UNIVERSITY OF CALIFORNIA
SANTA CRUZ

SUBSTANCE AND SURFACE IN FOUR COMPOSITIONS

A thesis submitted in partial satisfaction
of the requirements for the degree of

MASTER OF ARTS

in

MUSIC

By

Bryndan Shea Moondy

June 2020

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Professor Hi Kyung Kim, Chair

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Visiting Assistant Professor
Michelle Lou

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Acting Vice Provost and Dean of Graduate Studies

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Abstract

Substance and Surface in Four Compositions

by

Bryndan Shea Moondy

The following scores and the accompanying essay stand in representation of my creative work during the completion of my Master's degree at The University of California, Santa Cruz. The compositions included herein are *Entwined to Fray* (2018) for string quartet, *Fractured Pond* (2019) for ten players, *Contrasts* (2019) for solo piano, and *We, too, can divide ourselves…*(2020) for solo flute.

The essay component of this thesis has been separated into two main sections. The first portion focuses on a discussion of certain overarching concerns which have become central influences on my compositional thinking during the past two years, namely the derivation of musical forms through the exploration of abstracted dichotomous relationships found within extra-musical concepts/metaphors. Additionally, the first section also includes brief descriptions of various approaches to the conception and handling of musical materials employed within the two solo works included within this thesis. The second portion focuses on elucidating my creative process through in-depth analyses of the works *Entwined to Fray* and *Fractured Pond*.

Acknowledgements

This thesis is dedicated to my parents, Taun Moondy and George Mooney, whose unconditional support has made it possible.

I would also like to thank my advisor Hi Kyung Kim for her invaluable guidance during my course of study at UC Santa Cruz.

Part I

Compositions:

Entwined to Fray

Fractured Pond

Contrasts

We, too, can divide ourselves…

Entwined to Fray

for string quartet

(2018)

Bryndan Moondy

Performance Notes

All notes should be played senza vibrato unless otherwise specified

All trills are semi-tone trills unless otherwise specified

 a gradual change from one playing technique to another

mv — molto vibrato

sv — senza vibrato

mst — molto sul tasto

sp — sul ponticello

msp — molto sul ponticello (greater exposure of upper partials)

ob — bowing directly on the bridge (possibly diagonally) resulting in white noise with little to no pitch

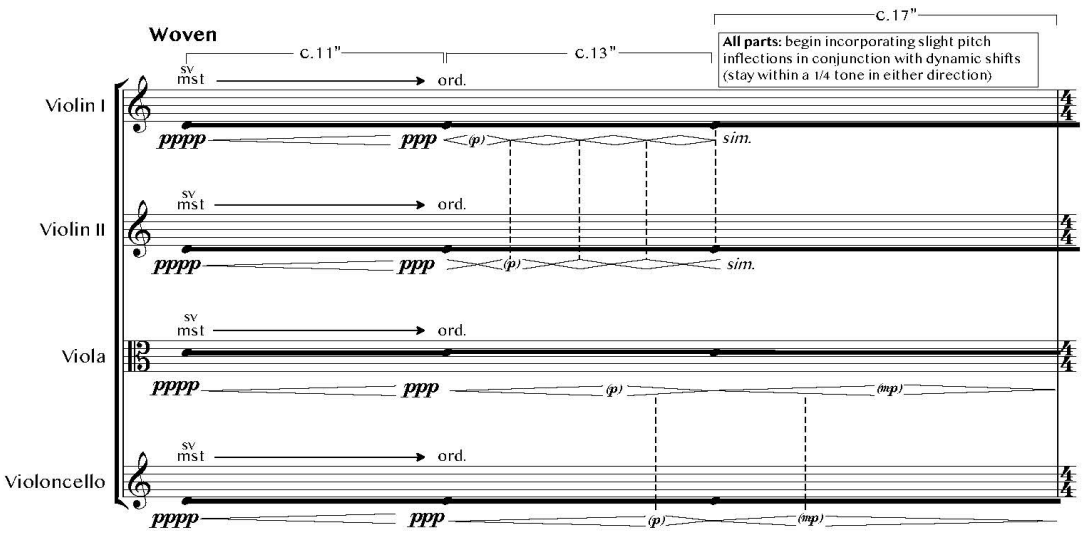
 harmonic trill - quickly alternate between harmonic pressure and full pressure with left hand (sounding result should be timbrally unstable)

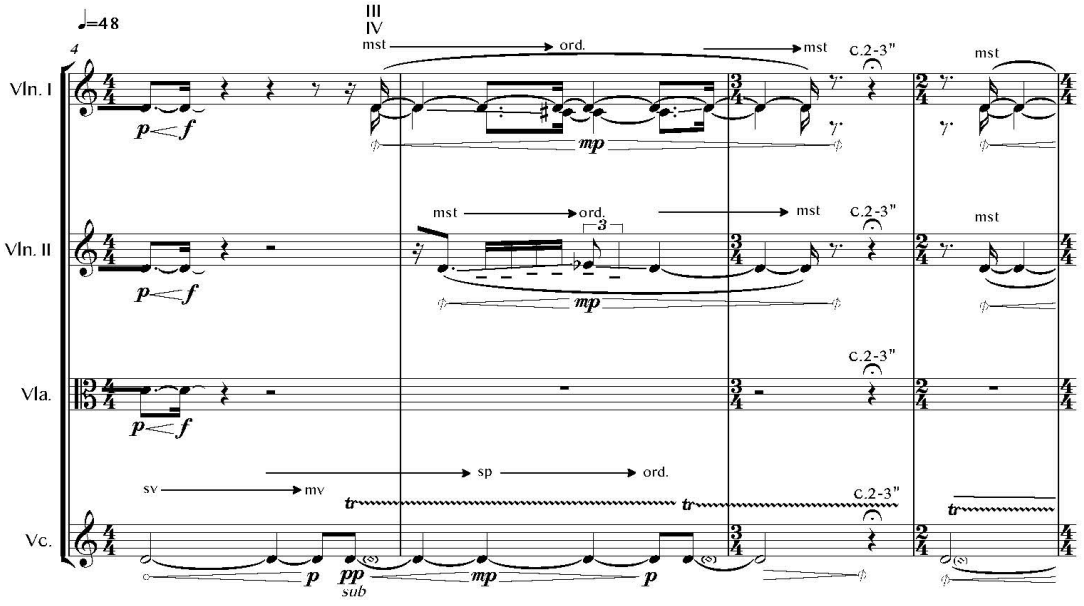
 increased bow pressure to the point at which pitch is replaced by noise

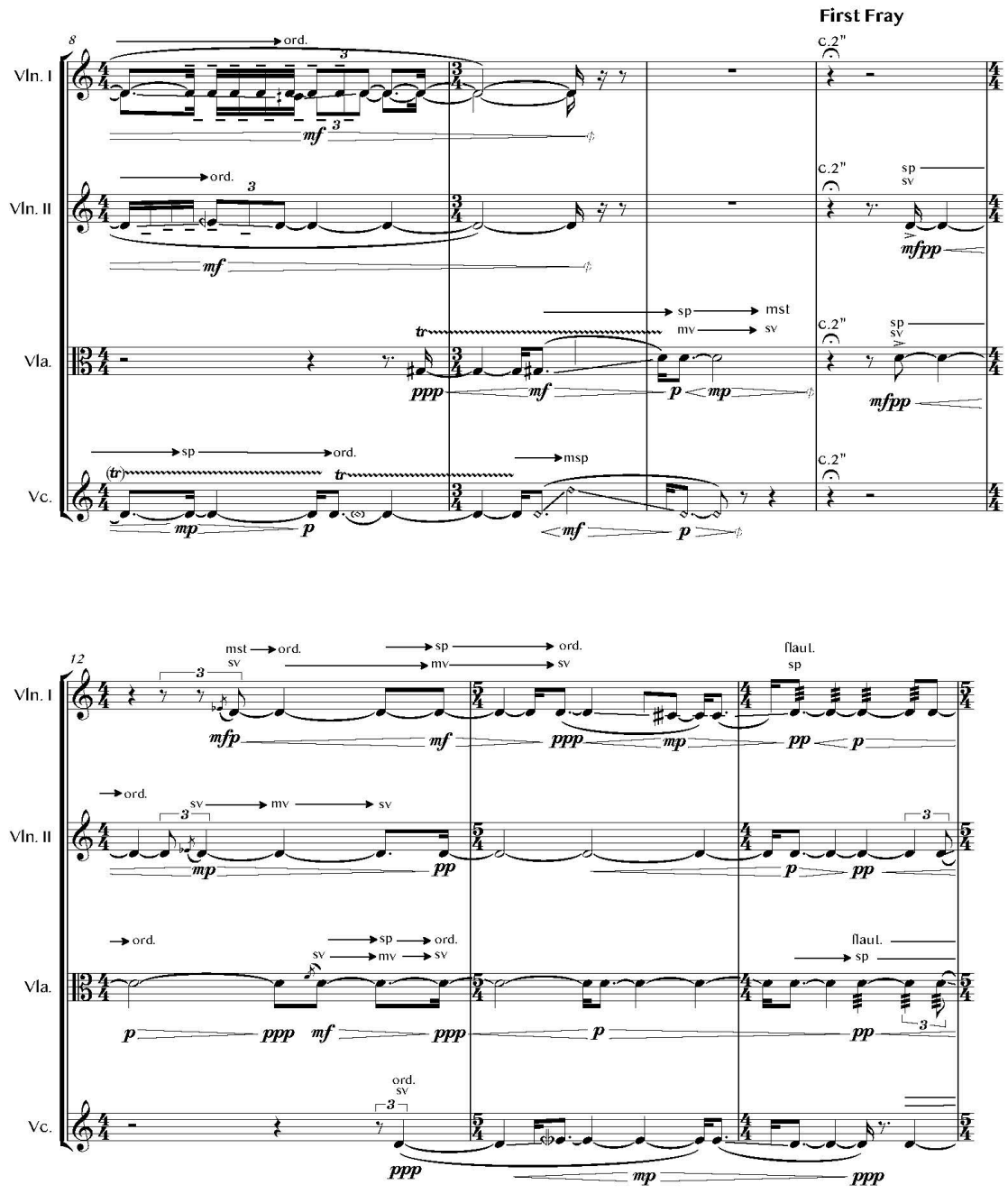
During the sections in time based notation that begin and end the piece, the three durations above the systems should be taken as approximations in which the proportion of one duration to the next is more important than the exact number of seconds it contains. Likewise, the dynamic indications do not need to be executed exactly; however, the relationships between the parts is of importance. Finally, bowing in these sections should be staggered throughout the ensemble and there should be no indication of pulse.

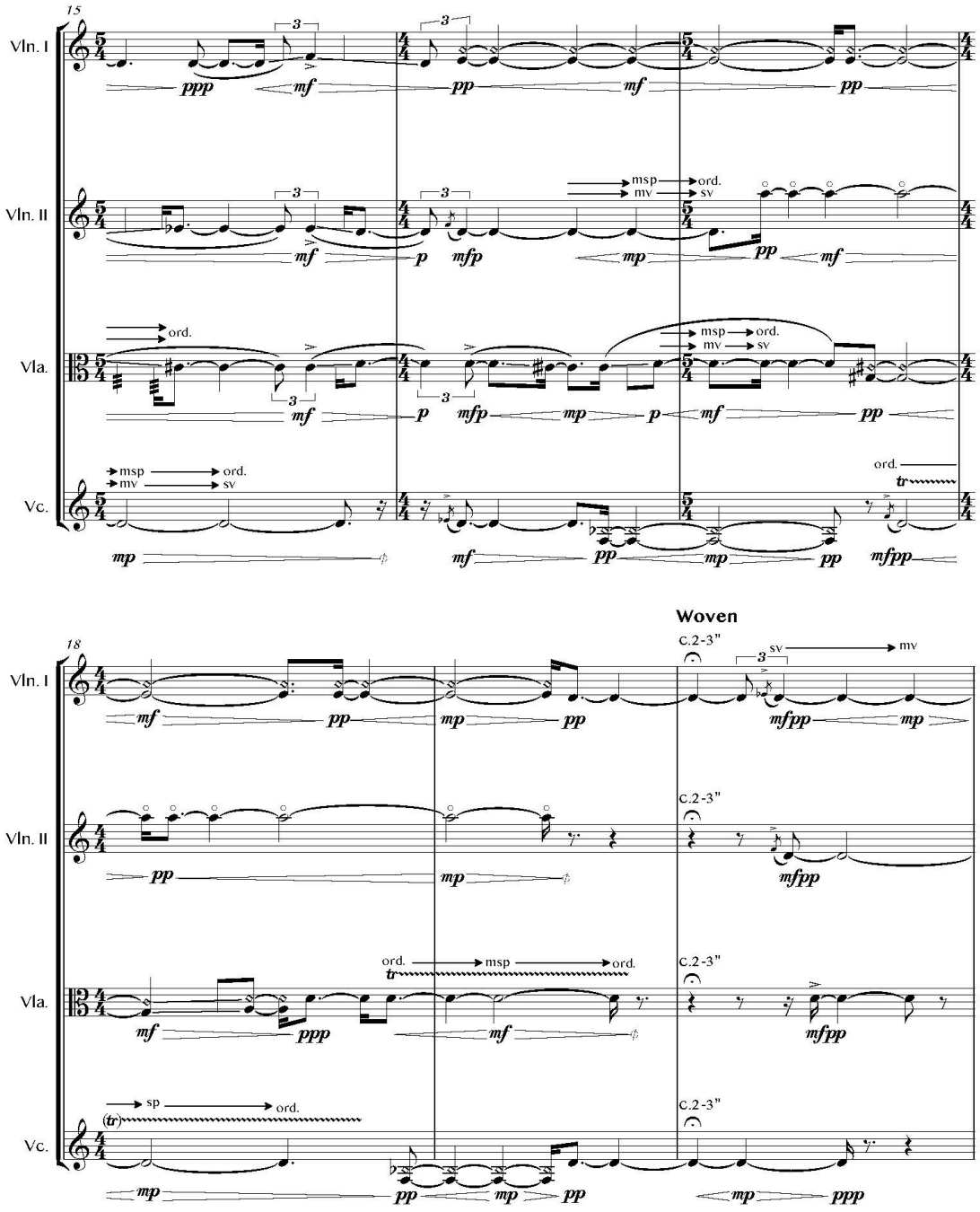
Entwined to Fray

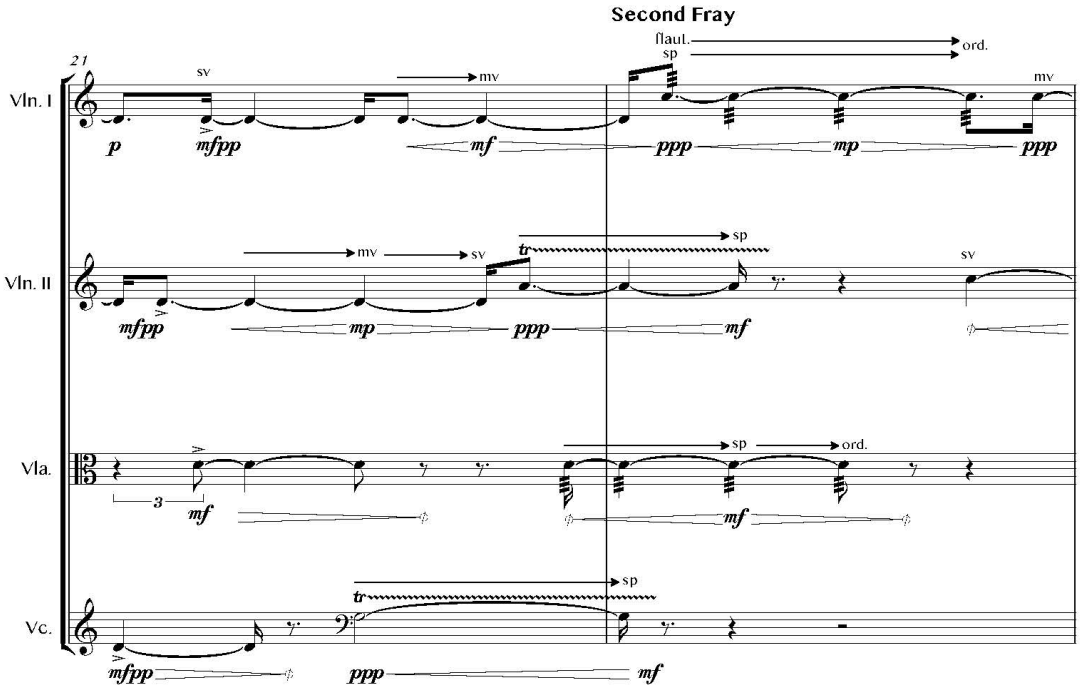
Bryndan Moondy (2018)

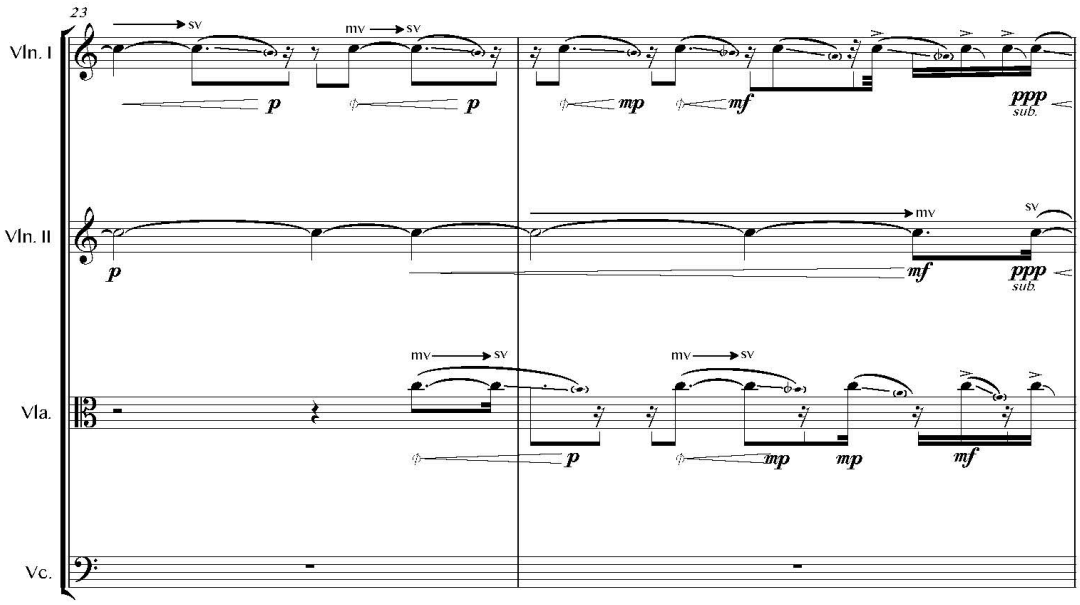


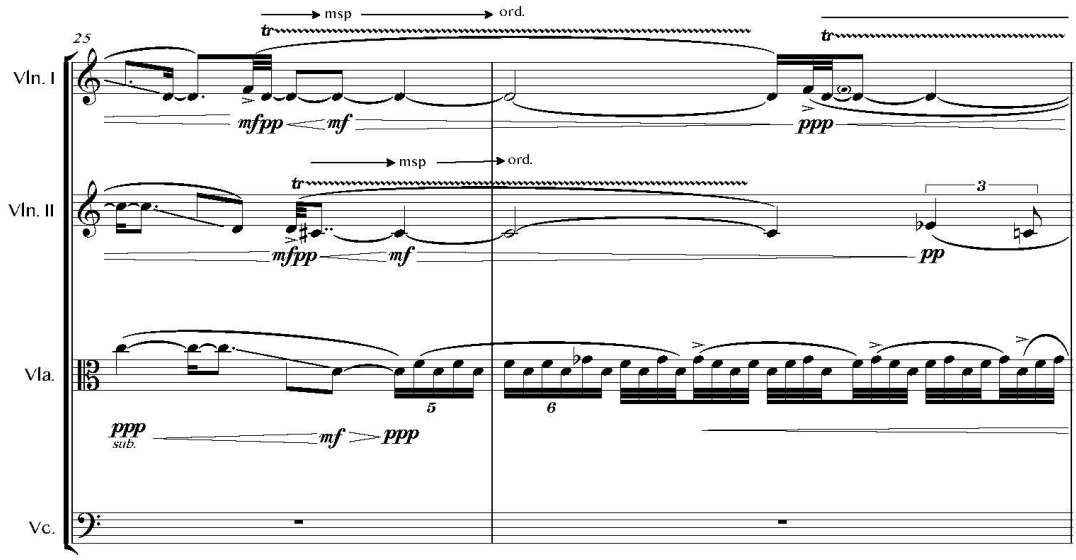


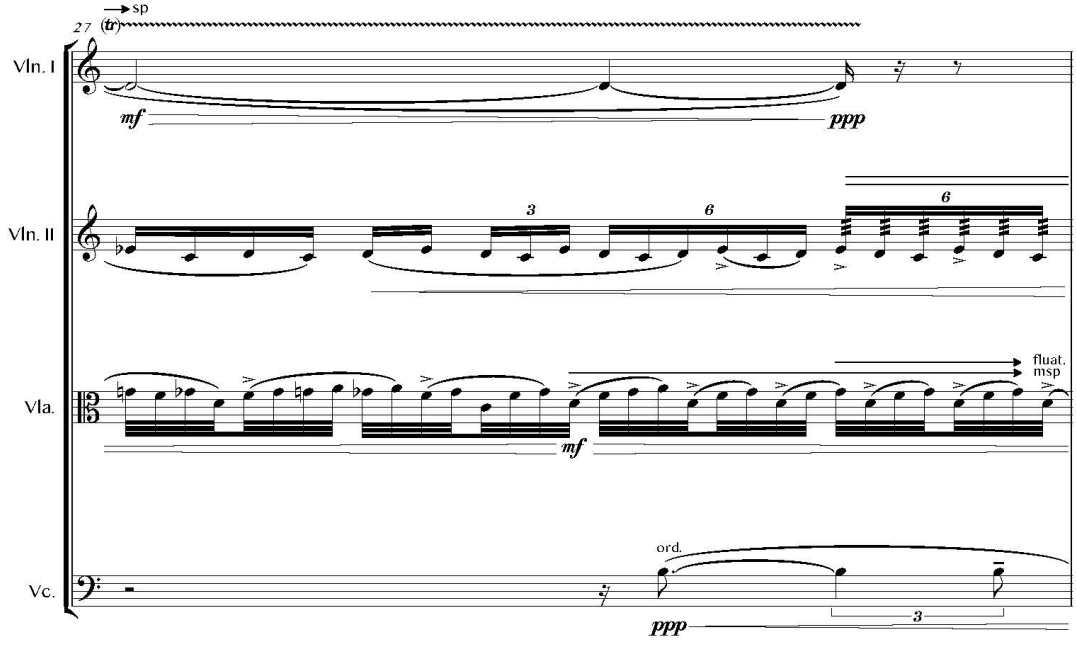

First Fray
8
Vln. I
Vln. II
Vla.
Vc.
ord.
sp
mst
mv
sv
msp
c.2"
mfpp
12
mst → ord.
sv
sp → ord.
mv → sv
flaut.
sp
ppp
mp
pp
p
mf
mfp
ppp

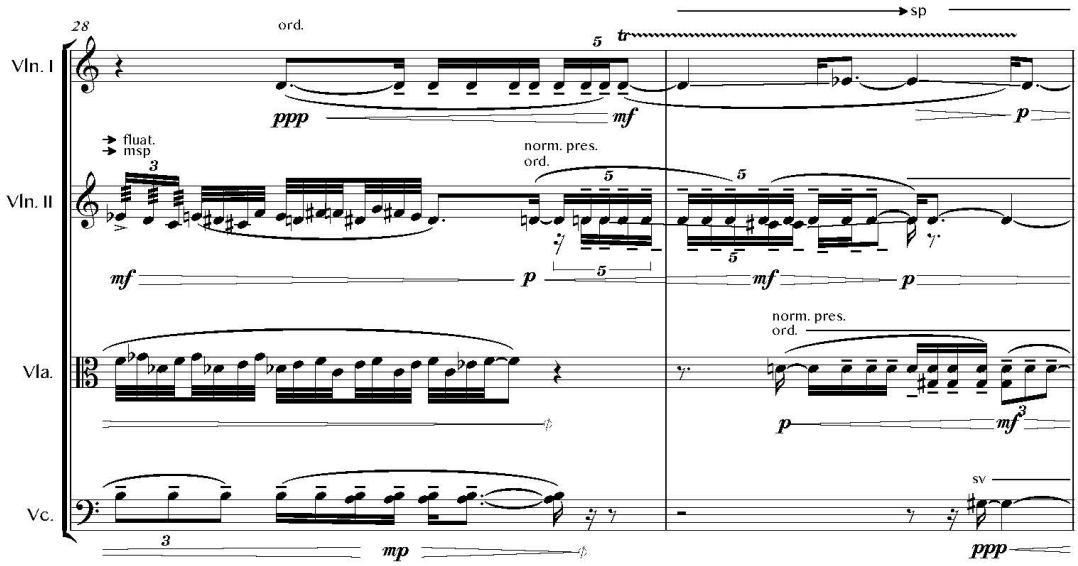

15
Vln. I
Vln. II
Vla.
Vc.
ppp
mf
pp
p
mfp
mp
msp
mv
ord.
sv
tr
mfpp
18
Woven
c.2-3"
sp
(tr)

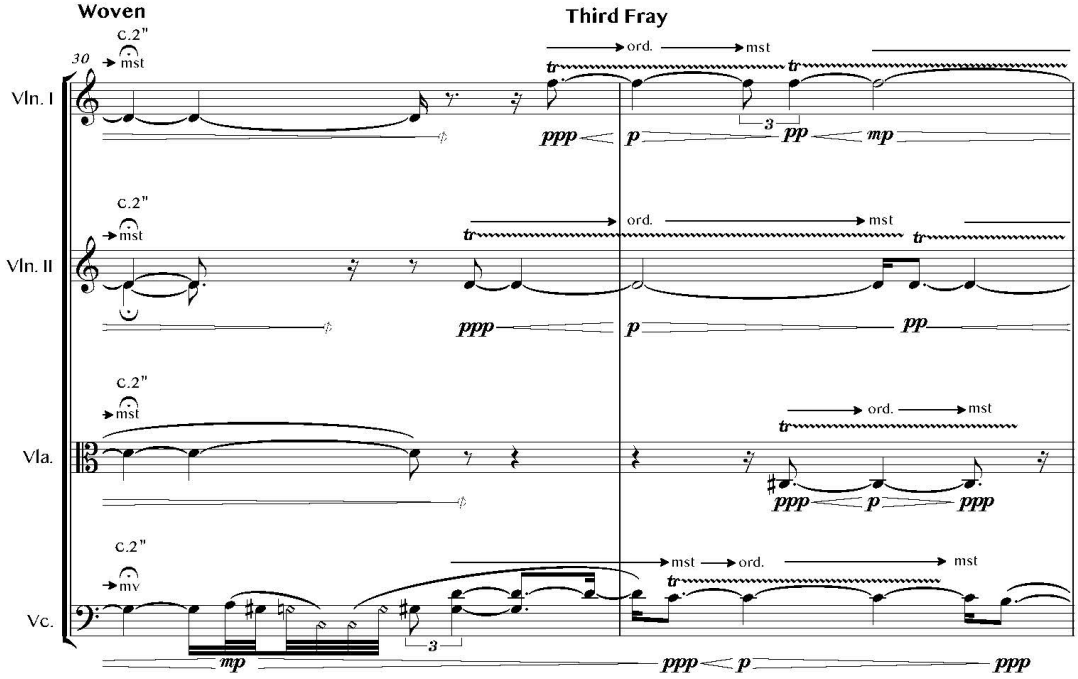

Second Fray
21
Vln. I
Vln. II
Vla.
Vc.
flaut.
sp
ord.
sv
mv
p
mfpp
mf
ppp
mp
tr
3

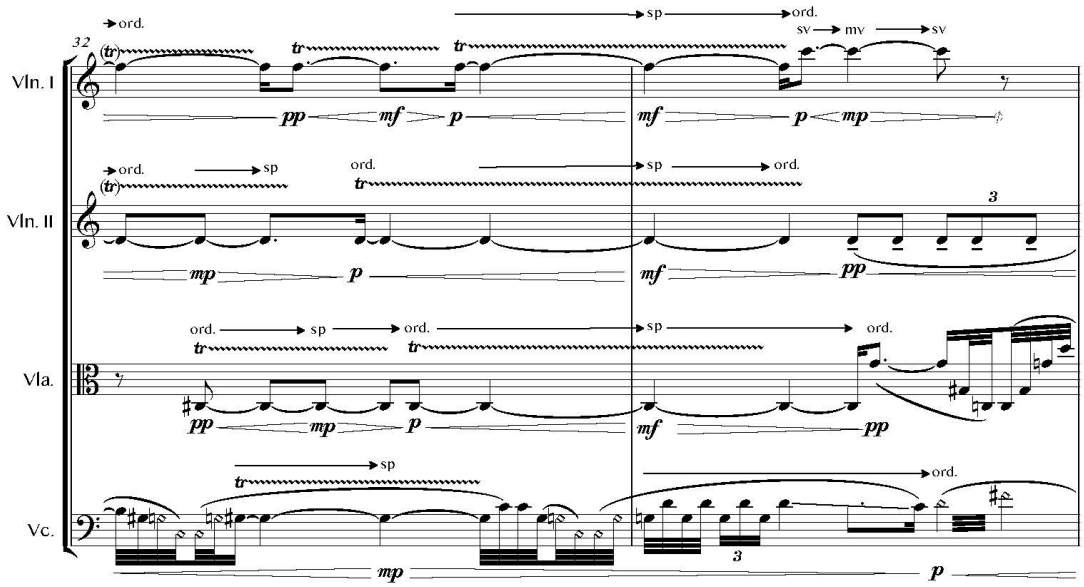

23
Vln. I
Vln. II
Vla.
Vc.
sv
mv
p
mp
mf
ppp
sub.

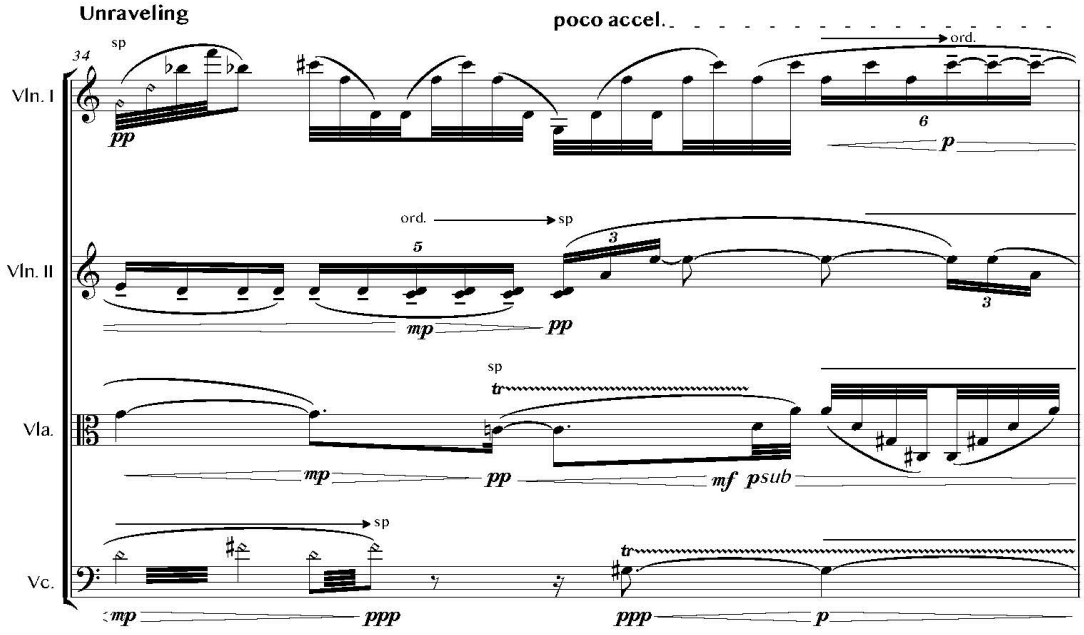

25
Vln. I
Vln. II
Vla.
Vc.
msp
ord.
tr
mfpp
mf
ppp
pp
3
5
6
ppp
sub.

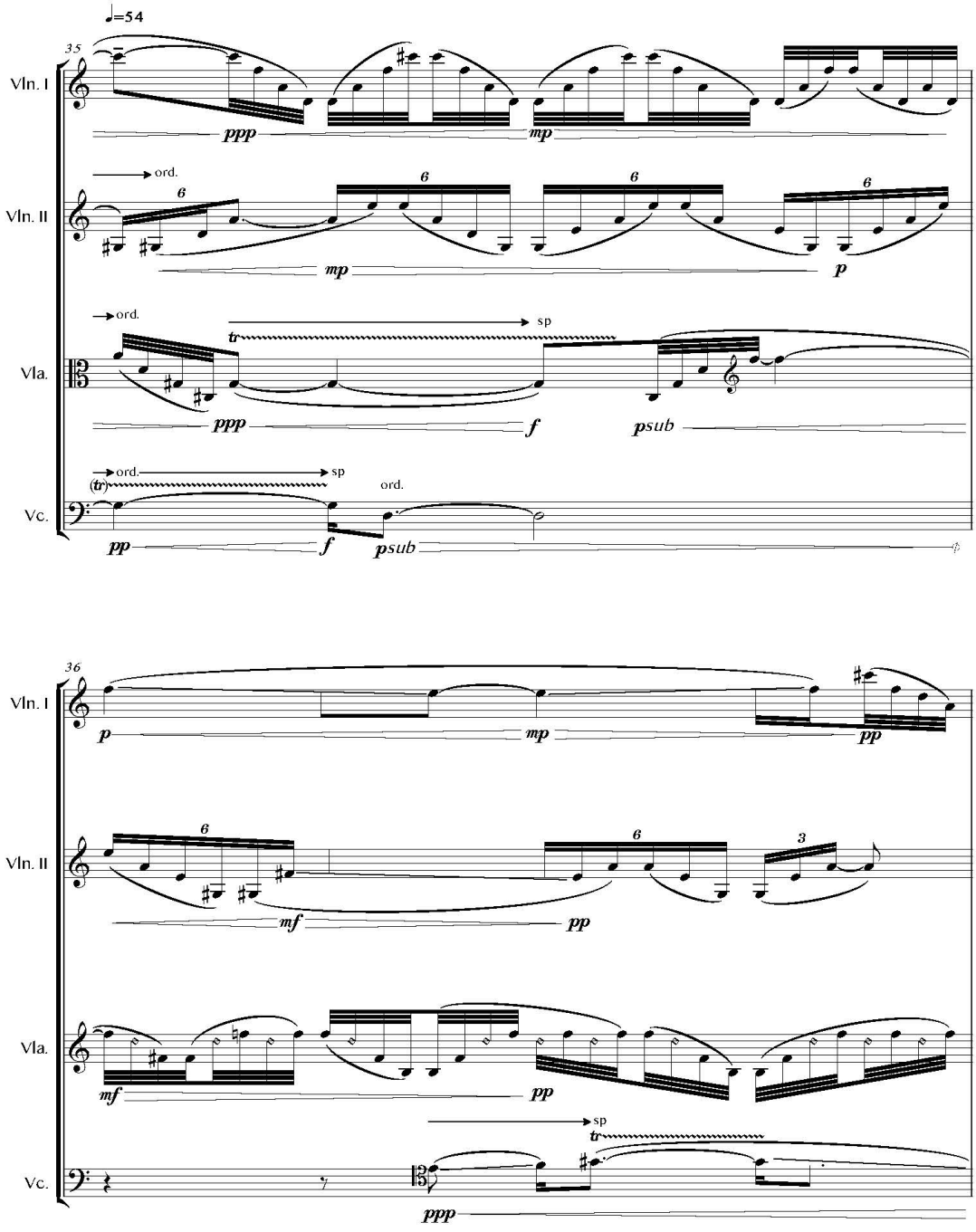

27
(tr)
sp
Vln. I
Vln. II
Vla.
Vc.
mf
ppp
3
6
fluat.
msp
ord.

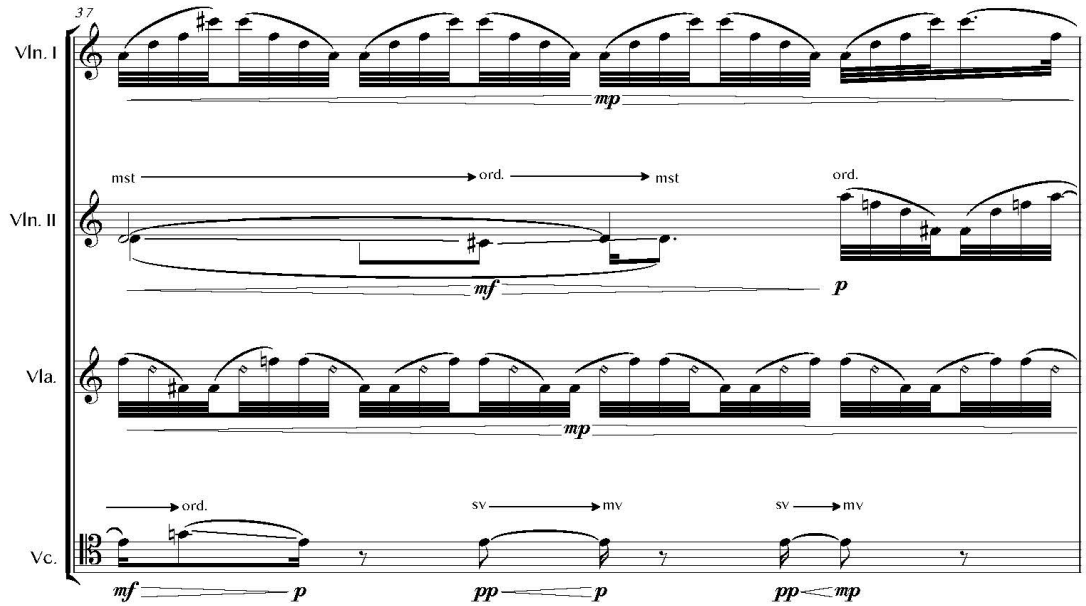

28
Vln. I
Vln. II
Vla.
Vc.
ord.
sp
fluat.
msp
norm. pres.
ord.
sv

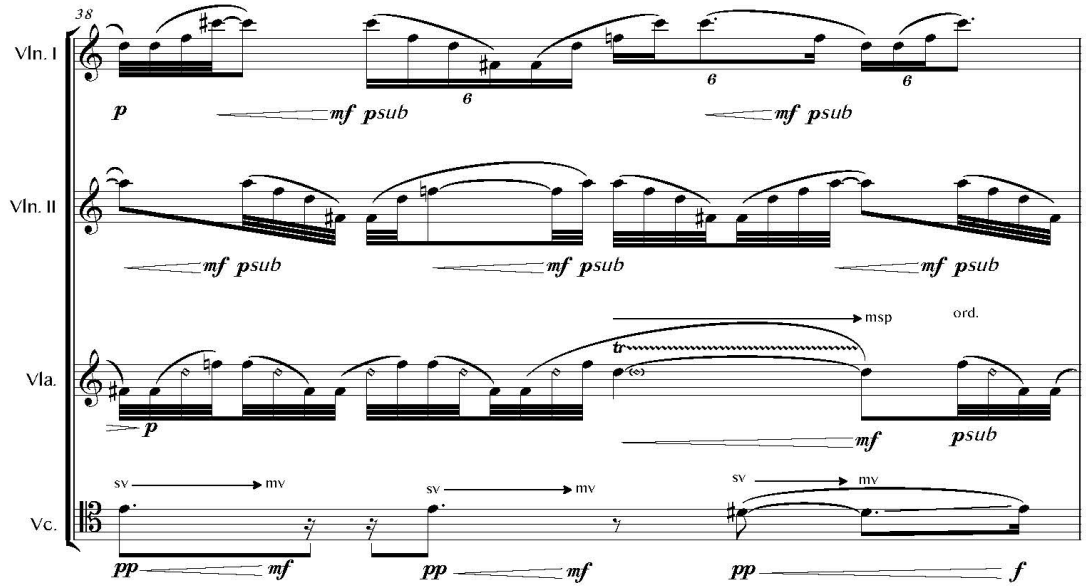

Woven
Third Fray
30
Vln. I
Vln. II
Vla.
Vc.
c.2"
mst
ord.
mv

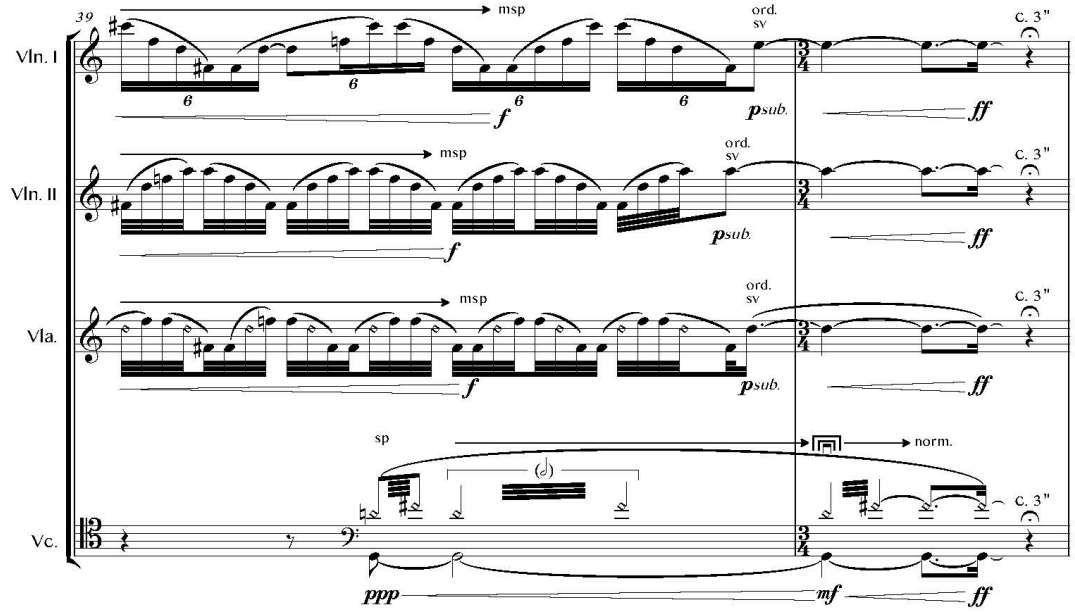

32
Vln. I
Vln. II
Vla.
Vc.
ord.
sp
sv
mv
tr
pp
mf
p
mp
3

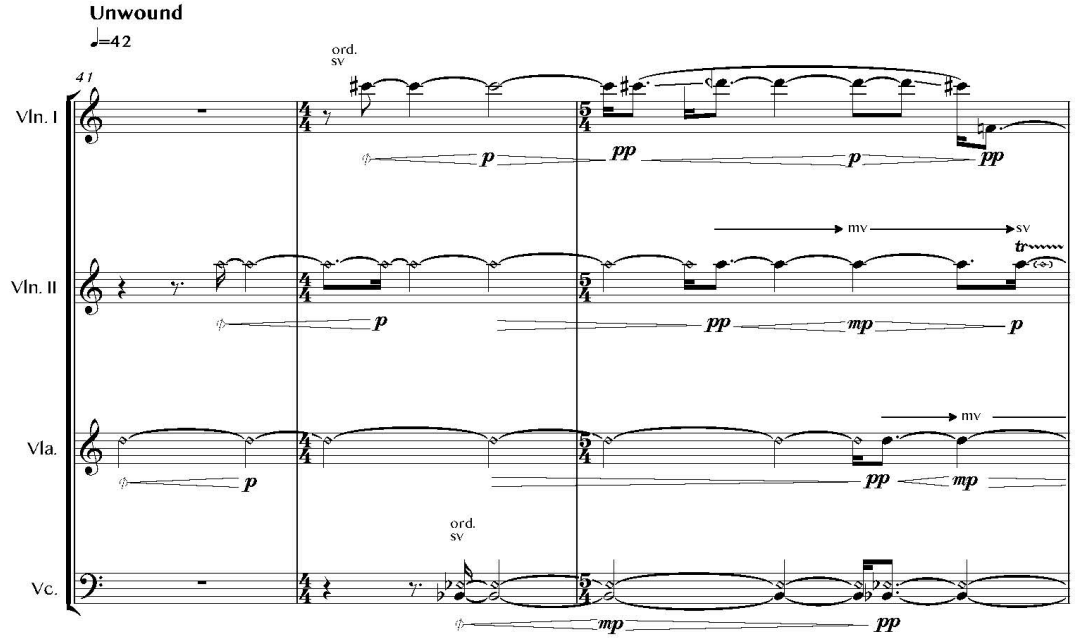

Unraveling
poco accel.
34
Vln. I
Vln. II
Vla.
Vc.
sp
ord.
tr
5
6
3
pp
mp
mf
psub
ppp

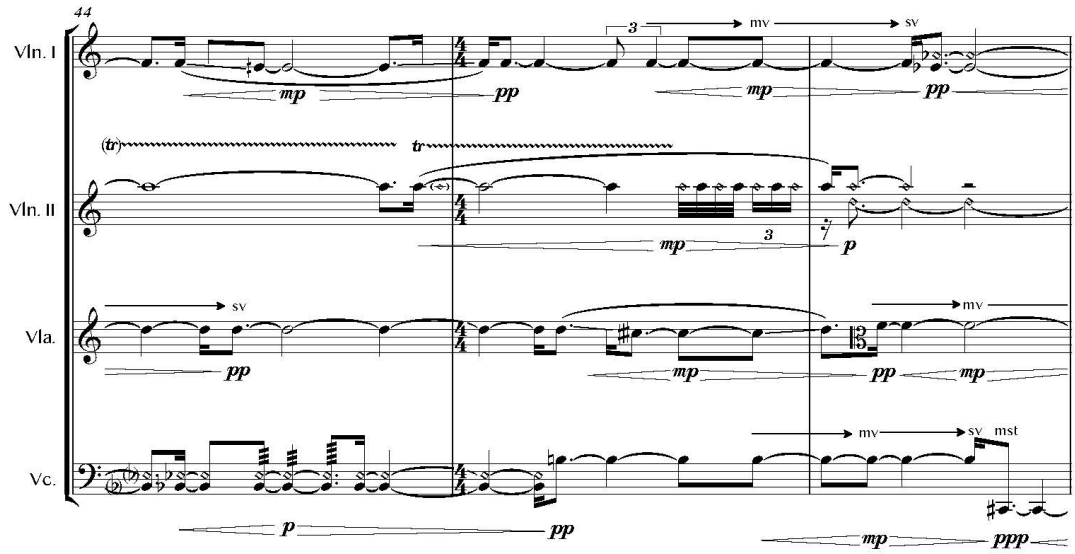

♩=54
35
Vln. I
Vln. II
Vla.
Vc.
ord.
sp
tr
(tr)
6
3
ppp
mp
p
f
psub
pp
mf
36

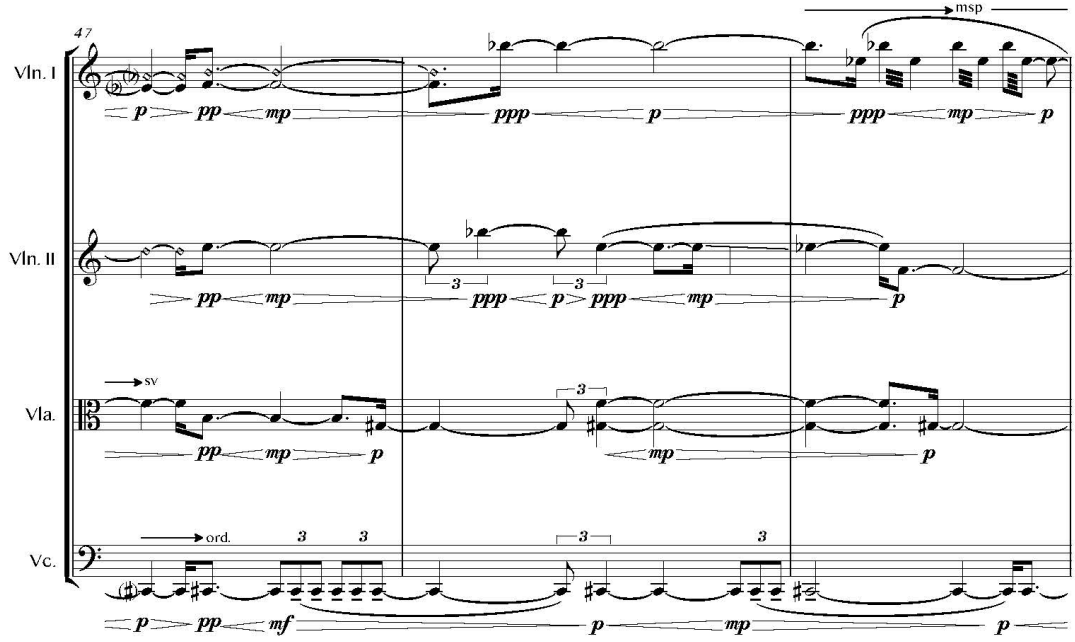

37
Vln. I
mp
Vln. II
mst
ord.
mst
mf
ord.
p
Vla.
mp
Vc.
ord.
mf
p
sv
mv
pp
p
sv
mv
pp
mp

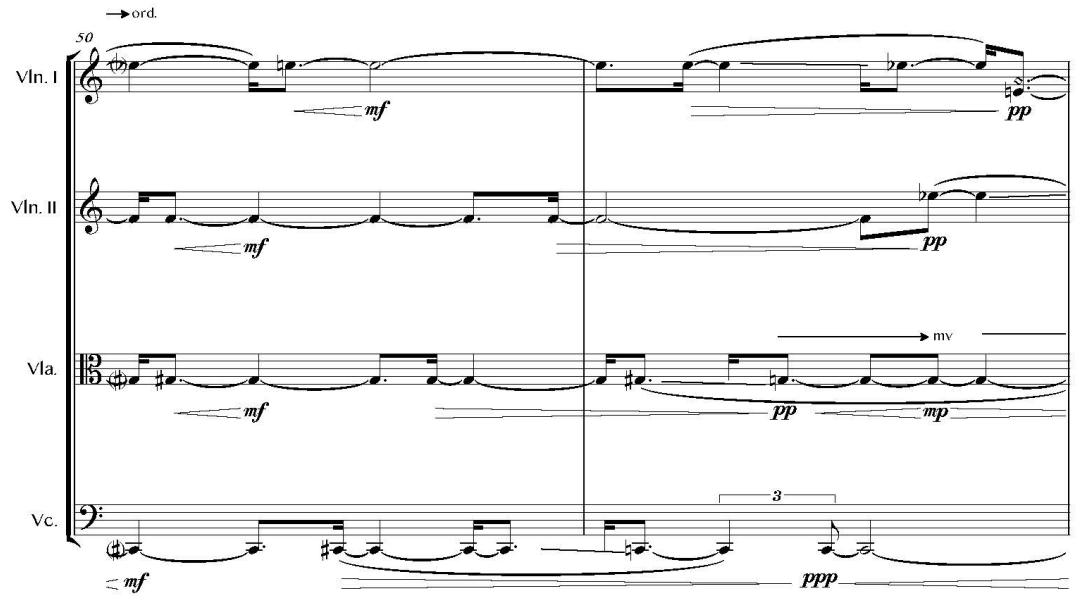

38
Vln. I
p
mf psub
6
6
mf psub
6
Vln. II
mf psub
mf psub
mf psub
Vla.
msp
ord.
tr
p
mf
psub
Vc.
sv
mv
pp
mf
sv
mv
pp
mf
sv
mv
pp
f

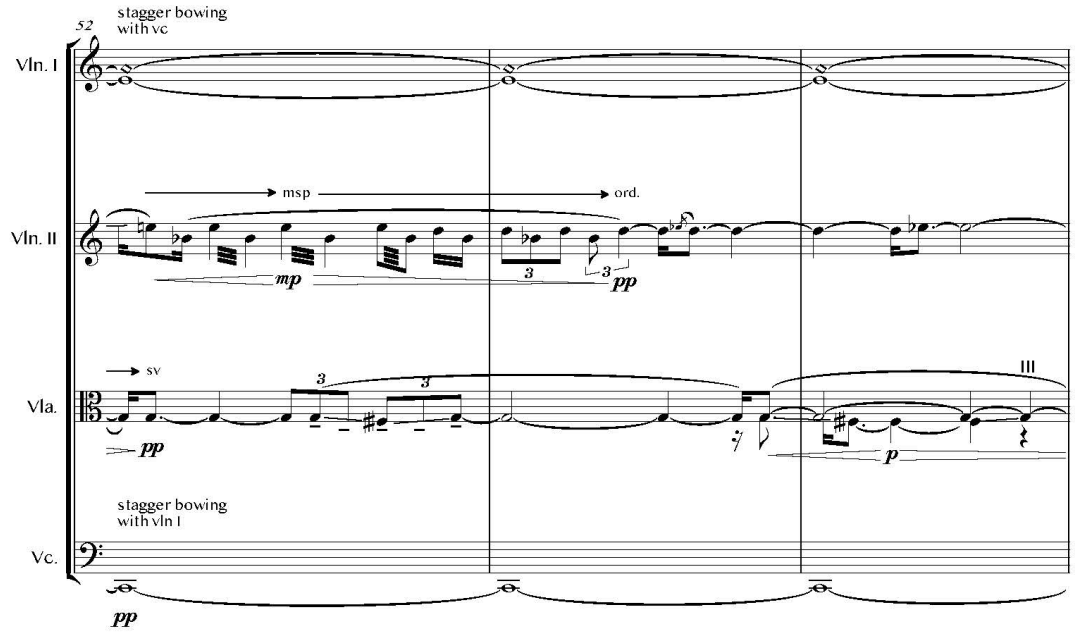

39
Vln. I
Vln. II
Vla.
Vc.
msp
ord.
sv
c. 3"
sp
norm.
f
psub.
ff
ppp
mf

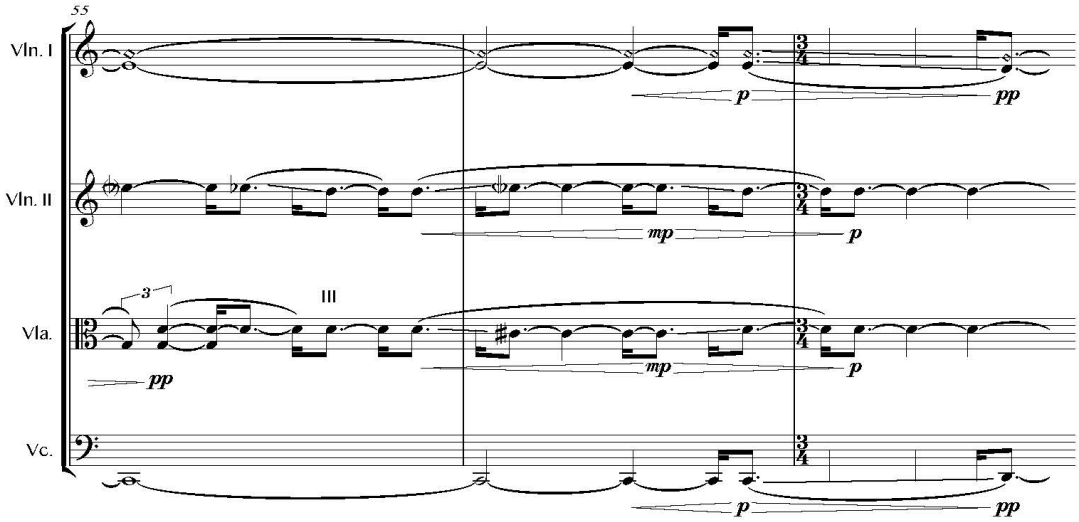

Unwound
♩=42
41
Vln. I
Vln. II
Vla.
Vc.
ord.
sv
mv
p
pp
mp

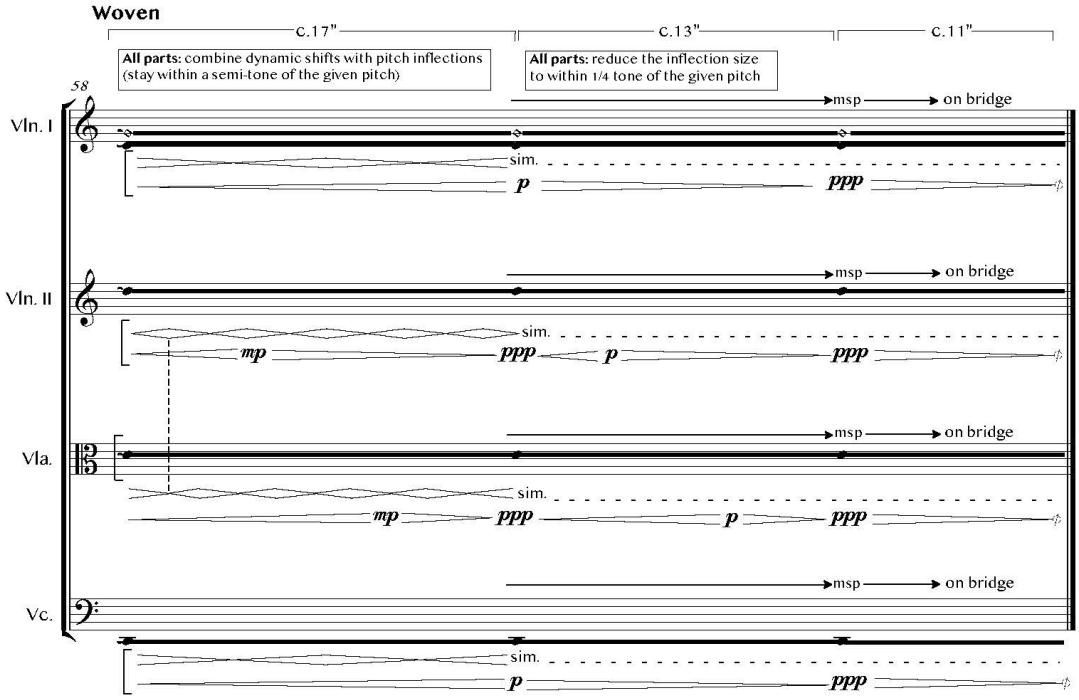

44
Vln. I
Vln. II
Vla.
Vc.
mv
sv
mst
tr
(tr)


47
Vln. I
Vln. II
Vla.
Vc.
msp
sv
ord.


50
ord.
Vln. I
mf
pp
Vln. II
mf
pp
Vla.
mf
mv
pp
mp
Vc.
3
mf
ppp


52
stagger bowing
with vc
Vln. I
Vln. II
msp
ord.
mp
3
3
pp
Vla.
sv
3
3
pp
III
p
stagger bowing
with vln I
Vc.
pp


55
Vln. I
Vln. II
Vla.
Vc.
3
III
pp
mp
p
pp


Woven
c.17"
c.13"
c.11"
All parts: combine dynamic shifts with pitch inflections (stay within a semi-tone of the given pitch)
All parts: reduce the inflection size to within 1/4 tone of the given pitch
58
Vln. I
Vln. II
Vla.
Vc.
msp
on bridge
sim.
mp
p
ppp

Fractured Pond

for ensemble

Bryndan Moondy

Instruments

Flute in C

Oboe

Bass Clarinet

Bassoon

Horn in F

Trombone

Violin

Viola

Violoncello

Double bass

Performance Notes:

General:

All trills are 1/2-tone trills

sv - senza vibrato

mv - molto vibrato (pitch change between 1/2 & 1/4-

tone) norm - normal vibrato

→ gradual change from one playing technique to another

accelerate or decelerate trill, tremolo, or bisbigliando over given duration

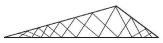
Woodwinds:

○ very airy tone, more air than pitch

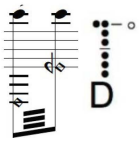
● full tone

bisb. bisbigliando/timbral trill (minor pitch variation if any)

Clarinet:

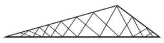


spectral multiphonic - gradually overblow to fade in indicated partial range (lower, middle, upper)

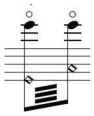


harmonic tremolo - accentuate harmonic more than fundamental pitches
(fingering taken from https://heatherroche.net)

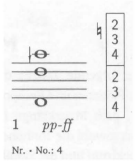
Flute:



gradually overblow (no distortion -> full distortion)



harmonic tremolo - accentuate harmonic more than fundamental pitches

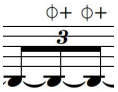


multiphonic fingering taken from Carin Levine's book *The Techniques of Flute Playing*

Brass:

+ harmon mute stem covered with hand

○ harmon mute stem uncovered



quickly uncover and re-cover harmon stem over given duration

Strings:

sp - sul ponticello

msp - molto sul ponticello

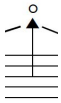
ord - ordinary bow position

stagger bow changes throughout section when playing long sustained notes

harmonic trill - quickly alternate between harmonic pressure and full pressure with left hand (sounding result should be timbrally unstable)


alternate 1/4-tone inflections above and below the given pitch combined with slight dynamic inflections


end 1/4-tone inflections


highest possible harmonic on the given string (indeterminate pitch)


circular bowing - move back and forth from sul ponticello to tasto in a circular motion

Fractured Pond

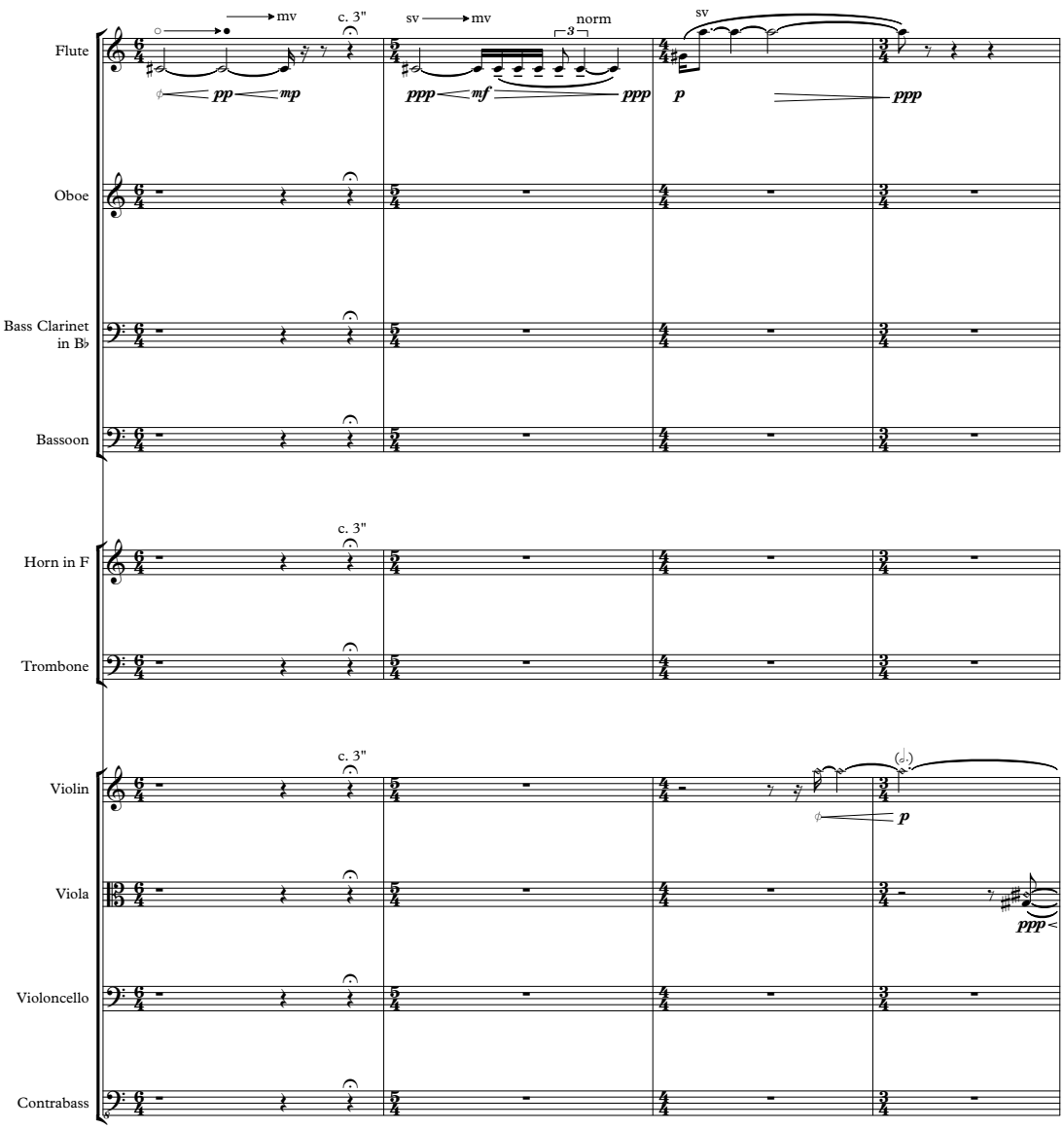
for ensemble

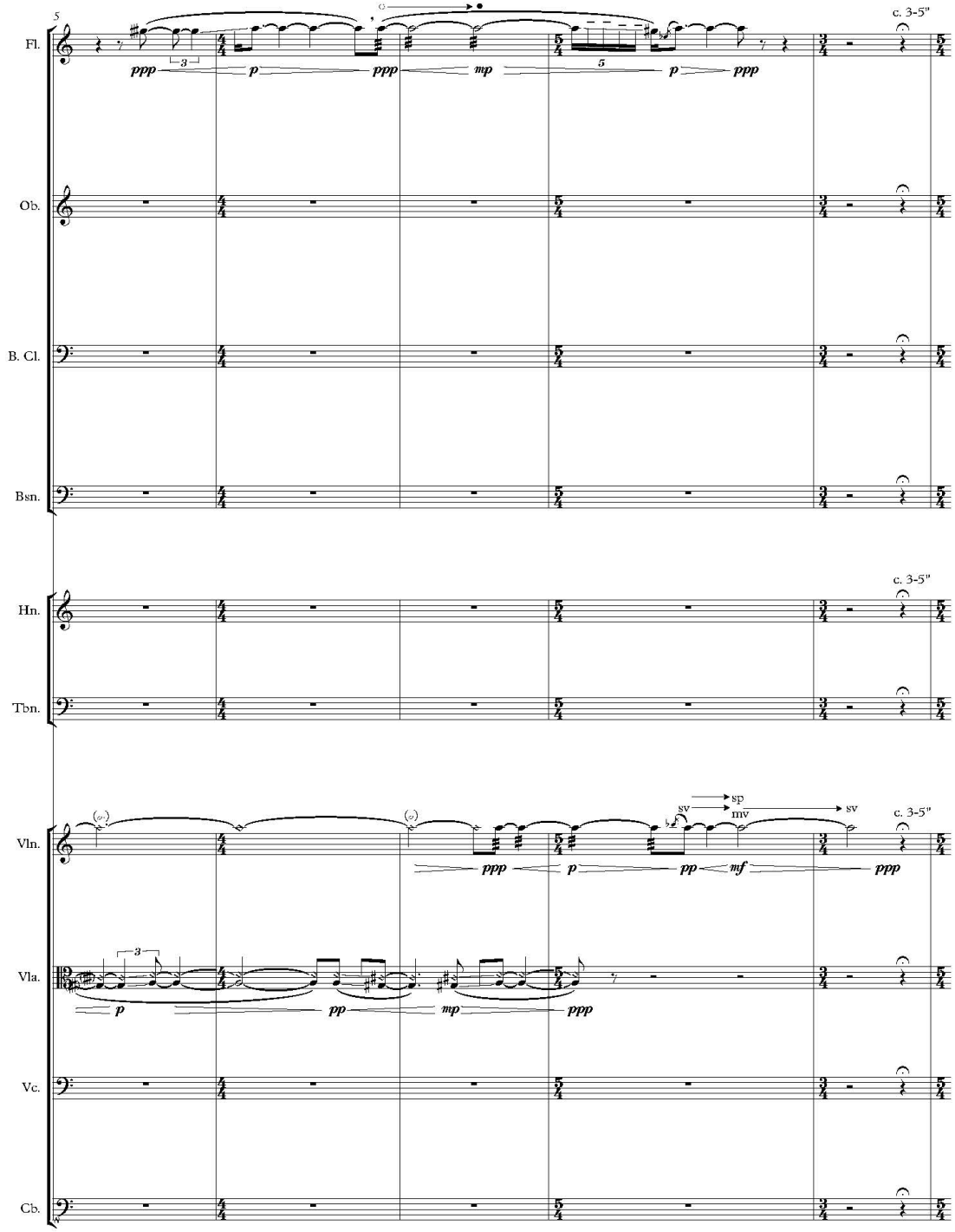
Score in C

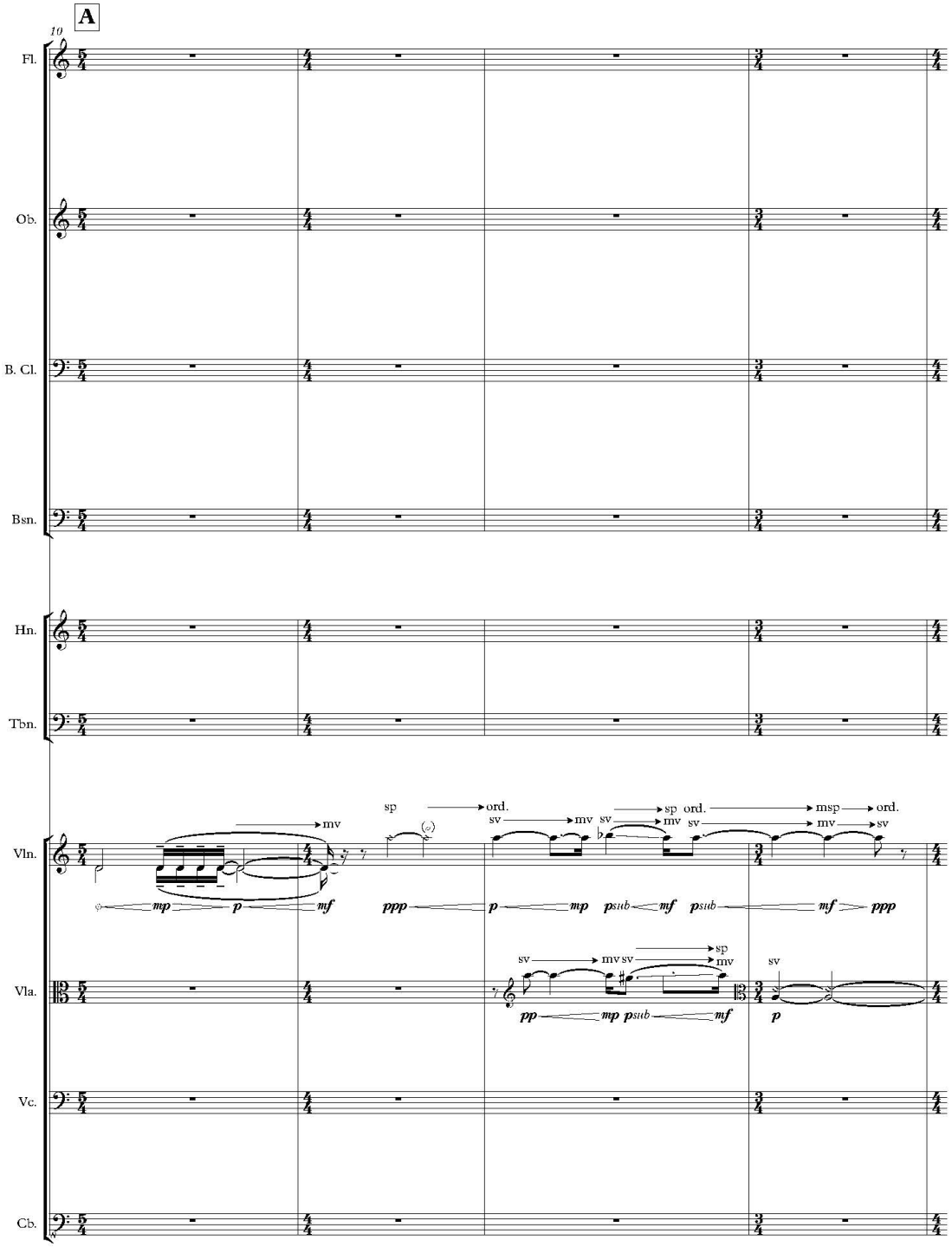
♩ = 48

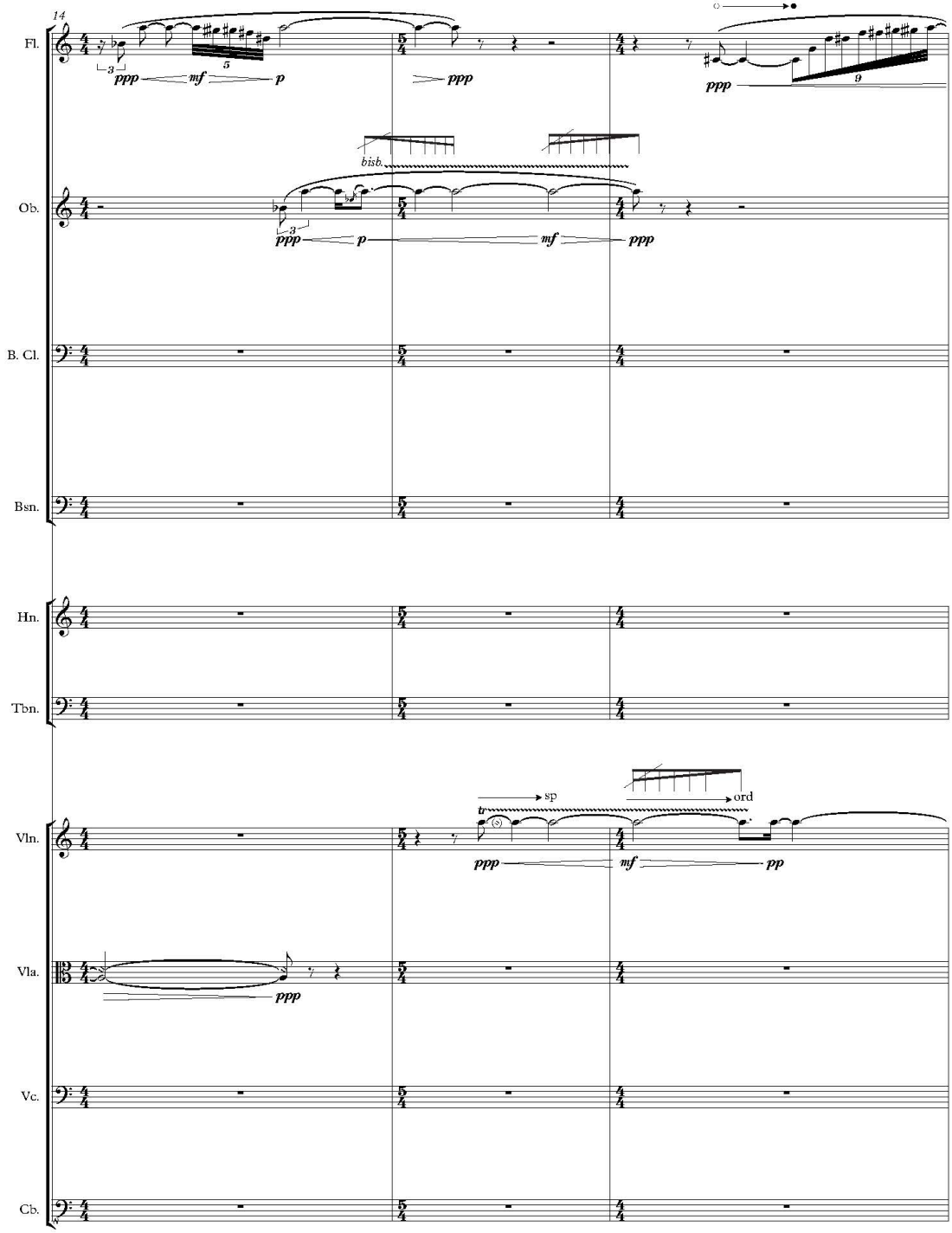
Bryndan Moondy (2019)

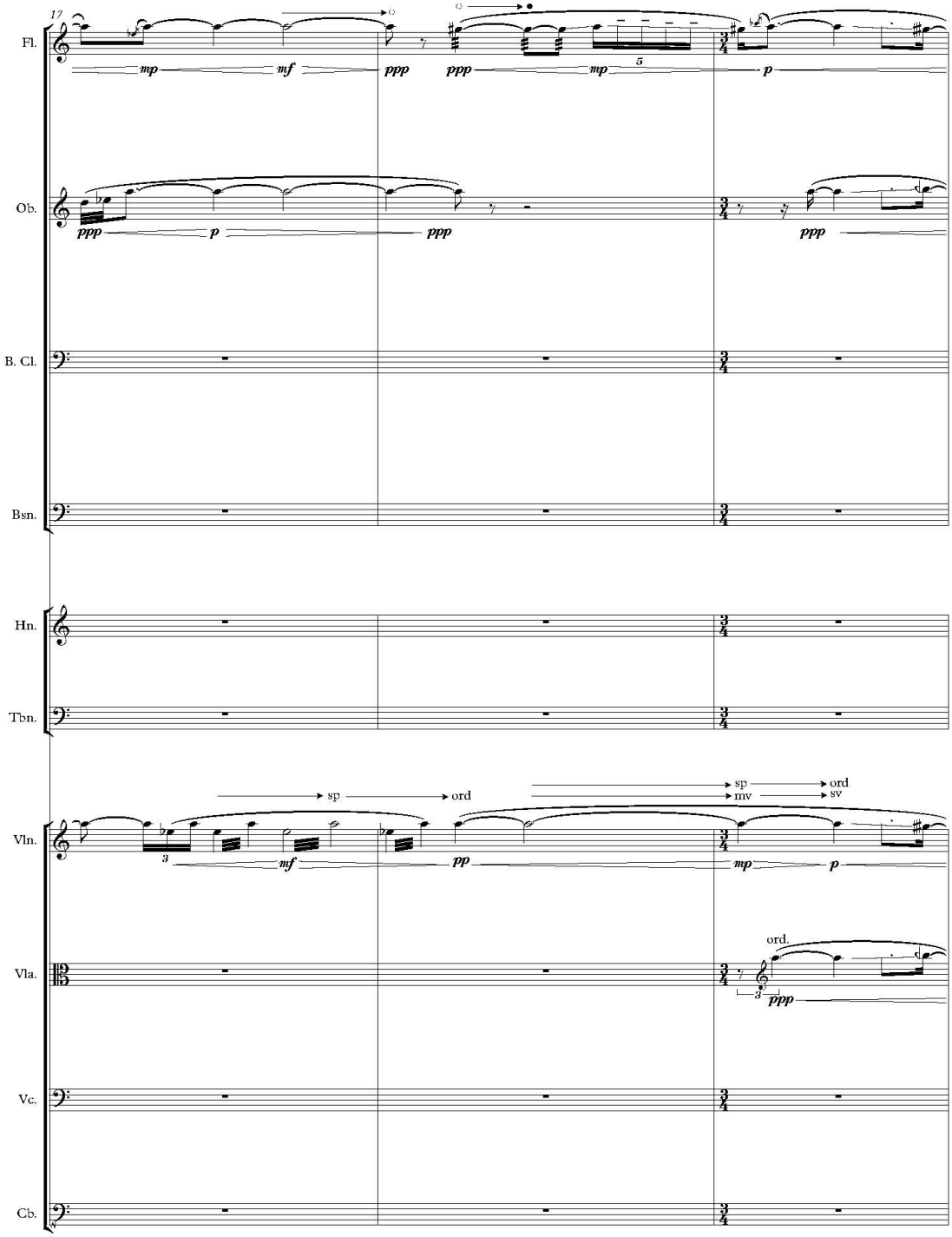
emerge, distort, dissolve; reflections on a rippling surface…

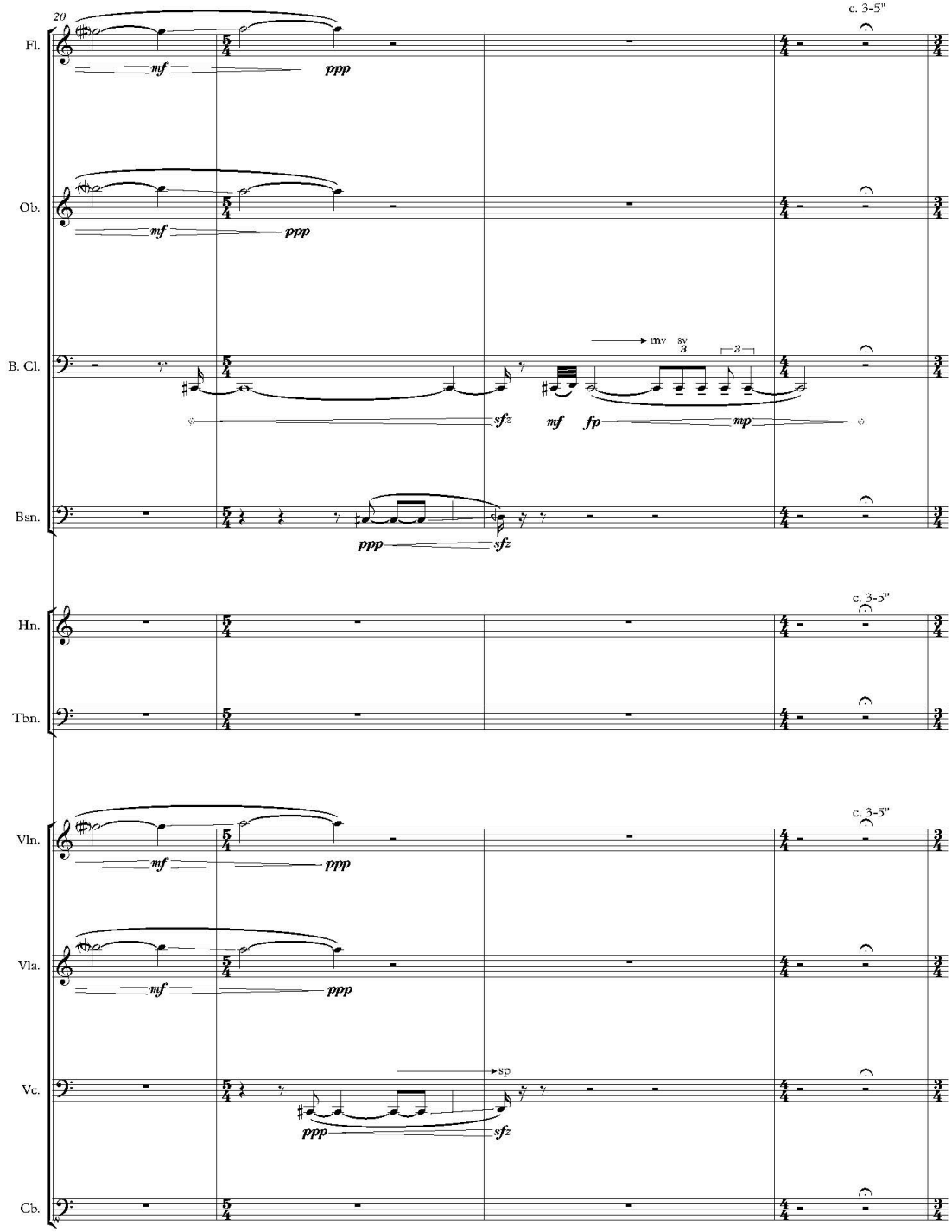


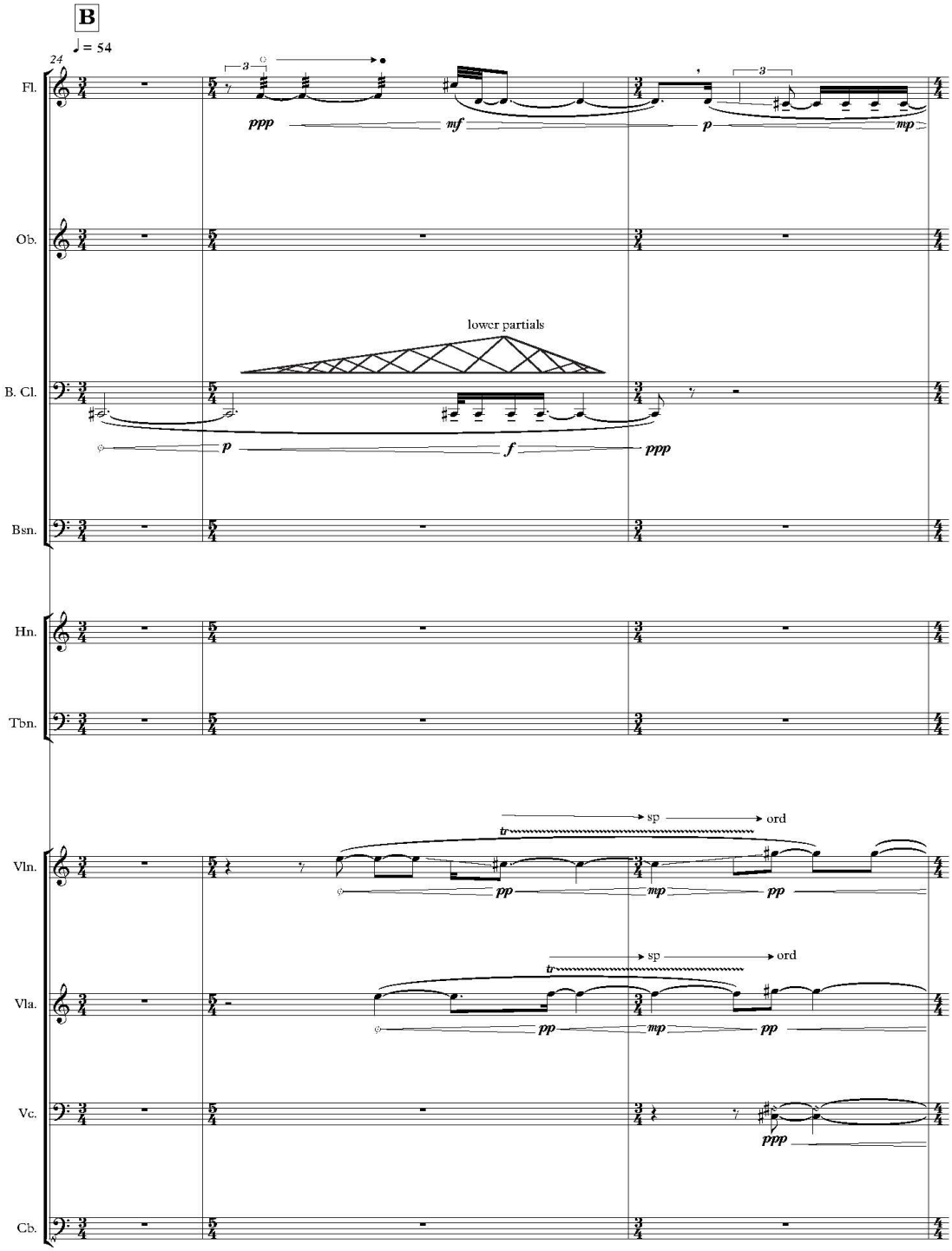

5
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
c. 3-5"
ppp
p
mp
pp
mf
sp
mv
sv

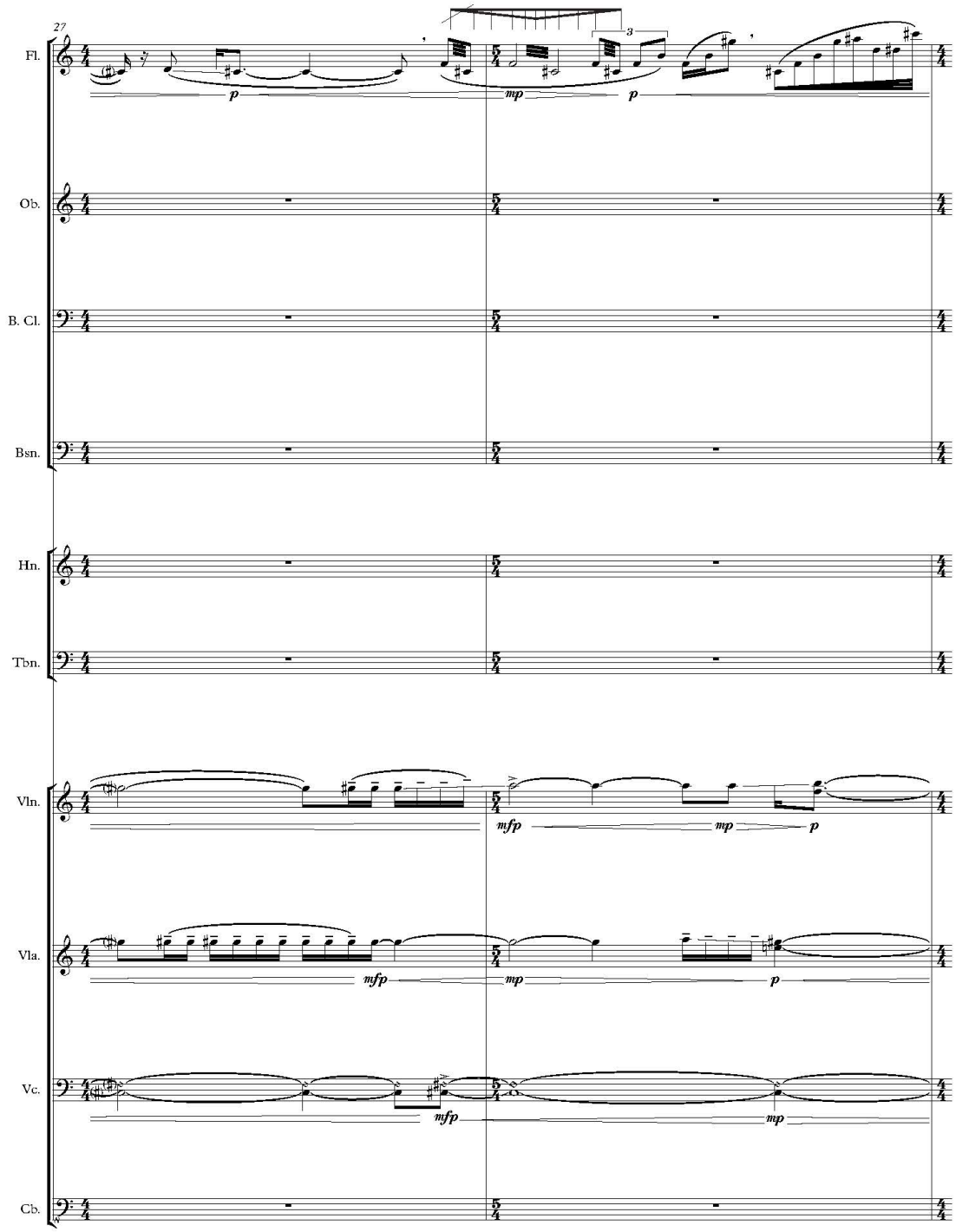

A
10
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
mv
sp
ord.
sv
msp
mp
p
mf
ppp
psub
pp

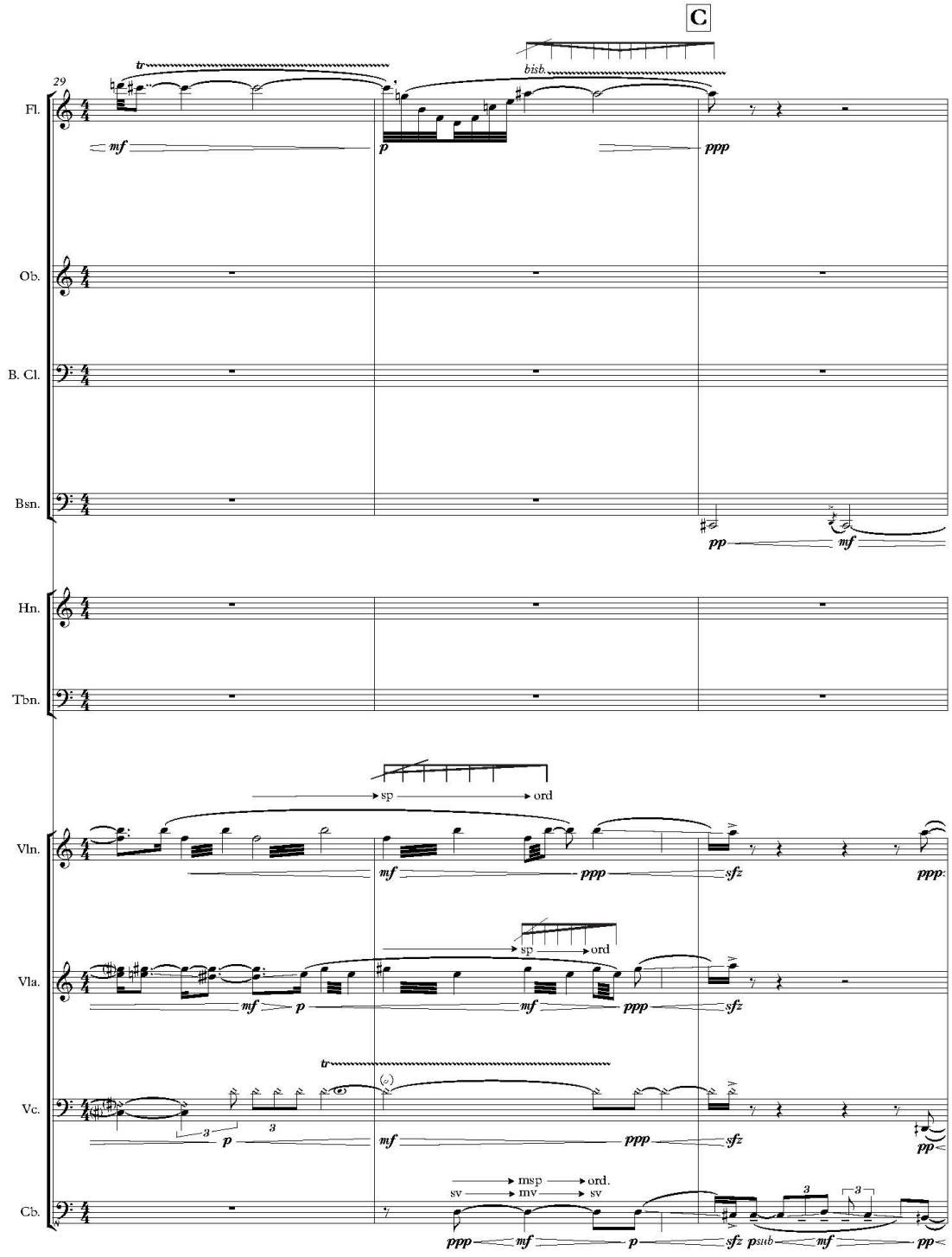

14
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
bisb.
sp
ord
ppp
mf
p
pp

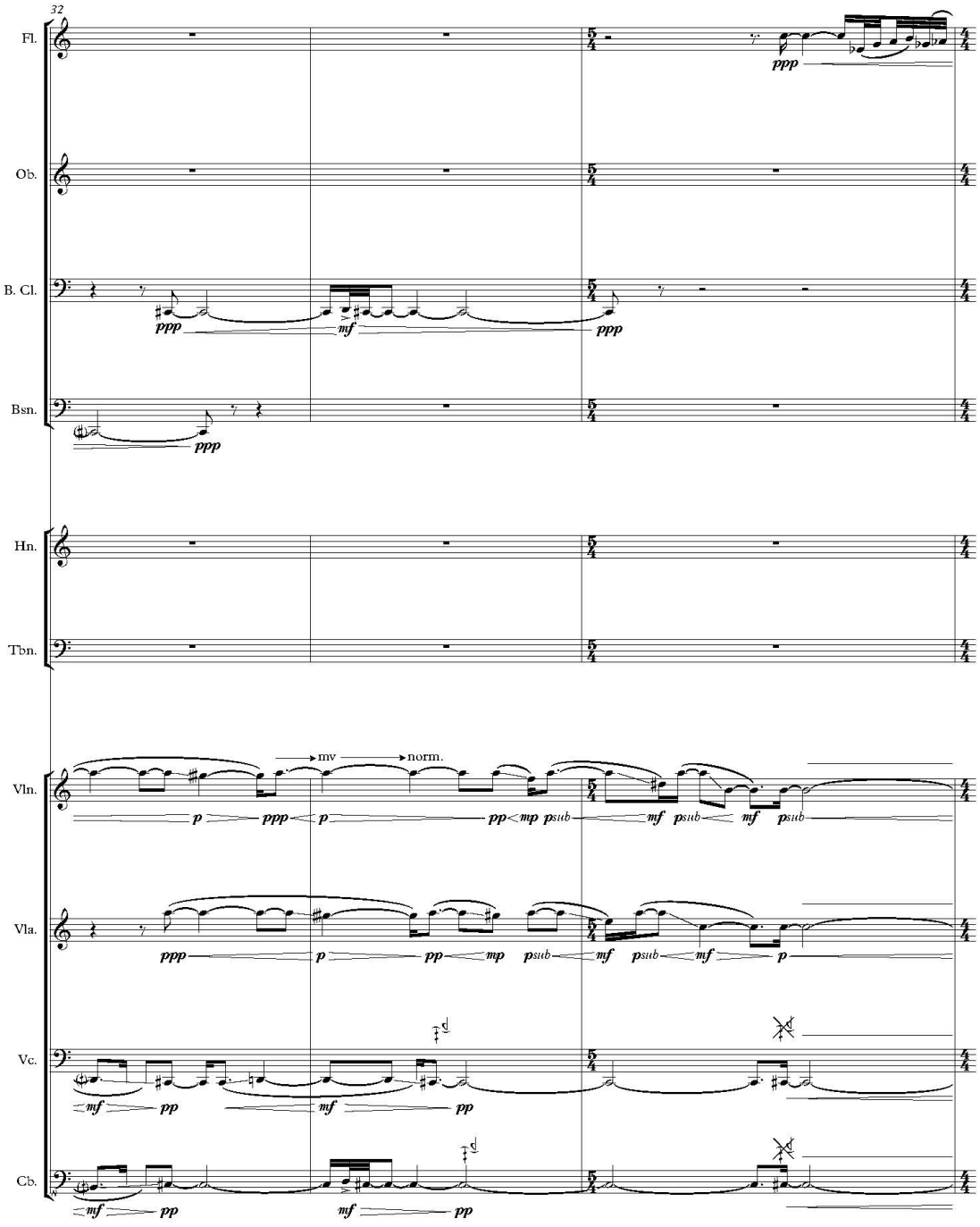

17
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
mp
mf
ppp
mp
5
p
ppp
p
ppp
ppp
sp
ord
sp
mv
ord
sv
mf
pp
mp
p
ord.
ppp

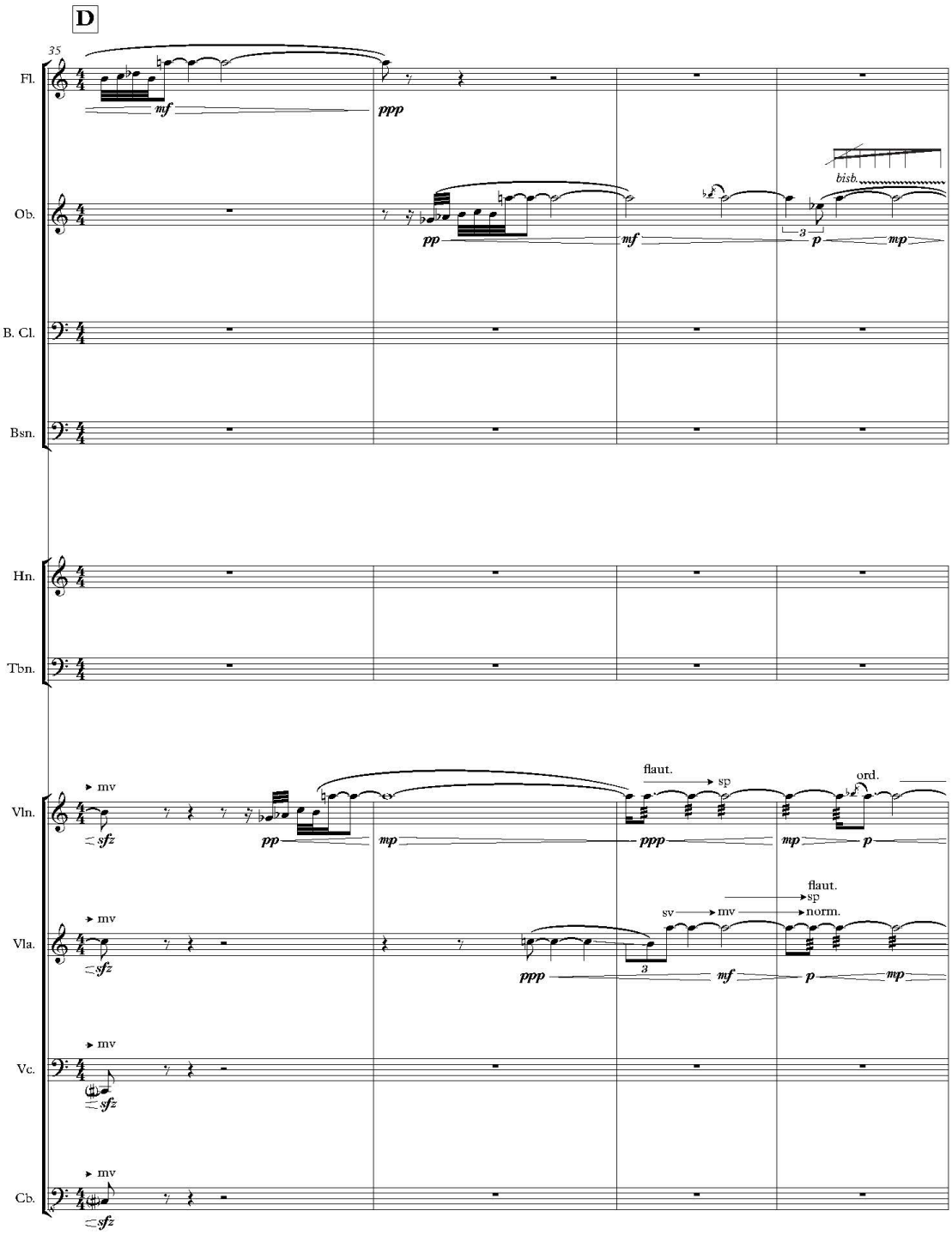

20
c. 3-5"
Fl.
mf
ppp
Ob.
mf
ppp
B. Cl.
inv
sv
3
3
sfz
mf
fp
mp
Bsn.
ppp
sfz
c. 3-5"
Hn.
Tbn.
c. 3-5"
Vln.
mf
ppp
Vla.
mf
ppp
sp
Vc.
ppp
sfz
Cb.

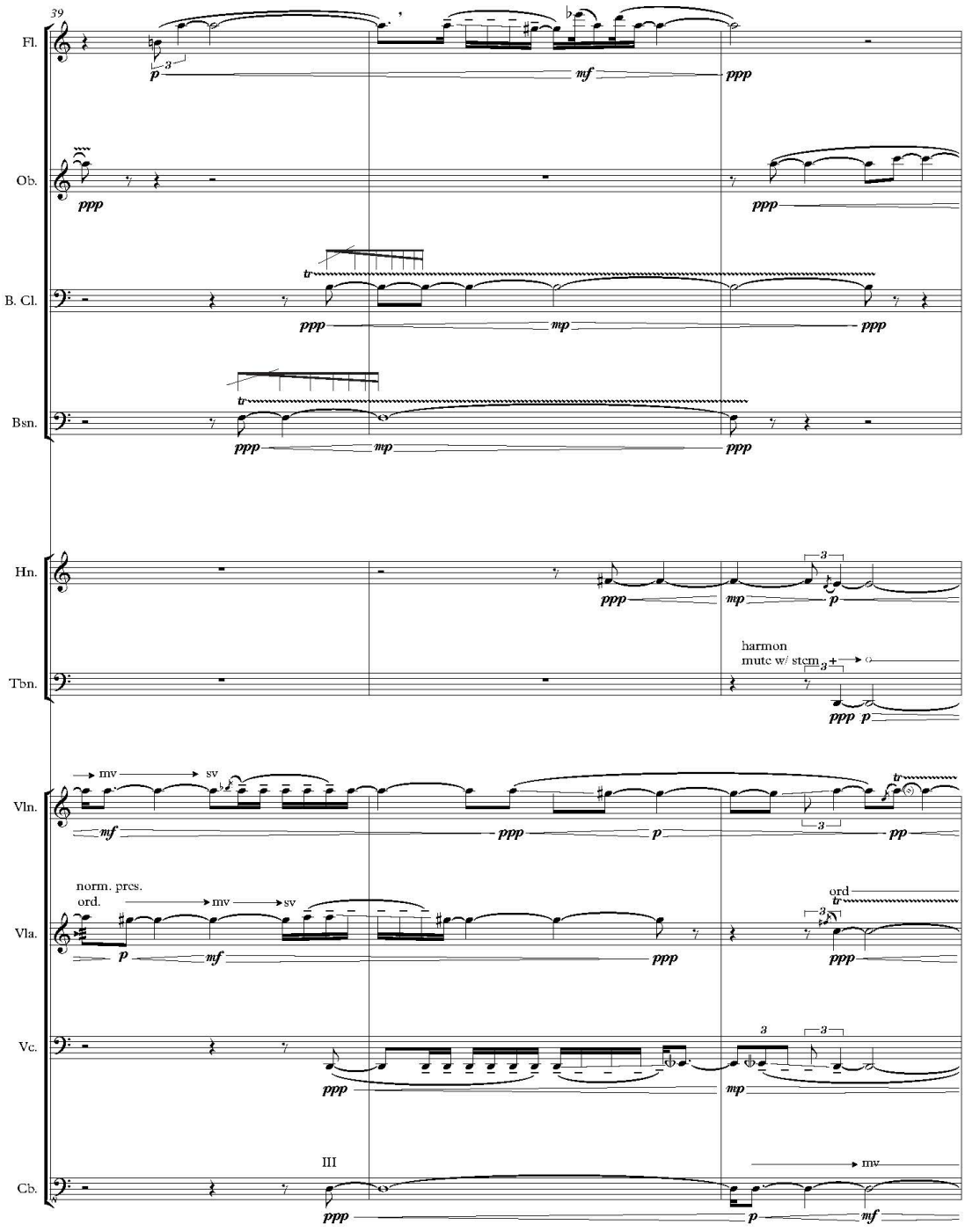

B
♩ = 54
24
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
lower partials
sp
ord
tr
ppp
mf
p
mp
pp
f

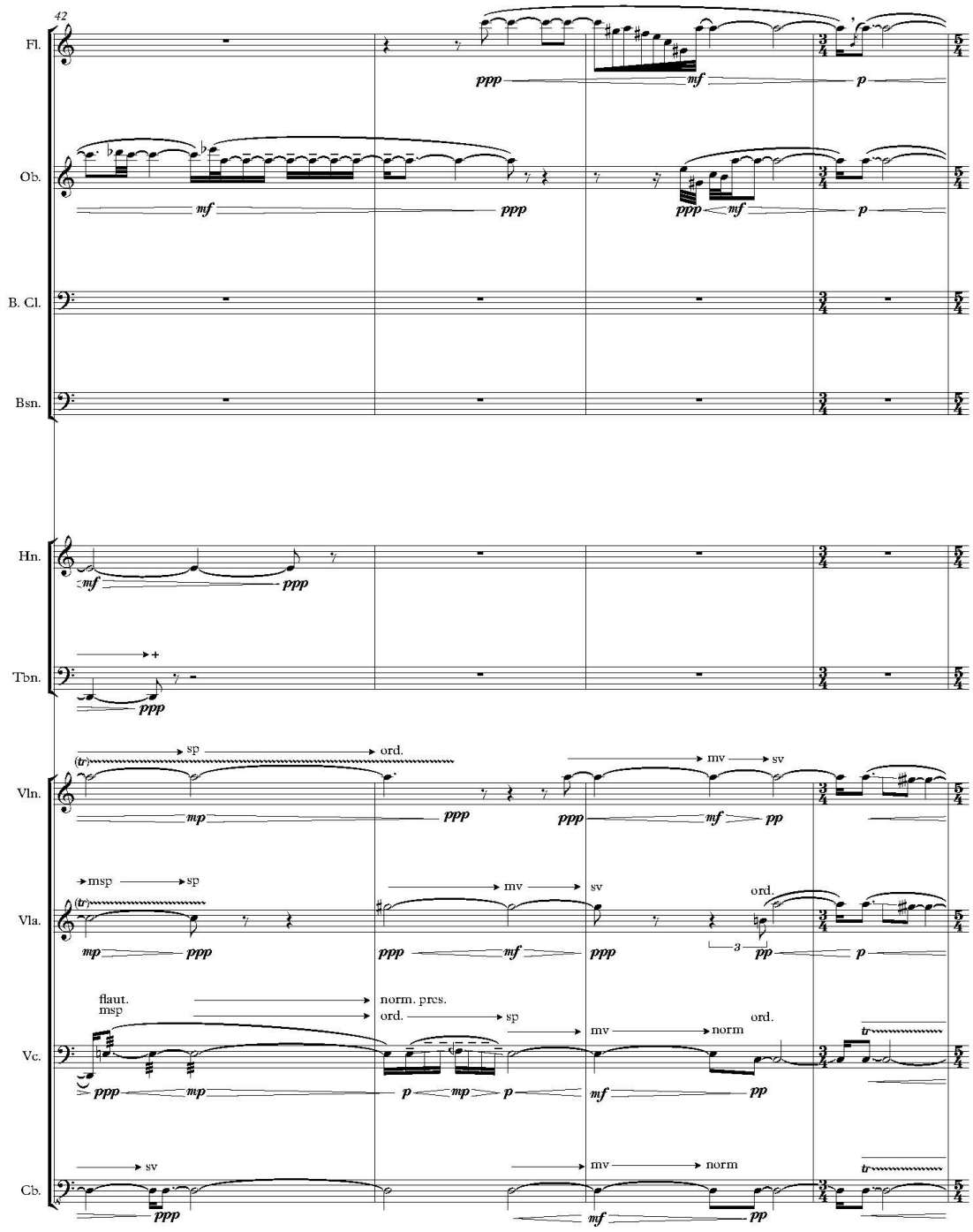

27
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
p
mp
p
3
mfp
mp
p
mfp
mp
p
mfp
mp

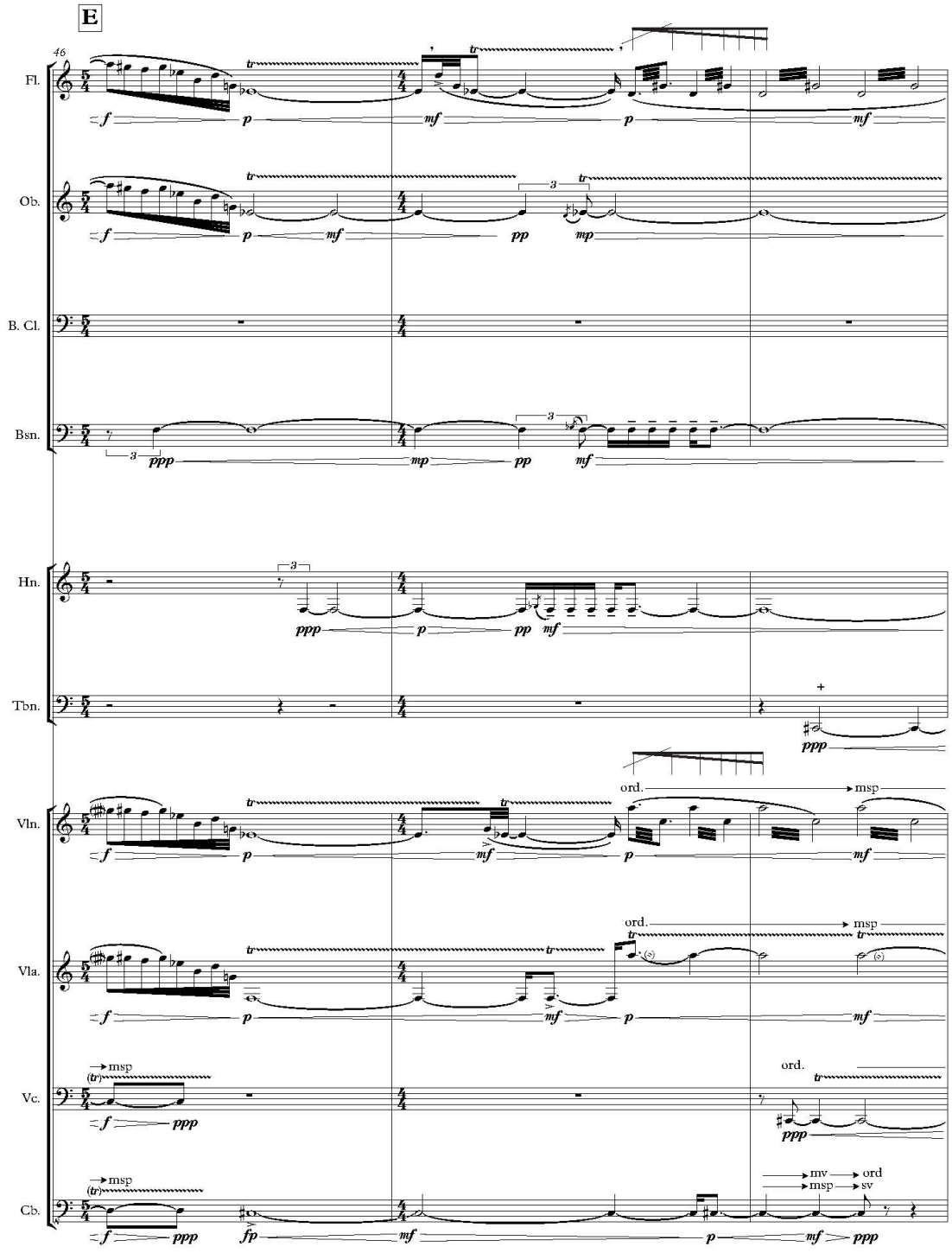

C
29
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
tr
bisb.
mf
p
ppp
pp
sp
ord
sfz
msp
mv
sv
ord.
psub

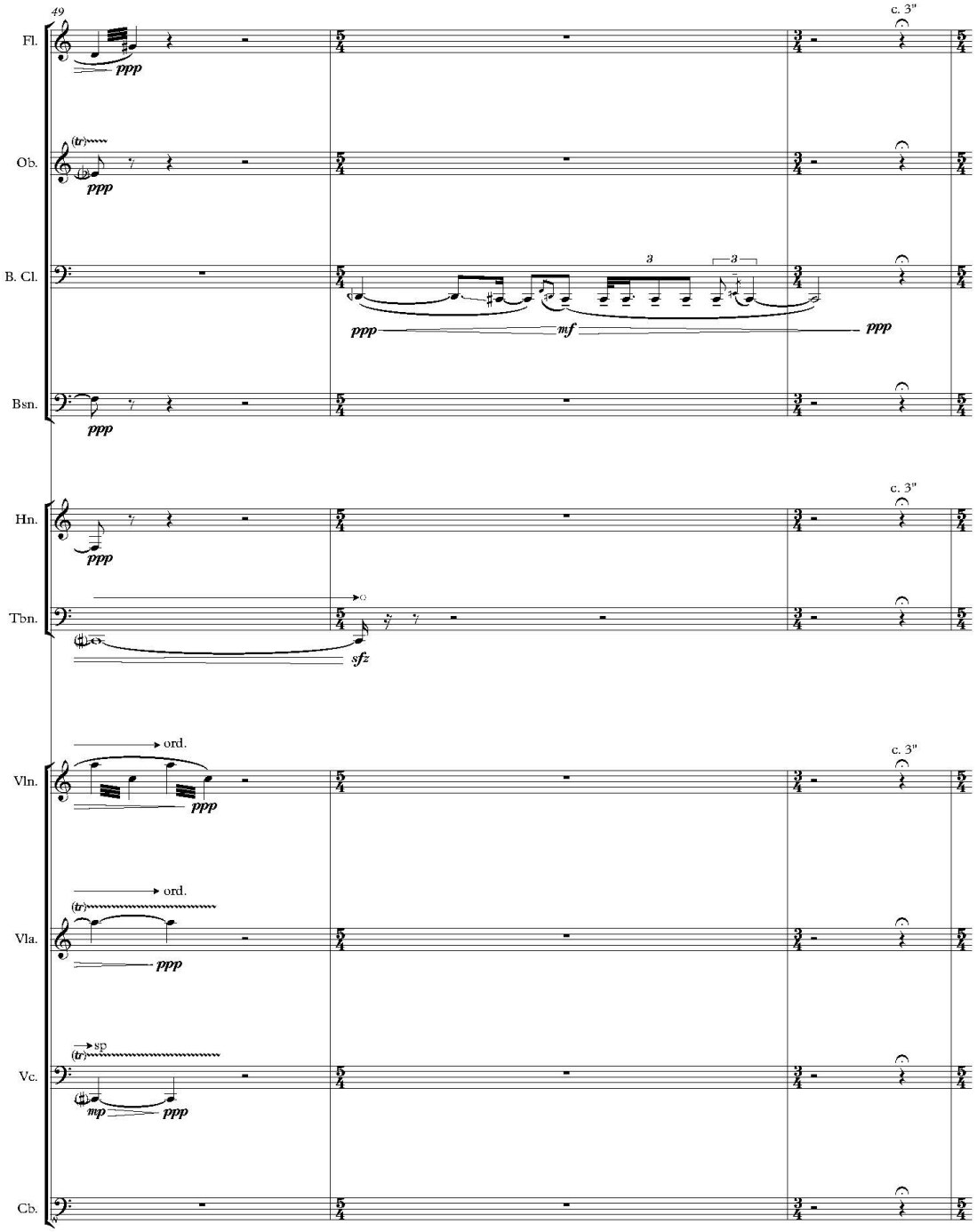

32
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
mv
norm.

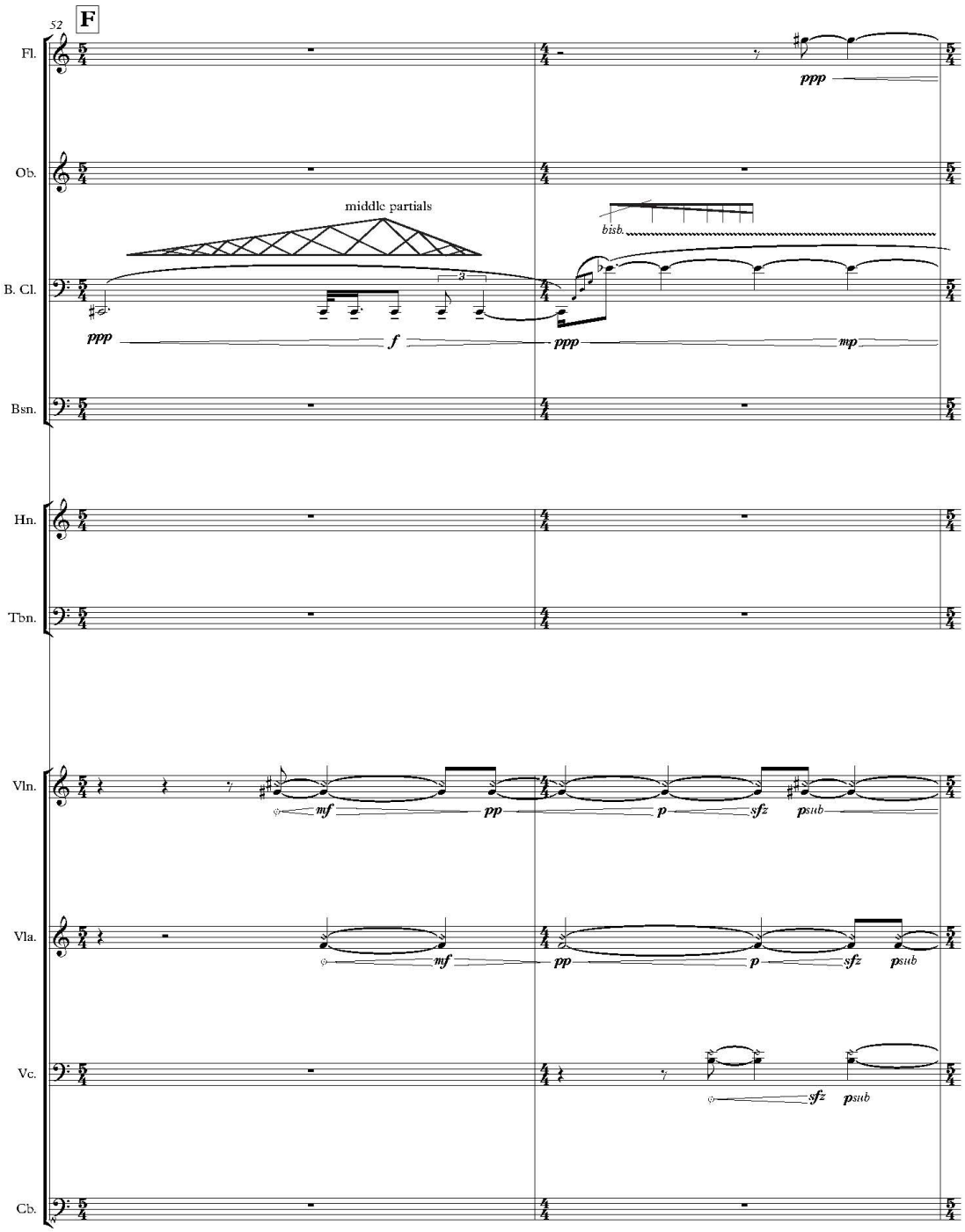

D
35
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
mf
ppp
pp
mf
bisb.
p
mp
mv
sfz
mp
ppp
flaut.
sp
ord.
sv
norm.

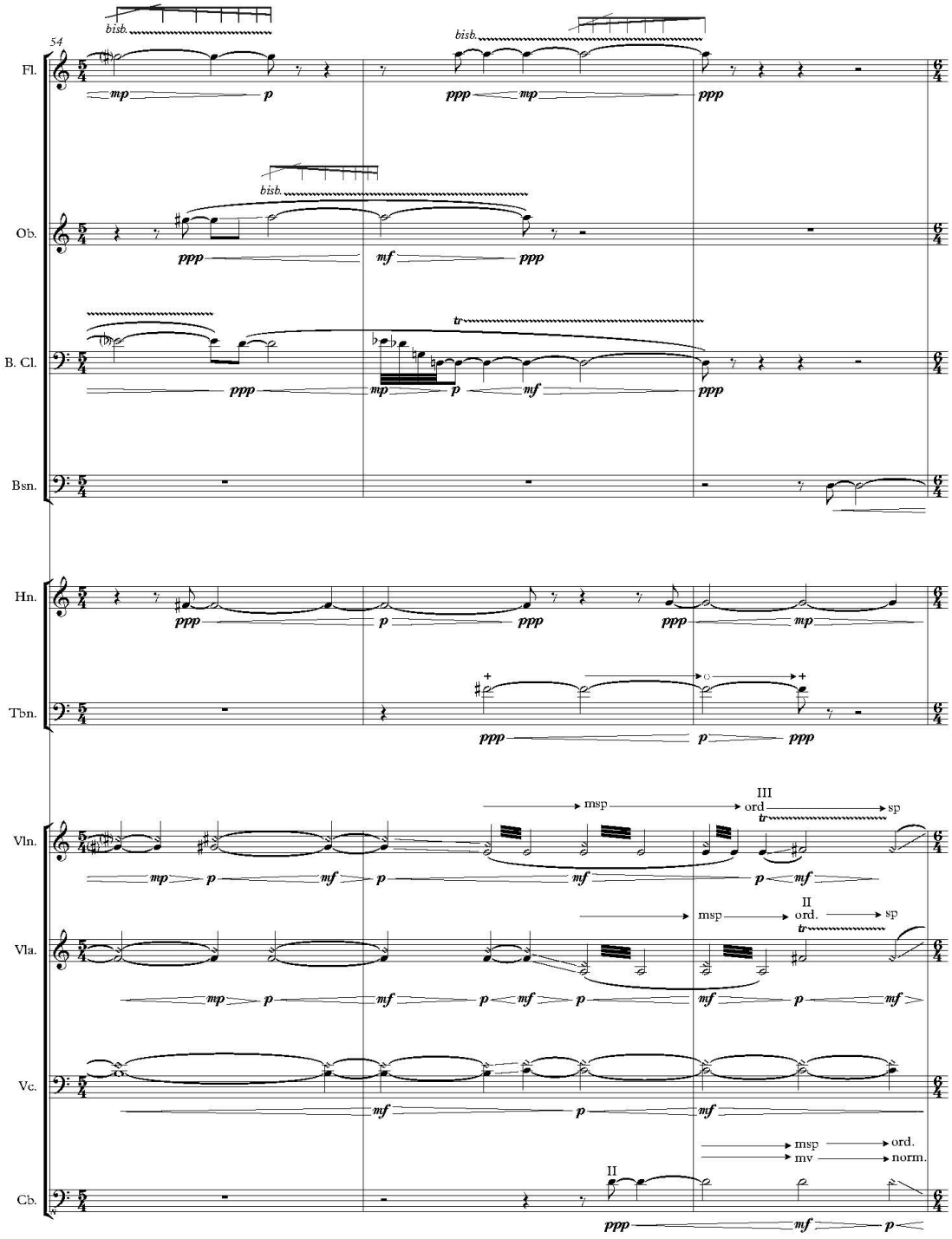

39
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
harmon
mute w/ stem
Vln.
mv
sv
Vla.
norm. prcs.
ord.
Vc.
III
Cb.

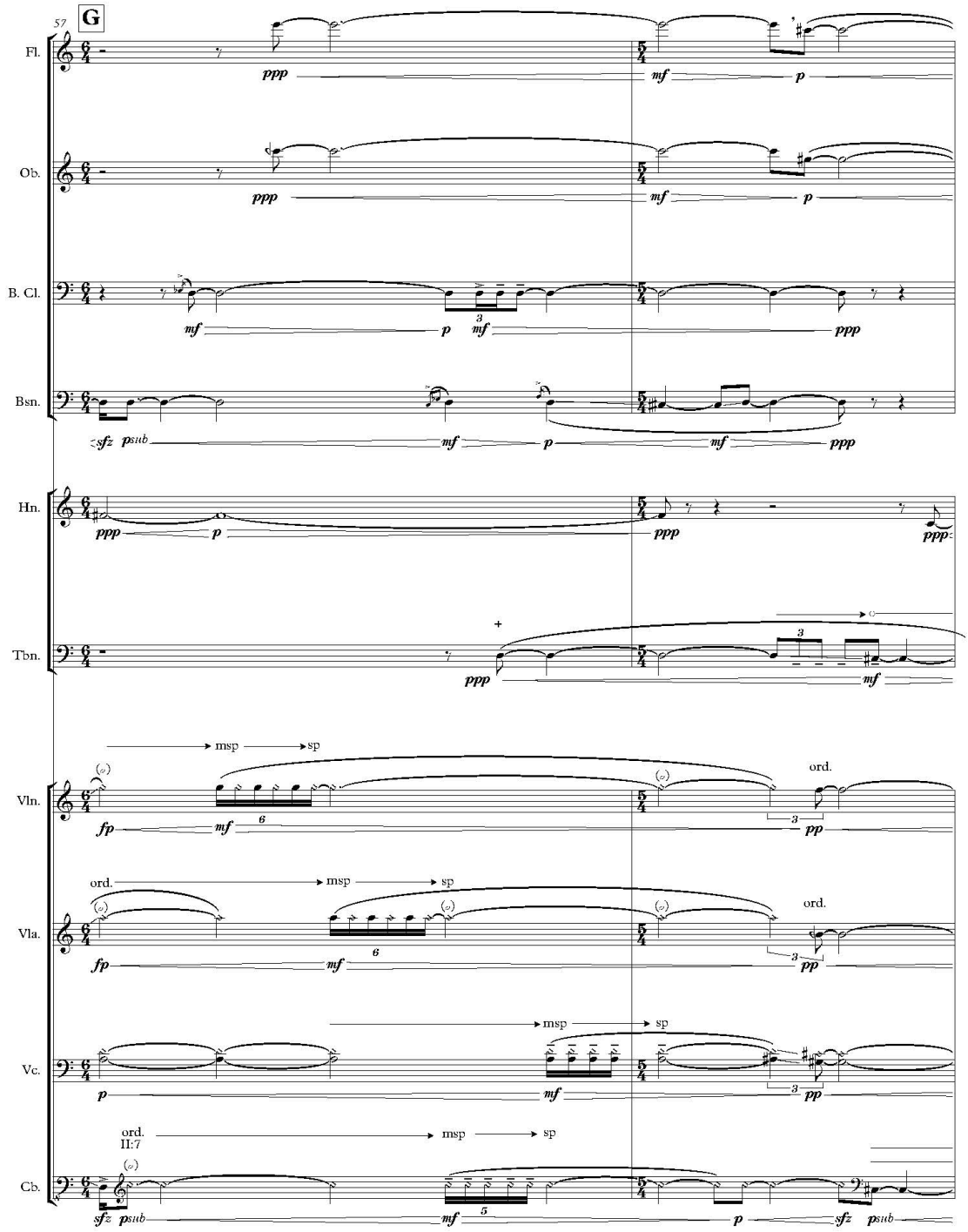

42
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
ppp
mf
p
mp
pp
sp
ord.
mv
sv
msp
flaut.
norm. pres.
norm
tr

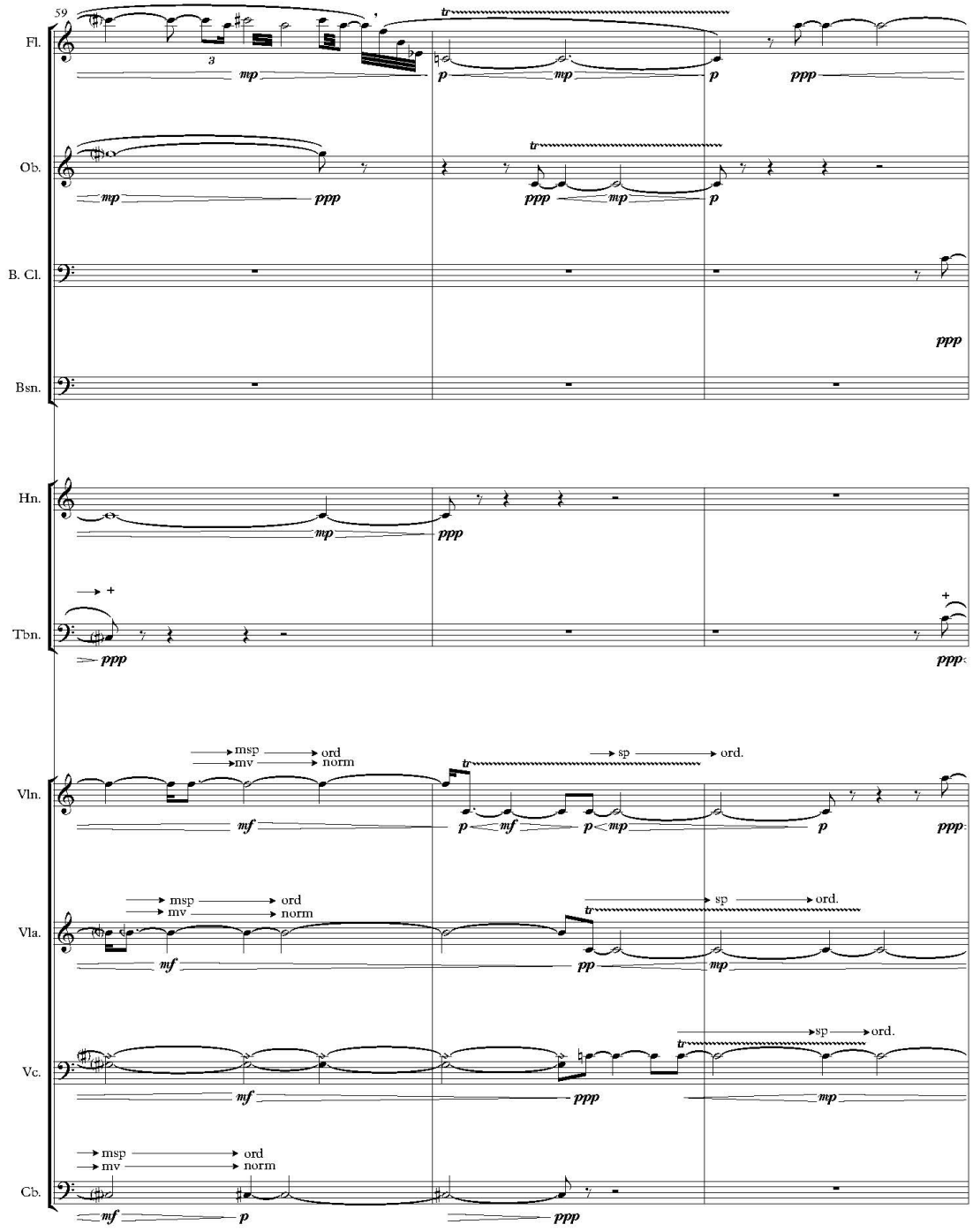

E
46
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
ord.
msp
mv
ord
msp
sv

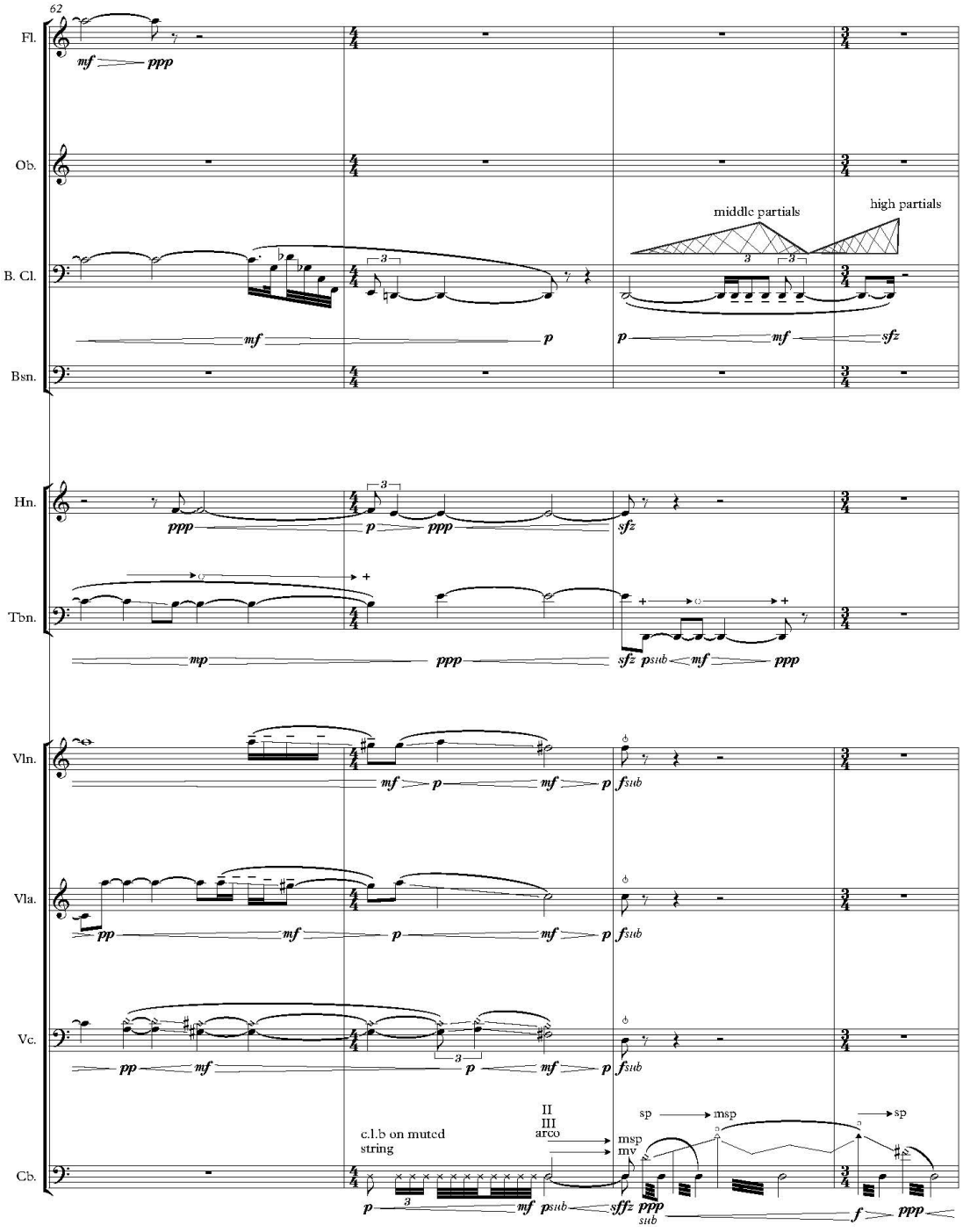

49
c. 3"
Fl.
ppp
Ob.
(tr)
ppp
B. Cl.
3
3
ppp
mf
ppp
Bsn.
ppp
c. 3"
Hn.
ppp
Tbn.
sfz
c. 3"
Vln.
ord.
ppp
Vla.
(tr)
ord.
ppp
Vc.
(tr)
sp
mp
ppp
Cb.

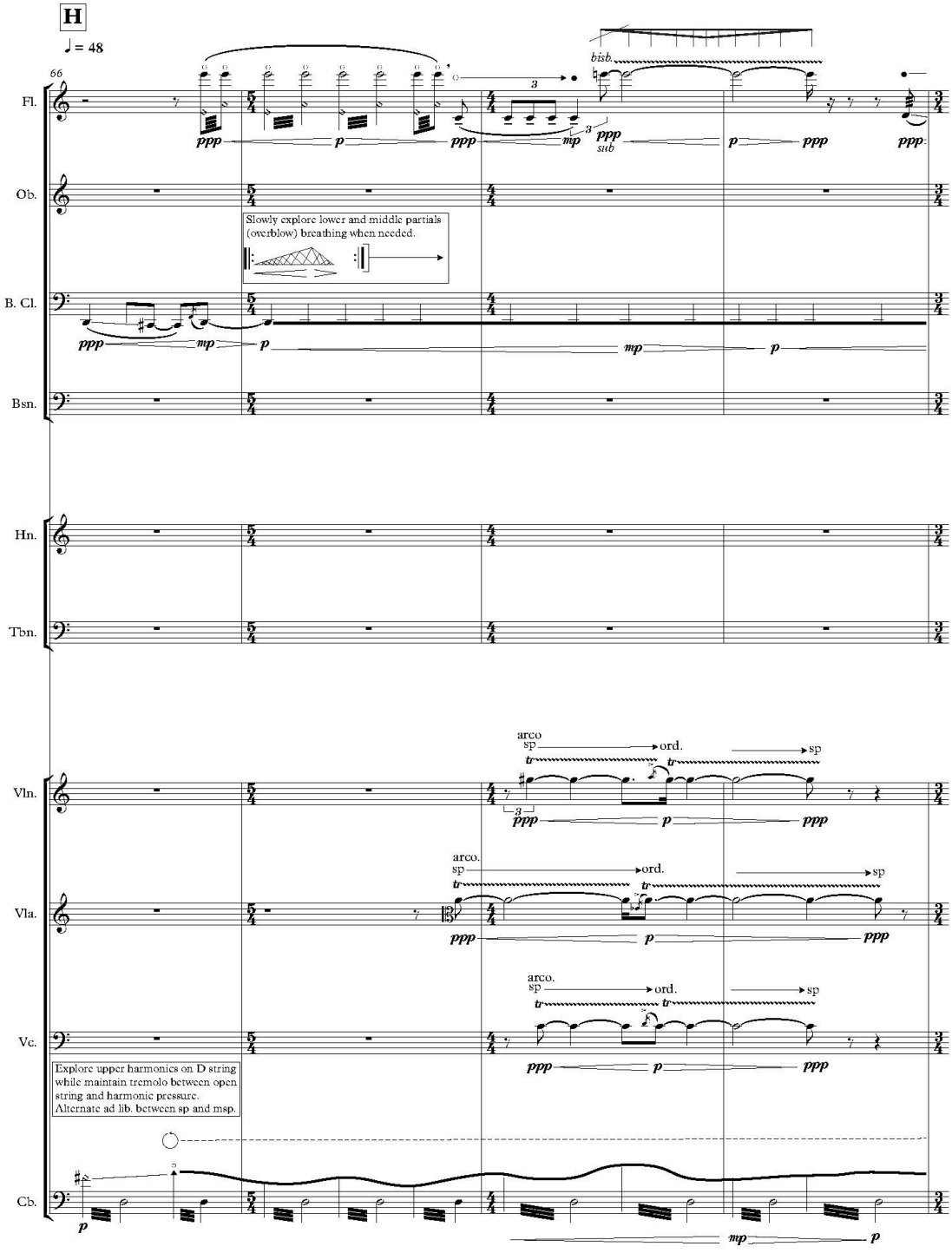

52
F
Fl.
ppp
Ob.
middle partials
bisb.
B. Cl.
ppp
f
ppp
mp
Bsn.
Hn.
Tbn.
Vln.
mf
pp
p
sfz
psub
Vla.
mf
pp
p
sfz
psub
Vc.
sfz
psub
Cb.

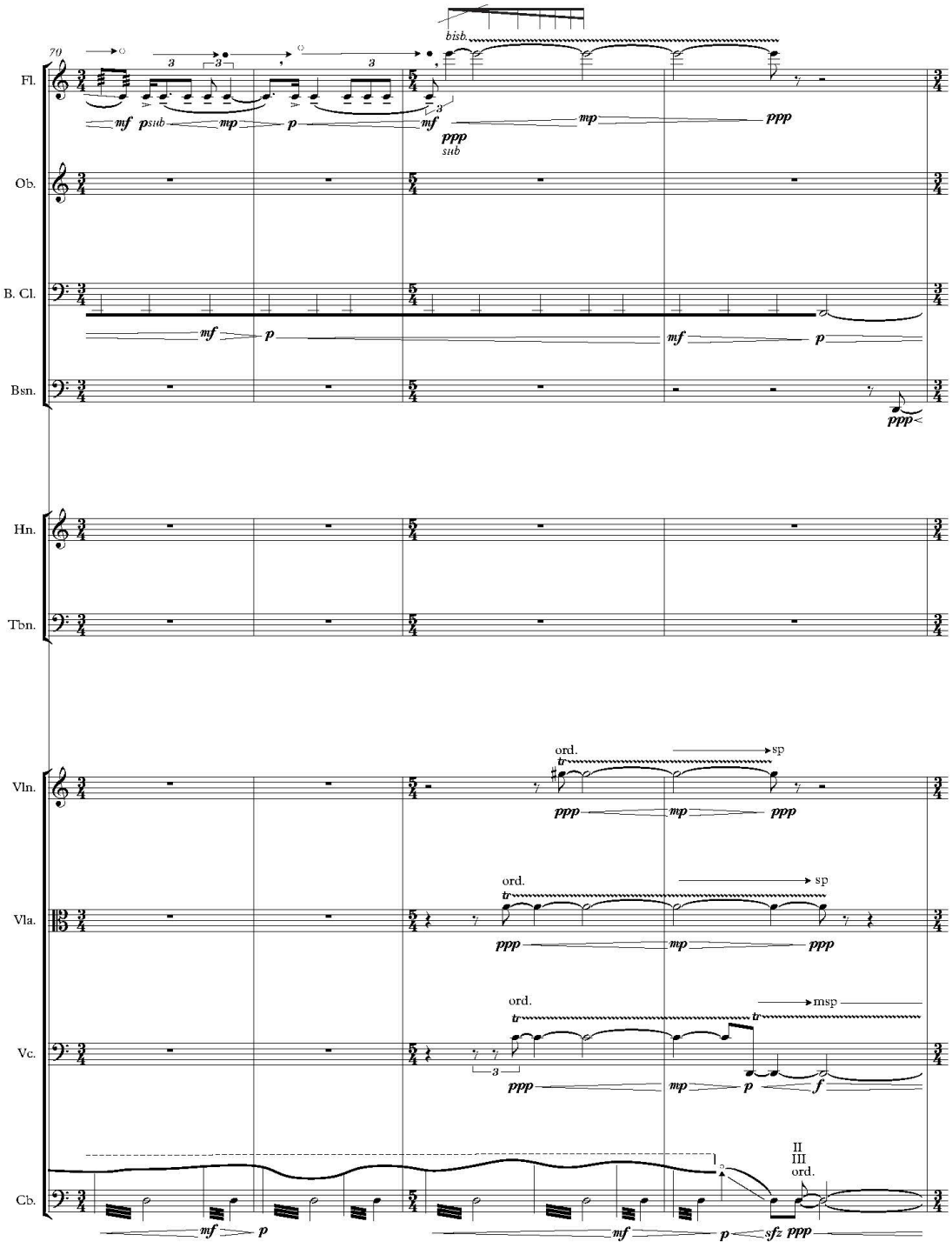

54
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
bisb.
tr
msp
ord
sp
III
II
mv
norm.

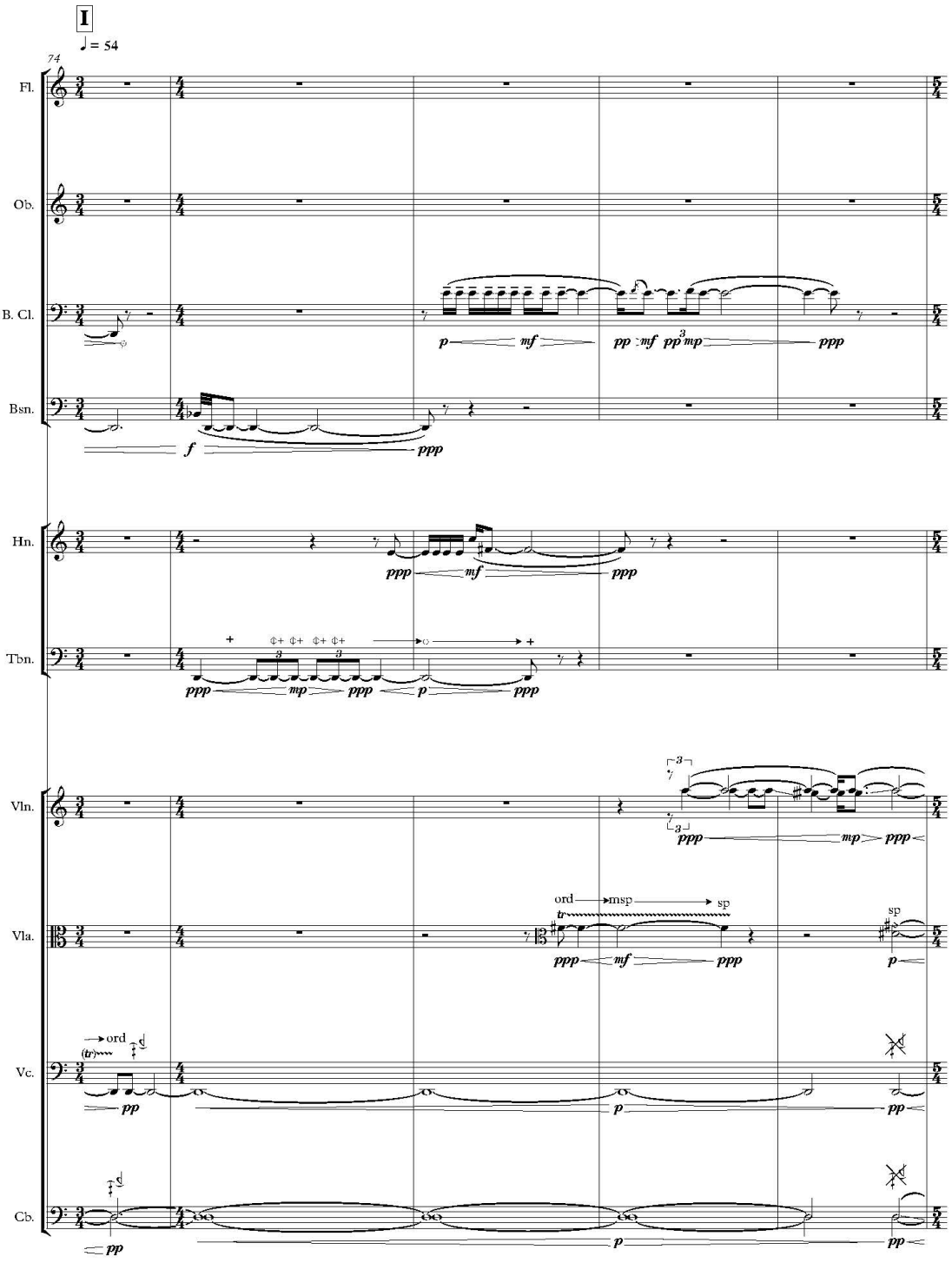

57
G
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
msp
sp
ord.
ord.
II:7

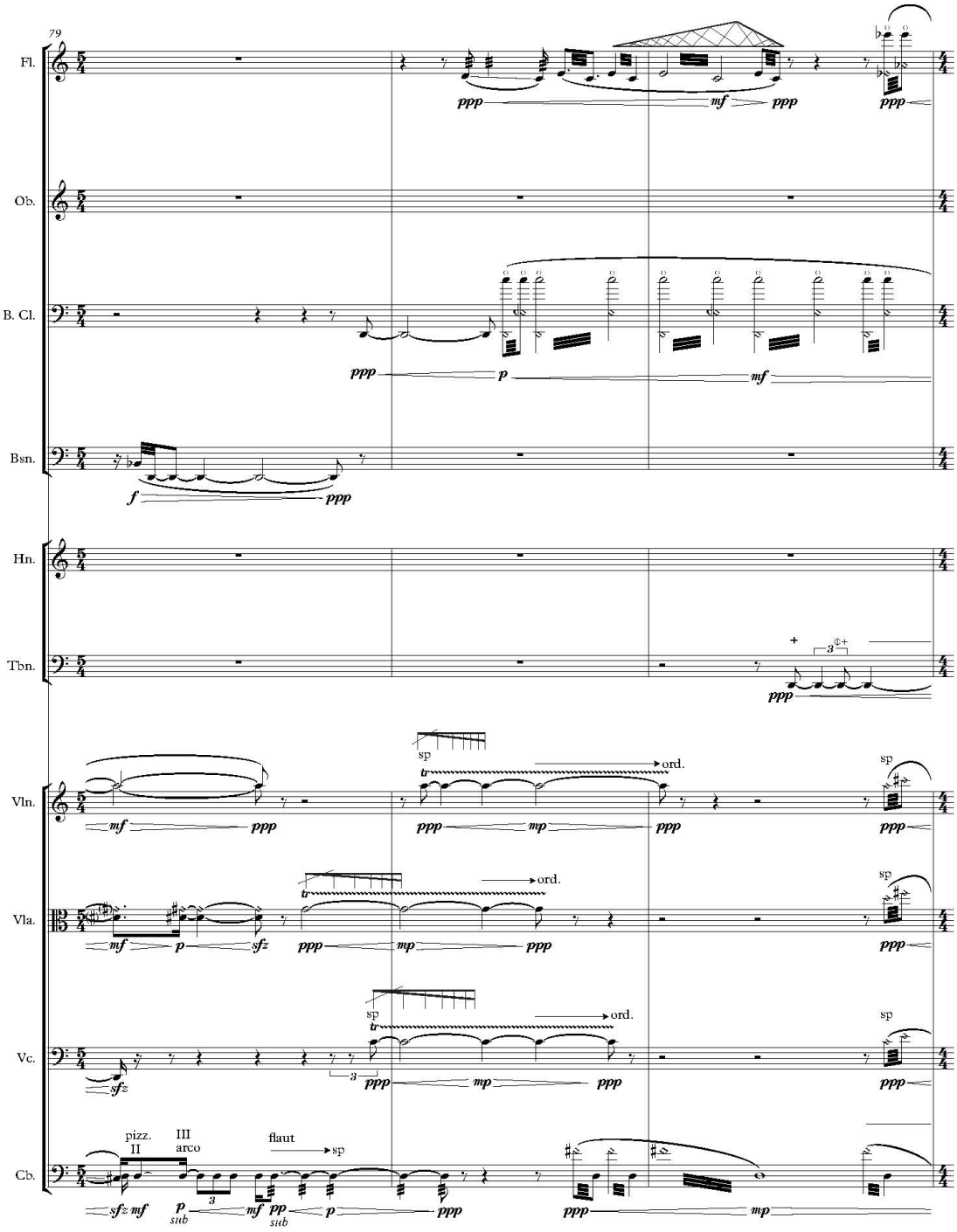

59
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
msp
mv
ord
norm
sp
ord.

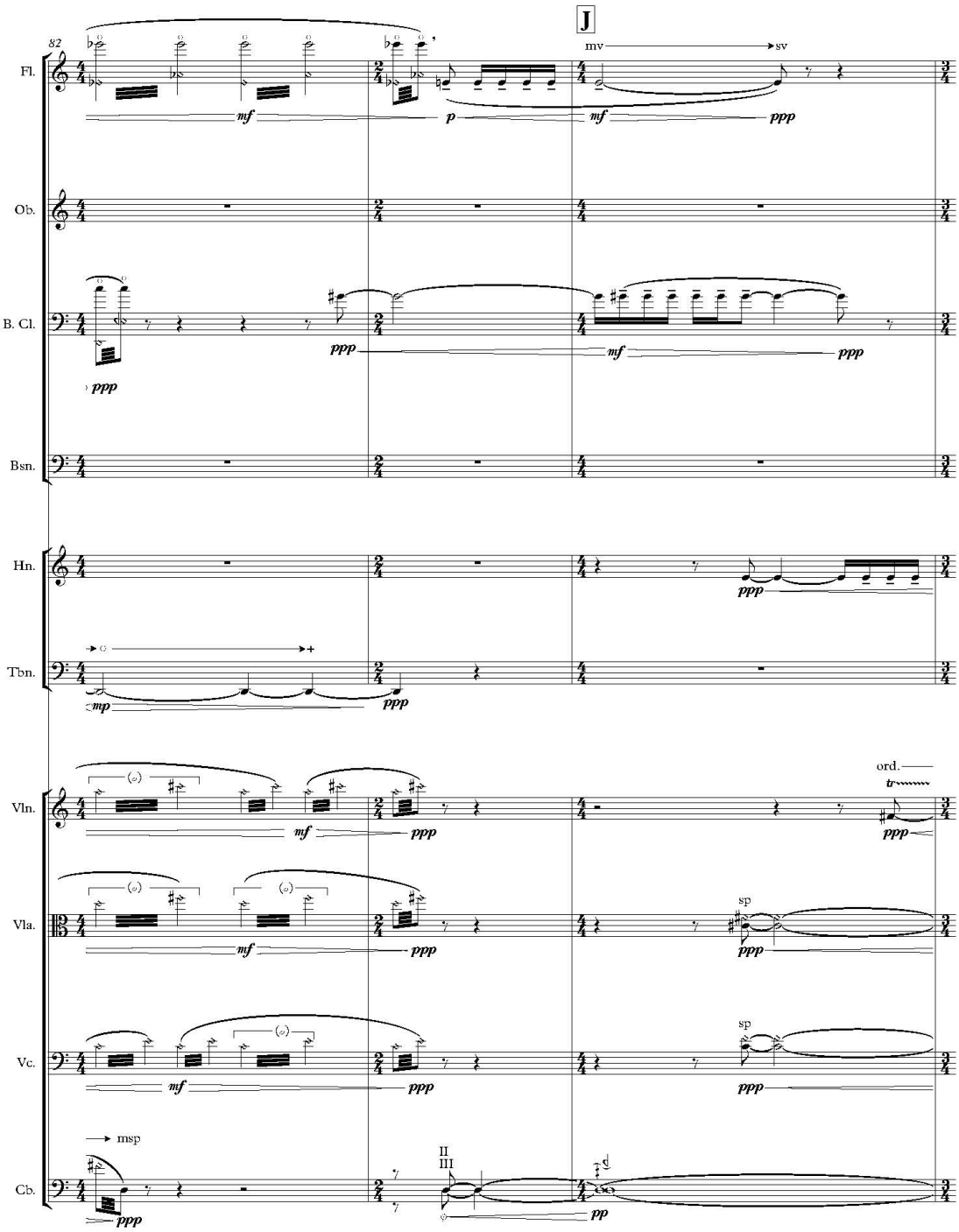

62
Fl.
Ob.
B. Cl.
Bsn.
middle partials
high partials
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
c.l.b on muted string
II
III
arco
sp
msp
mv

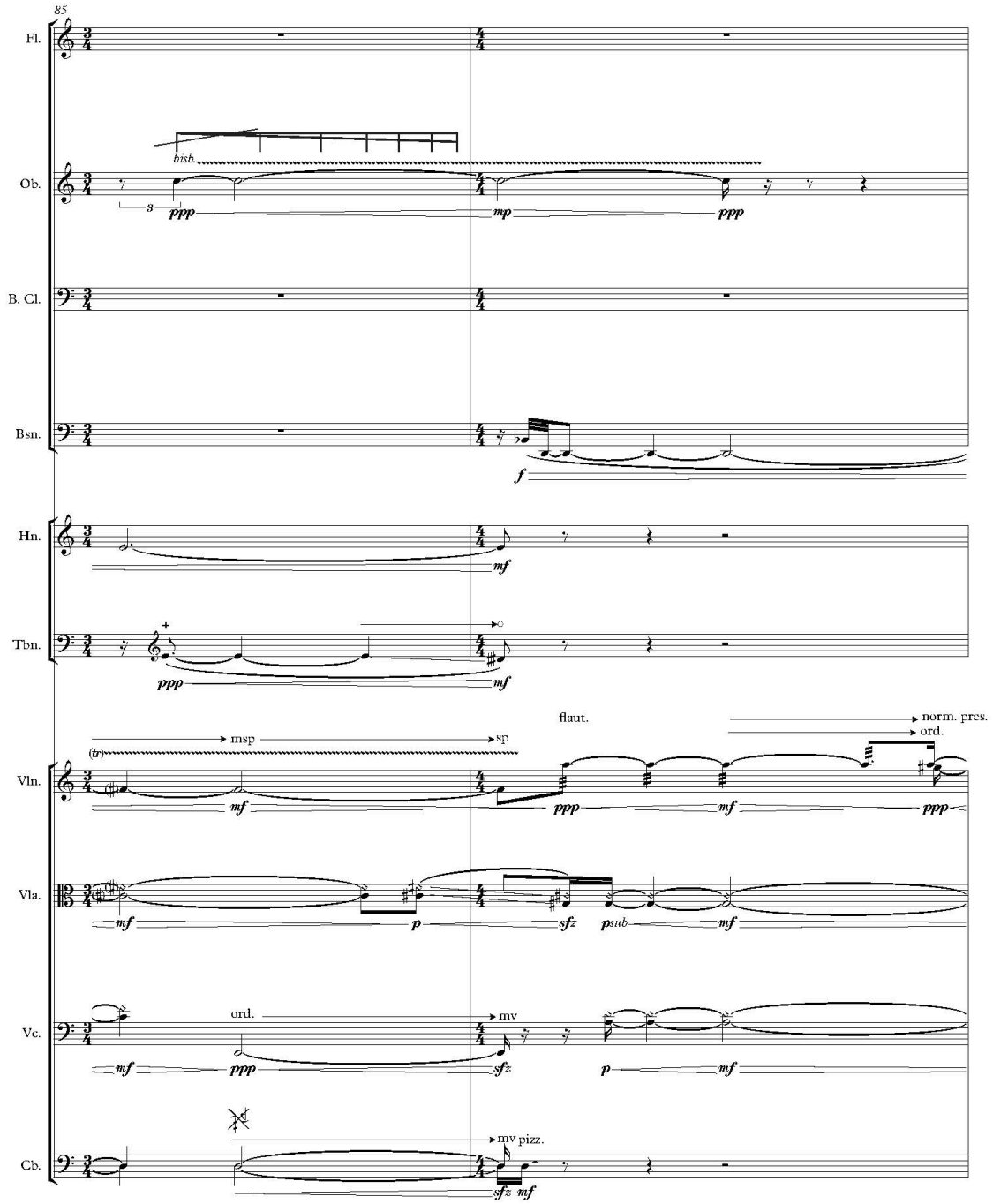

H
♩ = 48
66
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
bisb.
sub
Slowly explore lower and middle partials (overblow) breathing when needed.
arco
sp
ord.
Explore upper harmonics on D string while maintain tremolo between open string and harmonic pressure. Alternate ad lib. between sp and msp.

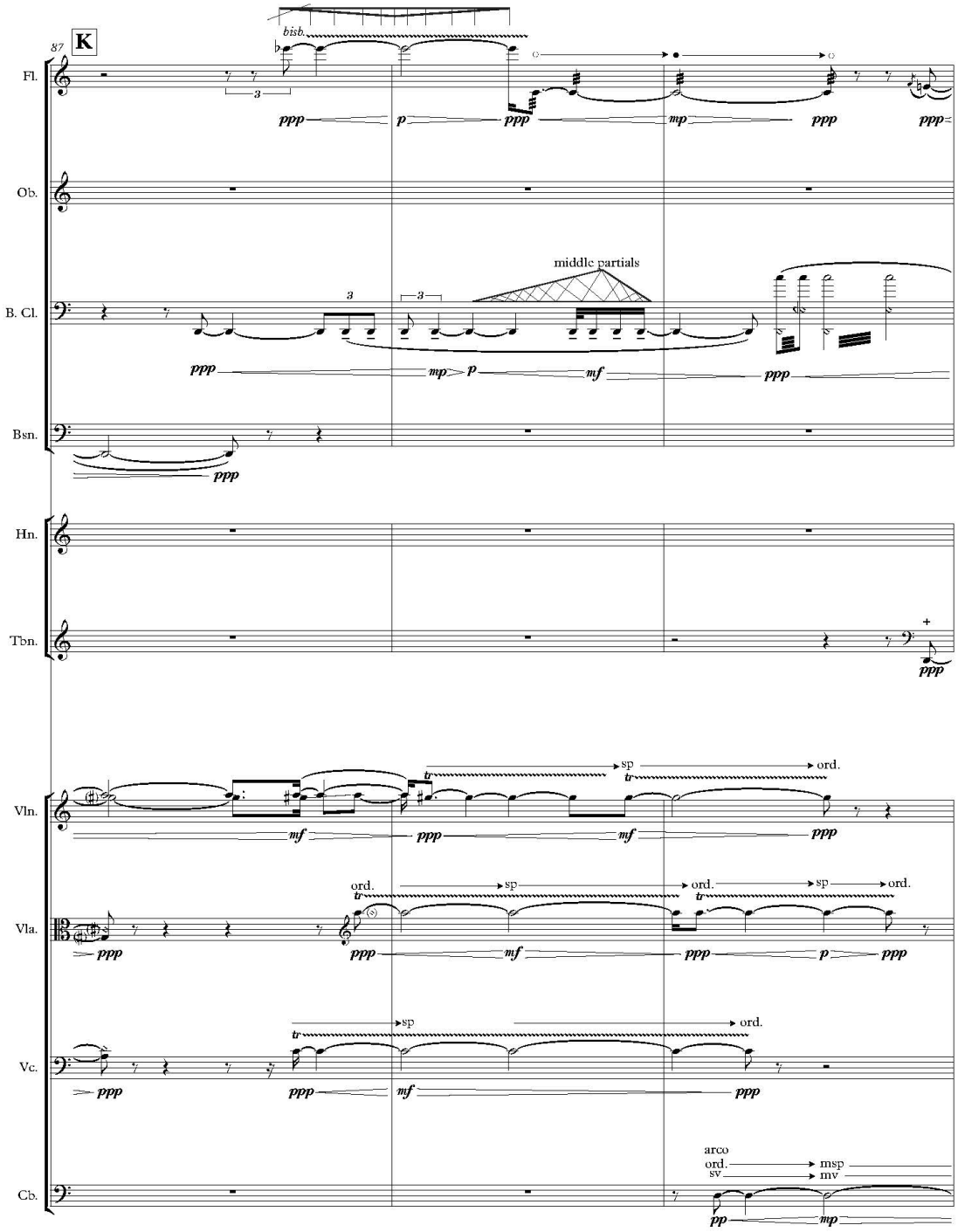

70
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
bisb.
mf psub mp p
mf
ppp sub
mp ppp
mf p
mf p
ppp
ord.
sp
ppp mp ppp
ord.
sp
ppp mp ppp
ord.
msp
ppp mp p f
II
III
ord.
mf p
mf p sfz ppp

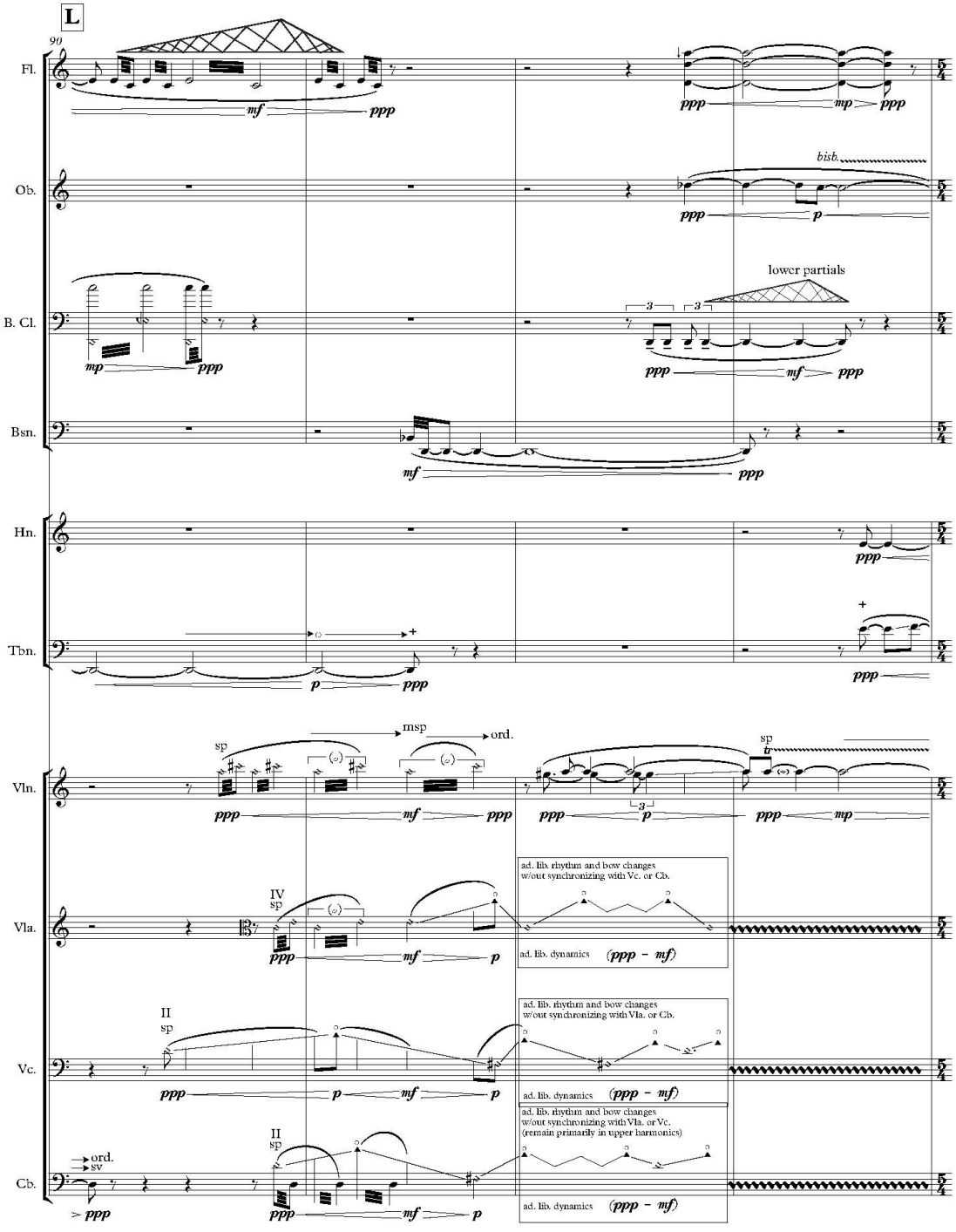

I
♩ = 54
74
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
ord
msp
sp

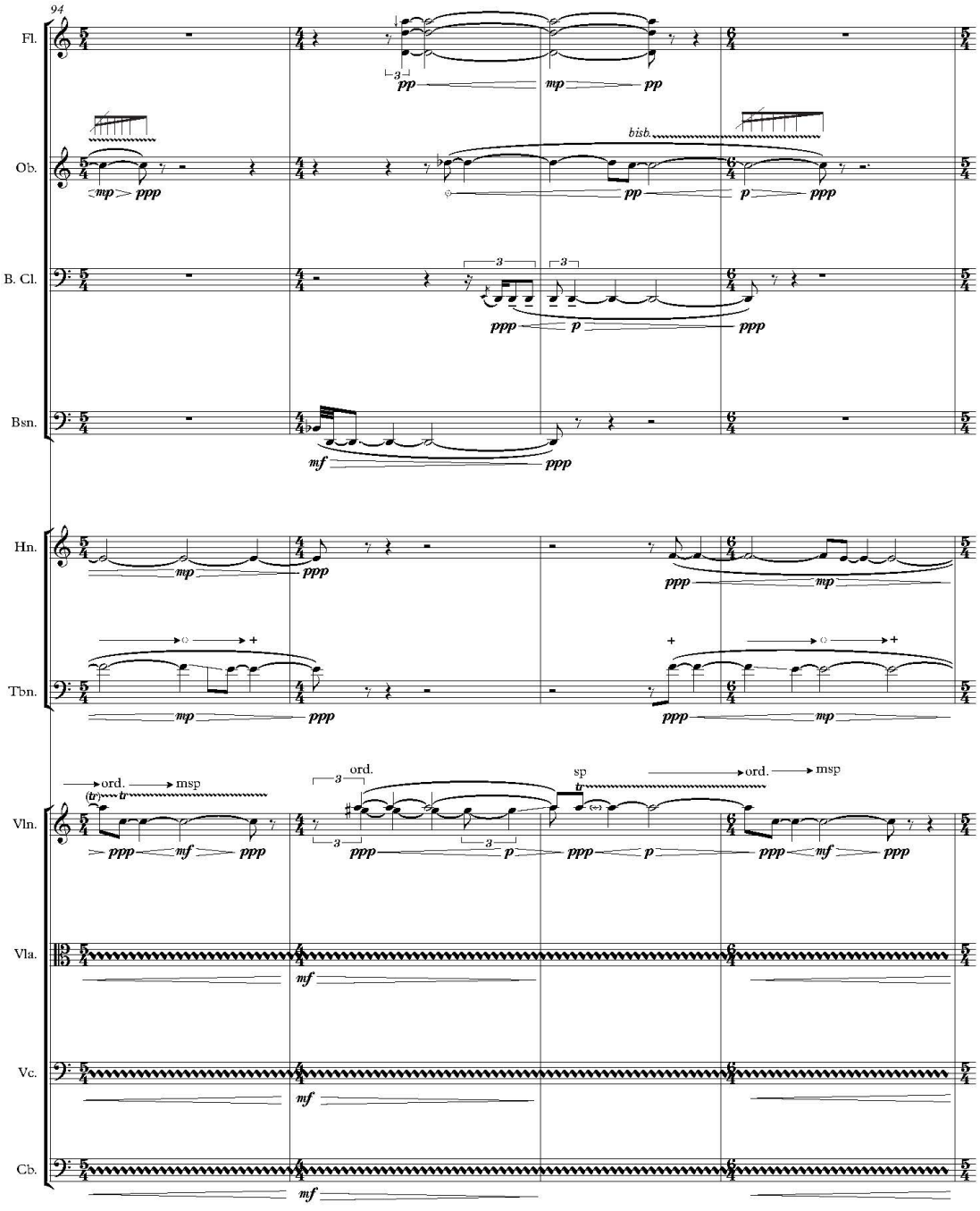

79
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
ppp
mf
p
f
sfz
mp
sp
ord.
tr
pizz.
II
III
arco
flaut
sub

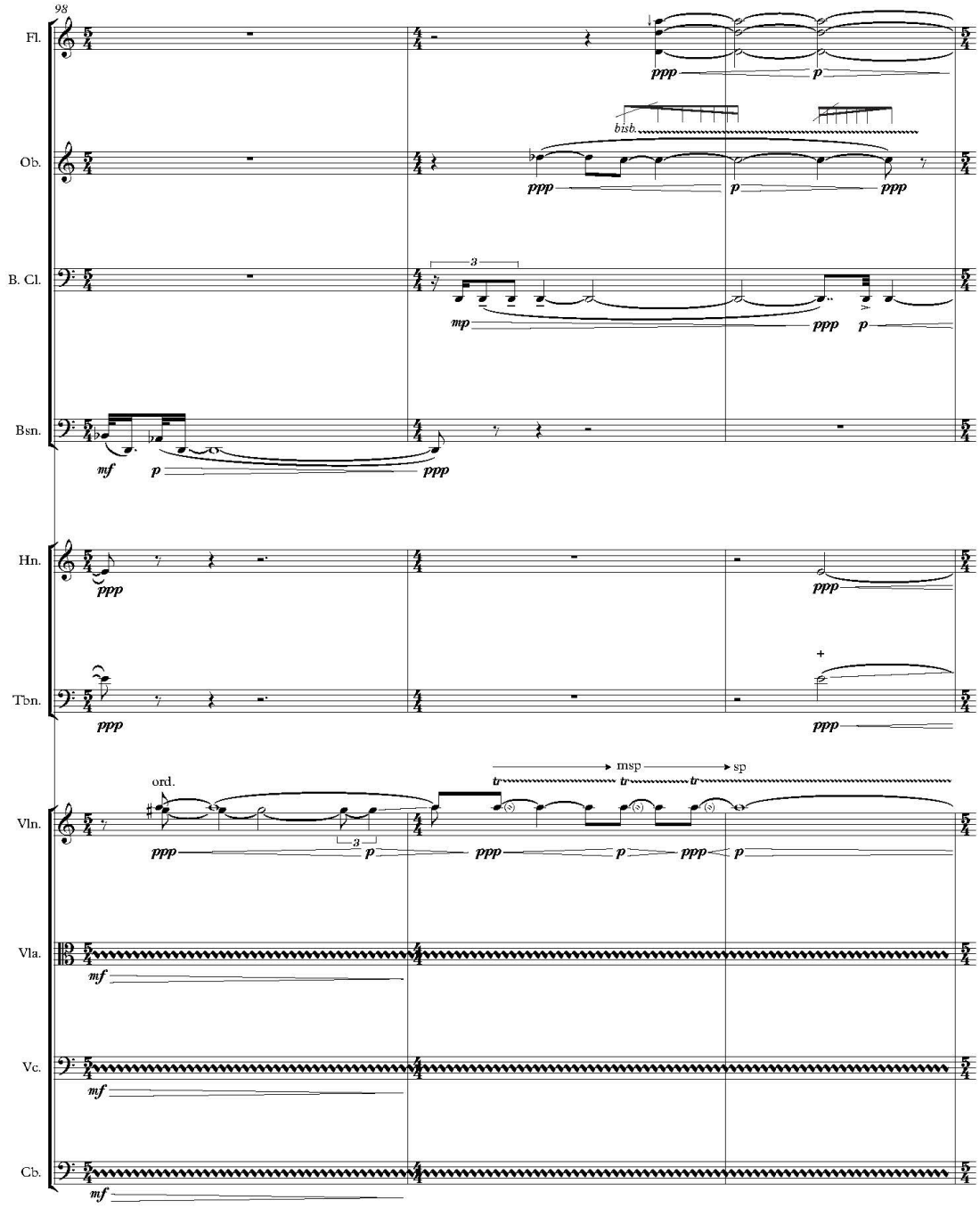

J
82
mv
sv
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
ord.
sp
msp
II
III

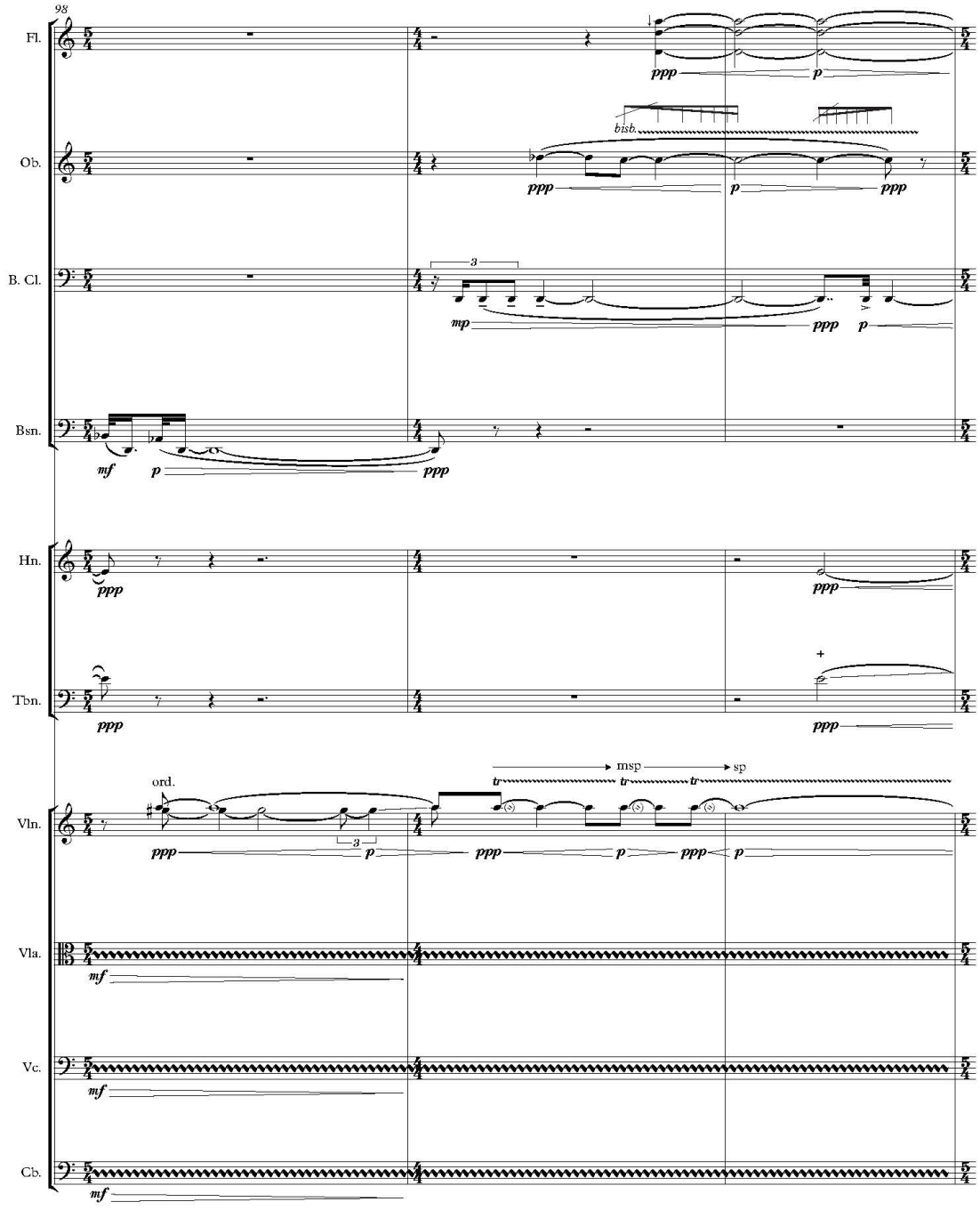

85
Fl.
bisb.
Ob.
3
ppp
mp
ppp
B. Cl.
Bsn.
f
Hn.
mf
Tbn.
+
ppp
mf
flaut.
norm. pres.
ord.
msp
sp
(tr)
Vln.
mf
ppp
mf
ppp
Vla.
mf
p
sfz
psub
mf
Vc.
ord.
mv
mf
ppp
sfz
p
mf
Cb.
mv pizz.
sfz
mf

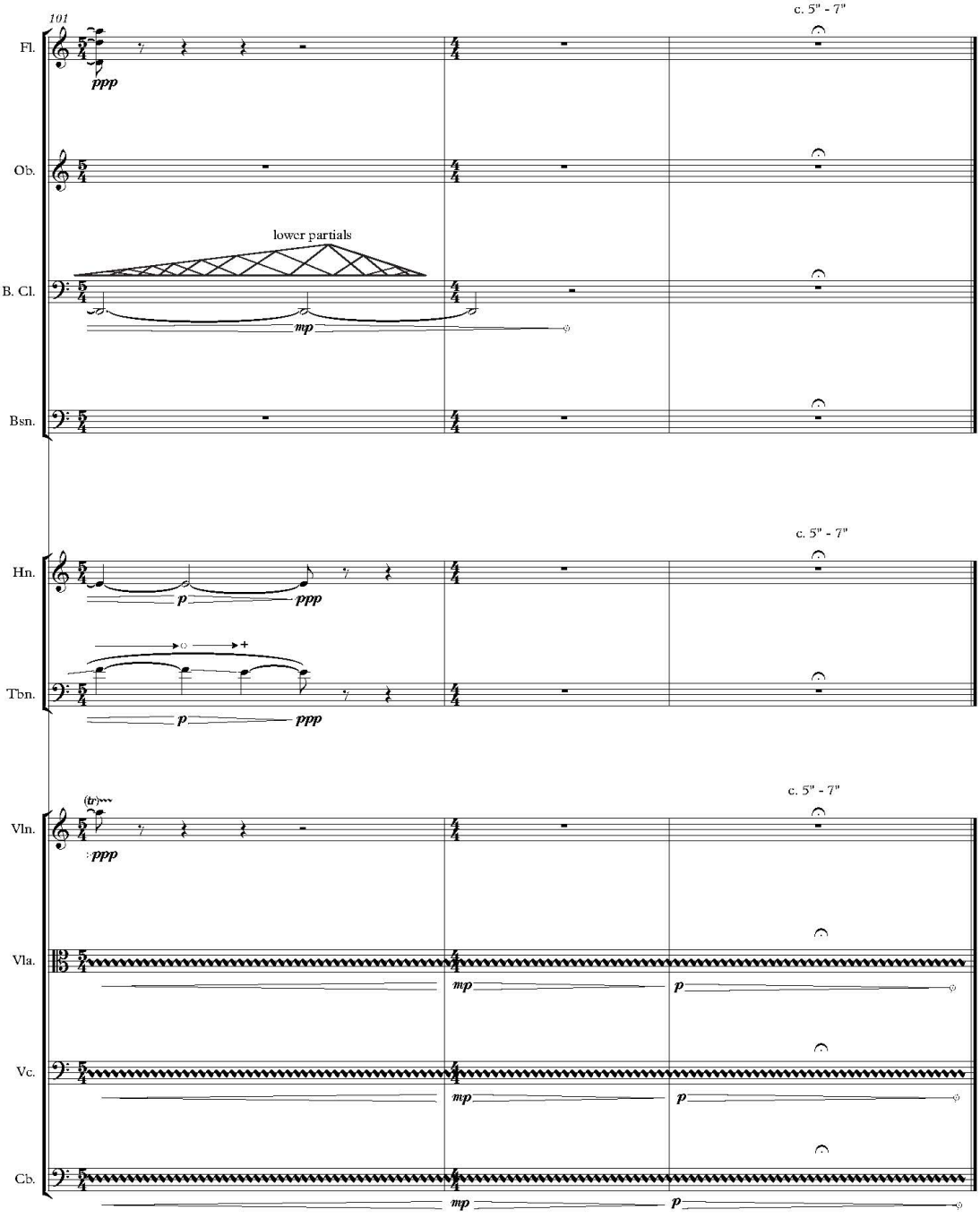

87
K
bisb.
Fl.
Ob.
B. Cl.
middle partials
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
sp
ord.
arco
msp
mv
sv


L
90
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
bisb.
lower partials
msp
ord.
sp
IV
II
ord.
sv
ad. lib. rhythm and bow changes
w/out synchronizing with Vc. or Cb.
ad. lib. dynamics (ppp – mf)
ad. lib. rhythm and bow changes
w/out synchronizing with Vla. or Cb.
ad. lib. dynamics (ppp – mf)
ad. lib. rhythm and bow changes
w/out synchronizing with Vla. or Vc.
(remain primarily in upper harmonics)
ad. lib. dynamics (ppp – mf)


94
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
bisb.
ord.
msp
sp


98
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
bisb.
ord.
msp
sp
ppp
p
mp
mf


98
Fl.
Ob.
B. Cl.
Bsn.
Hn.
Tbn.
Vln.
Vla.
Vc.
Cb.
bisb.
ord.
msp
sp


101
c. 5" - 7"
Fl.
ppp
Ob.
lower partials
B. Cl.
mp
Bsn.
c. 5" - 7"
Hn.
p
ppp
Tbn.
p
ppp
c. 5" - 7"
(tr)
Vln.
ppp
Vla.
mp
p
Vc.
mp
p
Cb.
mp
p

Contrasts

for piano solo

Bryndan Moondy

General:

In **the opening of the first movement** time has been quantified in seconds without a specific meter or tempo. During this section, the durations written above the staff should be taken as approximations with the proportion of one to the next being of greater importance than the exact number of seconds within each.

The length of the **large fermatas** which appear throughout the score should fall roughly within the specified durations; however, they may be held longer depending on the size and resonance of the performance space.

The **small noteheads in the second movement** should be interpreted as echoes of the note or chord which they follow and should be played at an ever decreasing dynamic.

The **sustain pedal** should remain depressed at the end of each movement. Do not release until indicated.


Cluster containing all white and black keys within given interval

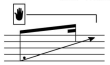

Cluster containing only white keys within given interval

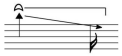
Techniques inside the piano:

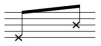

Hit the lowest bass strings with an open palm


Use **plectrum** to slowly scrape along the length of the indicated string. Irregularly vary the speed and pressure of the scrape.

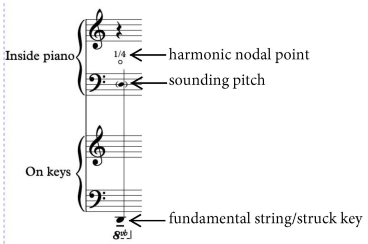

Use finger to mute the indicated string. Do not dampen completely as pitch should still be recognizable. **Bass strings** should be touched at the beginning of the winding. **Treble strings** should be muted at the bridge.


Use multiple fingers to gliss. across the strings within the indicated register.


Use plectrum to gliss. across the string behind the bridge approximately between G6 and D5.


Use **medium/hard yarn mallet** or knuckle to knock piano struts.
Bottom line indicates strut with lower resonance and middle line indicates strut with higher resonance.

Harmonics (Mvmt. III):



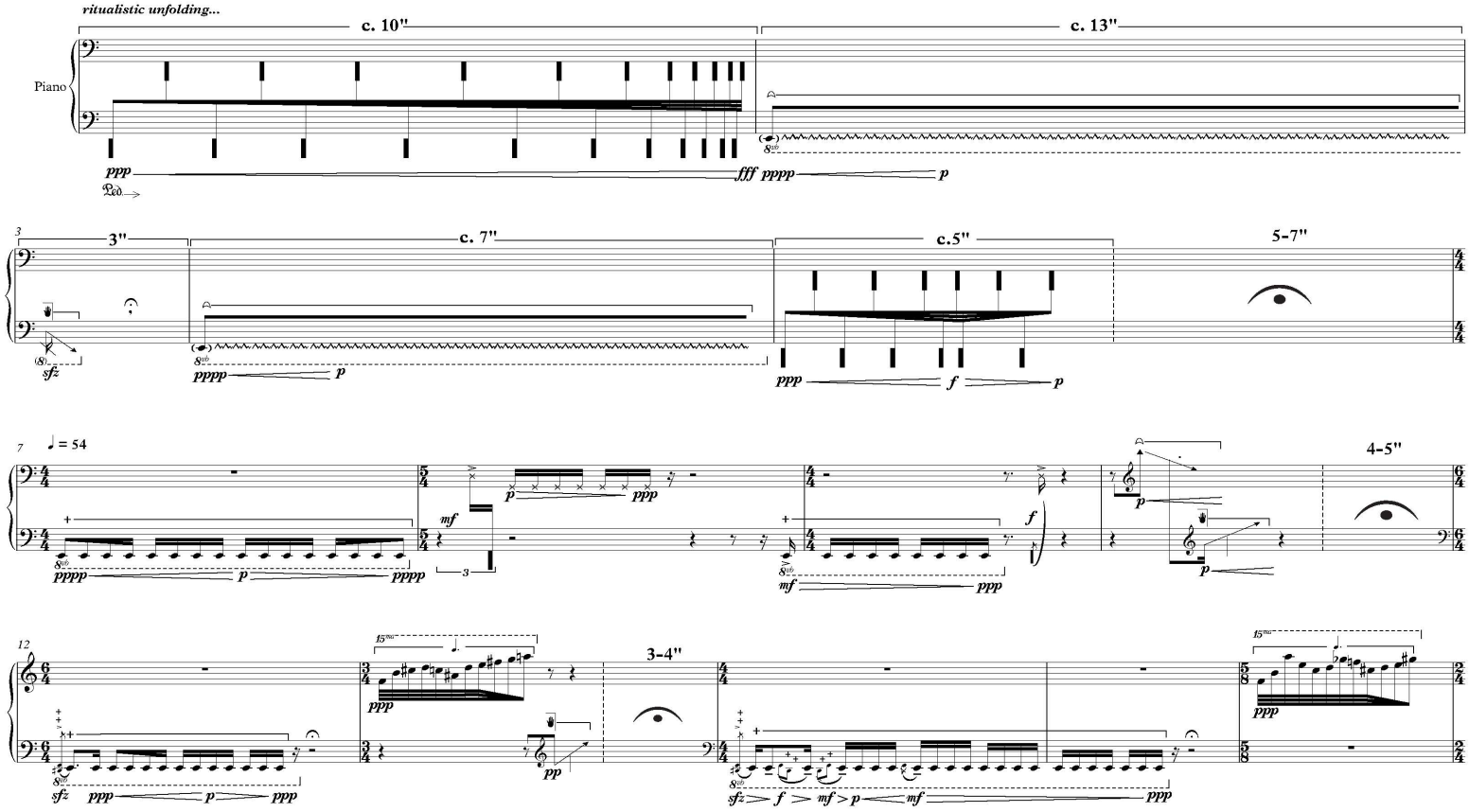
To produce harmonics on **wound bass strings** finger should remain on the nodal point after the keys is struck.

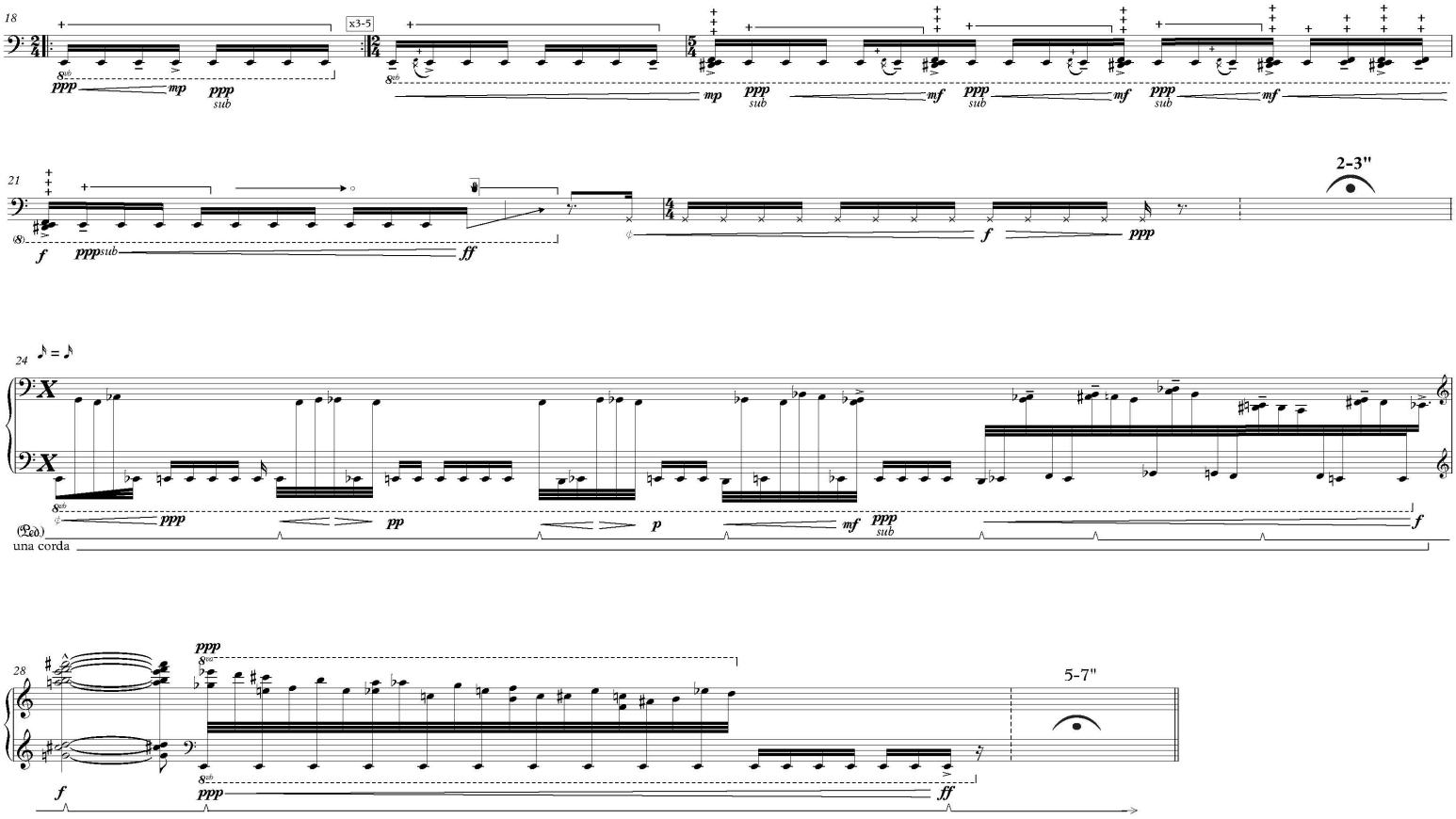
To produce harmonics on **treble strings** finger should be removed from nodal point imediately after the key is struck.

Contrasts

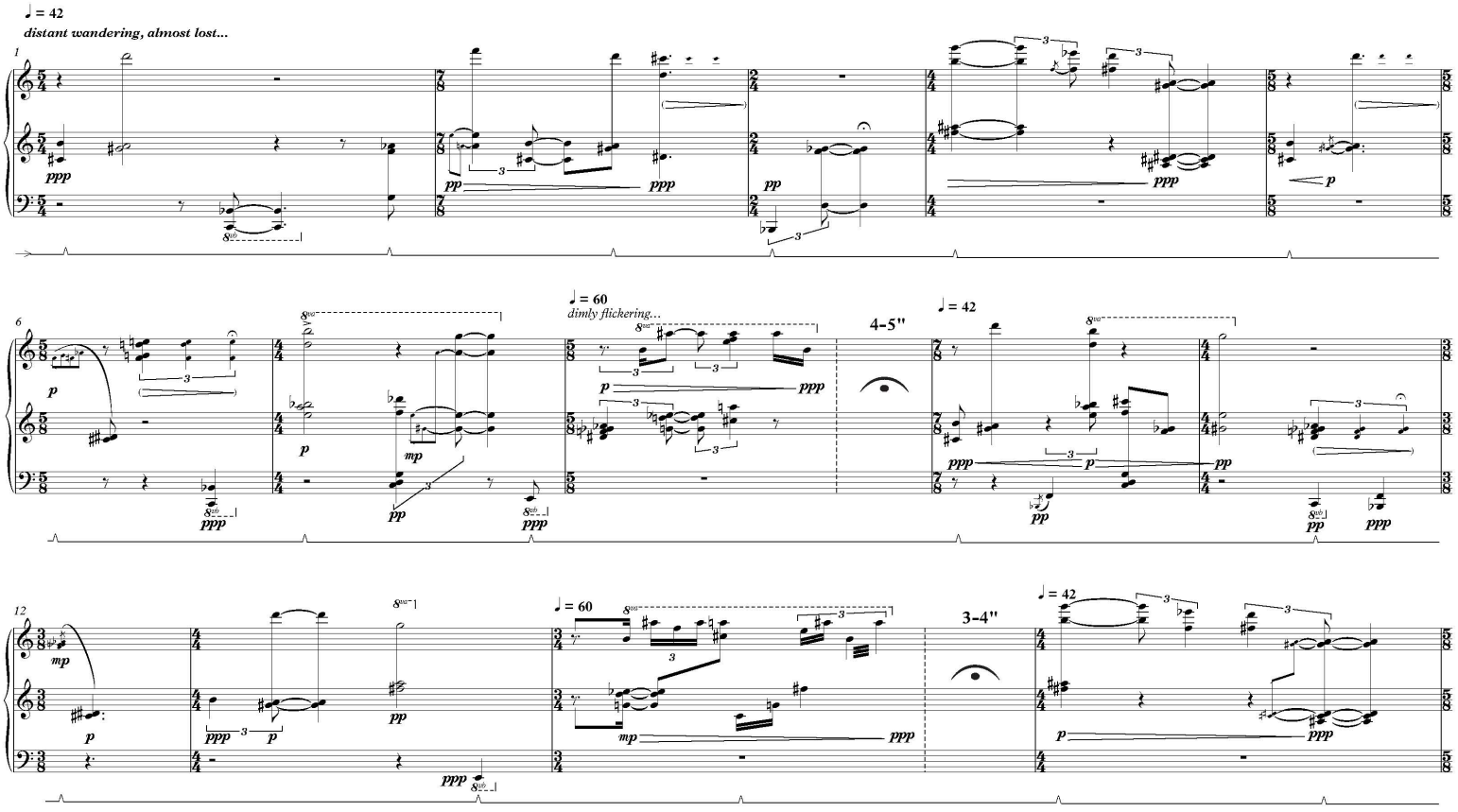
I

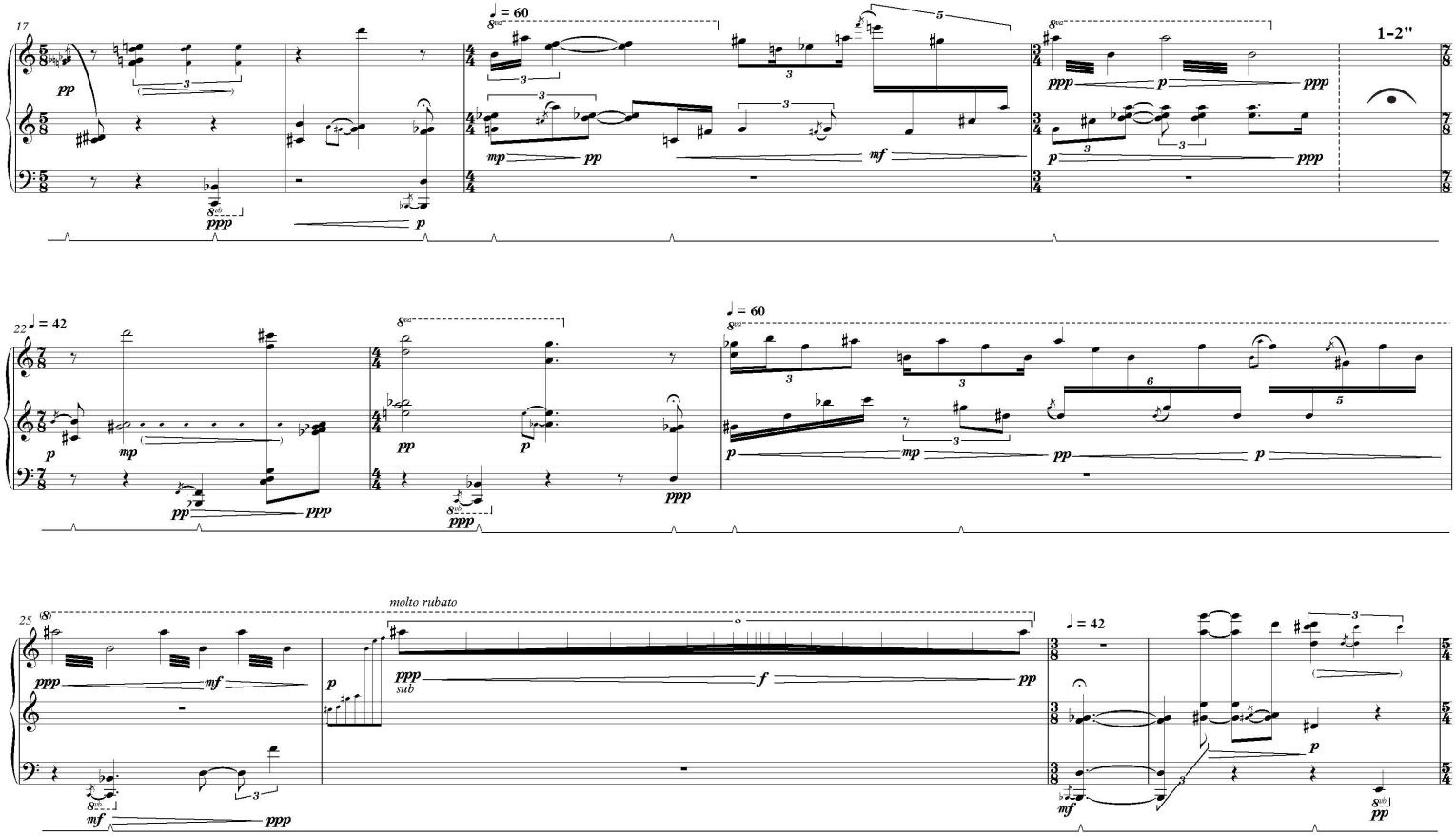
Bryndan Moondy (2019)

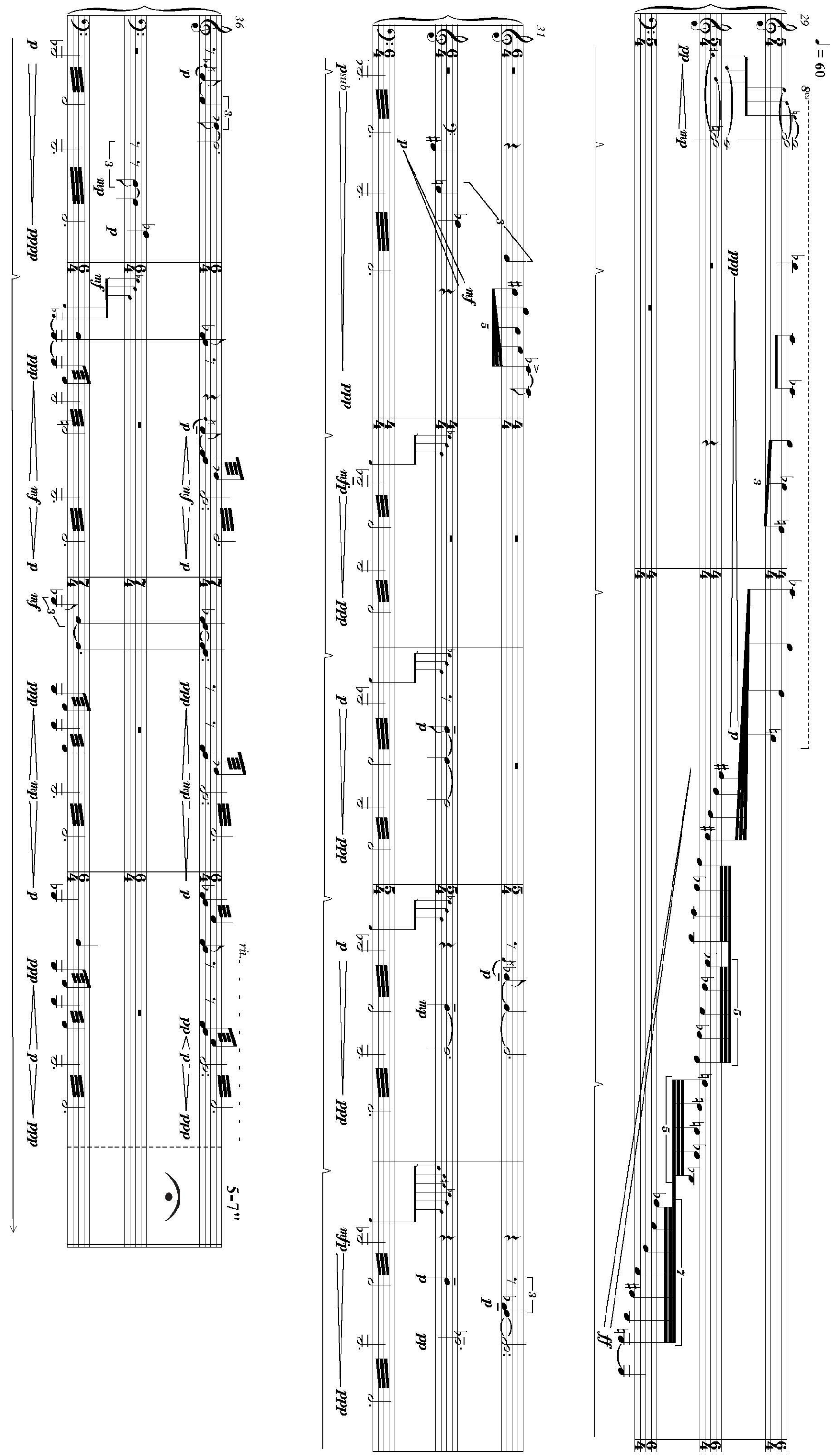



18
x3-5
ppp
mp
ppp
sub
mp
ppp
sub
mf
ppp
sub
mf
ppp
sub
mf
21
2-3"
f
pppsub
ff
f
ppp
24
ppp
pp
p
mf
ppp
sub
f
(Ped.)
una corda
28
ppp
f
ppp
ff
5-7"

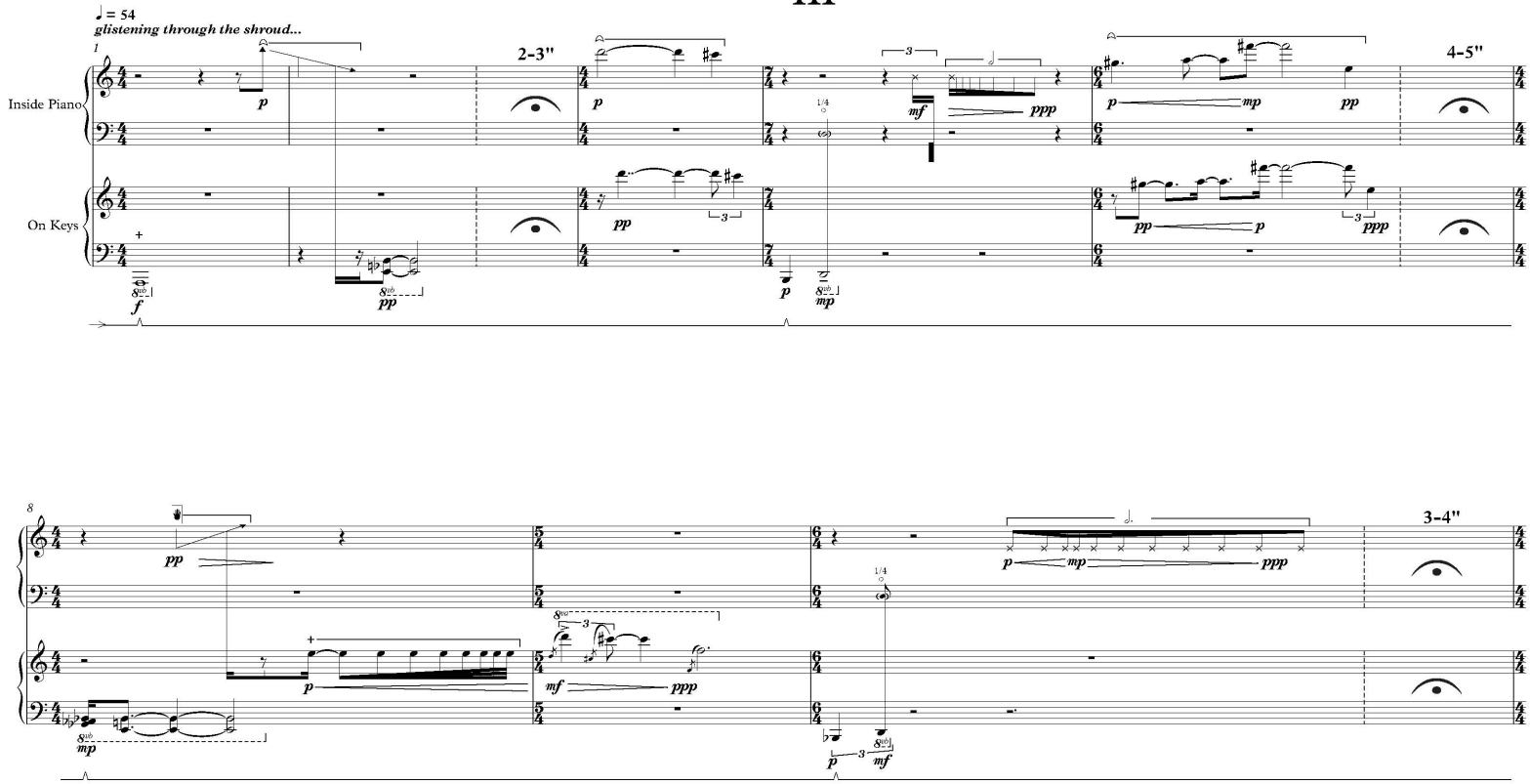
II

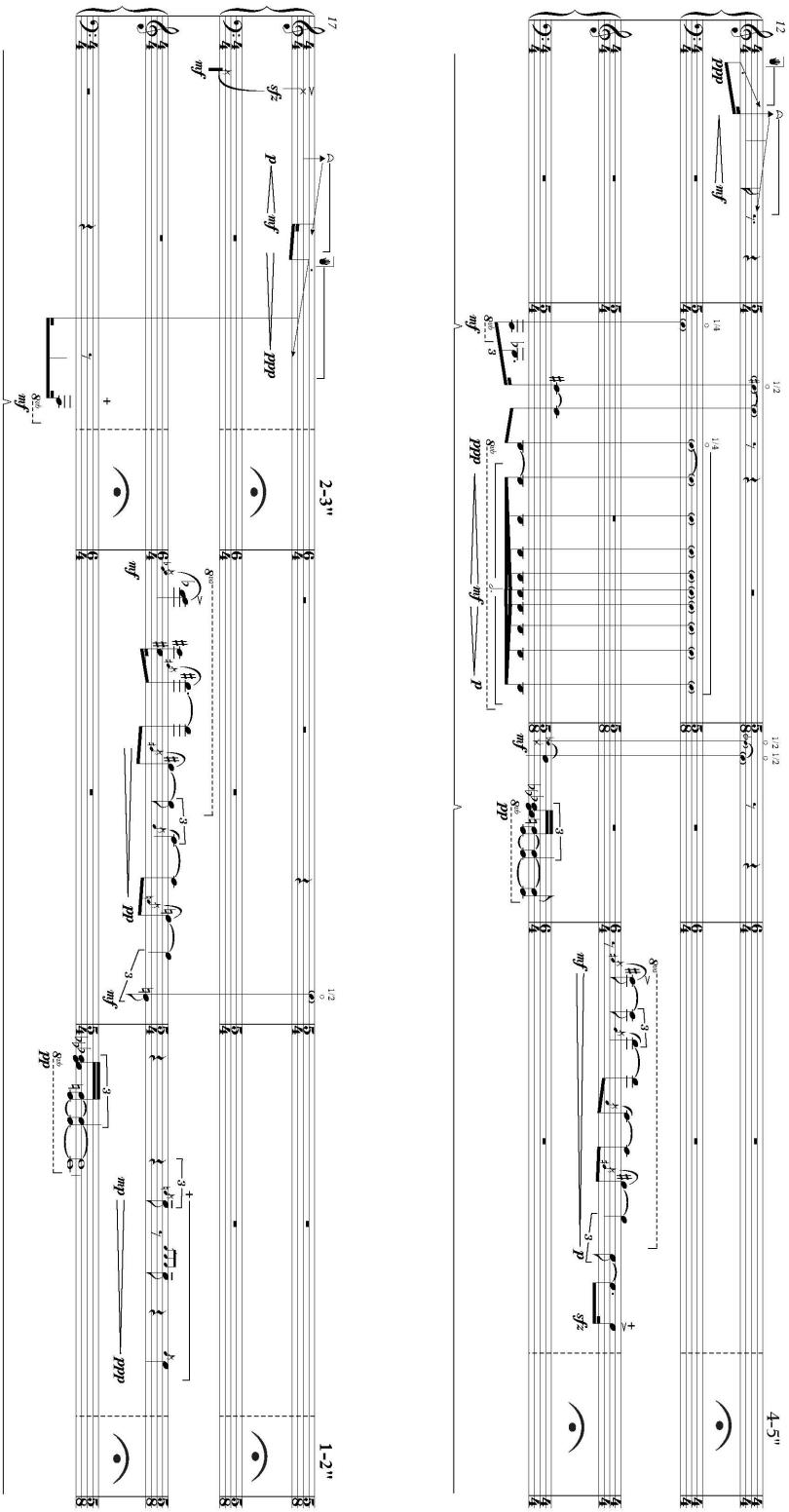

♩ = 42
distant wandering, almost lost...
1
ppp
pp
ppp
pp
ppp
p
6
p
mp
pp
ppp
ppp
♩ = 60
dimly flickering...
p
ppp
4-5"
♩ = 42
ppp
p
pp
pp
ppp
12
mp
p
ppp
p
pp
ppp
♩ = 60
mp
ppp
3-4"
♩ = 42
p
ppp

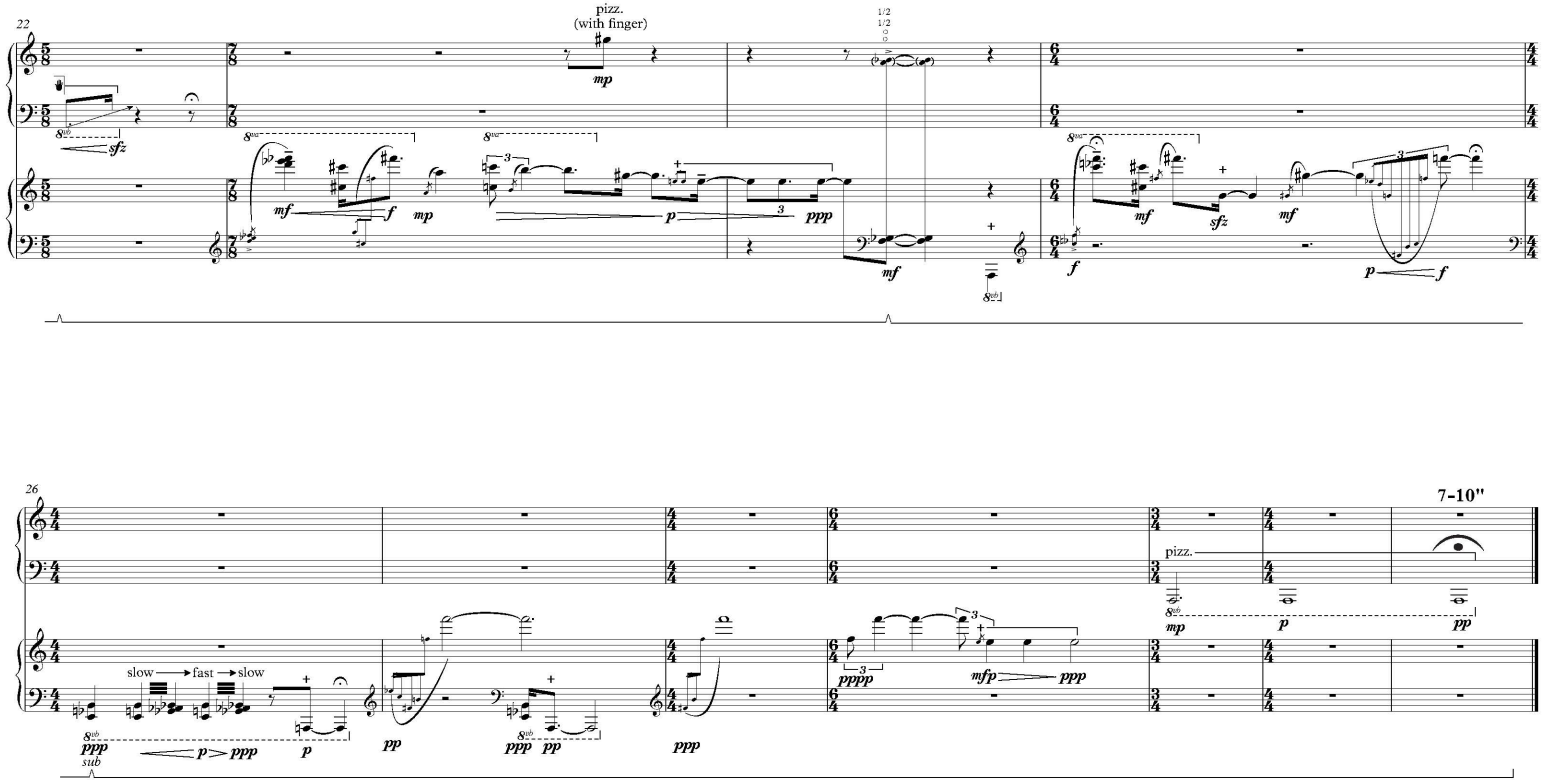

17
♩ = 60
1-2"
22
♩ = 42
♩ = 60
25
molto rubato
♩ = 42


♩ = 60
rit.
5-7"

III


♩ = 54
glistening through the shroud...
Inside Piano
On Keys
2-3"
4-5"
3-4"


12
17
4-5"
2-3"
1-2"


22
pizz.
(with finger)
mp
sfz
mf
f
mp
p
3
ppp
mf
1/2
1/2
mf
sfz
mf
f
p
f
26
7-10"
slow → fast → slow
ppp
p > ppp
p
pp
ppp
pp
ppp
pppp
mfp
ppp
pizz.
mp
p
pp

We, too, can divide ourselves...

for solo flute

Bryndan Moondy

We, too, can divide ourselves... draws inspiration and fragmentary text from Wisława Szymborska's poem "Autotomy," published in her 1972 collection entitled *Could Have.*

Autotomy

In danger, the holothurian cuts itself in two.
It abandons one self to a hungry world
and with the other self it flees.

It violently divides into doom and salvation,
retribution and reward, what has been and what will be.

An abyss appears in the middle of its body
between what instantly become two foreign shores.

Life on one shore, death on the other.
Here hope and there despair.

If there are scales, the pans don't move.
If there is justice, this is it.

To die just as required, without excess.
To grow back just what's needed from what's left.

We, too, can divide ourselves, it's true.
But only into flesh and a broken whisper.
Into flesh and poetry.

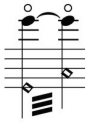
The throat on one side, laughter on the other,
quiet, quickly dying out.

Here the heavy heart, there non omnis moriar—
just three little words, like a flight's three feathers.

The abyss doesn't divide us.
The abyss surrounds us.

- In memoriam Halina Poświatowska

Notation

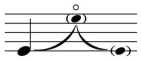


Harmonic timbral trill: a consistently fragile sound created by isolating a shared harmonic (indicated by standard note-heads) above a tremolo between two separate fundamentals (indicated by diamond note-heads). In each occurrence the harmonic should be clearly present with the fundamentals being virtually unheard.

Bisbigliando: a timbral trill containing little to no pitch fluctuation. The exact fingerings for each occurrence are left up to the player; however, pitch fluctuation should always be as minimal as possible.

Gradual transition from full air sound to airy sound with definate pitch to full tone.

Percussive effect created by combining either a lip or tongue pizz. with an accented key click.



Overblow through the harmonic spectrum of the given note.

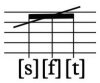
Vibrato

Transition from senza to molto vibrato then back to senza vib.

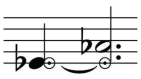
Transition from molto to senza vibrato.

Molto vibrato should always be as rapid as possible. When not otherwise specified, vibrato is left to the performers discretion.

Vocalization



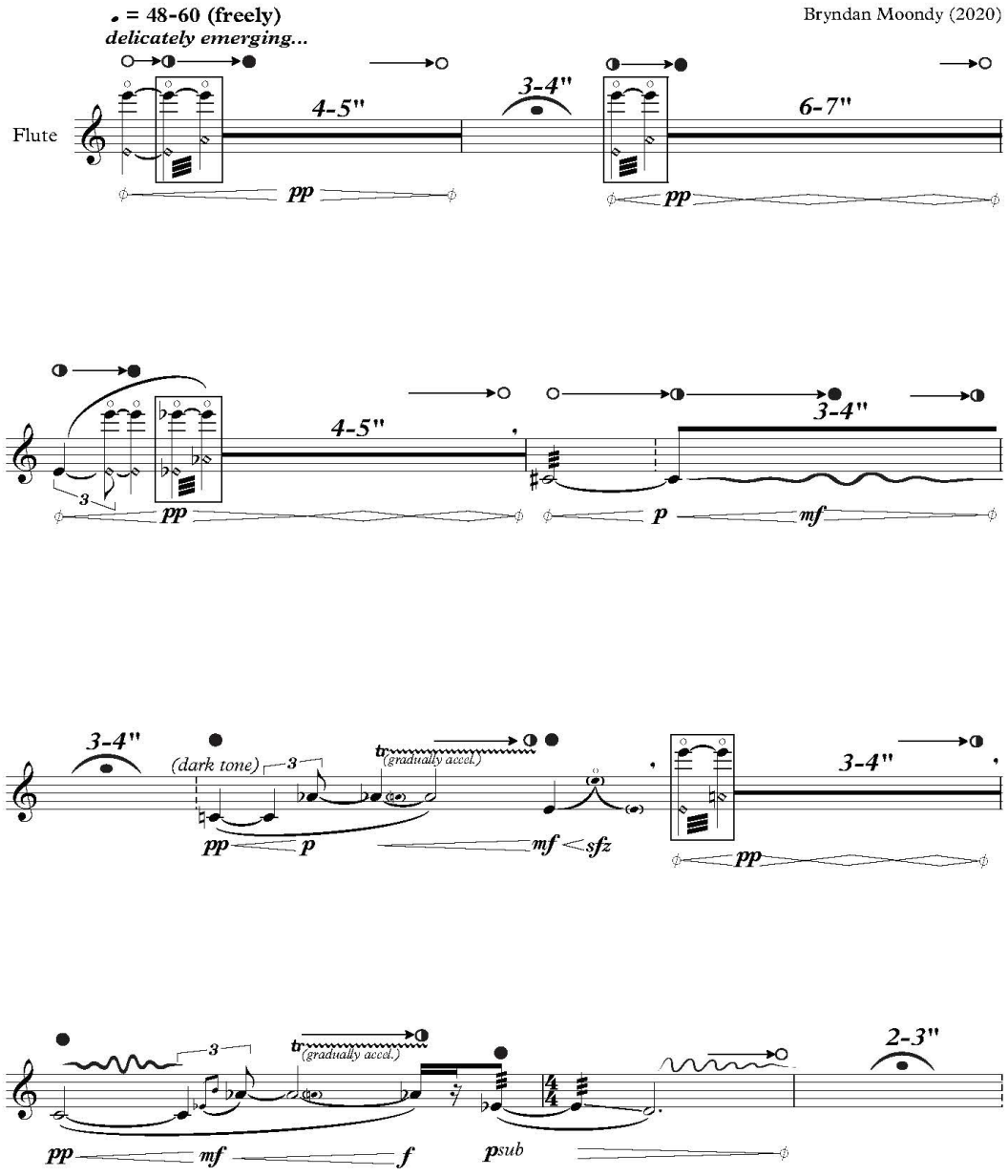
Speak given phonemes through the flute as fast as possible (unmetered).

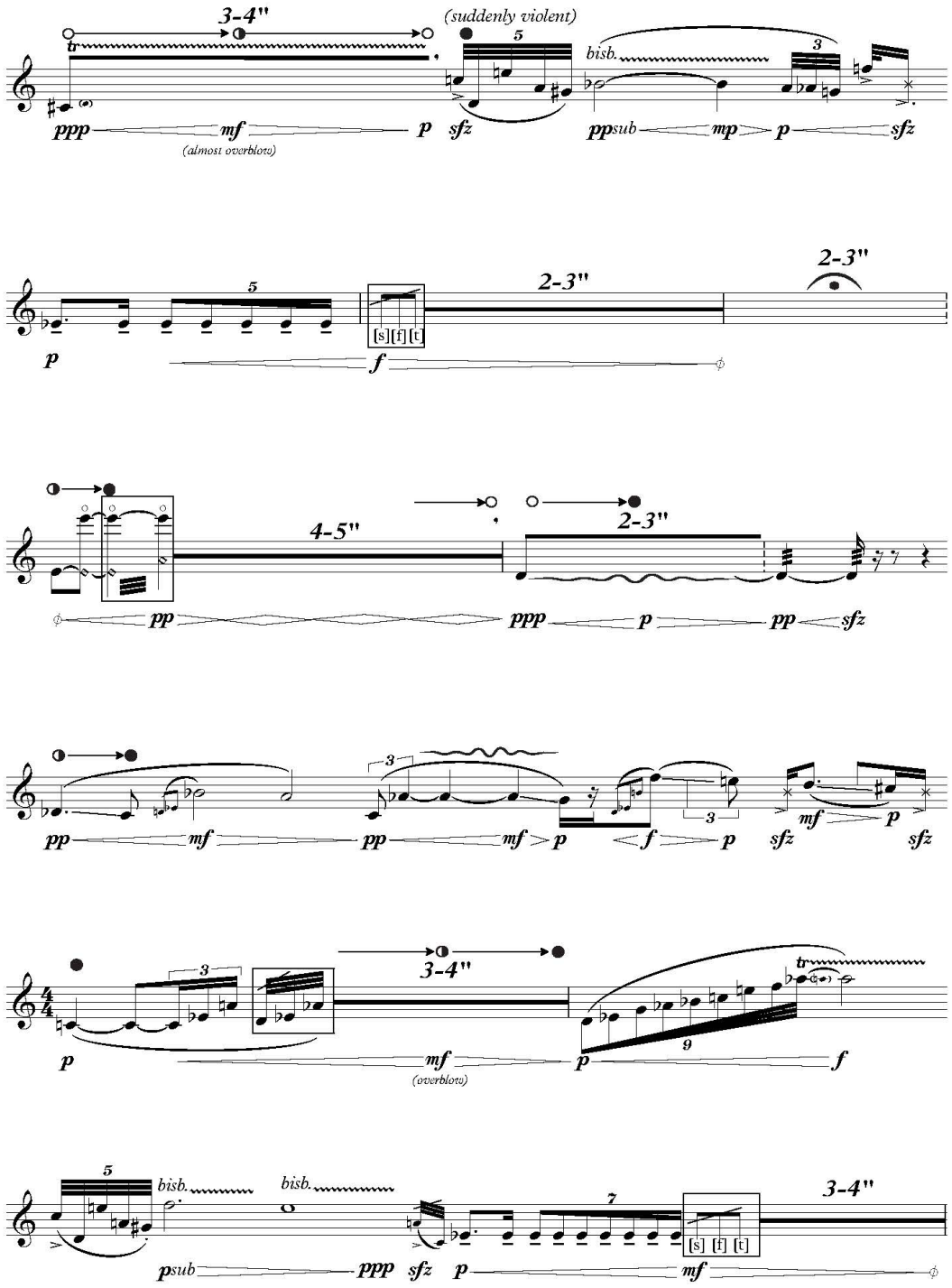


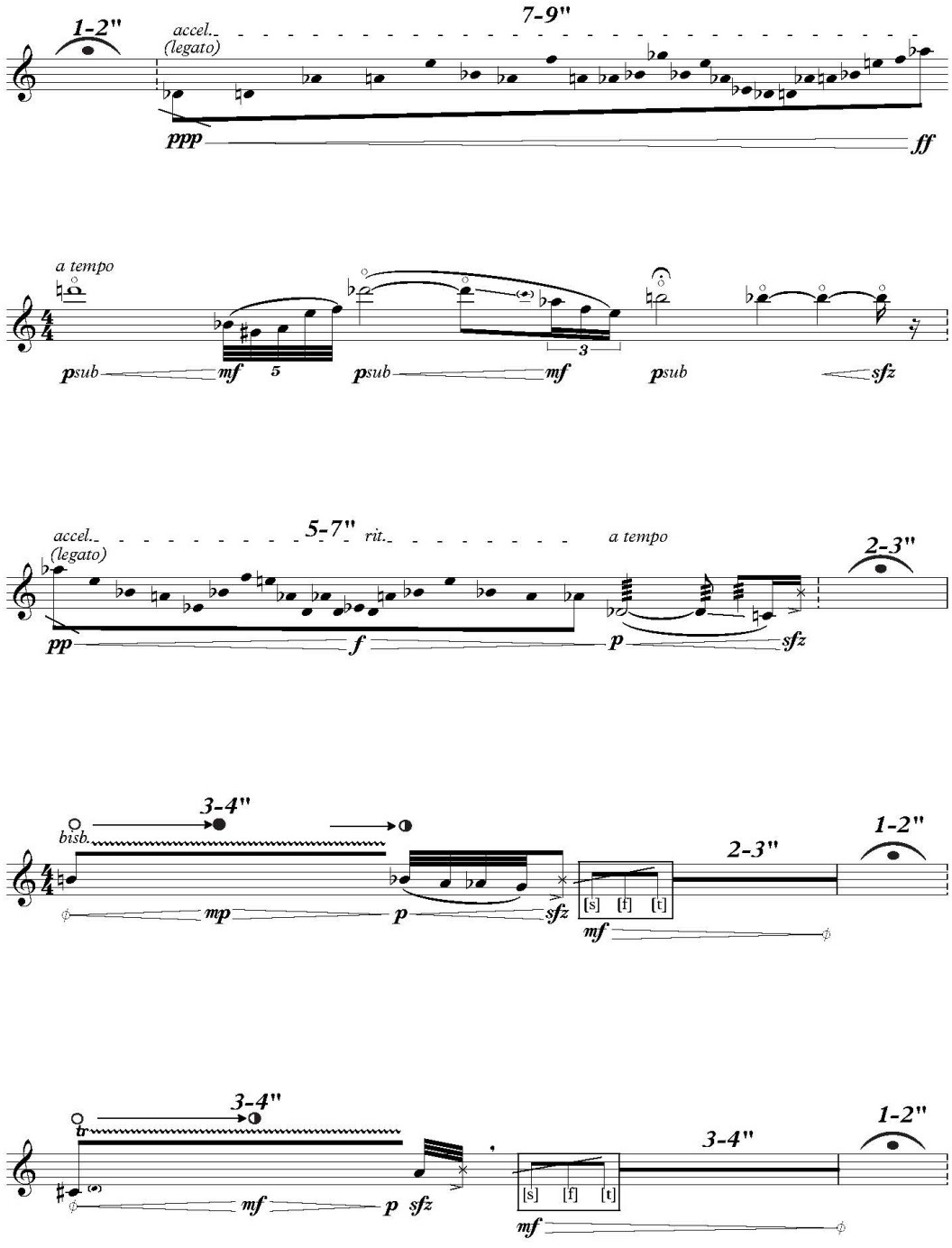
Sing the the pitch indicated by the circle/dot notehead while playing the pitch indicated by the standard notehead.

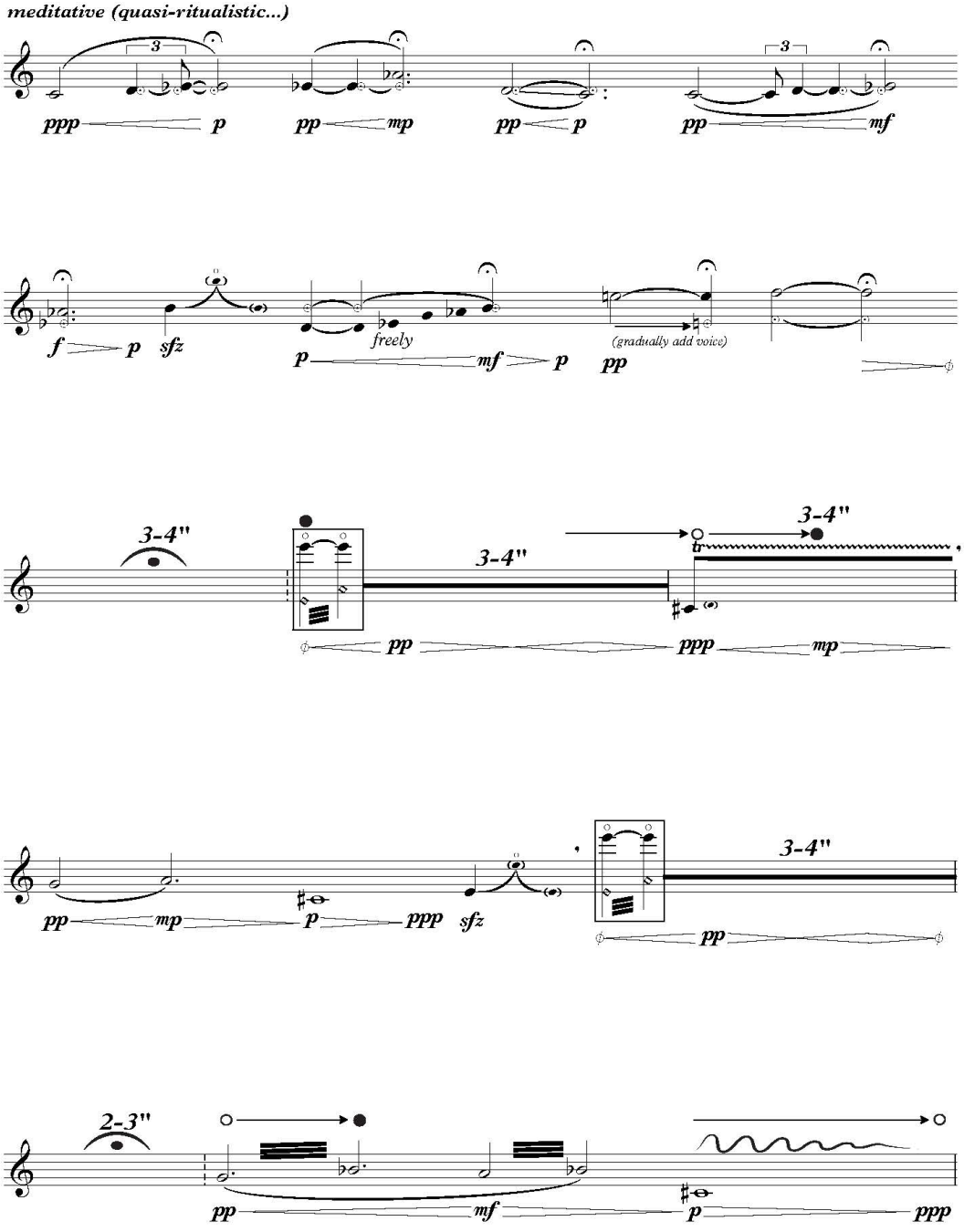
Throughout the piece tempo is freely variable, progressing through each gesture without a sense of metric structure.

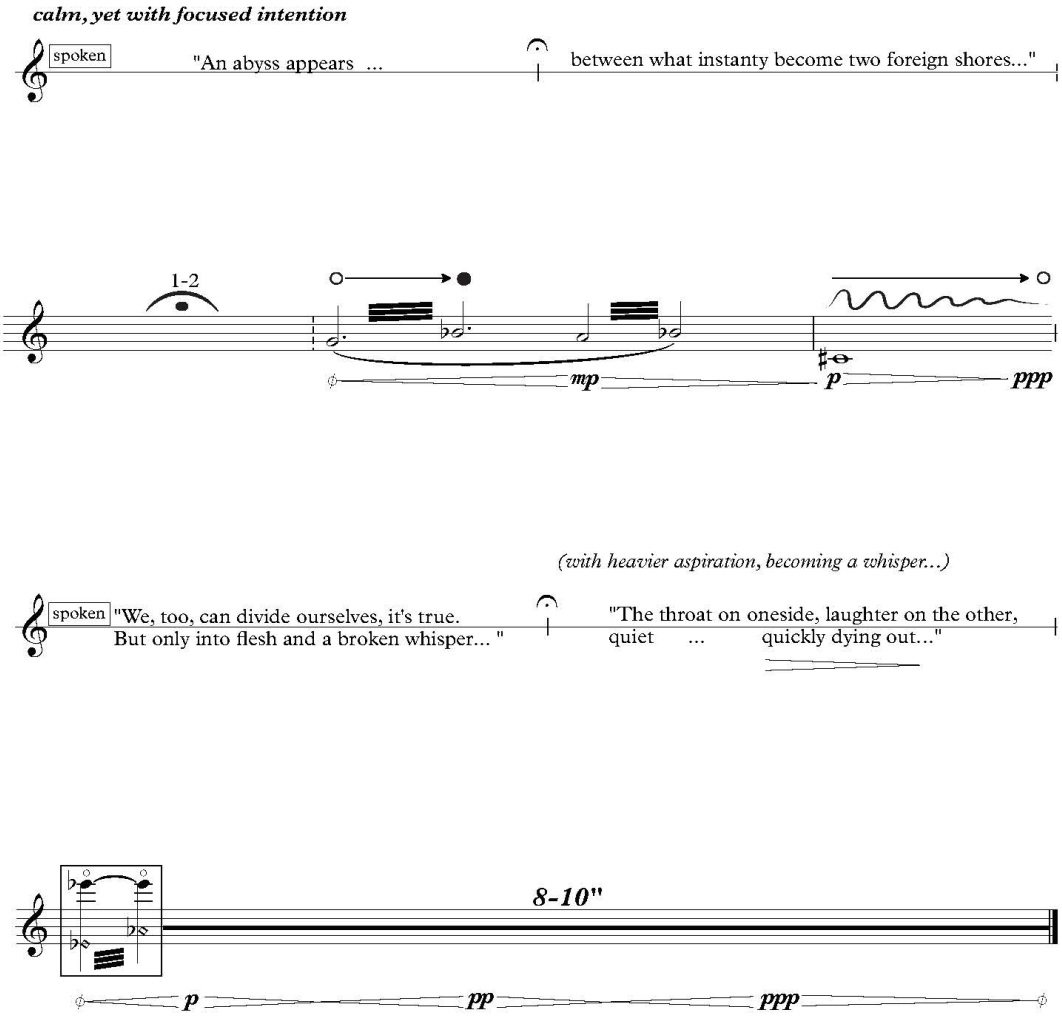
We, too, can divide ourselves...




3-4"
(suddenly violent)
bisb.
ppp
mf
(almost overblow)
p
sfz
ppsub
mp
p
sfz
2-3"
2-3"
[s] [t] [t]
p
f
4-5"
2-3"
pp
ppp
p
pp
sfz
pp
mf
pp
mf
p
f
p
sfz
mf
p
sfz
3-4"
p
mf
(overblow)
p
f
bisb.
bisb.
psub
ppp
sfz
p
[s] [t] [t]
mf
3-4"


1-2"
accel.
(legato)
7-9"
ppp
ff
a tempo
psub
mf
5
psub
mf
3
psub
sfz
accel.
(legato)
5-7"
rit.
a tempo
2-3"
pp
f
p
sfz
3-4"
bisb.
1-2"
2-3"
mp
p
sfz
[s] [f] [t]
mf
3-4"
tr
1-2"
3-4"
mf
p
sfz
[s] [f] [t]
mf


meditative (quasi-ritualistic...)
3
ppp
p
pp
mp
pp
p
3
pp
mf
f
p
sfz
p
freely
mf
p
pp
(gradually add voice)
3-4"
3-4"
3-4"
pp
ppp
mp
pp
mp
p
ppp
sfz
3-4"
pp
2-3"
pp
mf
p
ppp


calm, yet with focused intention
spoken
"An abyss appears ...
between what instanty become two foreign shores..."
1-2
mp
p
ppp
(with heavier aspiration, becoming a whisper...)
spoken
"We, too, can divide ourselves, it's true.
But only into flesh and a broken whisper... "
"The throat on oneside, laughter on the other,
quiet ... quickly dying out..."
8-10"
p
pp
ppp

Part II

Essay:

Substance and Surface in Four Compositions

Substance and Surface

1. Substance

To begin the discussion of my recent work I will first address what I perceive as the substance within my compositional output. In using the term substance I am referring to the conceptual, metaphorical, or poetic ideas at play in my music; or, those aspects which cannot be easily explained using a technical, musical lexicon. The following section will primarily focus on ways in which I have formed and developed these ideas within my work. I have chosen to address this topic first as it is, generally, my point of departure when beginning a new piece.

1.1 Dichotomy and Metaphor

A common source for my compositional impetus originates from the consideration of specific extra-musical metaphors drawn from visual or literary sources. In placing these concepts within a musical context, my goal has rarely been exact depiction in a programatic sense but instead the translation of specific abstracted characteristics or relationships that I find salient within a given idea. A simple example of this type of thinking can be found in an early composition of mine entitled *Cascade* (2015) for mixed quartet. Instead of attempting a direct representation of the water phenomenon implied by the title I based the work's form on a series of alternating, still and tumultuous sections. In this way, I attempted to distill the idea down into what I perceived as being its defining polarity and through approaching it within a sonic medium partially divorce it from its initial context.

As the above example suggests, my consideration and development of a given metaphorical concept often results in the extraction of what I view as a defining dichotomy central to its being. It is through the examination of these points of polarity, opposition, or contradiction, and the tensions which result from them, that I begin the conception of the character and behavior of musical materials within a new composition, as well as ways in which the work's overall formal trajectory might develop. Recently, I have focused primarily on three differing approaches to the presentation of this type of extra-musical material.

The first, which can be found throughout all three movements of my work *Contrasts* for solo piano, is the presentation of opposing characteristics within two or more coexisting sets of material which share a sonic space. The second is the examination of opposing characteristics or behaviors within a single musical gesture or entity. This approach is exemplified by *We, too, can divide ourselves…* for solo flute. The third, which will be discussed in detail within the second half of this thesis, is the presentation of a progressive change from one state, behavior, or character to its opposite. This final category is most clearly represented within the works *Entwined to Fray* for string quartet and *Fractured Pond* for ten players.

The following two subsections seek to explain and arrive at a clear differentiation between the first two categories listed above through a brief discussion of the two solo works contained within this thesis.

1.2 Coexistence of Conflicting Musical Materials

As its title suggests, *Contrasts* explores the ideas of duality and juxtaposition. The work examines various, more or less, oppositional dynamics which fade in and out of focus as they negotiate the possibility of resolution. On a more abstract, general level *Contrasts* considers the creation and perception of tension, questioning its inevitability and, in turn, its pull towards mitigation.

Each of *Contrasts'* three movements present one or more pairs of conflicting materials from which the music draws its sense of progression. Within the first

movement one can perceive three of these pairs: (1) discrete pitched versus noisy elements, (2) metered versus proportional rhythmic treatment, and (3) high register versus low register gestures. The second movement deals with a transition between stasis and directionality through the increasing appearance of overtly directional segments interspersed throughout a motionless chordal texture. The third movement focuses primarily on timbral juxtaposition; however, it also deals heavily with the visual contrast of the performers behavior as they frequently transition between gestures on the keys of the piano and actions within the body of the instrument.

I will orient my focus towards specific examples within the first movement to discuss my aspirations as to how the three dichotomies which it presents might effect the perception of the music. The first two instances of contrast are those of proportional versus metric rhythmic treatment and the appearance of pitched versus noisy elements (figures 1.1 and 1.2). Both of these dichotomies maintain similar relationships within the context of the music in that they both represent the extremes on a spectrum spanning the gap between predictability and unpredictability with metric rhythm and pitched material situated on the side of the predictable. To clarify, this spectrum refers to the predicability of results achieved by a performer as they interpret the score.

Despite the similarities in the relationships between the two pairs they both suggest a different type of musical progression. The rhythmic treatment indicates a distinctly temporal experience with stasis on one side and defined trajectory on the

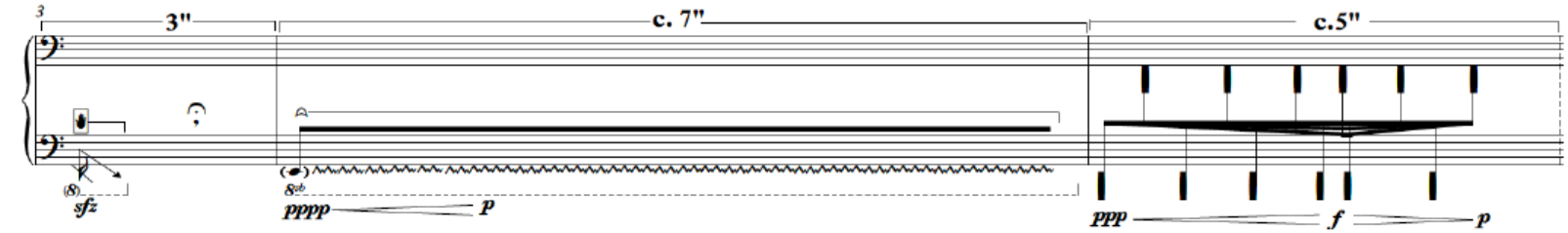


Figure 1.1 - Contrasts *(mm. 3 - 5): unpulsed, noise oriented material*

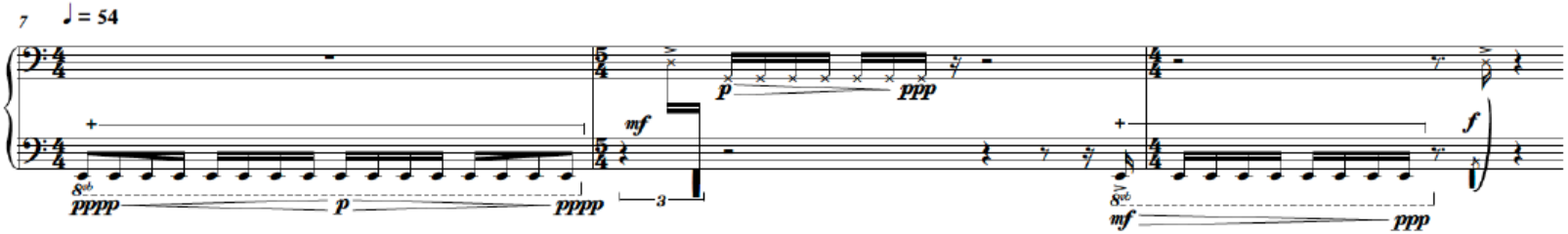


Figure 1.2 - Contrasts *(mm. 7 - 9): introduction of pitched and pulsed material*

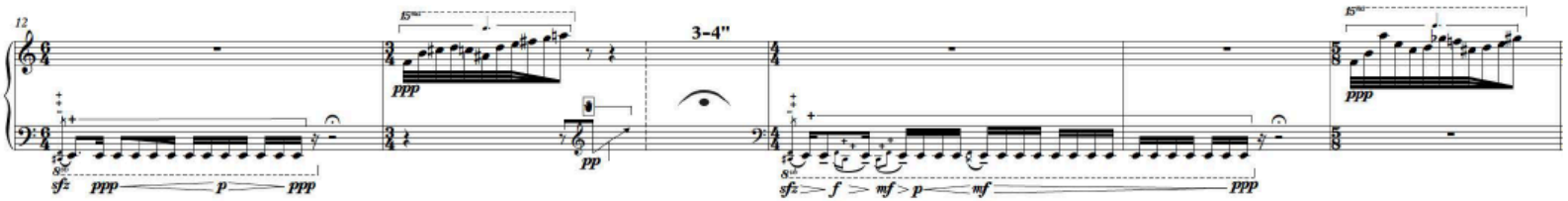


Figure 2 - Contrasts *(mm. 12 - 17): introduction of registral strata*

other. On the other hand, the employment of pitched materials and noisy materials depict a timbrally defined experience which does not hold any direct relation to the passing of time.

The third dichotomy presented within movement one, that of registral contrast (figures 2), differs from the previously mentioned two in that it presents little variance in the predictability of its elements upon subsequent iterations. Instead, the primary feature of their relationship is that of defining a musical space (in a metaphorically physical sense). From their first occurrences, the E1 pedal pitch and the undulating upper register fragments present two distantly separated sonic strata which I imagine as being ever present throughout the movement even when they are not actively being represented.

The combined effect of these three pairs of materials is the creation of a distinct musical environment defined in *space* by registral strata, in *color* by variance in noise saturation, and in *time* through the presence, or lack of, a metric pulse. As the tension created by the interplay of these elements builds, its need for resolution increases thus pushing the music forward, defining a trajectory for the movement.

1.3 Opposing Characteristics/Behaviors Within Individual Musical Gestures

We, too, can divide ourselves… draws inspiration and fragmentary text from Wisława Szymborska's poem "Autotomy" which she wrote in memoriam of the poet

Halina Poświatowska. Szymborska's text is a questioning meditation on the inevitable finality of death in which she explores a comparison between the creative act and the phenomenon of autotomy (the casting off of a part of the body [e.g. the tail of a lizard] by an animal under threat). *We, too, can divide ourselves… (We, too)* in no way seeks to resolve or restate the questions that Szymborska is asking; instead, it is an examination of the metaphorical acts of self-division that we as humans undertake within the creative process.

Unlike the emphasis on the juxtaposition of various musical materials within *Contrasts*, in *We, too…* I set out to arrive at my poetic goals, in part, through the use of reoccurring gestures which vary due to the employment of multiple simultaneously changing parameters. An example of this type of figure can be seen in the frequent occurrence of the harmonic tremolo gestures (figure 3) which are in constant fluctuation due to the alternation between fundamental pitches as well as changes in their amplitude and air/noise content. Despite these parametric divisions, these figures are realized by the performer as single musical gestures which, regardless of their variance, are recognizable as such.

Two more examples of this type of internal parameter shift can be found in the use of exaggerated vibrato, flutter tongue, and harmonic overblowing as distorting elements; and the incorporation of the flutist voice appearing simultaneously with traditional pitched playing (figure 4). With the latter I intended to draw attention to the flutist and their instrument as a connected entity which begins to gradually divide.

Ultimately, they arrive at a complete separation towards the end of the work when the flutist speaks text separated from a directly musical gesture.

While the work does incorporate a number of different types of material, its sense of momentum is derived not from the interaction between these elements (as in *Contrasts*). Instead, I imagine the work's various distinct gestures as existing sepa-rate from one another. It is through the repetition and variation of these gestures, and how they are each defined by varying degrees of parametric division, that *We, too…* arrives at its own type of trajectory; one oriented toward introspective examination and recollection.

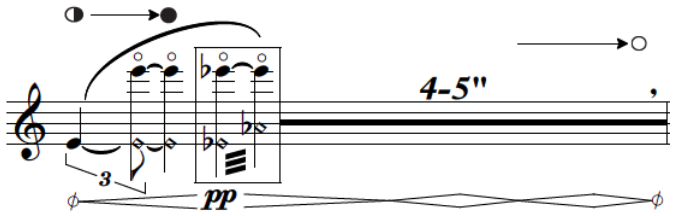


Figure 3 - We, too, can divide ourselves…, *harmonic tremolo gesture*

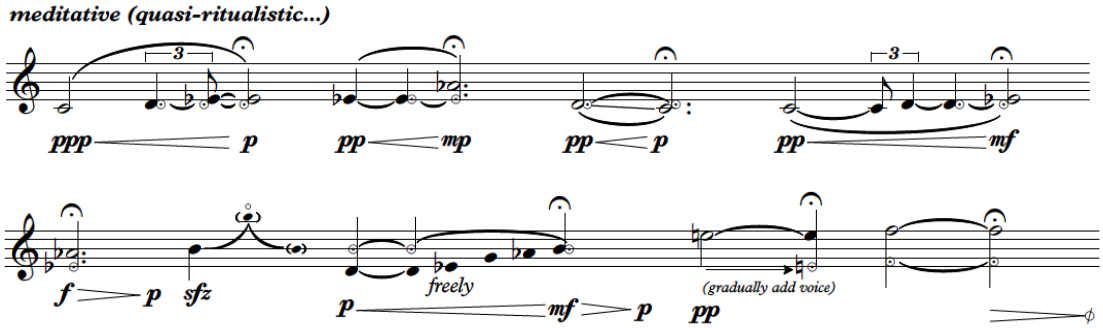


Figure 4 - We, too…, *emergence of voice alongside pitched playing*

2. Surface

Having reached a general understanding of some of the driving forces behind the metaphorical/poetic substance of my work, I will now shift my focus to an examination of some features at play within its sonic surface. This discussion seeks to illuminate specific concerns which inform my handling of purely musical elements. I will touch upon certain approaches which I have adopted in managing pitch and timbral resources as well as ways in which I have dealt with the structuring of musical time.

2.1 Defining Musical Objects

In translating the abstract, conceptual substance into a concrete, musical work I often rely on the creation of what I view as musical objects. For my purposes, I define a musical object as a sound structure exhibiting distinct attributes (e.g. pitch, timbre, behavior/mode of production, duration) which exists within, or helps to define, a musical space/environment. Musical objects differ from motivic or thematic material in that they vary in scale from single sonic events to extended melodies or sequences of harmonies; they do not rely on repetition (exact, complete, or otherwise) to maintain their status, and they do not, typically, display a prescriptive approach to rhythmic content. Finally, each musical object fulfills a specific function within the context of the composition it inhabits. Examples of musical objects that have been

discussed so far within this text are the materials that make up the dichotomous pairs within *Contrasts* and the parametrically divided gestures in *We, too.*

When composing a piece it is in the creation of musical objects that I begin my engagement with the components of music. This process is often heavily informed by intuitive decision making based on my own subjective musical tastes. The next section seeks to come to a better understanding of this process by focusing on examples of musical objects and their treatment within *Contrasts*, mvt. 2 and *We, too.*

2.2 Harmonic Objects and Their Temporal Treatment in *Contrasts*

The second movement of *Contrasts* deals with the tension created between an interwoven set of static, nondirectional harmonic objects and a progressively more present directional object.

In creating the static material I began with a sonority which makes its first appearance in the culminating gesture of *Contrasts*, mvt. 1 (figure 5). I added the pitches C, F#, Eb, and G# in order to complete the chromatic aggregate and then began intervallically stretching the sonority upward while maintaining C as its lowest pitch. This process of expansion was carried out rather intuitively, with my ear as the final arbiter; however, I made sure that each successive harmony included all

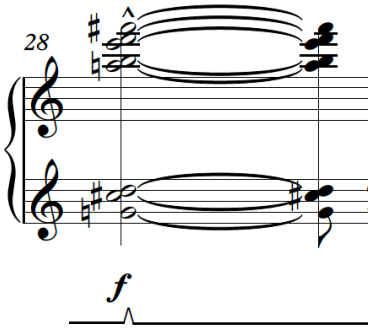


Figure 5 - Contrasts, *mvt. 1 (m. 28)*

12 chromatic pitches and that each displayed less pitch density within its lower register.

Ultimately, I arrived at a series of three sonorities, in addition to the initial one, which I then transposed down one, two, and three octaves respectively (figure 6.1). Finally, I superimposed all four sonorities to create a harmonic reservoir which, at a glance, exhibits similar characteristics to a compressed, equal tempered harmonic spectrum (figure 6.2).

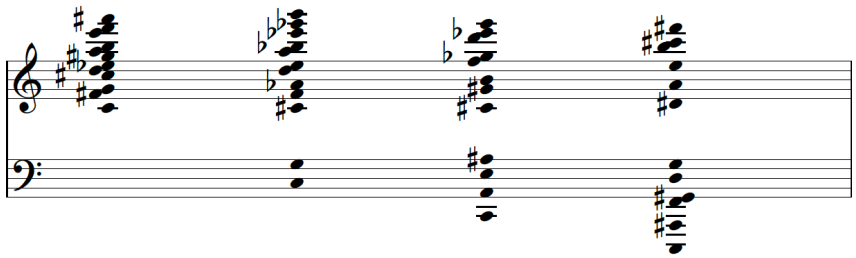


Figure 6.1 - *Stretched and transposed chromatic aggregates* (Contrasts)

Figure 6.2 - *Harmonic reservoir derived from the combination of chromatic aggregates*

I extracted six fragmentary harmonic progressions from this reservoir, each with their own character and gestural shape but all intentionally lacking any definite sense of trajectory (figure 7). I then constructed the static environment that exists within the piece by weaving together and overlapping these various harmonic fragments. The result of this process was a nondirectional chord sequence spanning 54 beats at MM = 48 which I view as its own large-scale musical object that maintains its sense of immobility, in part, through the variable intermixing and reoccurrence of the sonorities from the six harmonic fragments.

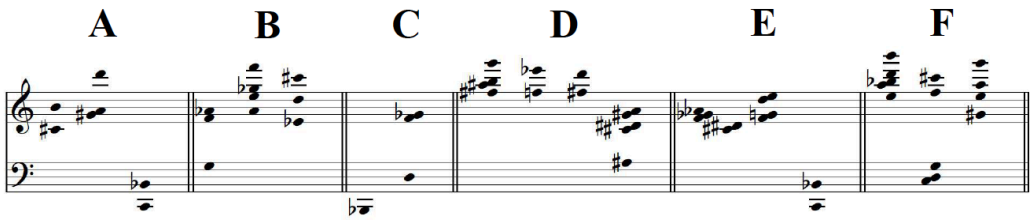


Figure 7 - *Six harmonic fragments used within nondirectional chord sequence in* Contrasts, *mvt. 2*

Another set of material which appears within the movement is what I previously referred to as the directional object. The harmonic content for this material stems from the same initial sonority used in deriving the pitch reservoir for the static environment (figure 5); however, in this case it is left almost entirely unaltered. Aside from this pitch content, the material derives its identity from, its gestural content, its sense of metric pulse (in contrast to the lack of pulse within its static counterpart), and its tempo (♩ = 60).

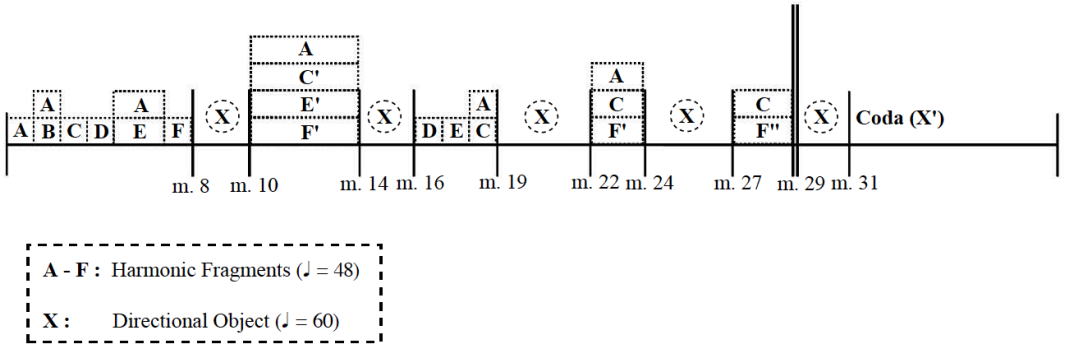


Figure 8 - *Formal structure of* Contrasts, *mvt. 2 with layout of harmonic fragments (see figure 7)*

Regarding the temporal presentation of these two objects (figure 8), I split the static sequence object into five segments of shorter and shorter length and within each of the gaps created by this fragmentation I placed longer and longer iterations of the directional object. The first three iterations are followed by moments of inactivity that act as transitional points from which the next static segment emerges. Beginning with the fourth iteration, the two objects are presented without the intervention of one of these points as though their two opposing modes of behavior have been forced into contact. The final iteration of the directional object is followed by the most trajectory oriented event in the piece: a scalar decent spanning the majority of the keyboard. The remainder of the work contains a coda which acts as an exploratory winding-out of this sense forward momentum. My aspirations as to the overall perception of this temporal treatment is that of stasis succumbing to a somewhat unstable directionality.

2.3 The Melodic Object and Its Division in *We, too, can divide ourselves…*

Another approach that I have taken to the use of, what I consider, a musical object, can be heard in *We, too, can divide ourselves.* Prior to beginning any other work on the piece I composed a single melodic object (figure 9) from which I planned to derive the rest of the works material. Ultimately, this did not come about; however, fragments of the melody do appear in different guises throughout the piece, acting as pillars around which one might orient their listening. Not only does this give the piece a degree of formal consistency that would otherwise be lacking but it also furthers the work's conceptual narrative.

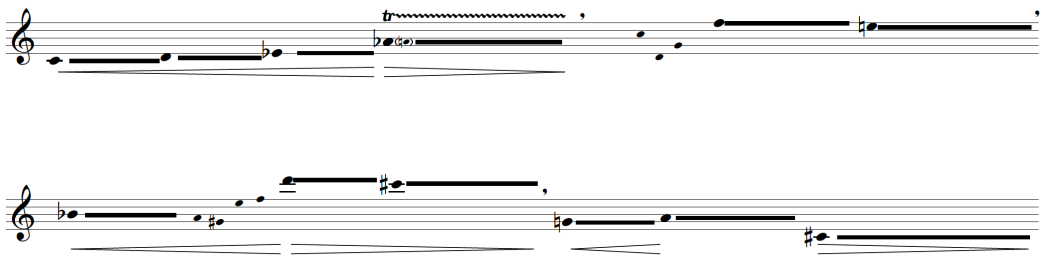


Figure 9- *Melodic object (*We, too, can divide ourselves*)*

As mentioned, *We, too, can divide ourselves…* deals with the idea of single entities which are effected by some type of internal division. Previously, I discussed this idea in relation to the various short gestural materials that appear throughout the piece. Perhaps a more obvious bearer of this metaphorical content comes in the form

of this divided melody. Although the melody is never heard in its complete form within the work, its various segments share a similarity of character that unites them in the memory of the listener.

While the rest of the gestural material within the piece is fleeting and often highly colored by noise, the melodic fragments maintain a lyrical nature and clarity of tone which separates them from their surroundings. In this way they stand out of the texture as objects of contemplation. In arriving at and moving through each one, the listener is reminded of those which came before which helps to orient them before, once again, being propelled out into the nebulous musical surroundings in search of the next fleeting melody.

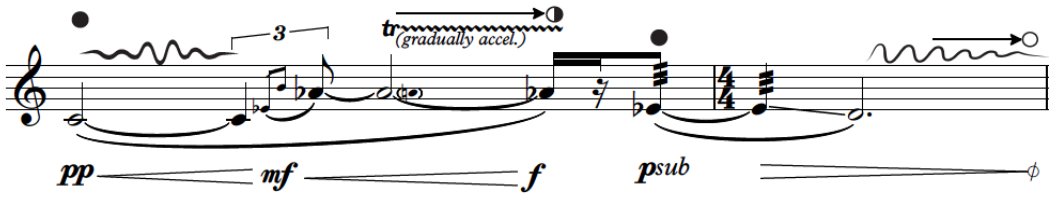


Figure 10.1 - *Fragment the melodic object (subphrase 1)*

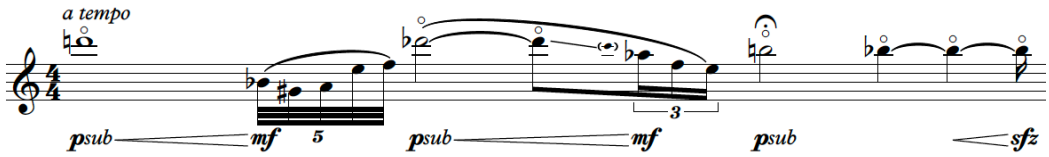


Figure 10.2 - *Fragment of the melodic object with some pitch reordering (sub-phrase 3)*

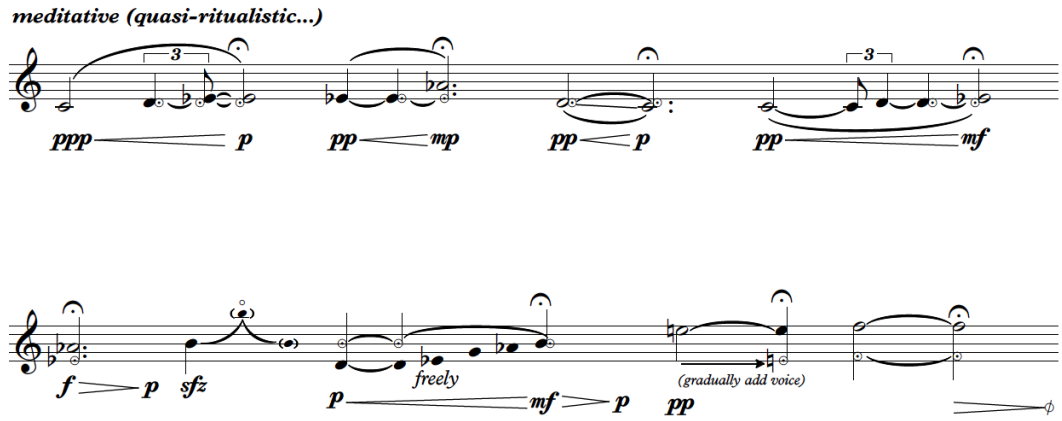


Figure 10.3 - *Fragment the melodic object (subphrases 1 and 2)*

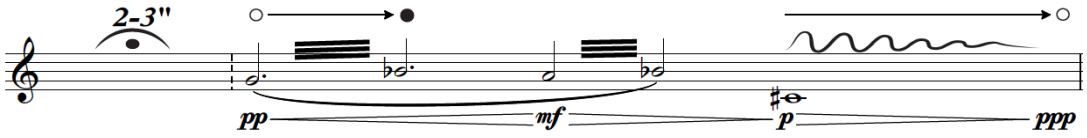


Figure 10.4 - *Fragment of the melodic object (subphrase 4)*

Analyses

Introduction

The second half of this essay is dedicated to analyses of two works: *Entwined to Fray* for string quartet and *Fractured Pond* for ten players. My examination of these works will not approach these pieces solely as completed works but instead, with each, I will attempt to address the various stages of my compositional process, from the point of initially grappling with conceptual, extramusical material; through the creation of abstract sketches and the development of form; to the conception and use of specific musical objects.

Entity and Gestalt

Both *Entwined to Fray* and *Fractured Pond* deal with the examination of the same central dichotomy, that of unity and autonomy within the context of a musical ensemble. That said, my approach to this idea differs significantly between the two pieces. At the core of this difference lies the abstract concept of the unity of an *entity* versus the unity of a *gestalt*.

For my purposes, I define an *entity* as a seemingly indivisible unit with a distinct, independent existence and identity, while I define a *gestalt* as a construct with a distinct identity arrived at through the unification of a number of autonomous elements. A final, possibly more subjective and debatable, distinction that I will make is that, in the act of perception, one recognizes an *entity* as a whole before comprehending any of its components (if they exist). Conversely, when perceiving a *gestalt* one is initially aware of individual parts before being able to discern the whole that they combine to create. This last differentiation becomes quite important when distinguishing between these two concepts within a sonic context.

Within *Entwined to Fray* (*EtF*) I dealt primarily with the concept of *entity* and in *Fractured Pond* (*FP*) I focused on the concept of *gestalt.* As I move forward with my examination of these two works, the significance of the differentiation between these two concepts and the manifestation of each within the pieces will become clear. I also hope to demonstrate how *FP* is, in many ways, a logical outgrowth of my work on *EtF.*

Entwined to Fray

3.1 From Metaphor to Abstract Form

The following section discusses the translation of specific metaphorical substance into a temporal structure that would ultimately determine *Entwined to Fray's* form and trajectory.

My initial inspiration for *EtF* came in the imagery of an undulating strand which, under the influence of imperceptible forces, gradually begins to fray ultimately unraveling completely. I imagine this strand as an *entity* with it components initially bearing no individual identity; however, as the process of unwinding progresses each sub-strand begins to develop its own sense of autonomy. As this process continues this sense of independence intensifies eventually arriving at a point at which each sub-strand might be perceived as an *entity* unto itself.

In attempting to translate this visual metaphor into a musical form, I began intuitively sketching a series of small graphical representation of ways that this process might develop (figure 11.1 and 11.2). I became interested in the tension between two imagined forces at play within the unraveling: the first, an almost centripetal energy compelling the *entity* to maintain unity, and, the second, an outward pull acting upon each sub-strand separately. I adopted the idea of an episodic form in which the changes brought about by the exertion of these two forces could be expressed in alternation with one another. These episodes, characterized by either a pull

inwards or outwards, are made up of what I will refer to as *EtF's* 'Woven' (A) and 'Fray' (B) musical objects, respectively.

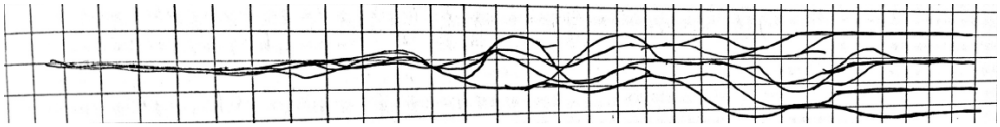


Figure 11.1 - *Initial visualization of the unraveling strand*

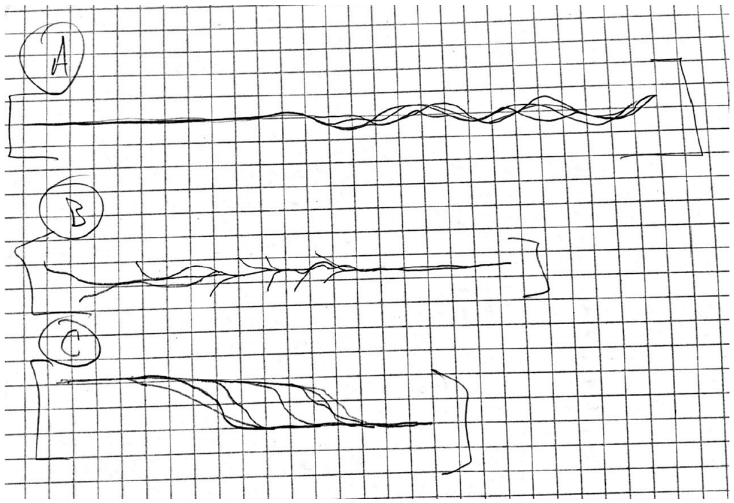


Figure 11.2 - *Three visualizations of portions of 'Fray' sections*

In order to define a sense of overall trajectory within the progression from unity to separation/autonomy, I envisioned a greater degree of activity and disorder with each successive 'Fray' episode and a progressively shorter, less stable moment of respite with each 'Woven' section. This increase in activity eventually evolves to-

wards a climactic break which takes place roughly 2/3rds of the way through *EtF*. I will refer to the section in which this break takes place as *EtF's* 'Unraveling'(C). The final portion of the form, made up of the 'Unwound' (D) musical object, abandons the episodic nature of the first portion of the work, instead, opting for a more continuous flow which begins by presenting each sub-strand as its own autonomous *entity*.

Having achieved an idea as to the overall trajectory and the rough, proportional relationships of *EtF's* form, I began sketching various musical fragments that coincided with my ideas regarding each of the work's four section types. From this point I was able to begin the act of shaping the work's musical surface, placing the abstract concepts discussed above within a concrete sonic context. The remainder of my analysis of *EtF* will provide an examination of the exact temporal structure of the piece before circling back around to discuss the appearance and function of specific materials and musical objects within each section.

3.2 *EtF*: Temporal Structure

Entwined to Fray's form can be separated into eight sections of variable length, an introduction, and a coda (figure 12). Beyond this, a single macro division can be place at approximately 2/3rds of the way through the work's full duration (m. 42). The first 5 minutes of the piece, up until this macro division, see the unfolding of the introduction and sections 1-7, while the final 3 minutes and 10 seconds present section 8 and the coda.

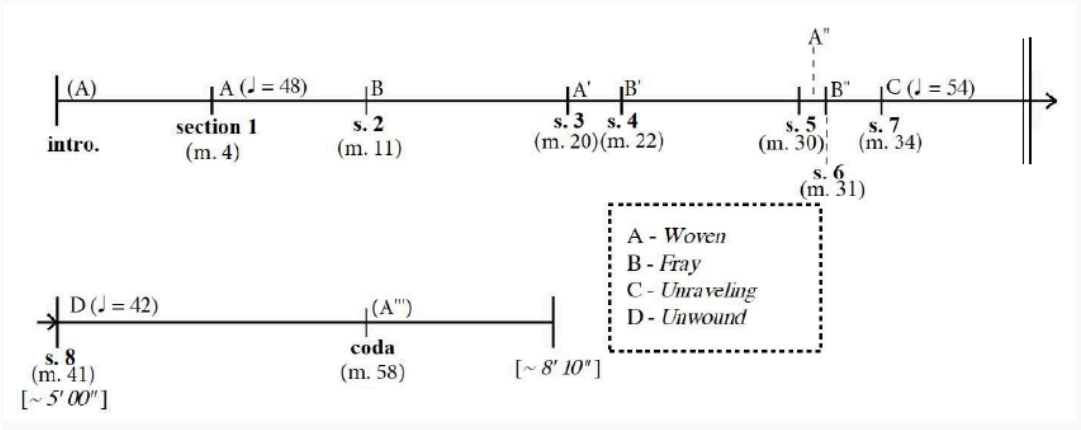


Figure 12 - Entwined to Fray's *formal structure with coinciding musical objects (A-D)*

EtF begins with an introduction lasting approximately 40 seconds and containing an unmetered, semi-aleatoric presentation of the 'Woven' (A) object. Following the introduction, at m. 4, the work's first six sections are comprised of alternations between three iterations of the 'Woven' (A) object and three forms of the 'Fray' (B) object. In this back and forth, each appearance of the A object becomes more and more fleeting until it is dissolves completely into the B material. Section 7, spanning mm. 34 - 41, is occupied by the presentation of the 'Unraveling' (C) object. The section begins with an accelerando from ♩ = 48 to ♩ = 52 with the latter tempo helping to propel the music forward to the climactic break which occurs at the section's close.

The final third of *EtF* can be separated into two portions: section 8 and the coda. Section 8 (mm. 42 - 58) begins with an immediate slowing to a tempo of ♩ = 42

in which it presents the 'Unwound' (D) musical object. A sub-sectional division can be placed about halfway through section 8 (m. 51) with the latter half dealing with a transition into the coda which takes the form of an extended cadential gesture (to be discussed below). The work's coda returns to the unmetered, aleatoric nature of its introduction and lasts roughly 40 seconds.

3.3 *EtF:* Musical Surface

In the previous two sections I have mentioned a series of musical objects (A-D) which appear throughout *Entwined to Fray*. I will now discuss each in detail paying special consideration to the function that each plays within the work's trajectory and conceptual narrative.

EtF's introduction presents the ensemble at its most unified with all four members producing a single unison D4. This unison will come to be recognized as the first iteration of the 'Woven' (A) object. At this point in the score, the music is written in a seconds based, durational notation and is broken into three segments of increasing length each of which contains slight variations in playing technique contributing to a sense of progressive activity throughout the section (figure 13). Throughout this section, despite the gradually changing levels of activity (timbral shift → dynamic fluctuation → microtonal inflection), the ensemble is perceived as a single *entity.* This can be said of each subsequent appearance of the 'Woven' object through the work; however, each one presents a greater degree of instability.

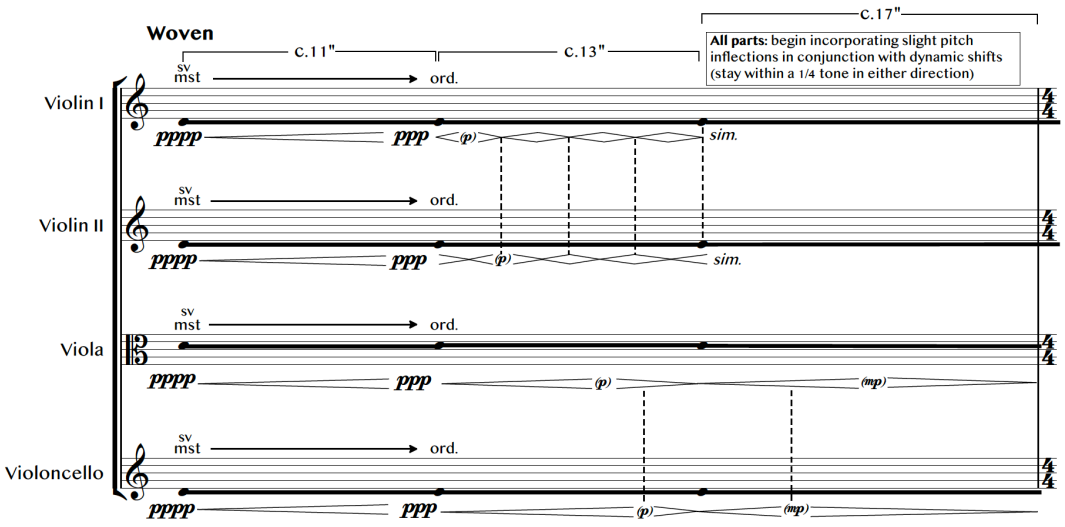


Figure 13 - Entwined to Fray*: Introduction*

Section 1 (mm. 4 - 11) is occupied by a continuation of the introduction's 'Woven' object and presents the first instance of its division: a pitch-range expansion allowing for the inclusion of D4's chromatic neighbors. Additionally, the section comes to a close with a gesture shared by the viola and cello which begins on G#3 in m. 9. This G# acts as a type of inciting force throughout the first 2/3rds of *EtF* with its appearance frequently occurring at moments of transition between the 'Woven' object and a 'Fray' (m. 9, m. 21, and m. 30).

Before proceeding with my explanation of each of the three forms of the 'Fray' (B) object, I want to justify my use of the term musical object with reference to these sections. Despite the significant variance of behavioral characteristics and pitch

content between 'Frays' I consider them to be three, increasingly active, presentations of the same object due to their shared role in progressing *EtF's* conceptual narrative.

Section 2 contains the first, and most subdued, 'Fray' (B) object which begins to subvert the unity of the ensemble through variation in playing techniques (vibrato fluctuation, tremolo, and bow position change). Additionally, the section contains a fleeting melody performed in string harmonics which I view as an echo of the cello's harmonic glissando which accompanies the viola's G#4 at the close of section 1. Despite its great degree of removal, this harmonic melody maintains a downward trajectory as if compelled by a sense of gravity exerted by the initial D4 unison.

Section 3 (mm. 20 - 21) finds a return to the 'Woven' object which is once again disrupted by the appearance of G#4 in the cello part in m. 21 signifying a transition into the second 'Fray' (B') (section 4). This section begins with the appearance of the pitch C5 in the first violin and viola parts which is effected by the same sense of gravity which pulled at the melody in the first 'Fray.' In this case, the downward pull forces the two parts into an almost hocket-like gesture of descending glissandos of increasing length whose endpoints outline a chromatic descent to Ab4. This motion is followed by a greater degree of rhythmic activity within the ensemble which gradually increases throughout mm. 25 - 29. The pitch range that this rhythmic activity inhabits (C4 - G4) acts as the chromatic compliment to the tetrachord outlined by the preceding glissando gesture. Overall, this second 'Fray' furthers the conceptual narrative by increasing the division of the ensemble (*entity*) through more expansive

rhythmic and pitch resources. That said, a degree of connection is maintained by utilizing similar gestures which seem to flow from, and influence one another.

The third and final 'Fray' (B"), within section 6 (mm. 31 - 33), acts as a kind of transitional moment from its preceding 'Woven' (A") object in section 5 and the 'Unraveling' object which follows it in section 7. The primary effect of this transition is that of registral expansion. Until this point, the pitch range employed within *EtF* rarely extended beyond G#3 and C5; however, at this point the outer limits of this range expand to C3 and C6. This change imparts a greater degree of vertical space within which the continued fragmentation of the strand *entity* can take place.

Section 7 (mm. 34 - 40), which is occupied completely by the tumultuous 'Unraveling' (C) object (figure 14), propels *EtF* towards its climactic moment. The character of the 'Unraveling' object is defined, in equal parts, by its harmonic content and chaotic rhythmic texture. The object's rhythmic character is arrived at through the use of arpeggio type gestures created by rolling the bow across the strings. The arpeggios take place at varying speeds and rarely share the same point of attack (bow direction change) within more than two parts. Combined, these desynchronized gestures impart a feeling of instability within the ensemble as its four members continue towards their individual realizations of autonomy.

The effect of these somewhat conflicting rhythmic gestures are counterbalanced by the semi-static harmonic structure which they outline (figure 15). Throughout the section, this sonority shifts slightly; however, it always returns to its central

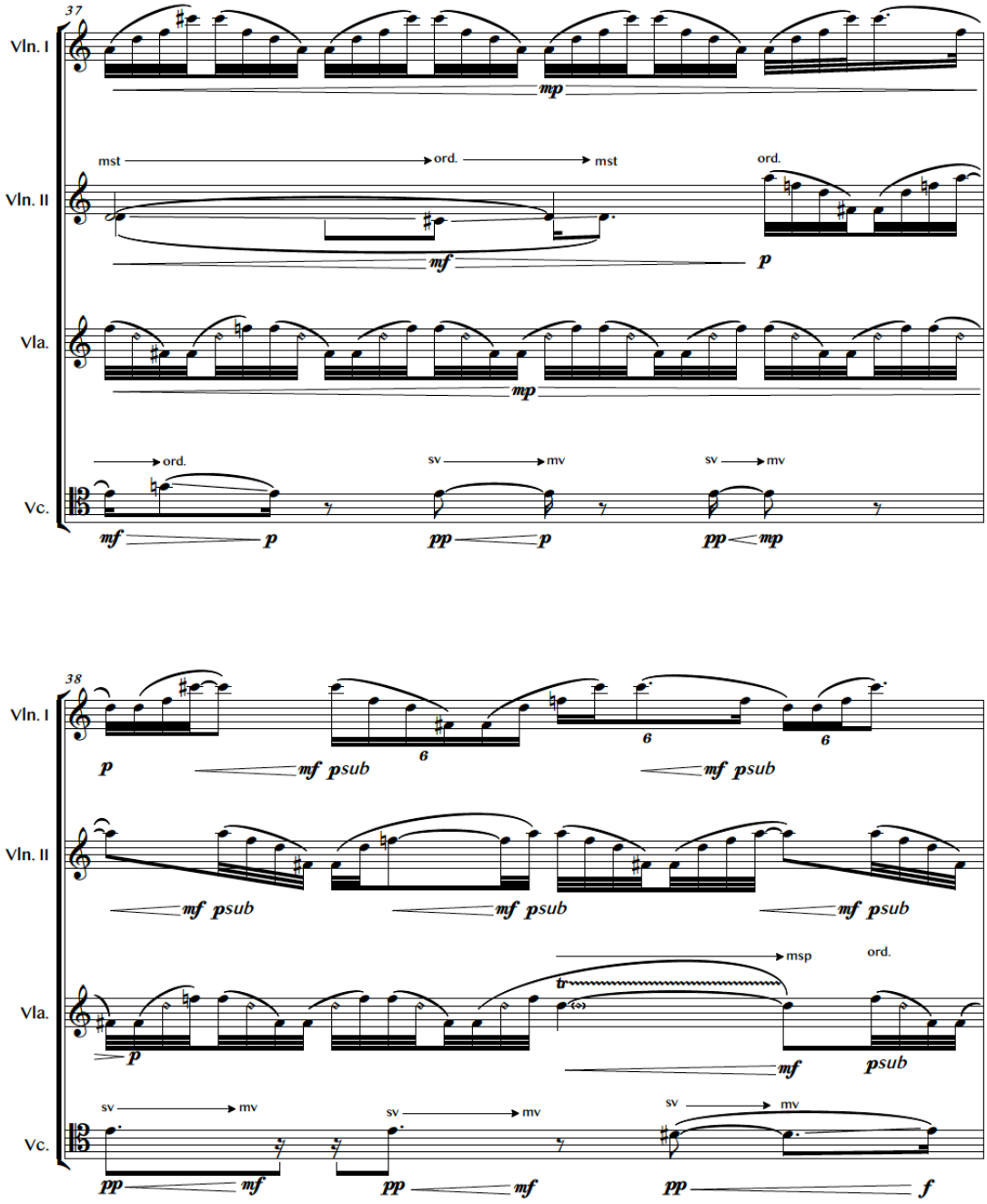


Figure 14 - *Portion of* Entwined to Fray's *'Unraveling' (C) object.*

structure. This harmonic unification, coupled with the coinciding rhythmic heterogeneity, creates a sense of an *entity* in the process of breaking apart whose components are still unable to abandon their connections completely.

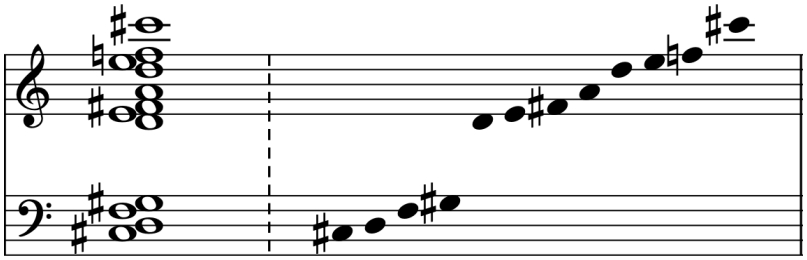


Figure 15 - Entwined to Fray*: harmonic content of the 'Unraveling' object*

Section 7 reaches a breaking point in m. 40 followed by a brief silence from which emerge four sonic strands, one held by each player, marking the opening of *EtF's* final, and longest, section. At its outset section 8 (mm. 41 - 57) presents the ensemble at its most divided with each of the four players creating their own individual line, unaffected by actions of one another. The removal of tension created by this sense of independence is fleeting. With the appearance the cello's C#2 in m. 46 the ensemble begins to be pulled towards that pitch's harmonic series. In m. 49 the result of this pull is heard with the ensemble resting on a sonority made up of a C#2 fundamental and equal-tempered representations of its 3rd, 5th, 9th, and 13th partials (figure 16).

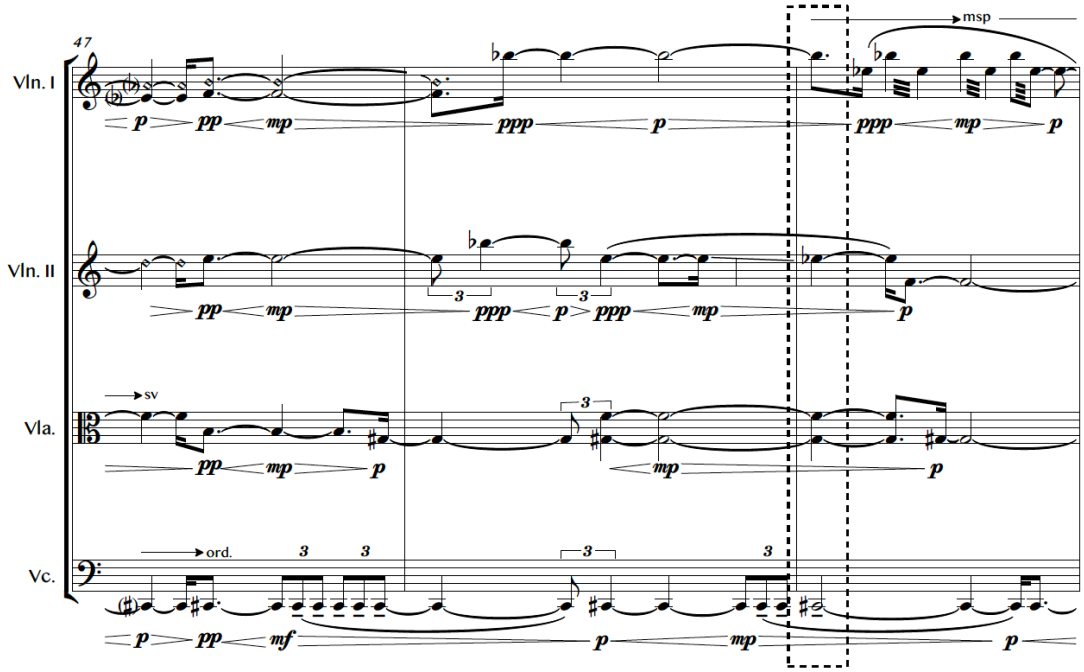


Figure 16 - Entwined to Fray*: movement towards C#2 spectrum with arrival indicated (m. 49)*

Mm. 51 - 57 contain an extended cadential gesture which I conceptualized as a magnification of a cadence which one might hear in renaissance polyphony. In it, each of the four voices in the ensemble slowly wind their way from their spectral sonority to four, octave displaced, D's with the inner voices moving through a drawn out ornamental figure in the process (mm. 52 - 56). After each voice resolves to their respective D the coda reverts to a similar aleatoric process to that carried out in the introduction, this time reversing its trajectory, gradually reducing the amount of activity within the ensemble until it eventually fades out of existence.

This renewed unification at the end of *EtF* might initially seem counter to the work's overall conceptual narrative of progression from complete interdependence to autonomy. This is partially the case; however, I will draw attention back to the concepts of *entity* and *gestalt* in explaining my reasoning behind its inclusion. I began *EtF* with the intention of it coming to a close after the ensemble members had reached a state of autonomy. As mentioned, the ensemble does, in fact, reach this point of independence (mm. 41 - 43) but I did not feel that this was a fitting end to the piece. Instead, I reimagined the form, leaving everything as it was but adding a portion to the end in which these newly autonomous strands would be recontextualized as components of a new, larger whole. This re-unification occurs with the appearance of the C# spectrum in m. 49. At this point the members of the ensemble continue to maintain some degree of autonomy (as individual musical lines); however, they also adopt the role of partials within a single, unified sonority. In this way the overall formal trajectory for *EtF* became defined not only by the dissolution of an *entity* but also the formation and perception of a *gestalt.*

Fractured Pond

4.1 From Metaphor to Abstract Form

Like all of the pieces discussed in this thesis, *Fractured Pond,* for ten players (fl. bcl. ob. hrn. trb. vln. vla. vc. cb.), began with the translation of an extramusical idea into a musical context. Similar to the way that *Entwined to Fray* began with ideas centered around the concept of the sonic strand *entity*, *Fractured Pond* began with ideas regarding the perception of sonic *gestalts.*

In his works *Three Worlds* and *Rippled Surface* (figure 17), MC Escher demonstrates how one might discern three layers when looking at a clear, reflective body of water: the subsurface, the reflected image (supra-surface), and the transparent surface itself. On a still day it might be easier for the viewer to accurately recognize the images above and below the waters surface. However, upon even a minor disruption, such as ripples in the water's surface, these images loose their consistency and begin to meld together into a single distorted *gestalt*. These ideas acted as my initial inspiration when beginning work on what would become *Fractured Pond*.

Figure 17 - *MC Escher's* Three Worlds *(left) and* Rippled Surface *(right).*

I began conceiving of a musical trajectory informed by this idea of a rippling surface acting as a type of mediator for the interplay between images that appears above and below it. I arrived at a form built around the, relatively simple, idea of various sonic *gestalts* appearing, being distorted, disrupted, and disappearing. In relation to the visual concepts mentioned, these *gestalts* act as sonic representations of the combination of images above and below a rippling surface.

In making sketches of the temporal forms that this idea might inhabit I chose to follow the same macro-form as *EtF* with a large scale structural division occurring roughly 2/3rds of the way through the piece. The first large portion would include the appearance of five separate structures. The final third of the piece would then seek a type of resolution through the mixing and interweaving of various elements from earlier in the work.

Figure 18.1 - *Initial visualization of formal structure for* Fractured Pond

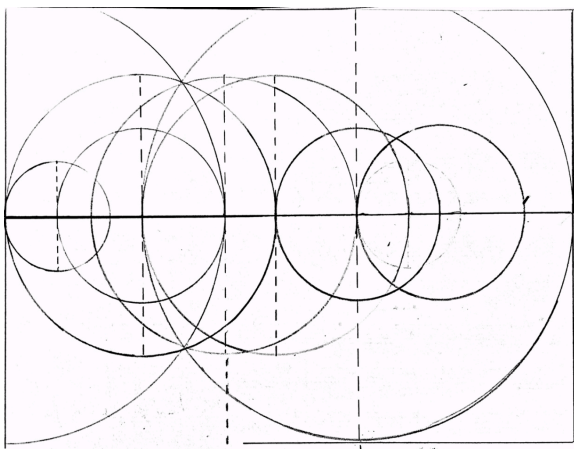


Figure 18.2 - *Refined visualization of formal structure with rough indications (dotted lines) for the appearances of the* gestalt *structures*

The final addition to my abstract formal scheme for *FP* was the conception of two musical objects which would help regulate the overall trajectory of the music. Similar to the two imagined forces at play within *EtF,* one would compel the music towards a greater degree of activity while the other would attempt to manifest stasis. Unlike the forces in *EtF, FP's* are expressed within two concrete sonic representations. The first, a disruptive, instigating force, takes the form of a series of low register bass clarinet gestures (the 'disrupter' object). The second, a static, calming force, appears as a series of sustained iterations of the pitch A5 (the 'still' object). Both of these musical objects will be discussed in greater detail below (section 4.4).

4.2 *FP:* Temporal Structure

As mentioned, *Fractured Pond's* overall form is similar to that of *Entwined to Fray* in that a large-scale structural division can be placed at approximately 2/3rds of the way through the work. The first large portion can be broken into three segments which make up the first three sections of the work with the division between each indicated sonically through the appearance of the bass clarinet's 'disrupter' object. The second large portion is divided into two segments comprised of a transitional moment (section 4) followed by section 5.

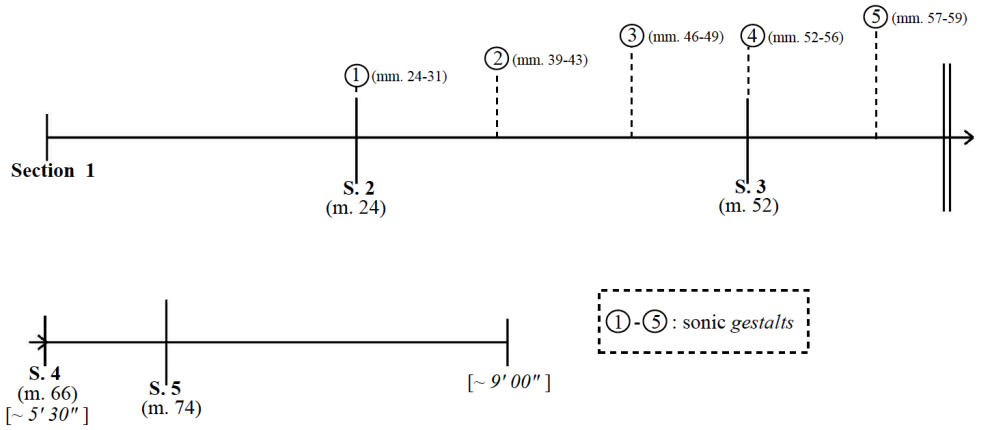


Figure 19 - Fractured Pond's *formal structure with occurrences of sonic* gestalt *structures*

Section 1 (mm. 1 - 23) establishes the sonic environment from which the rest of the work emerges through a sustained presentation of the 'still' object. The first appearance of the 'disrupter' object occurs in mm. 20 - 23, signaling the section's close. Section 2 (mm. 24 - 51) begins with a continuation of the 'disrupter' object which triggers the appearance of the first *gestalt* structure (mm. 24 - 31). The second and third *gestalt* structures are also heard within section 2 at mm. 39 - 43 and mm. 46 - 49, respectively. The intervening material is made up of, slightly more fortified, iterations of the 'still' object and the second occurrence of the 'disrupter' at the end of the section. Like its predecessor, section 3 (mm. 53 - 65) begins with a continuation of the 'disrupter' object from which emerge the forth and fifth *gestalt* structures (mm. 52 - 56 and mm. 57 - 59). These events are followed up by the most aggressive presentation of the 'disrupter' object which causes a rupture in the musical surface that the work had inhabited until that point. Section 4 (mm. 66 - 73) acts as a type of transitional interlude, bridging the gap between the climactic break at the end of section 3 and the new musical surface presented in section 5 (mm. 74 - 103).

4.3 *FP:* Musical Surface

I will begin my examination of *Fractured Pond's* musical surface by addressing the makeup of the 'disruptor' and 'still' objects which appear throughout the first 2/3rds of the piece. I will then explain the construction of the five *gestalt* structures and their appearance in sections 2 and 3. Finally, I will discuss the material makeup of sections 4 and 5.

The 'disruptor' object, which acts as the structural demarcator for the first three sections, appears with slight variation with each of its occurrences; however, it is always comprised of the same base materials (figures 20.1, 20.2, 20.3). The object is made up of sustained pitch oscillations around C#2 and D2 and, in its first two iterations, is split in the middle with its first half occurring at the end of a section and its second half introducing the next

section. Another key feature of the 'disruptor' object is the swelling overblow/spectral multiphonics which occur on the pitches C# or D.

It should also be noted that, aside from the object's structural role, the 'disrupter' also introduces certain musical materials that appear throughout the piece. Its primary contribution is in the importance it instills in the pitches C#2 and D2. Following the object's first statement these pitches appear as pedal-tones throughout the work, carried primarily by the contrabass and cello. Additionally, the overblow multiphonics are indirectly linked to the harmonic makeup of the various *gestalt* structures.

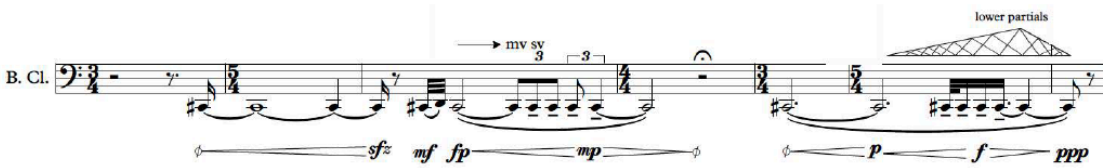


Figure 20.1 - *first occurrence of the 'disruptor object' (mm. 20 - 26)*

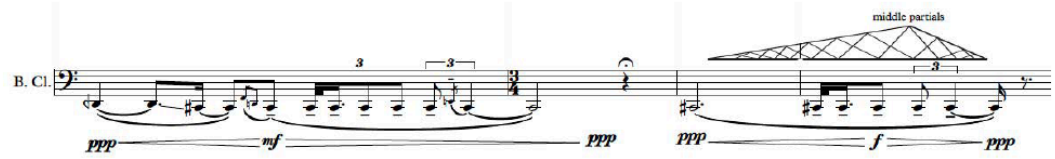


Figure 20.2 - *second occurrence of the 'disruptor object' (mm. 50 - 53)*

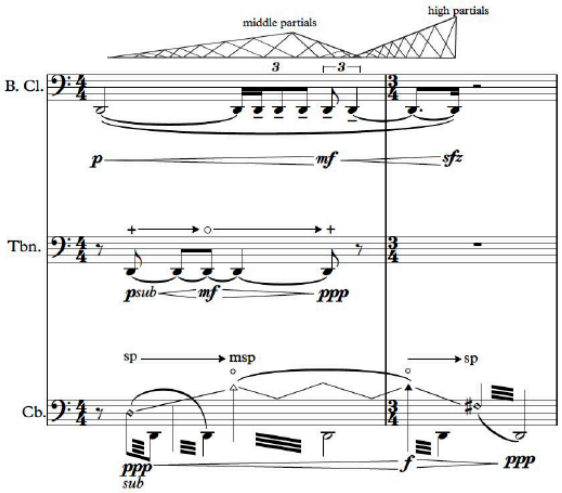


Figure 20.3 - *third occurrence of the 'disruptor object' (mm. 64 - 65) reinforced by tbn. and cb.*

The ‘still’ object consists of sustained repetitions of the pitch A5 propelled by timbral fluctuation and occasional pitch inflections of a quarter-tone or semi-tone. As mentioned, section 1 works to establish the underlying musical environment upon which the following two sections are built. This is done through an extended presentation of the ‘still’ object (mm. 1 - 21), carried out by the flute, oboe, violin and viola, which becomes gradually more active before being interrupted by the ‘disrupter’ object’s initial statement. From this point on, throughout sections 2 and 3, the ‘still’ object acts as a type of mediating force or connective tissue which binds the work’s successive events together (mm. 35 - 39, 44 - 45, 61 - 62).

These two objects act as contrasting counterparts within *FP’s* conceptual framework. The ‘still’ object acts as the static, undisturbed surface upon, and through, which various images can be perceived while the ‘disruptor’ acts as a ripple inducing force which, in distorting the surface, causes these images to fuse together into multipart *gestalt* structures.

As mentioned, sections 2 and 3 contain the appearance of the five sonic *gestalts* which act as the primary events within the first large portion of *FP.* Each of these structures (figure 21) is made up of two vertical sonorities which transform or melt into one another over the course of their presentation. For the most part, the first sonority in each of these pairs appears gradually within the music, carried by multiple instruments or instrumental groups. As they emerge their various components appear

within relatively autonomous lines or gestures; however, they quickly begin to meld together into single units. Once fused the initial sonorities undergo varying degrees of harmonic and timbral distortion thus transitioning into their successor.

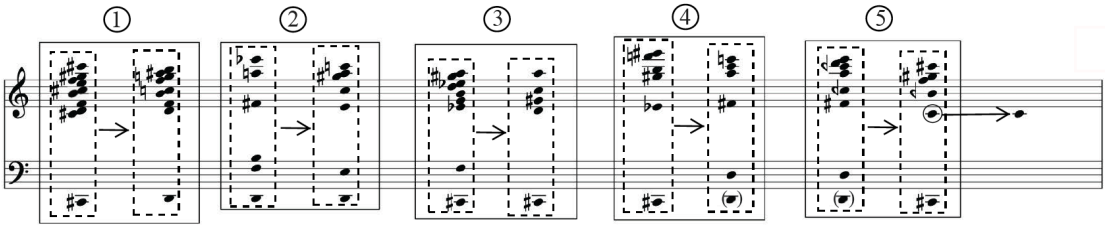


Figure 21 - *Harmonic content in* Fractured Pond's *5 sonic* gestalt *structures.*

Each of the harmonies that make up these five sets are comprised of upper register structures, with varying degrees of density, and an underling C#2 or D2. I think of each of these five sets as quasi-spectral, harmonies. While the fifth set is the only one that seeks any degree of accuracy in depicting the overtone series, I still consider the other four as fitting within this categorization due to the way they are perceived sonically. In each case the low register pitch acts as a type of fundamental tone which, when it is heard, becomes a sort of unifying force, binding together the pitches within the upper structures. In this way, they are not true spectral derivations; however, they are perceived in a very similar way; possibly as intuited, enharmonic distortions of natural spectra.

The first *gestalt* structure begins to emerge from the 'disrupter' object in m. 24 carried by the flute, and strings. In this instance the strings are acting together within a single gesture while the flute outlines the *gestalt's* initial harmony with melodic flourishes. The two components blur into unity in m. 29 as they present the *gestalt's* second sonority.

In addition to their harmonic make up, the five *gestalts* often employ different types of behavioral elision to further the sense of unity across the ensemble. For example, the second *gestalt* (mm. 39 - 43) contains a pulsing behavior that winds its way through part of the ensemble (figure 22). This type of gesture also occurs in *gestalt* 1 as well as, to varying degrees, in *gestalts* 3-5. Other examples of behavioral elisions are the passing of trill and vibrato gestures between instruments.

The first sonority of *gestalt* 3 (mm. 46 - 49) appears, initially, as a descending figure shared by the flute, oboe, violin, and viola which then solidifies into a sustained chord that spans the entire ensemble. Midway through m. 47 this chord shifts to *gestalt* 3's second sonority which quickly dissolves into the quasi-fundamental C#2. This pitch fades into an iteration of the disruptor object which brings section 2 to a close.

Section 3 begins with the appearance of *gestalt* 4 which, like *gestalt* 1, emerges from one of the overblow multiphonics in the disruptor object. The initial sonority fades gradually into the second in mm. 54 - 55 which shifts almost instantly into the presentation of *gestalt* 5 (figure 23). The fifth, and final, *gestalt* structure

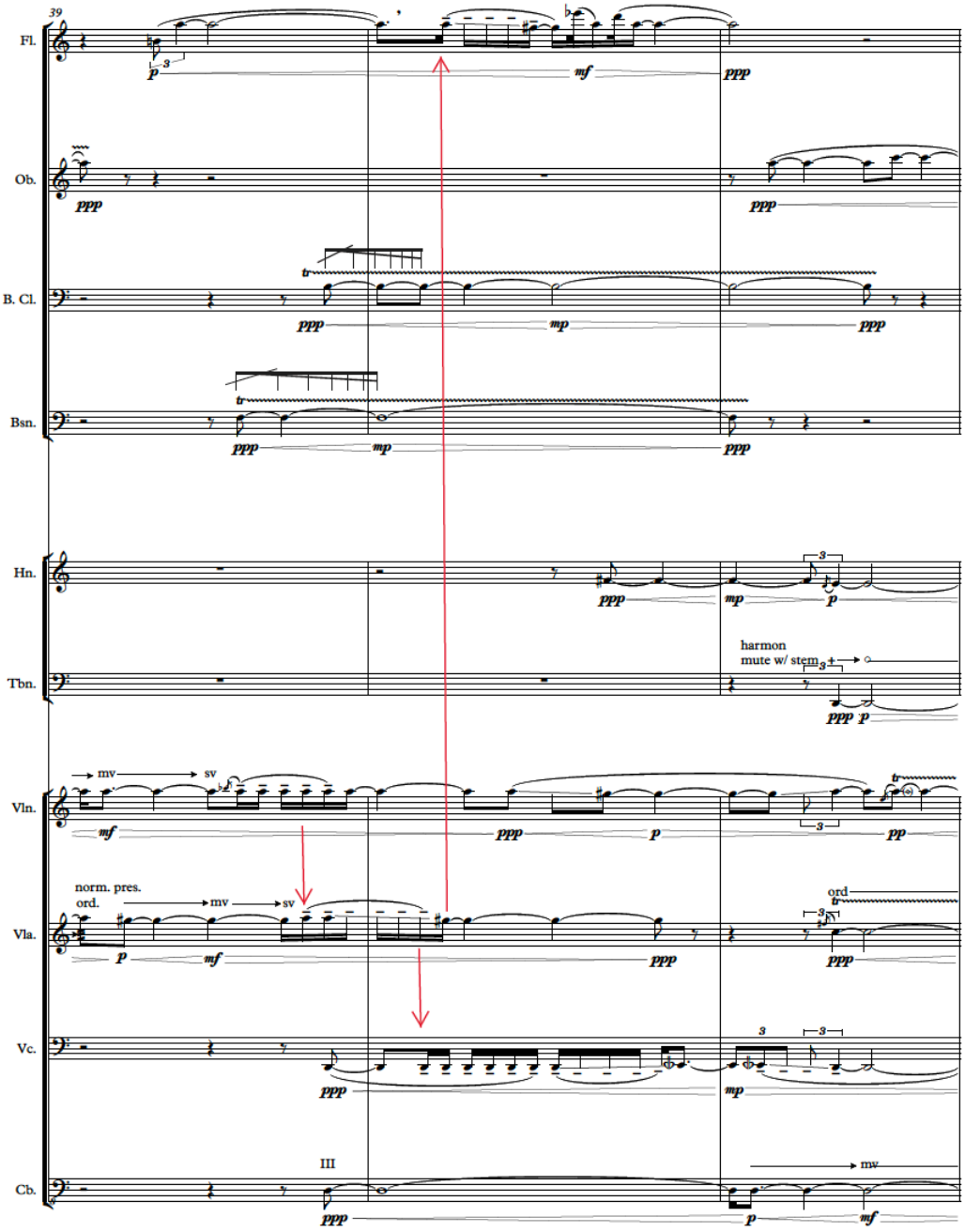


Figure 22 - *Pulsing behavior within* gestalt 2 *(*Fractured Pond *mm. 39 - 41)*

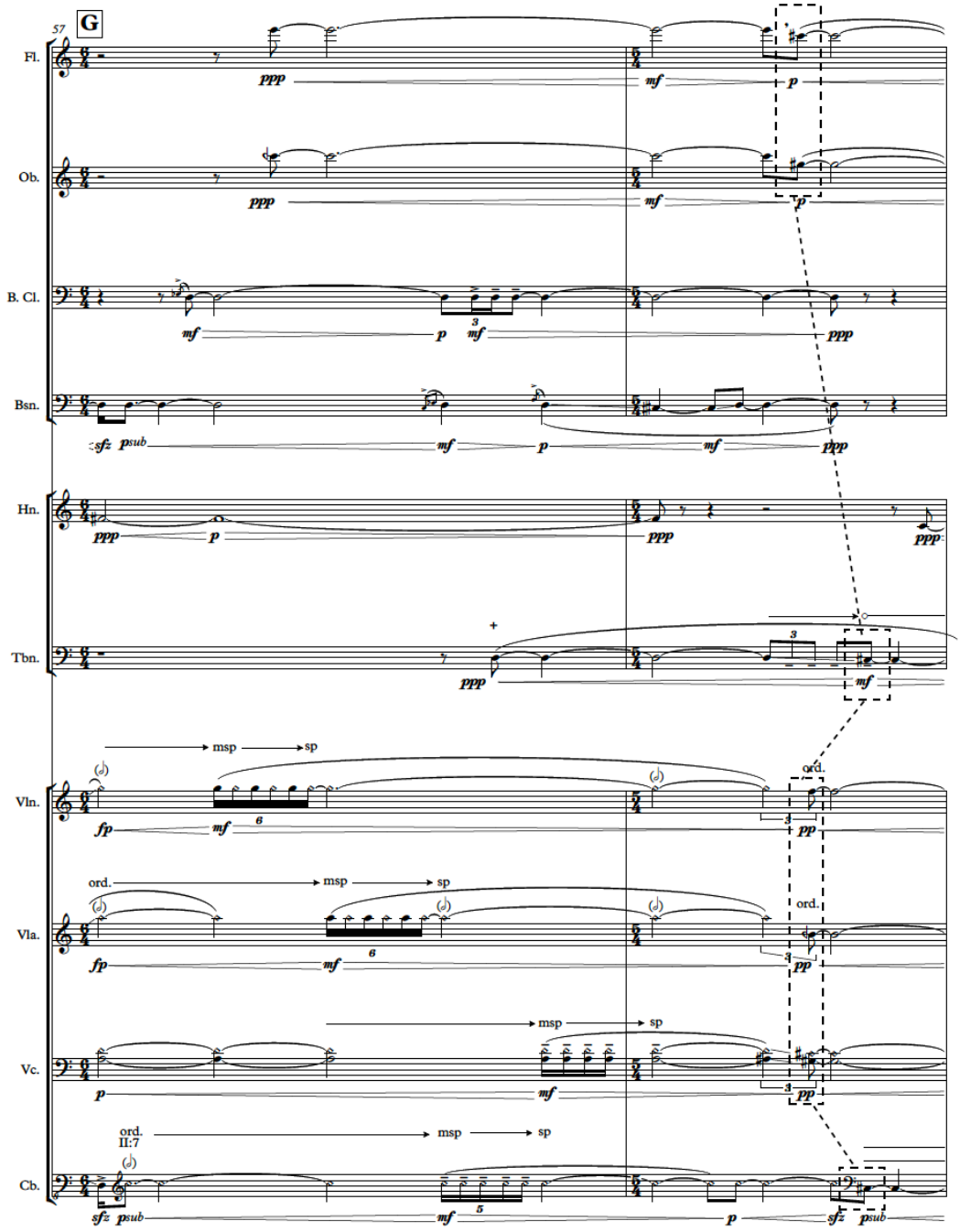


Figure 23 - *Spectrum over D2 and its transition to spectrum of C#2 in* gestalt *5 (*Fractured Pond*, mm. 57 - 58)*

(mm. 57 - 60) contains the only literal presentation of the harmonic series within *FP*. The initial sonority presents an equal tempered harmonic series over a D2 fundamental. Although the fundamental itself is not represented in the score, the presence of its 2nd, 5th, 7th, 12th, 14th, 16th, and 18th partials convey the harmony's spectral origin. The D spectrum is quickly transformed to a C# spectrum (*gestalt* 5's second sonority) carried by a pulsed glissando in between the two spectrums second partials (tbn. m. 58). This second harmony does contain the spectrums fundamental which is reinforced by its 7th, 10th, 12th, ad 18th partials. The presence of the outlier C4 within the harmony pulls the music out of *gestalt* 5 and into a brief iteration of the still object which is quickly followed by the final appearance of the disruptor object.

Section 4 (mm. 66 - 73) follows the climactic break created by the final appearance of the 'disruptor' object in section 3. The musical material that makes up this section is largely comprised of figures that I imagine as echos of the final statement in section 3 acting as a transition between it and the final section of *FP*. The bass clarinet and contrabass play sustained gestures that explore the harmonic series above D2 which echo their gestures in mm. 64 and 65 and establish the prominence of the D pedal tone that caries through the remainder of the work. The flute alternates between timbrally variable E6s and C4s which carry over from the C4 that envelopes the ensemble in mm. 60 - 62 and the E4 *sforzandos* in the brass in m. 64. Finally, the strings briefly interject with combined trill gestures. The section is brought to a close by a distorted trill on D2 in the cello.

Section 5 (mm. 74 - 103) is comprised of fragments of gestural materials from earlier in the work as well as brief, new figurations. Examples of the prior material can be seen in the occurrences of the pulsing behavior which appeared in each of the *gestalts* (mm. 75 - 76); and reappearances and developments of, the combined trill gesture which appeared in the strings in section 4 (mm. 79 - 83). Additionally, the 'disruptor' and 'still' objects make reappearance as well; however, the former does not hold the same force it did previously. That said, the 'still' object does maintain a degree of its connective quality, appearing three times throughout section 5 (vln. and vla. in mm. 77 - 81, 86 - 90, 92 - 101) pulling the music towards a conclusion through its repetition.

The new material primarily takes the form of various types of harmonic figurations (fl., bcl., vln., vla., vc., in mm. 80 - 83). In mm. 89 - 92 these gestures are overtaken by aleatoric harmonic figures in the lower strings which are all carried out on the instruments' respective D strings. In reference to the conceptual framework of *FP,* I imagine this shared texture as a type of perpetually rippling surface which gradually envelops the rest of the ensemble forcing any images that might appear above or below it to disappear almost immediately.

Conclusion

In summary, my compositional process, with regard to my recent work, has been highly informed by the translation of extramusical ideas into sonic contexts. Typically, this involves arriving at my own subjective distillation of a given idea. The results of this process become, what I consider, the underlying substance of my work. In placing these results within an auditory environment I often create sets of musical objects which sonically embody their characteristics and, in so doing create, the surface features of my work. These objects are then placed within specifically constructed temporal structures which are arranged in such a way that the interactions of the materials within them define a certain trajectory which, ultimately, aspires to convey some sense of their germinal concept.