The Use of Registral Spacing and Rhythmic Density as Musical Trajectories in a Portfolio of Original Compositions

Volume 1 of 2: Portfolio of Original Compositions

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Presented in partial fulfilment of the requirements of the degree of Doctor of Philosophy in Music (Composition) 2020

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Never-ending Torture

for soprano and harp

Poumpak Charuprakorn (2016)

FULL SCORE

Never-ending Torture was composed in collaboration with the Cardiff-York Universities Coma and Disorders of Consciousness Research Centre for the event 'Coma Notes: music and poetry exploring consciousness and coma' which was a part of the ESRC/Cardiff Festival of Social Science to convey the stories of patients in a coma and their families who are facing this heartbreaking situation.

The composition does not aim to tell the story in a direct, linear narrative, but rather to use music to express the misery of the families and patients involved through the creation of sounds that a patient in a coma might be experiencing, such as partially heard conversations and distorted sonorities, by using fragmentation of the text, barely comprehensible sounds sung by the soprano as well as various sound clusters created by harp.

The piece starts with the thunderous sound of a harp followed by fast gestures and the dramatic long crescendos of a soprano. Not all text is meant to be comprehensible. The soprano alternates wordless, non-lexical singing with fragments of text accompanied by clusters in the harp. What starts as a big wave of clusters later turns into a soft, sparse, pointillistic texture. The middle section features whispers and hums supported by a range of muffled sounds produced by the harp before a short, but intense, outburst of emotions returns. The composition appears to end with a mother's quiet plea to 'end' her son's 'suffering', but it is finally disrupted by another thunderous sound that perpetuates the idea of 'never-ending' torture or even depicts a final cry of anger and despair.

The composition was premiered at Cardiff University on 16 November 2016 by Gwenllian Llyr (harp) and Sarah Dacey (soprano).

Duration: ca. 6 minutes

(Messages from anonymous mothers, adapted by Poumpak Charuprakorn)

..... no! Oh, my son! .....
My son, my love!
No! No! My son, help him!
Please, help him!
Somebody, please, help.

(You are going to be alright.
Somebody is going to help you.
Oh, my son.
Somebody, please, help him.
Please, somebody, save him.)

.....

(Mister? Mister? Mister!)

..... you! ..... him! .....
He is feeling, he is feeling the pain!

Please end this.
Please end this suffering.

.....

PERFORMANCE NOTES

Soprano

A letter in brackets is the consonant and/or the vowel of the sound

An arrow between two brackets represents a gradual change of the vowel

Texts with crossed noteheads need to be spoken (or whispered)

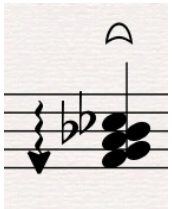
Harp

means that the performer is required to play the strings with force to create buzzing sounds

A crossed notehead represents Bartok's pizzicato

A black vertical rectangle needs to be played by hitting the strings

A dashed slur indicates a phrase

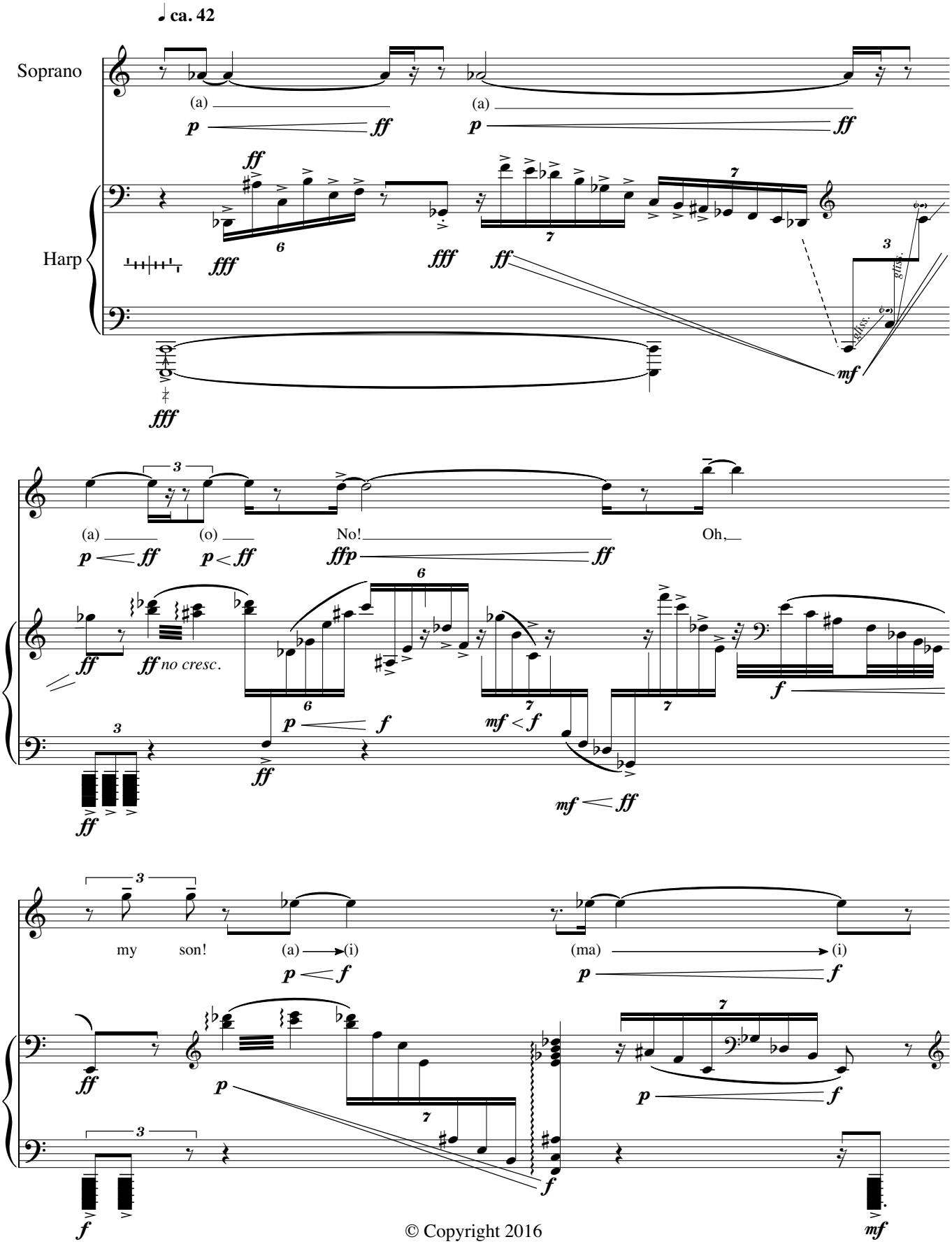


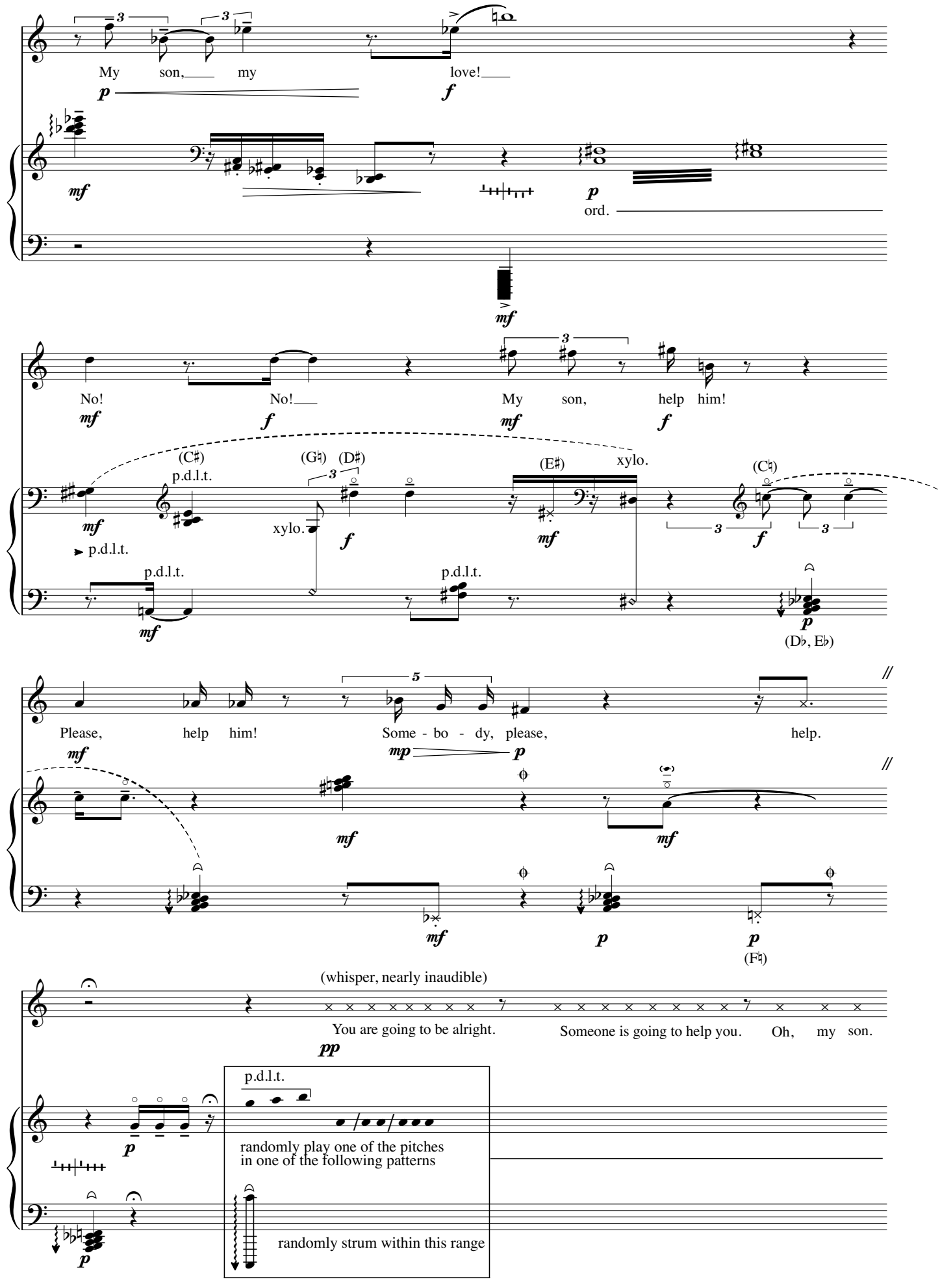
represents strumming the strings with fingernails

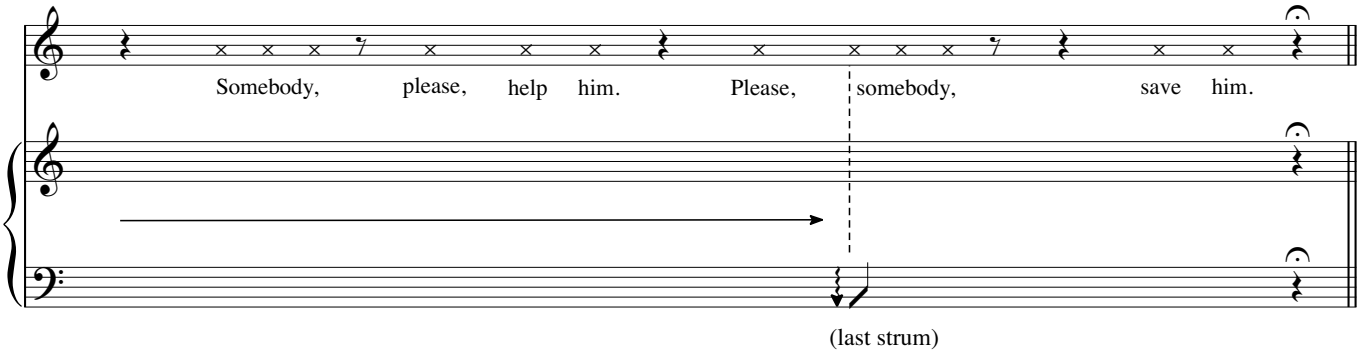
Full Score

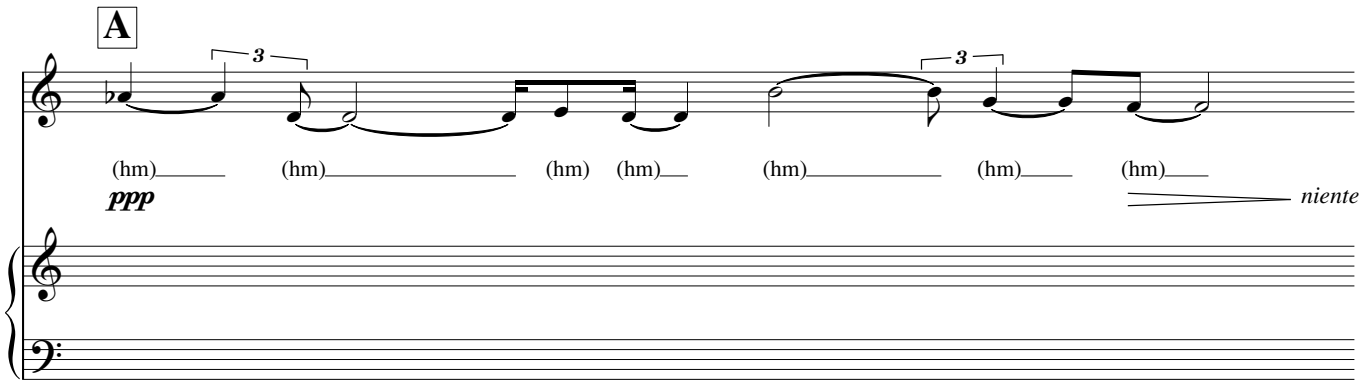
Never-ending Torture

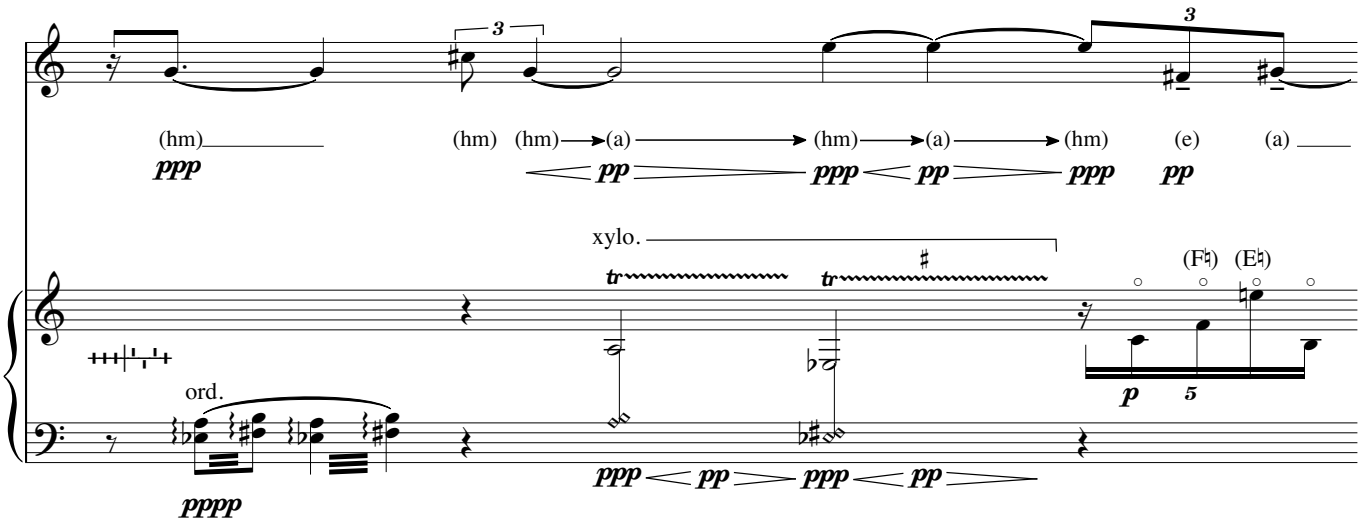
Poumpak Charuprakorn (2016)

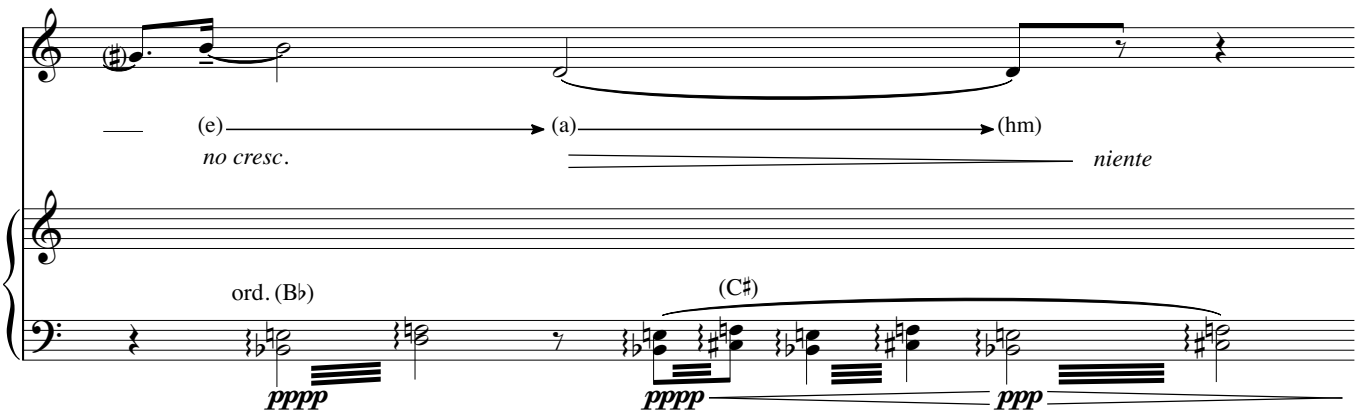


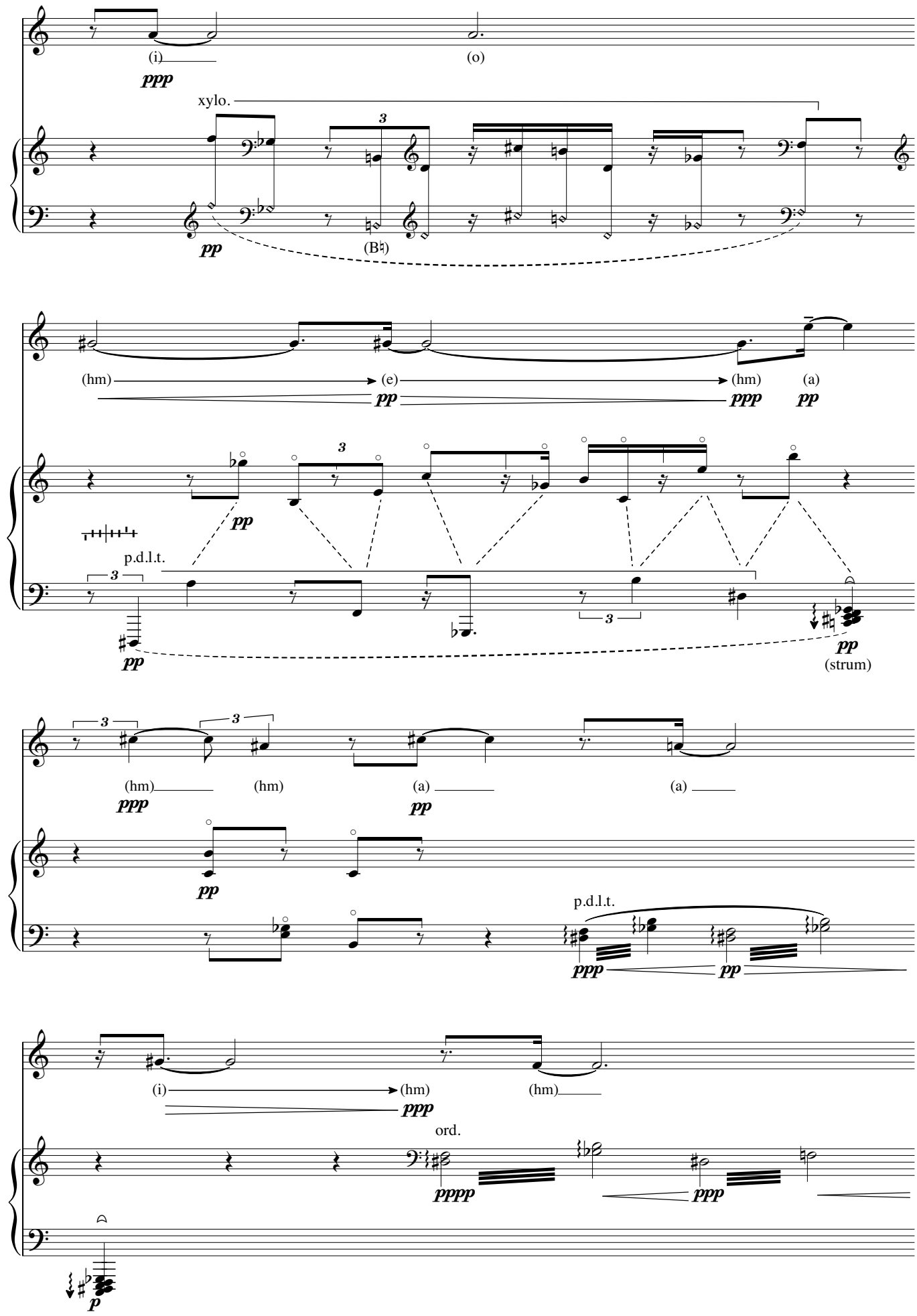

My son, my love!
No! No! My son, help him!
(C♯) p.d.l.t.
(G♮) (D♯)
xylo.
(E♯)
xylo.
(C♮)
p.d.l.t.
p.d.l.t.
p.d.l.t.
(D♭, E♭)
Please, help him! Some - bo - dy, please, help.
(F♮)
(whisper, nearly inaudible)
You are going to be alright.
Someone is going to help you. Oh, my son.
p.d.l.t.
randomly play one of the pitches
in one of the following patterns
randomly strum within this range

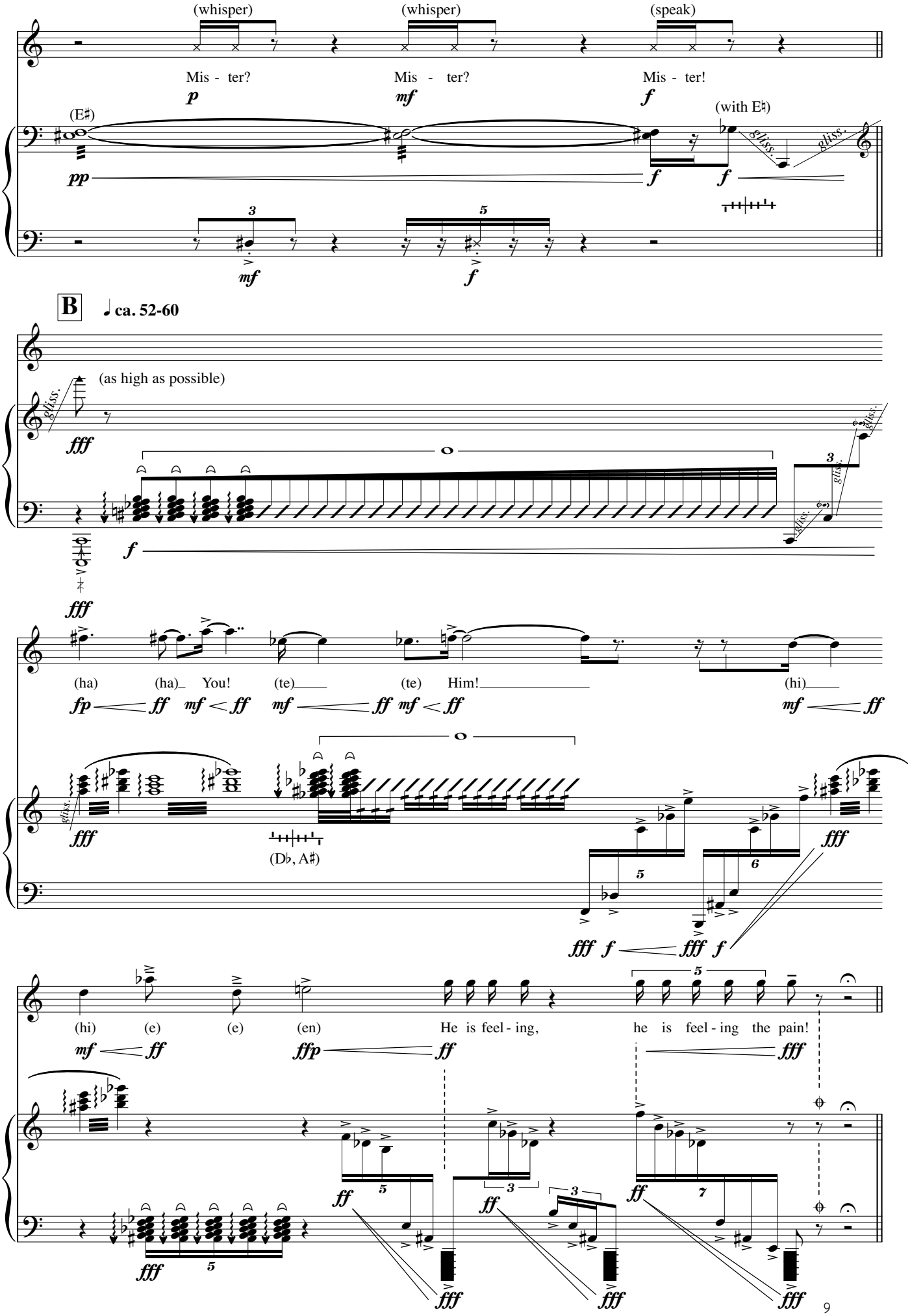

Somebody, please, help him. Please, somebody, save him.
(last strum)

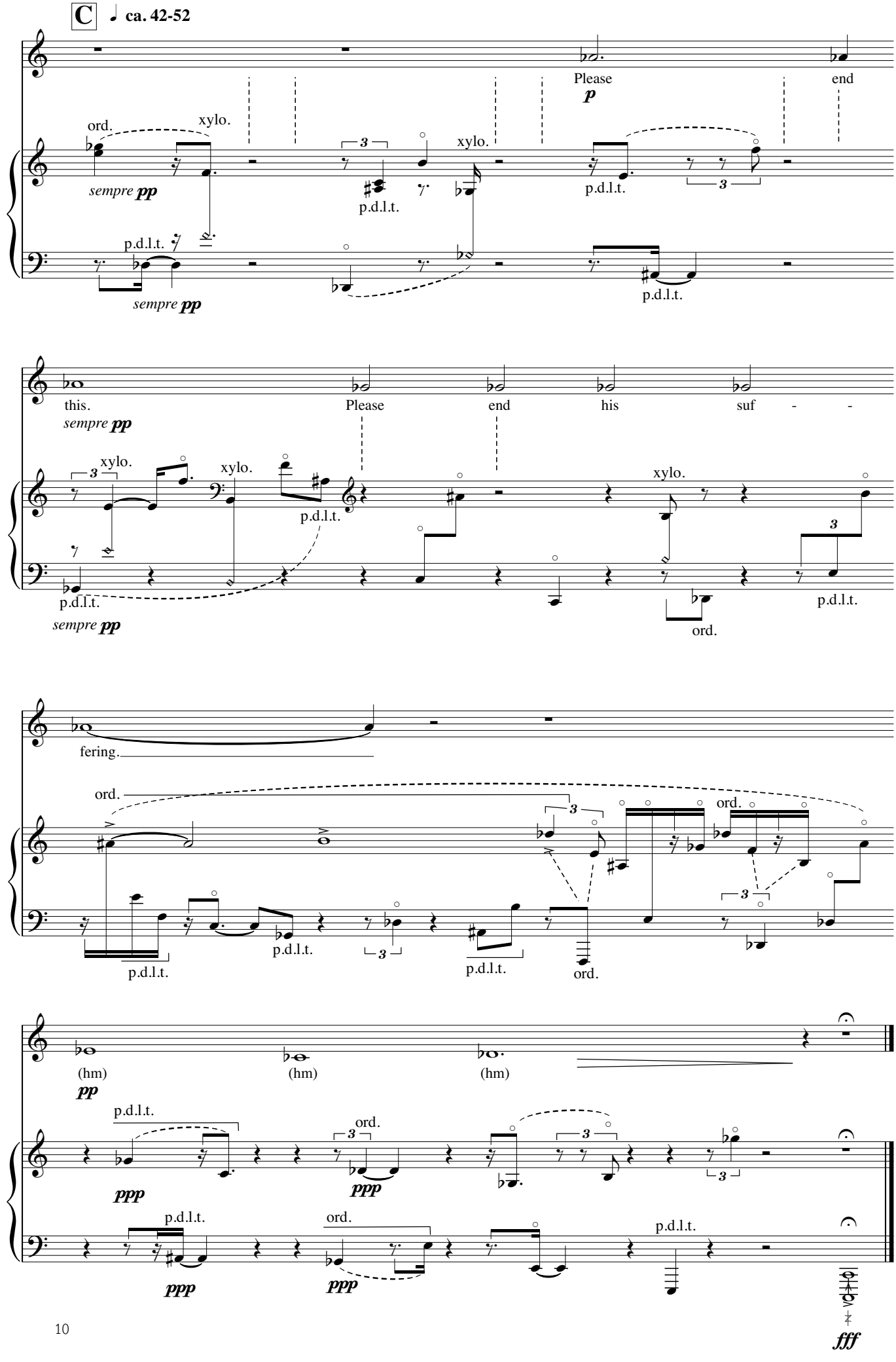

A
3
3
(hm) (hm) (hm) (hm) (hm) (hm) (hm)
ppp
niente


3
3
(hm) (hm) (hm)→(a) (hm)→(a) (hm) (e) (a)
ppp pp ppp pp ppp pp
xylo.
tr tr
(F♮) (E♮)
ord.
p
5
pppp
ppp pp ppp pp


(e) (a) (hm)
no cresc.
niente
ord. (B♭)
(C♯)
pppp
pppp
ppp


(i)
(o)
ppp
xylo.
3
pp
(B♮)
(hm)
(e)
(hm)
(a)
pp
ppp
pp
3
p.d.l.t.
3
pp
3
pp
(strum)
3
3
(hm)
(hm)
(a)
(a)
ppp
pp
pp
p.d.l.t.
ppp
pp
(i)
(hm)
(hm)
ppp
ord.
pppp
ppp
p


(whisper)
(whisper)
(speak)
Mis - ter?
Mis - ter?
Mis - ter!
p
mf
f
(E♯)
(with E♮)
pp
f
f
gliss.
gliss.
3
5
mf
f
B
ca. 52-60
(as high as possible)
gliss.
fff
f
3
gliss.
gliss.
fff
(ha) (ha) You! (te) (te) Him! (hi)
fp ff mf ff mf ff mf ff mf ff
gliss.
fff
(D♭, A♯)
5
6
fff
fff f fff f
(hi) (e) (e) (en) He is feel - ing, he is feel - ing the pain!
mf ff ffp ff fff
ff
5
3
3
ff
7
fff
5
fff
fff
fff


C
ca. 42-52
Please
p
end
ord.
xylo.
sempre pp
p.d.l.t.
this.
Please
end
his
suf - -
fering.
(hm)
pp
ppp
ord.
fff

Tea-Time

for soprano and electronics

Poumpak Charuprakorn (2018)

in collaboration with Heather Fuller

FULL SCORE

i

Tea-Time is a composition for soprano and electronics which aims to express the notion of time inspired by the absurd, but thought-provoking, conversation from the remarkable 'Mad Tea Party' in Lewis Carroll's *Alice's Adventure in Wonderland* and the fact that we sometimes choose to inefficiently spend the time of our lives which is running out everyday. The soloist is accompanied by an audio track digitally generated from her pre-recorded narration. The music starts with a quotation from the book and later morphs into a vortex of sound, various expressions of the singer, and ends with another quotation that states the worrying situation we are in.

The composition was composed in collaboration with Heather Fuller for Cardiff University's *Composition Showcase: Project in Collaboration 2018.*

The premiere was performed at Cardiff University on 1 May 2018 by Heather Fuller (soprano).

Duration: ca. 4 minutes

Performance notes

Normal notehead = sing

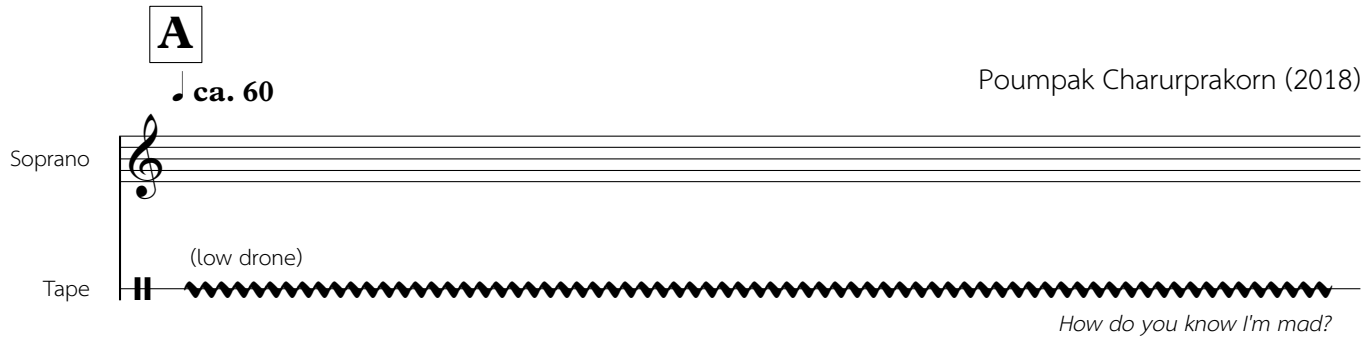
Crossed nothead = speak, unspecified pitch

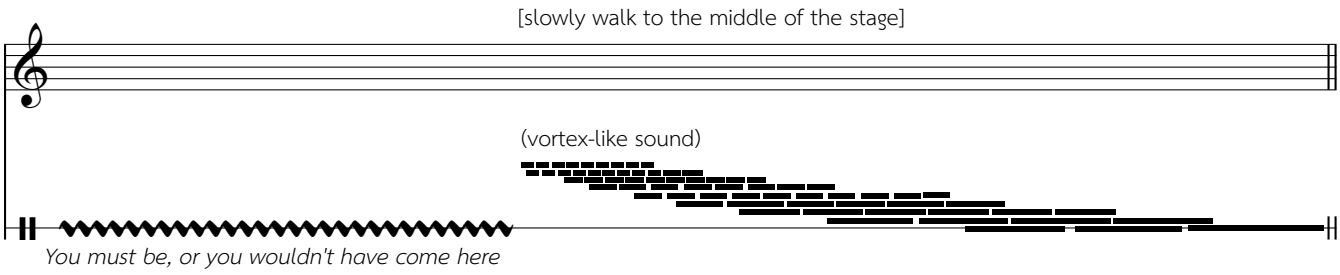
Triangular notehead = choose the pitch at random or from any audible pitch from the audio track

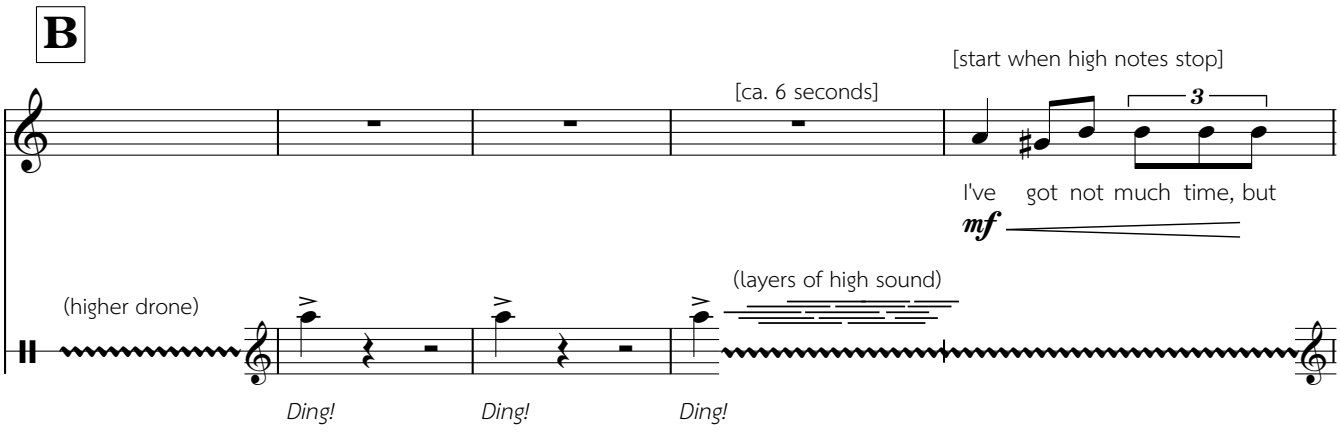
Please contact the composer for Max patch which includes a recording sub-patch and an audio track generator.

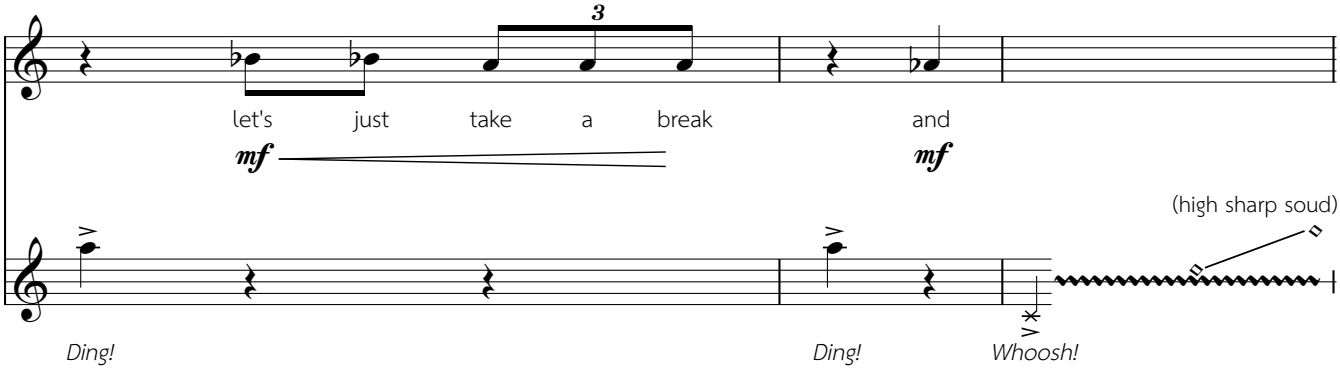
Tea-Time

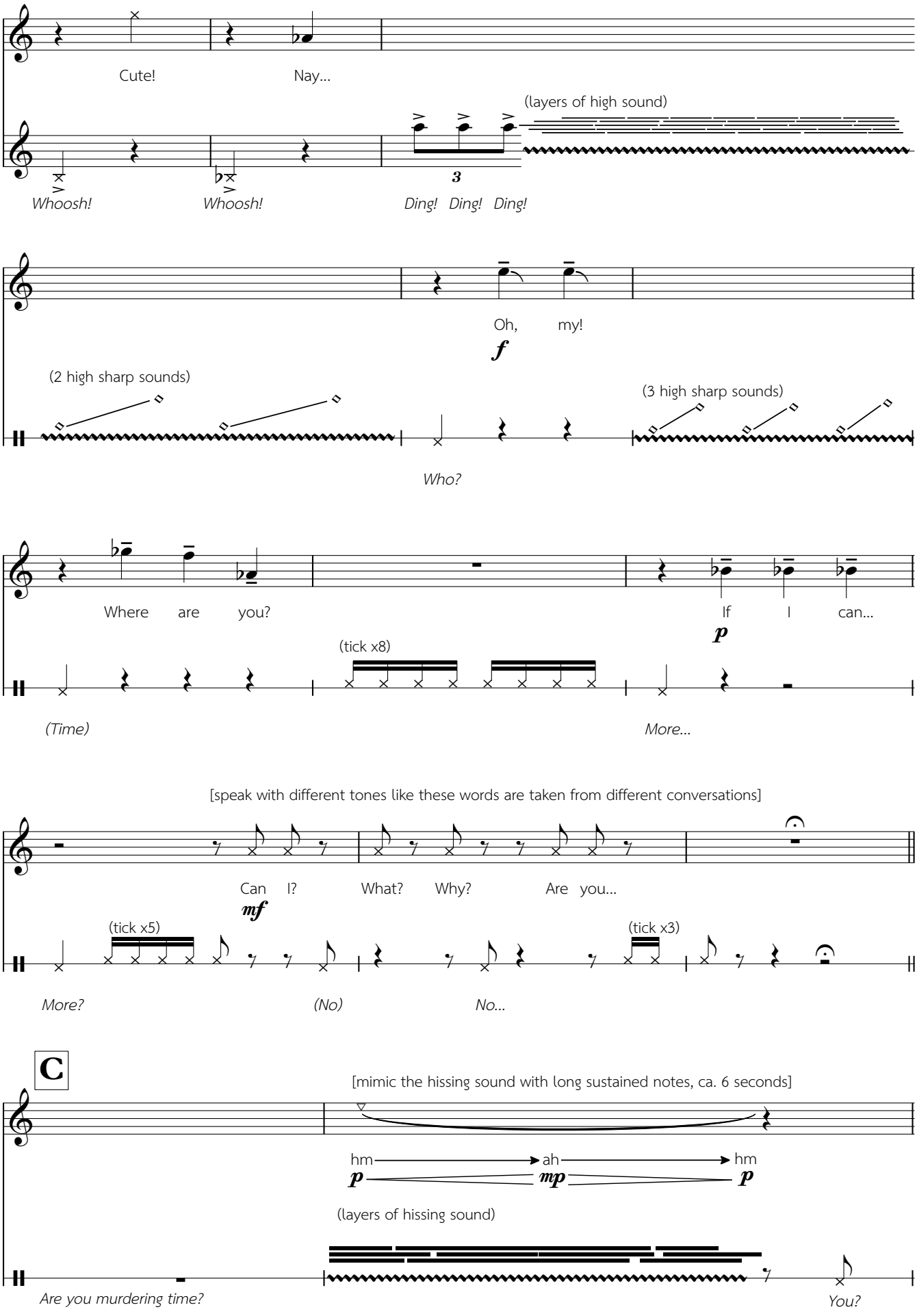
for soprano and electronics



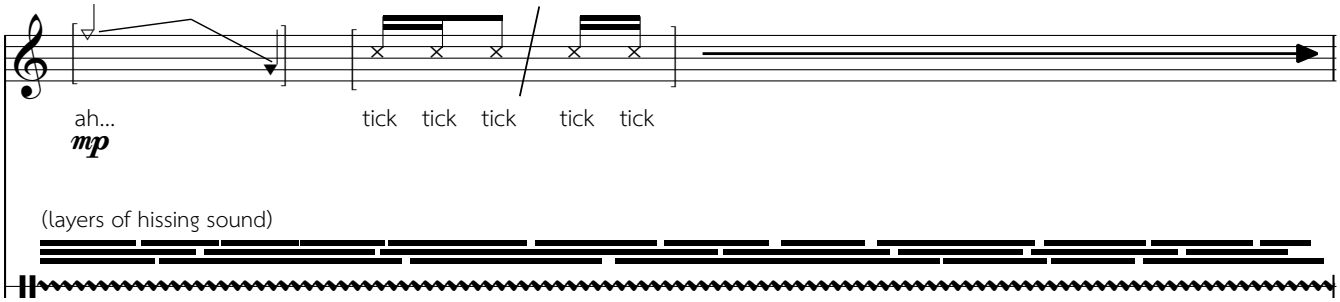


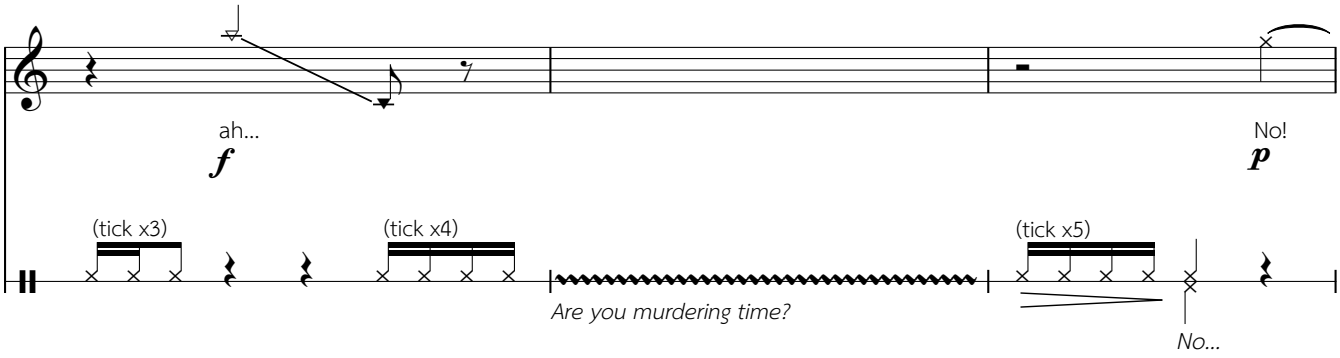


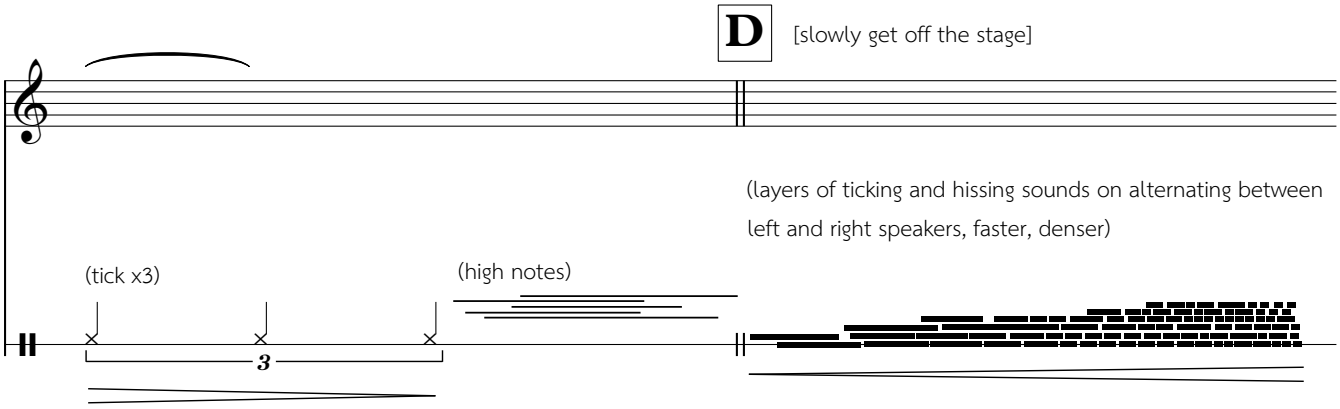



Cute!
Nay...
(layers of high sound)
Whoosh!
Whoosh!
Ding! Ding! Ding!
Oh, my!
f
(2 high sharp sounds)
(3 high sharp sounds)
Who?
Where are you?
If I can...
p
(tick x8)
(Time)
More...
[speak with different tones like these words are taken from different conversations]
Can I?
What? Why?
Are you...
mf
(tick x5)
(tick x3)
More?
(No)
No...
C
[mimic the hissing sound with long sustained notes, ca. 6 seconds]
hm
ah
hm
p
mp
p
(layers of hissing sound)
Are you murdering time?
You?

[free expressions, freely combine singing the written shape and mimicking ticking sound, ca. 6 seconds]

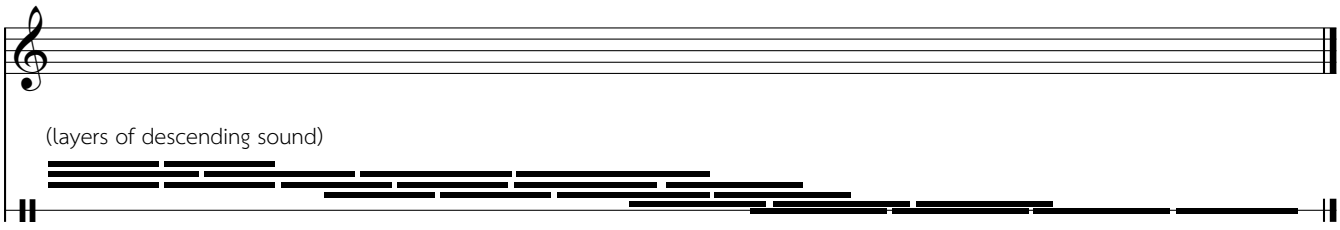






But I don't want to go among mad people

Oh, you can't help that; we all mad here. I am mad, you are mad.



...with steps we take...

for violin, clarinet in B♭, piano, percussion, soprano, and electronics

Poumpak Charuprakorn (2019)

Score in Transposition

i

...with steps we take... is a composition for violin, clarinet in Bb, piano, percussion, soprano, and electronics. It was composed in collaboration with Francis Favis, Amanda Forest, Matthias McIntire, Yolanda Tapia, and Hillary Young during Toronto Creative Music Lab 2019. The composition, involving recorded soundscapes, instrumental sounds, and live electronics, portrays how human's actions affect this planet through the dialogues between the instrumentalists, soprano, and the synthesis of live-recorded sounds of the ensemble and recording of a stream, birds, and cicadas. Different spectral areas are explored by different instrumental techniques in different sections.

Premiered at 918 Bathurst Centre, Toronto, Canada on 15 June 2019 by Matthias McIntire (violin), Amanda Forest (clarinet), Yolanda Tapia (piano), Francis Favis (percussion), Hillary Young (soprano), and Poumpak Charuprakorn (electronics).

Instrumentation

Violin

Clarinet in Bb

Piano

A metal object (such as a coin) is needed

Percussion

Any instruments or objects that can produce these following sounds:

A high, metallic, scraping sound

4 different registers of sustained/tremolo sounds

3 dry (secco) sounds

Soprano

Electronics

A compouter with Max/MSP and two speakers are needed

Duration: circa 6 minutes

Performance Notes

- Playing from a full score is highly recommended.
- All rhythmic notations are proportional and can be decided at performers' discretion within the indicated timeframe.
- Each bar is approximately 5 seconds long.
- Most of the notes are short, except the ones followed by black arrows or ties which must be sustained

Electronics

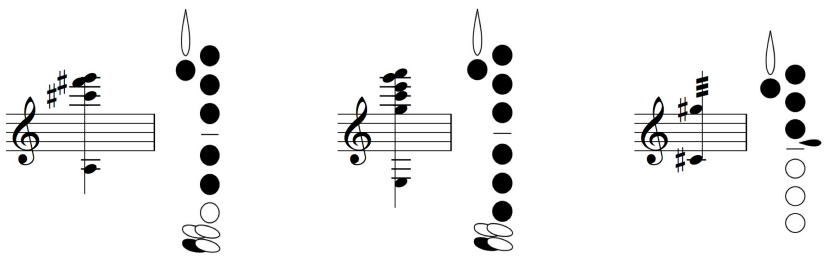
- The stopwatch in the patch is only a guide. Aim to interact with the performers and trigger the sections by clicking the buttons.
- In a different performance, with a different microphone or a different setup, all of the volume and input gains have to be adjusted including the number boxes for the values of threshold, amp, and convolution.

Violin

- Hammering gestures (from around 50" onwards) should be played by holding the sustained notes with index and ring finger, then play a short burst of tremolo with middle or little fingers as indicated (with demi-semi-quavers or wiggly lines).
- Square noteheads represent scratchy, non-pitched sounds.
- Triangle noteheads can be any notes in the highest register of the instrument.

Clarinet

- Pianississimo passages are meant to be murmurous without any apparent attacks. Play the given notes in any order, as rapidly as possible.
- Triangle noteheads represent key clicks with air sound (for short, ticking sounds).
- Fingerings of multiphonics are given below:

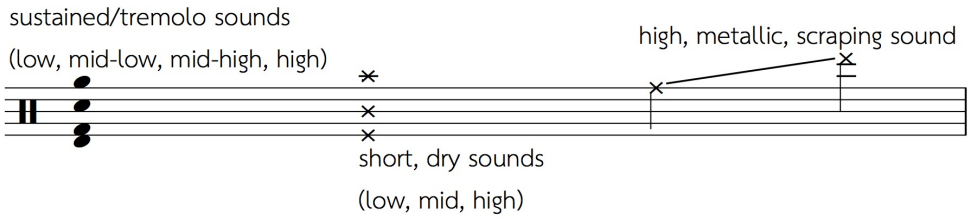


Piano

- Pianississimo passages are meant to be murmurous without any apparent attacks. Play the given notes in any order, as rapidly as possible.
- Cross noteheads require the player to play inside the piano. It can be only muting the strings while playing the key normally (section C) or tapping the strings with a metal object (sections E and F).

Percussion

- Instruments are not specified and can vary in different performances. As the sound of the ensemble will be electronically processed, finding objects with interesting timbres will surely add more variety to the composition.
- Aim to produce these following sounds:
  - A high, metallic, scraping sound [e.g. bowed metal dish or bowed cymbal]
  - 4 different registers of sustained/tremolo sounds (low, mid-low, mid-high, high) [e.g. bassdrum with mallets, snare drum with wiretap brush, metal pan with mallet, triangle]
  - 3 dry (secco) sounds (low, mid, high) [e.g. wood slat, guiro, shakers]
- The sounds can be created by any forms of playing (with drum sticks, mallets, superballs, hands, etc.)



Soprano

- Normal notehead = sing or hum
- Cross notehead = speak
- Diamond notehead = whisper

...with steps we take...

Here, hear; listen, it's near.
Floods in winter, blizzards in summer;
Hear, (here; listen,) it's near.

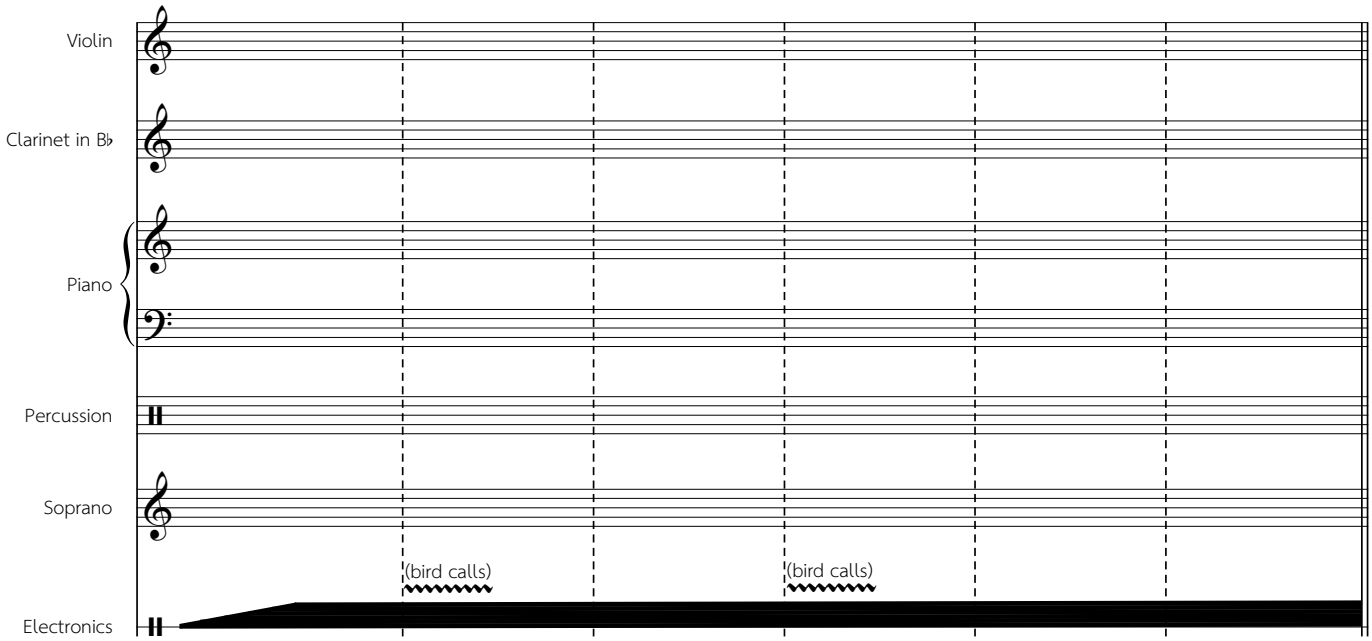
Stars shake
With steps we take.
Eternal lake
Resonates what we make.

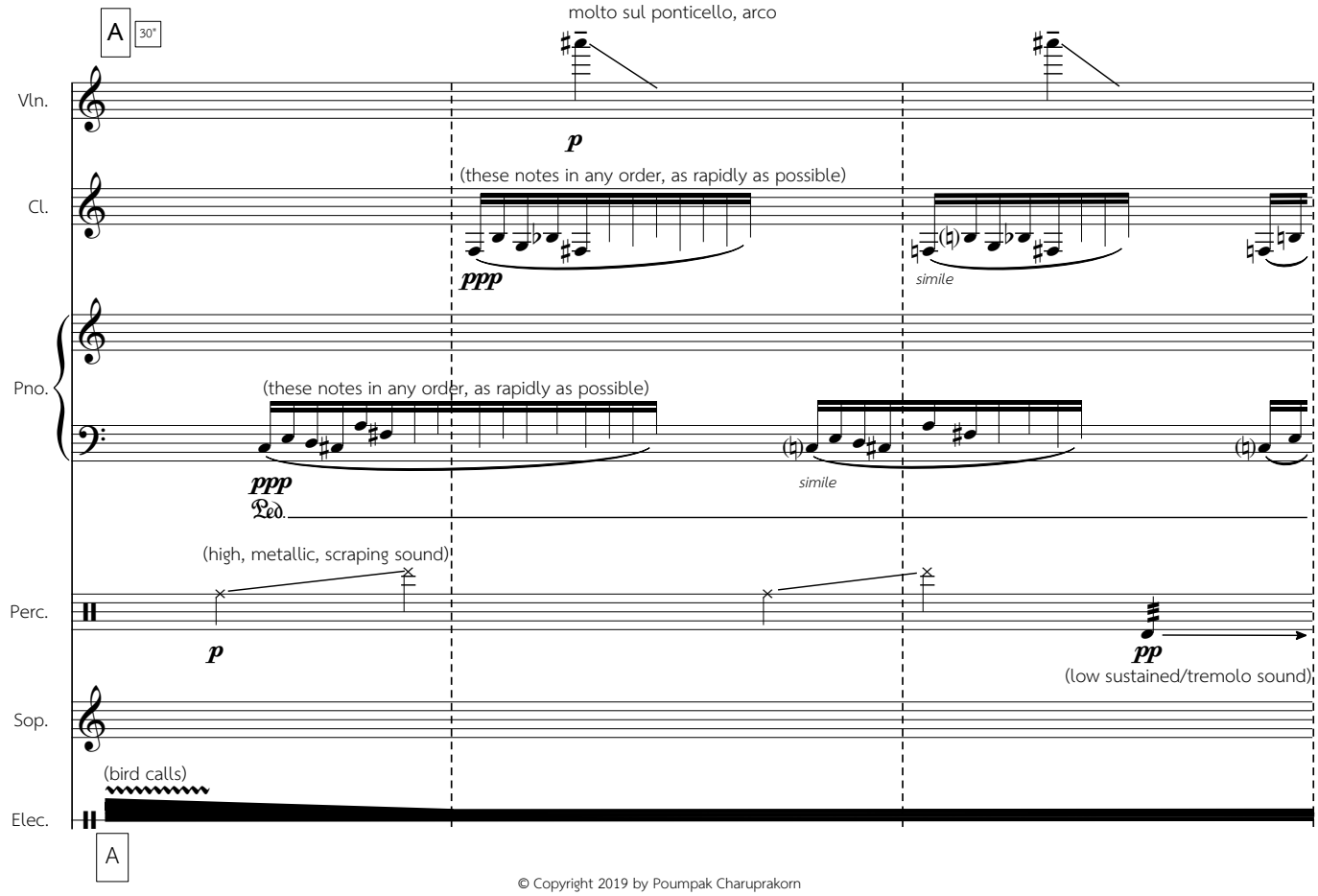
...with steps we take...

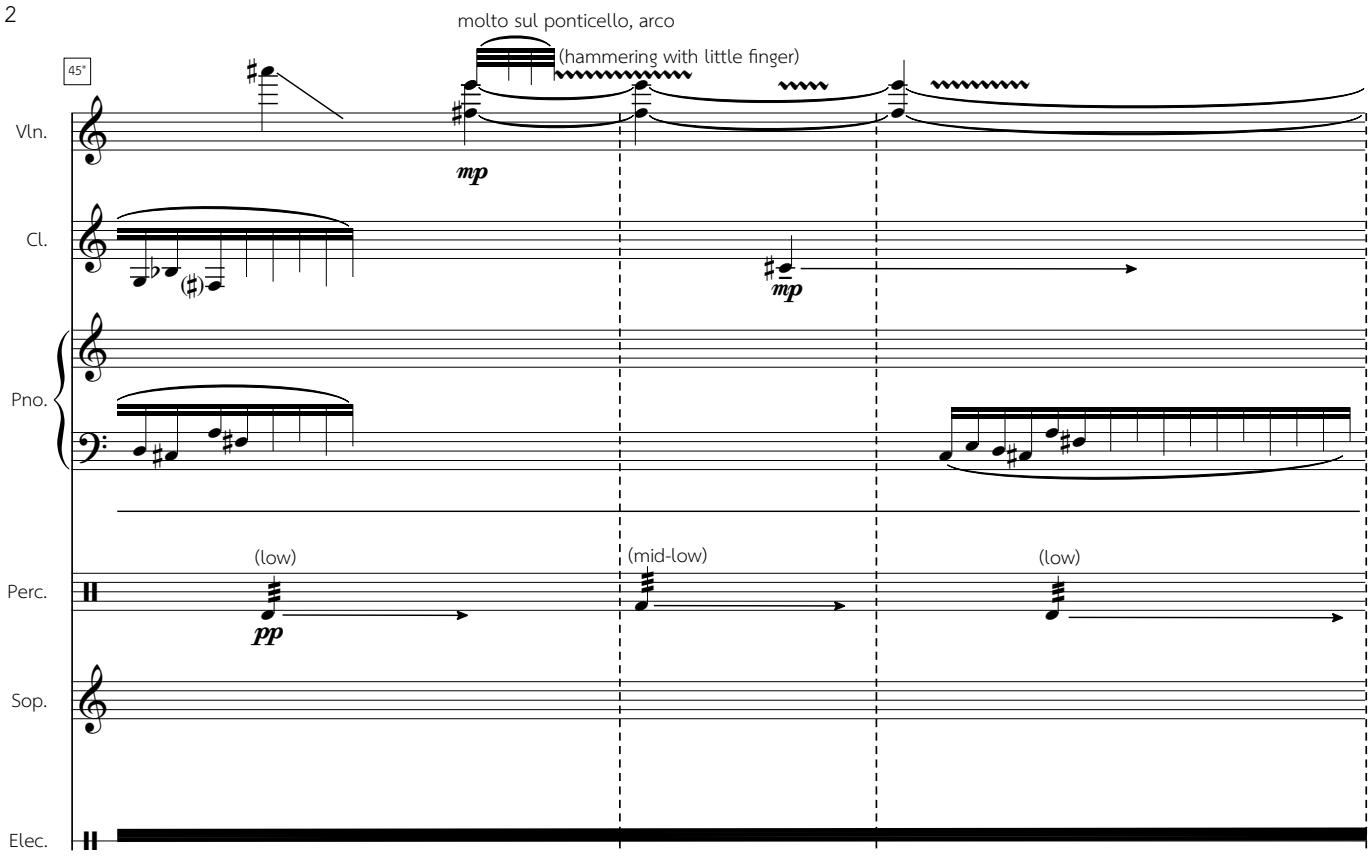
for violin, clarinet in B♭, piano, percussion, soprano, and electronics

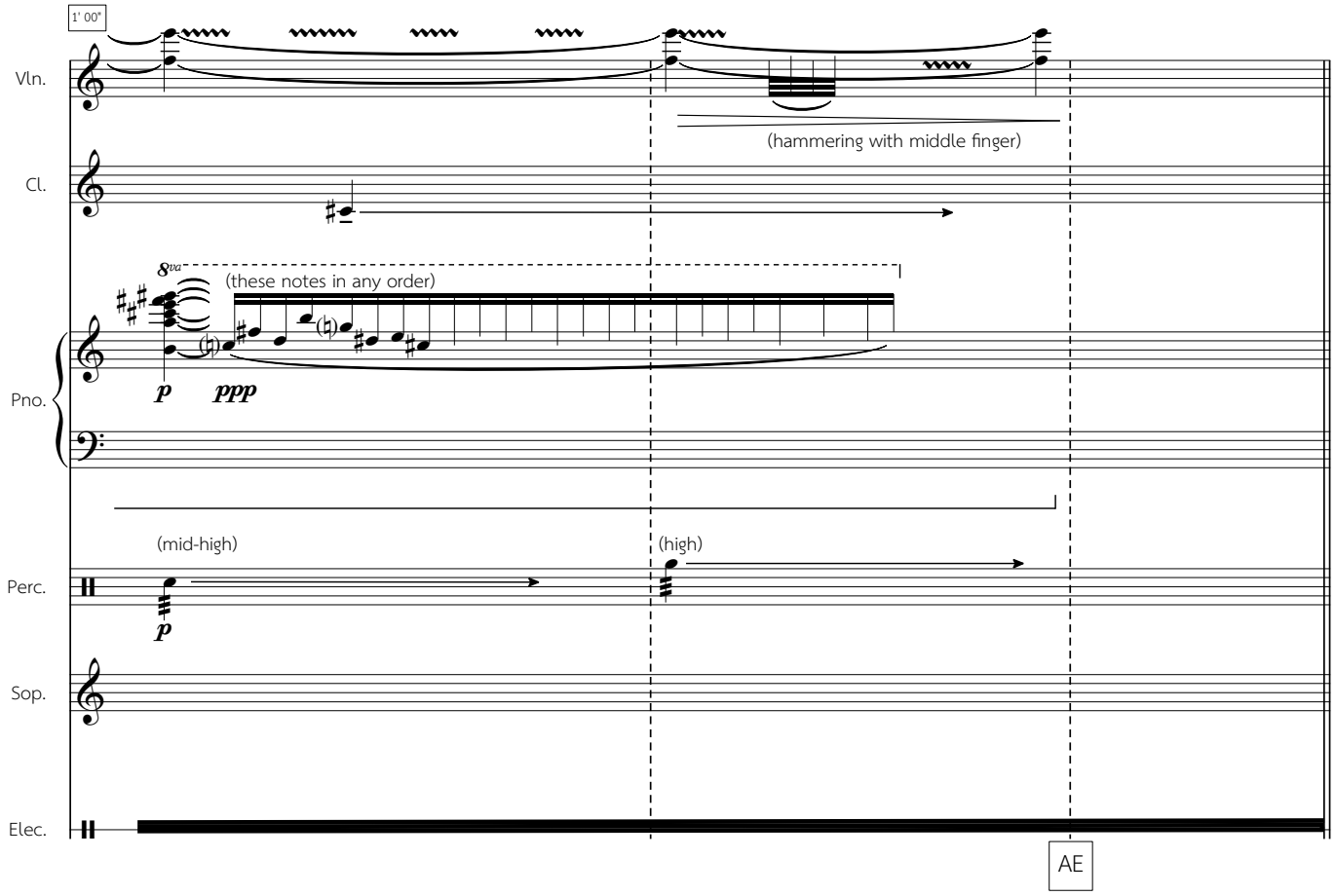
In collaboration with Francis Favis, Amanda Forest, Matthias McIntire, Yolanda Tapia, and Hillary Young

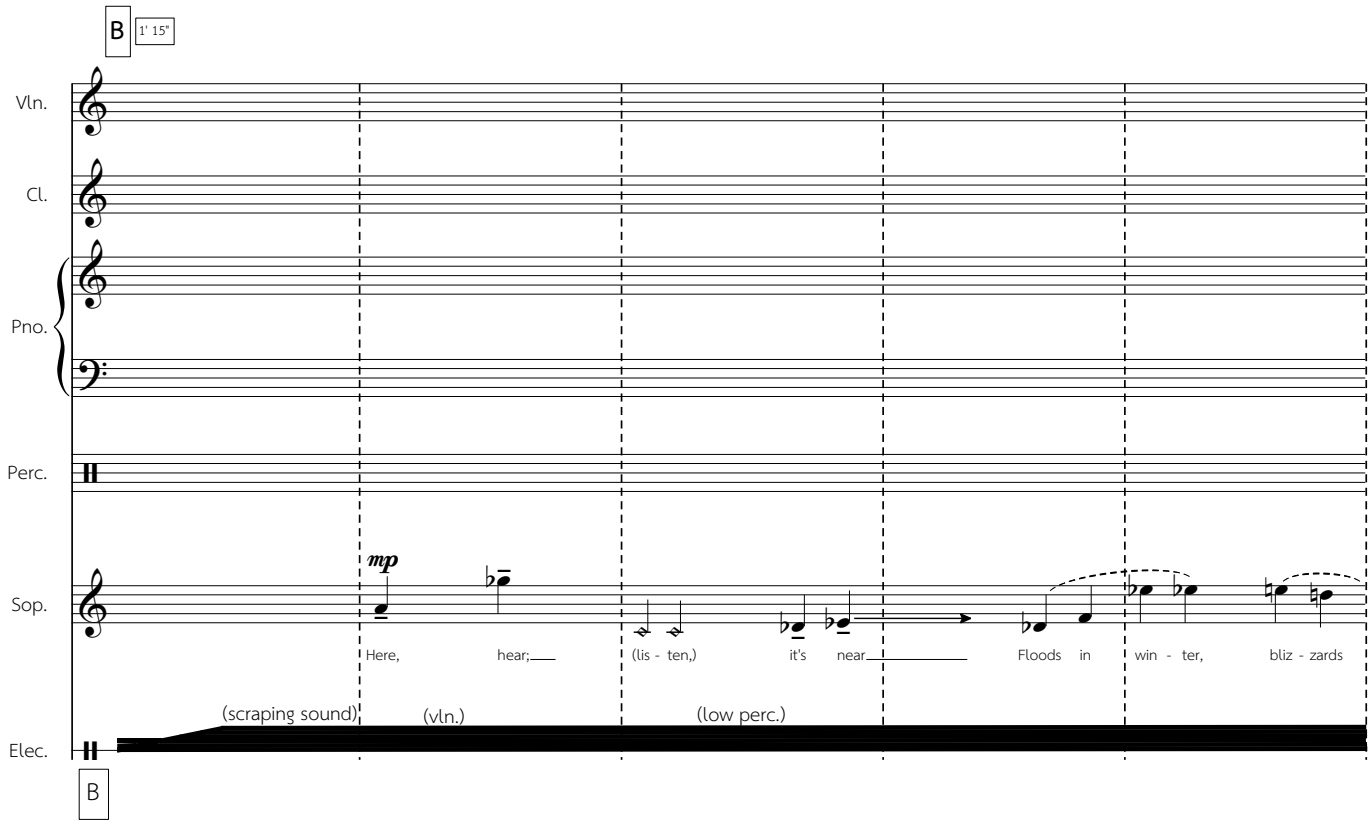
Poumpak Charuprakorn (2019)

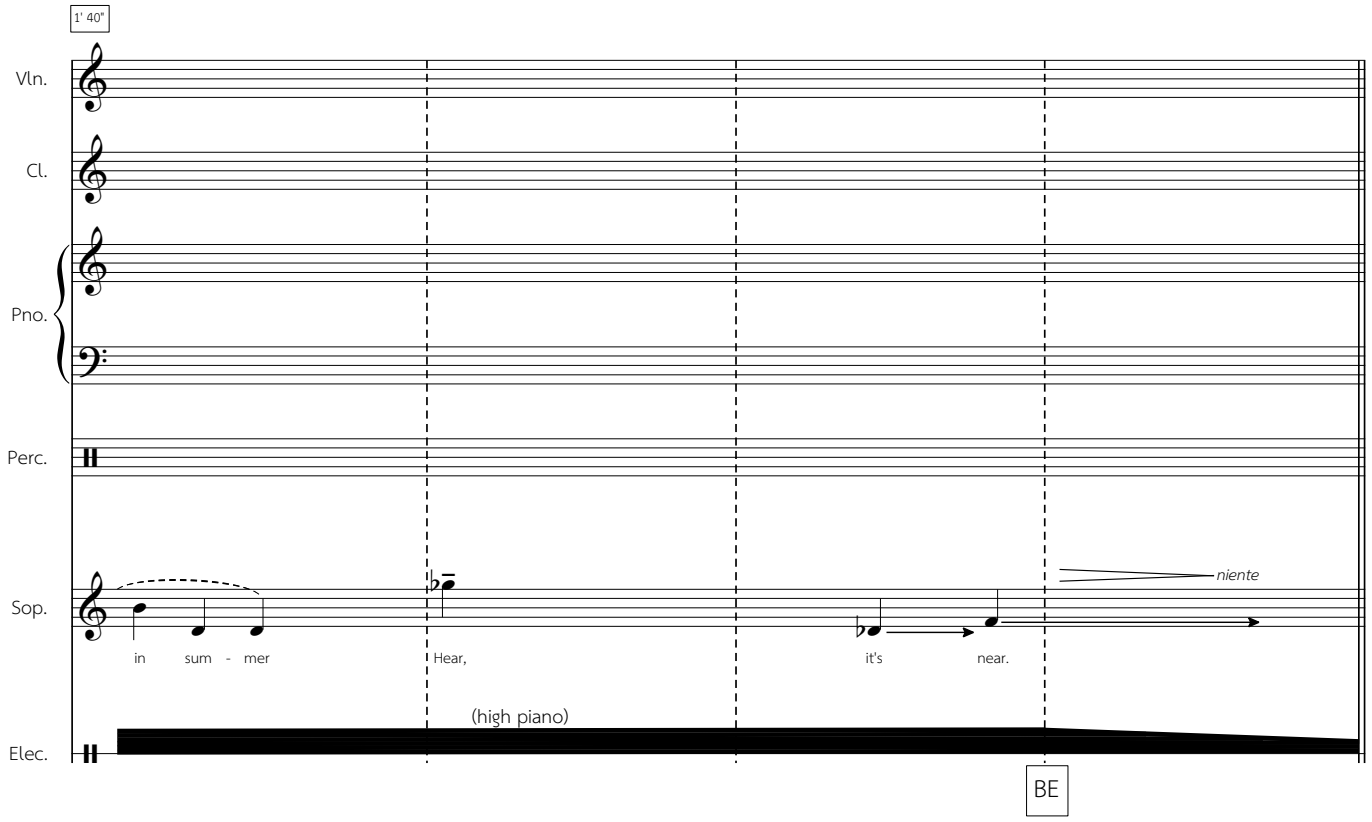


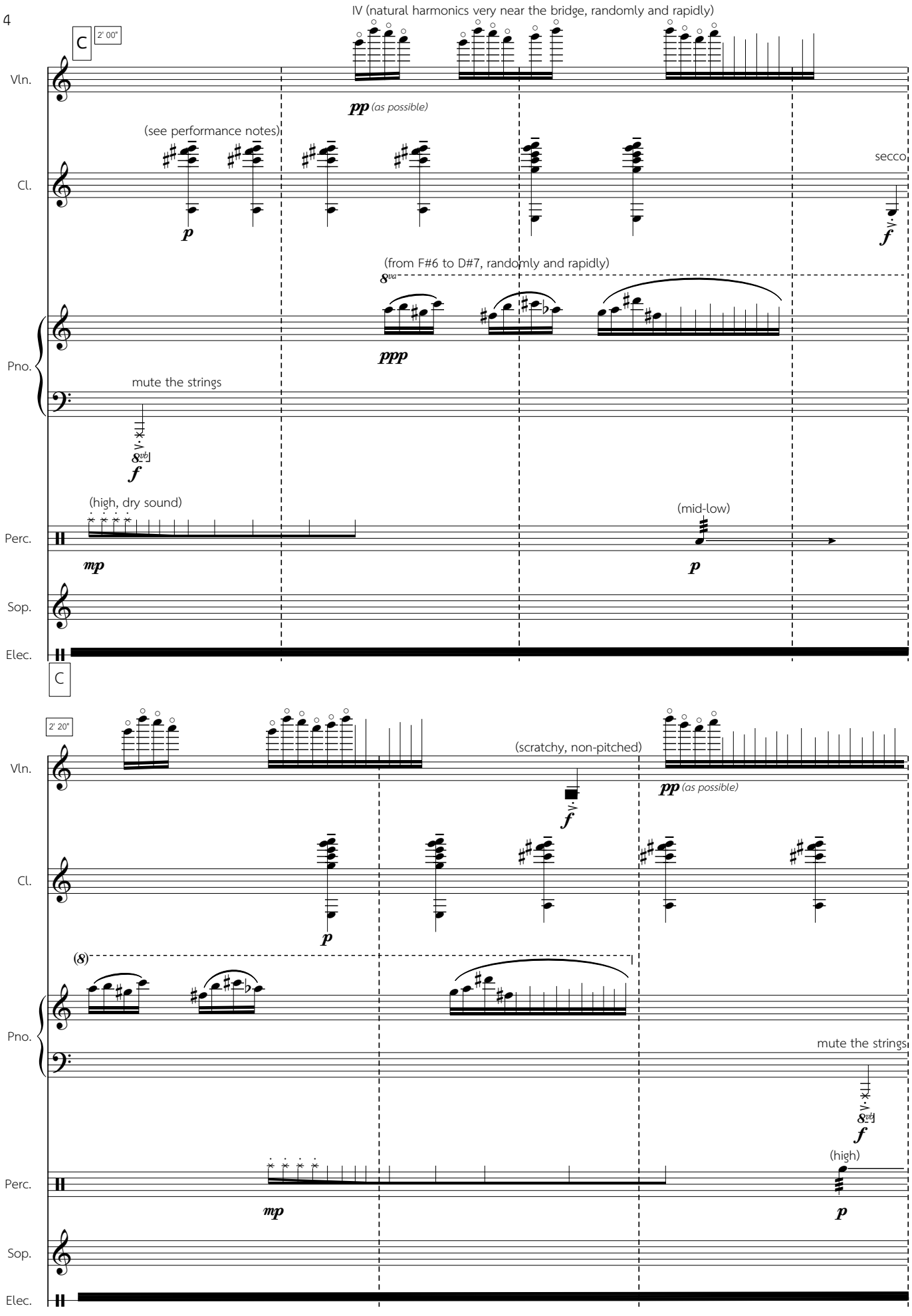


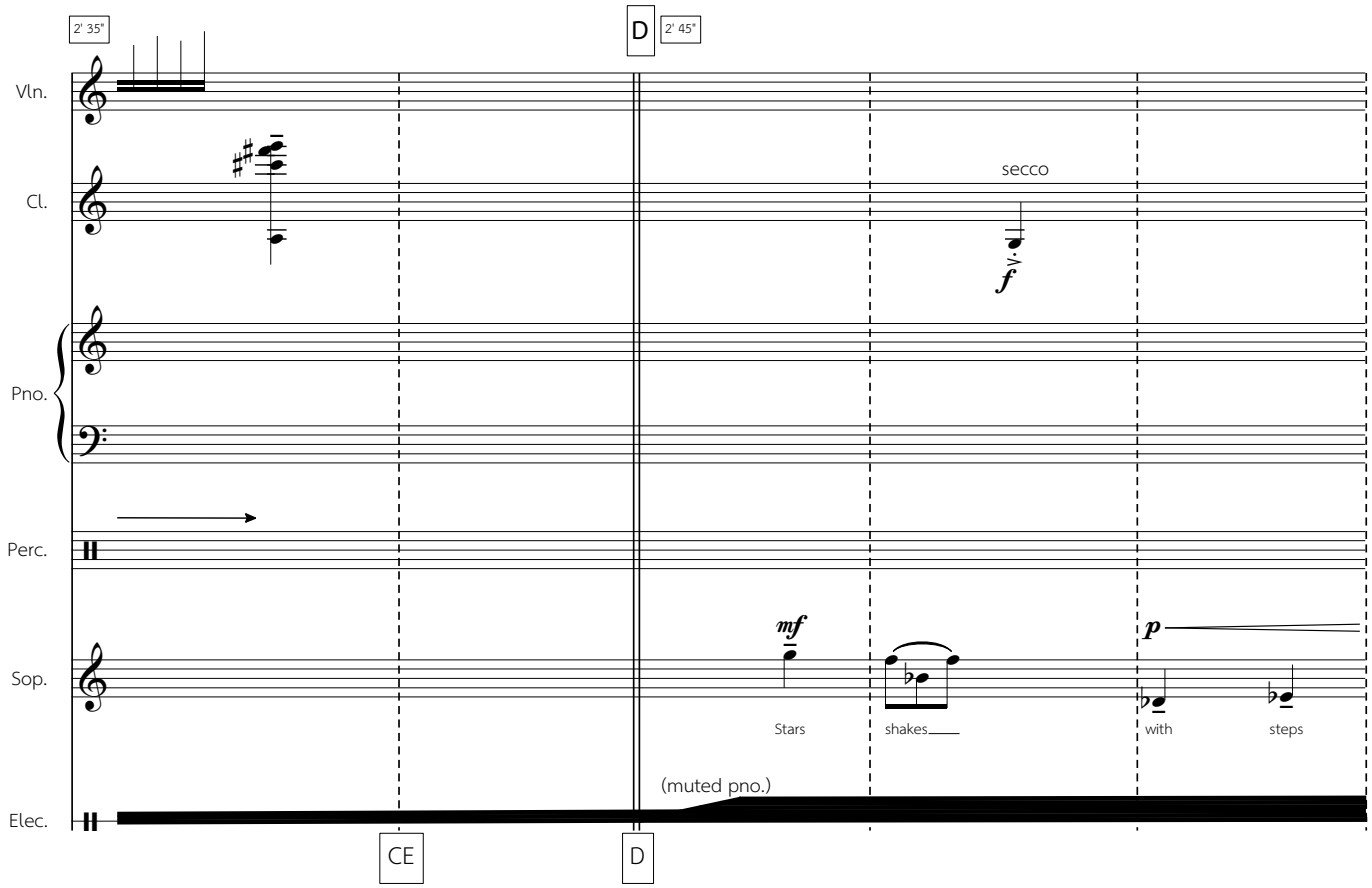

molto sul ponticello, arco
(hammering with little finger)
45"
Vln.
Cl.
Pno.
Perc.
Sop.
Elec.
mp
mp
(low)
pp
(mid-low)
(low)

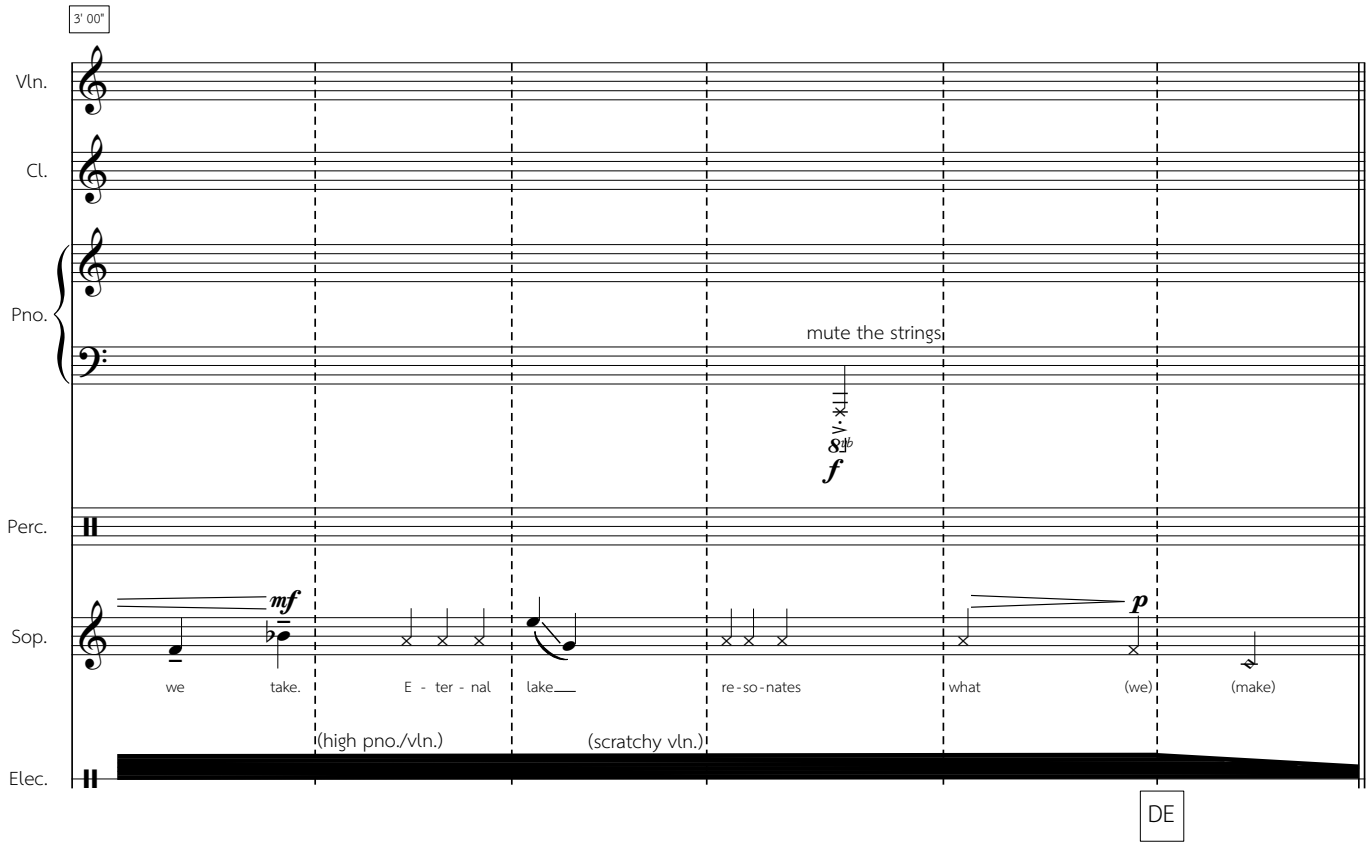

1' 00"
Vln.
Cl.
Pno.
Perc.
Sop.
Elec.
(hammering with middle finger)
8va
(these notes in any order)
p
ppp
(mid-high)
p
(high)
AE

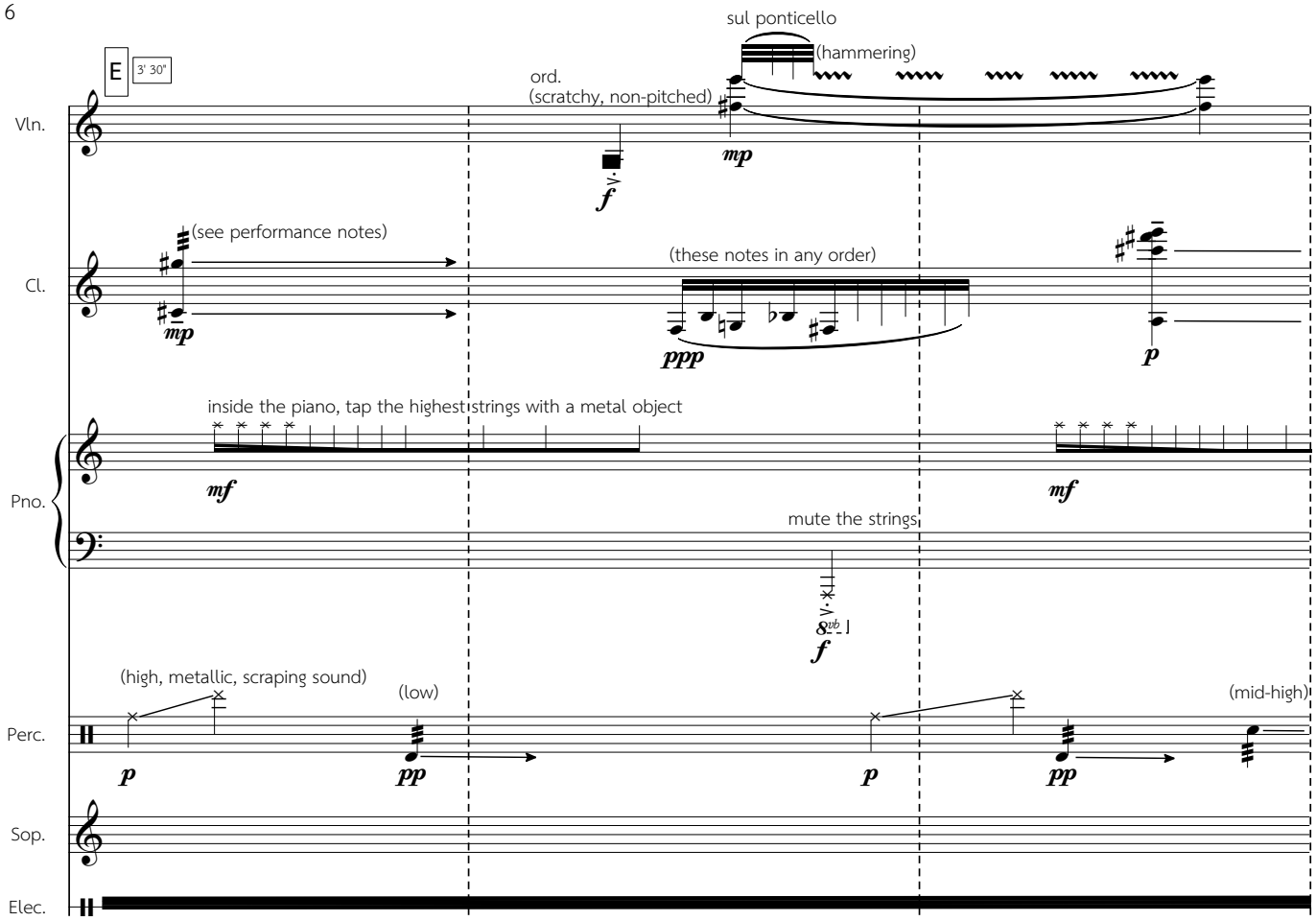

B
1' 15"
Vln.
Cl.
Pno.
Perc.
Sop.
Elec.
mp
Here, hear;
(lis - ten,) it's near
Floods in win - ter, bliz - zards
(scraping sound)
(vln.)
(low perc.)
B

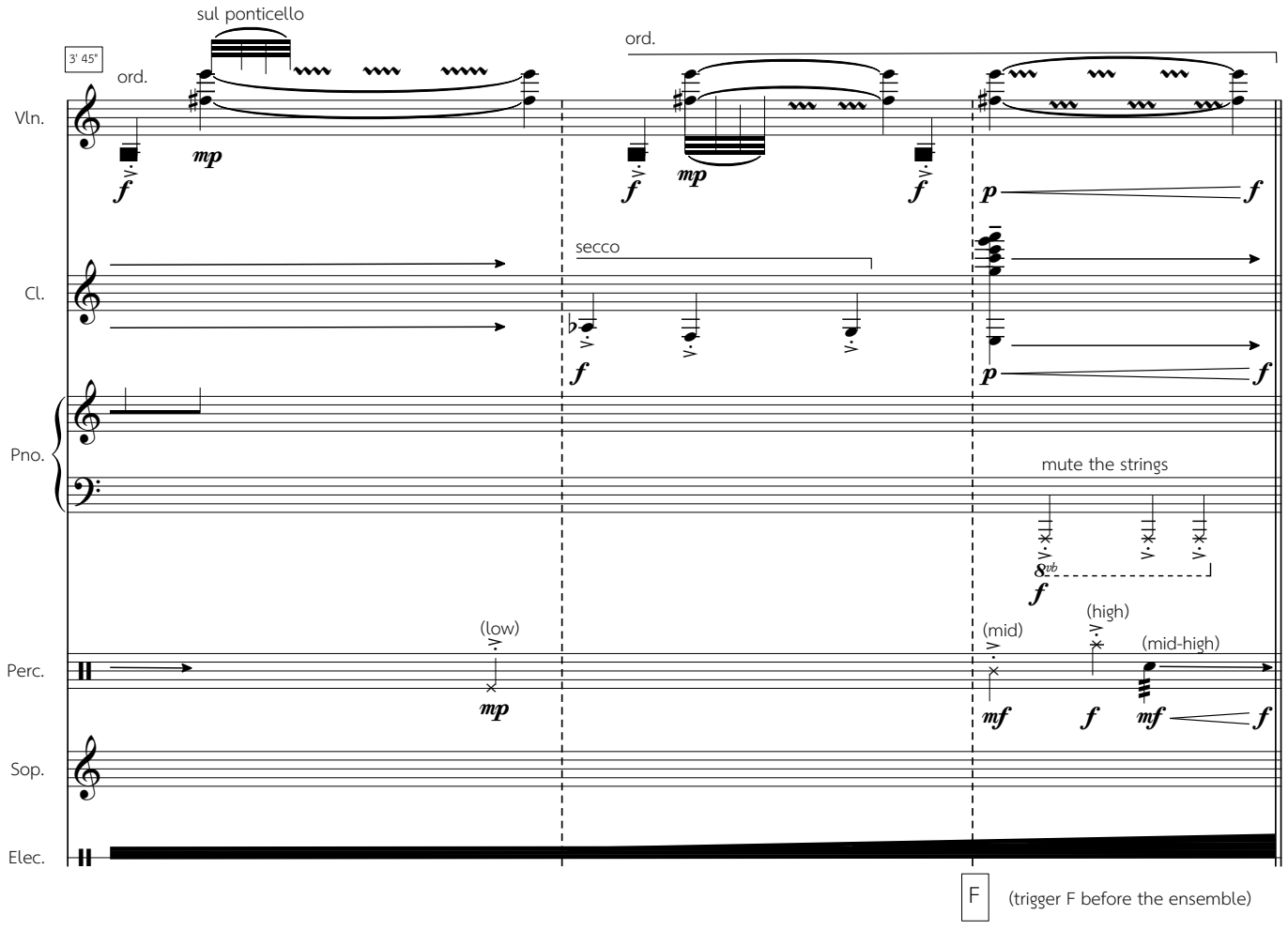

1' 40"
Vln.
Cl.
Pno.
Perc.
Sop.
Elec.
in sum - mer
Hear,
it's near.
niente
(high piano)
BE

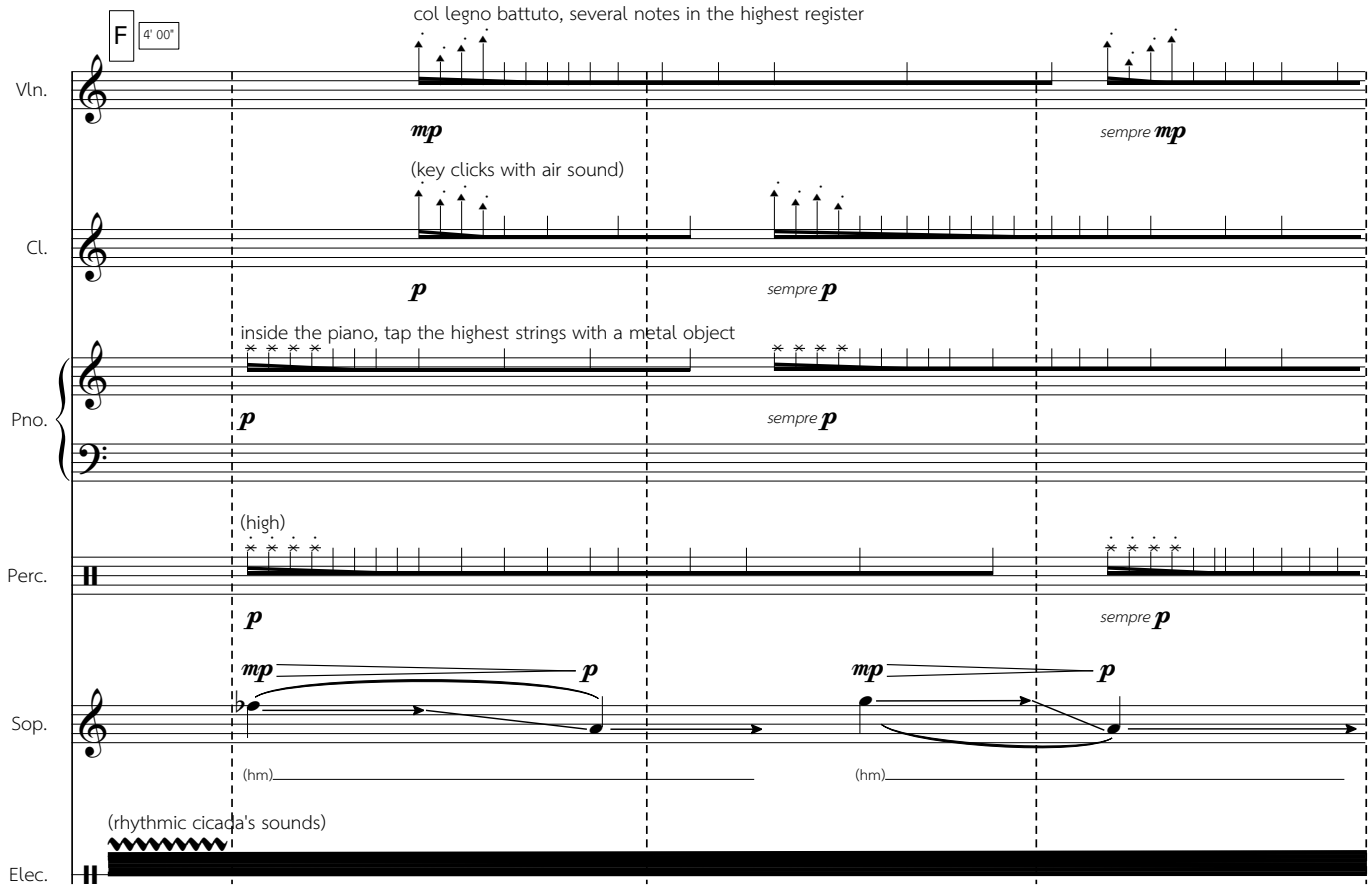

C
2' 00"
IV (natural harmonics very near the bridge, randomly and rapidly)
Vln.
pp (as possible)
(see performance notes)
Cl.
secco
p
f
(from F#6 to D#7, randomly and rapidly)
8va
Pno.
ppp
mute the strings
8vb
f
(high, dry sound)
(mid-low)
Perc.
mp
p
Sop.
Elec.
C
2' 20"
Vln.
(scratchy, non-pitched)
f
pp (as possible)
Cl.
p
(8)
Pno.
mute the strings
8vb
f
(high)
Perc.
mp
p
Sop.
Elec.

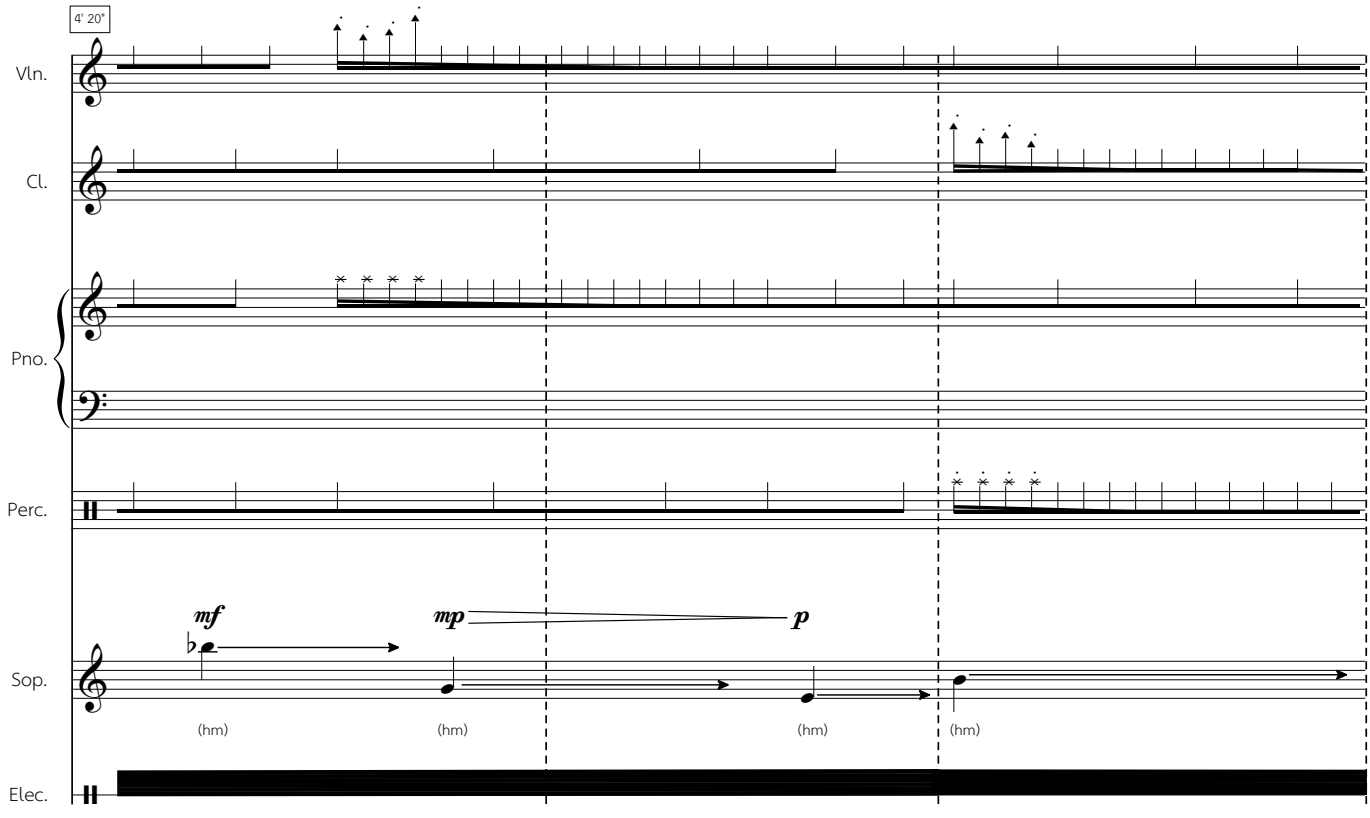

2' 35"
D
2' 45"
Vln.
Cl.
Pno.
Perc.
Sop.
Elec.
secco
f
mf
Stars
shakes
p
with
steps
(muted pno.)
CE
D


3' 00"
Vln.
Cl.
Pno.
Perc.
Sop.
Elec.
mute the strings
f
mf
we
take.
E - ter - nal
lake
re-so-nates
what
p
(we)
(make)
(high pno./vln.)
(scratchy vln.)
DE

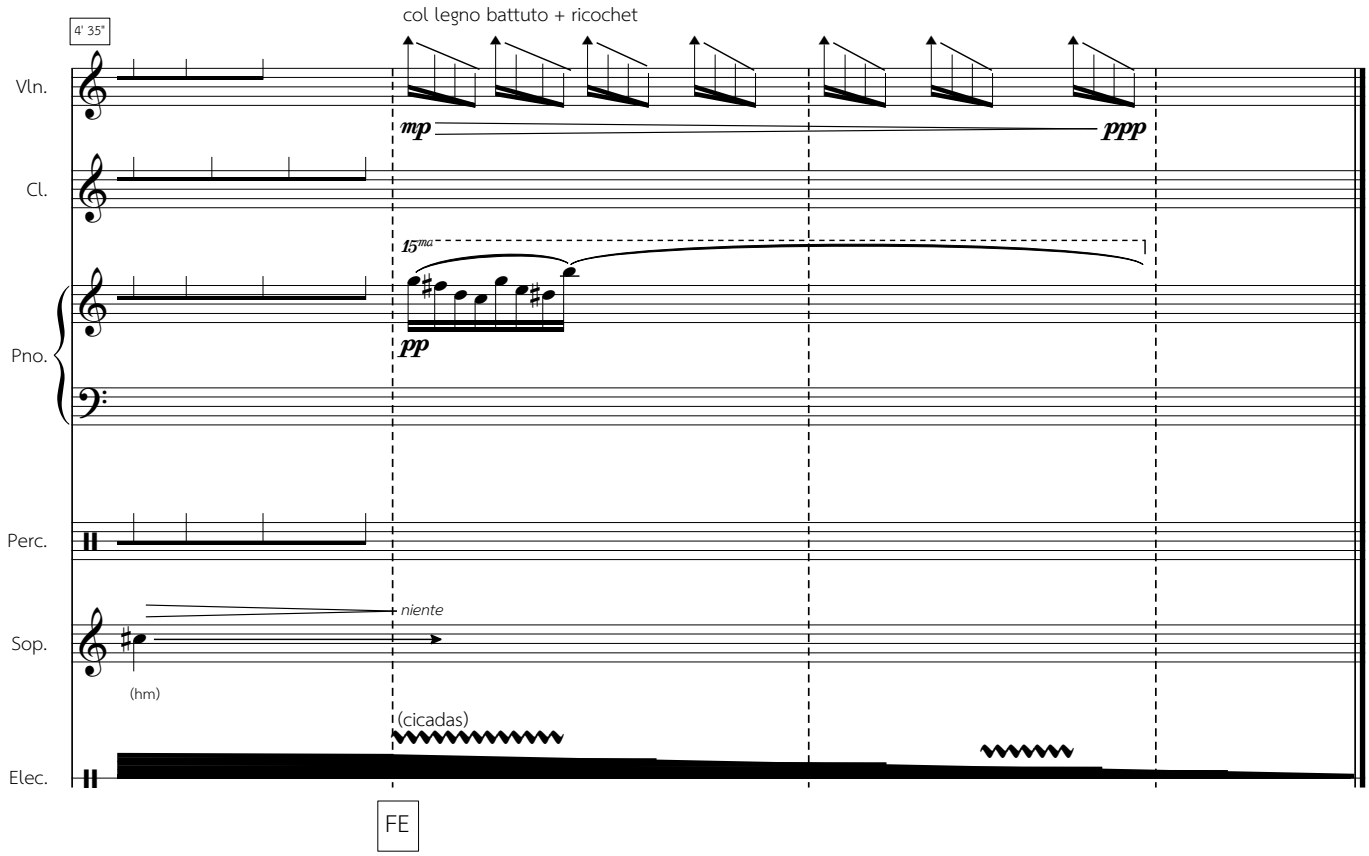

E
3' 30"
Vln.
sul ponticello
(hammering)
ord.
(scratchy, non-pitched)
mp
f
Cl.
(see performance notes)
mp
(these notes in any order)
ppp
p
Pno.
inside the piano, tap the highest strings with a metal object
mf
mf
mute the strings
f
Perc.
(high, metallic, scraping sound)
(low)
(mid-high)
p
pp
p
pp
Sop.
Elec.


3' 45"
Vln.
sul ponticello
ord.
ord.
f
mp
f
mp
f
p
f
Cl.
secco
f
p
f
Pno.
mute the strings
f
Perc.
(low)
mp
(mid)
(high)
(mid-high)
mf
f
mf
f
Sop.
Elec.
F
(trigger F before the ensemble)


F
4' 00"
col legno battuto, several notes in the highest register
Vln.
mp
sempre mp
(key clicks with air sound)
Cl.
p
sempre p
inside the piano, tap the highest strings with a metal object
Pno.
p
sempre p
(high)
Perc.
p
sempre p
mp
p
mp
p
Sop.
(hm)
(hm)
(rhythmic cicada's sounds)
Elec.


4' 20"
Vln.
Cl.
Pno.
Perc.
mf
mp
p
Sop.
(hm)
(hm)
(hm)
(hm)
Elec.

8


4' 35"
col legno battuto + ricochet
Vln.
mp
ppp
Cl.
15ma
1
Pno.
pp
Perc.
niente
Sop.
(hm)
(cicadas)
Elec.
FE

Natural Currents

for flute, alto saxophone, percussion and piano

Poumpak Charuprakorn (2017)

FULL SCORE IN C

i

INSTRUMENTATION

Flute

Alto Saxophone

Percussion
(bass drum, snare drum, suspended cymbal, woodblocks w/ wiretap brushes, mallets, drumsticks)

Piano

Duration: ca. 3 minutes

PERFORMANCE NOTES

Barlines and time signatures do not imply any strong beats

A dashed crescendo shows the direction of a phrase; the change of dynamic should be very subtle

FLUTE

flz. = flutter-tonguing

ord. = without flutter-tonguing

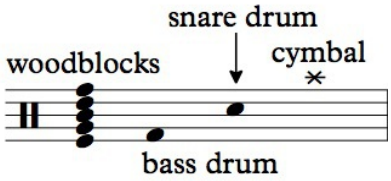
An arrow represents gradual change from flz. to ord.

ALTO SAXOPHONE

flz. = flutter-tonguing

+ = slap-tonguing

PERCUSSION



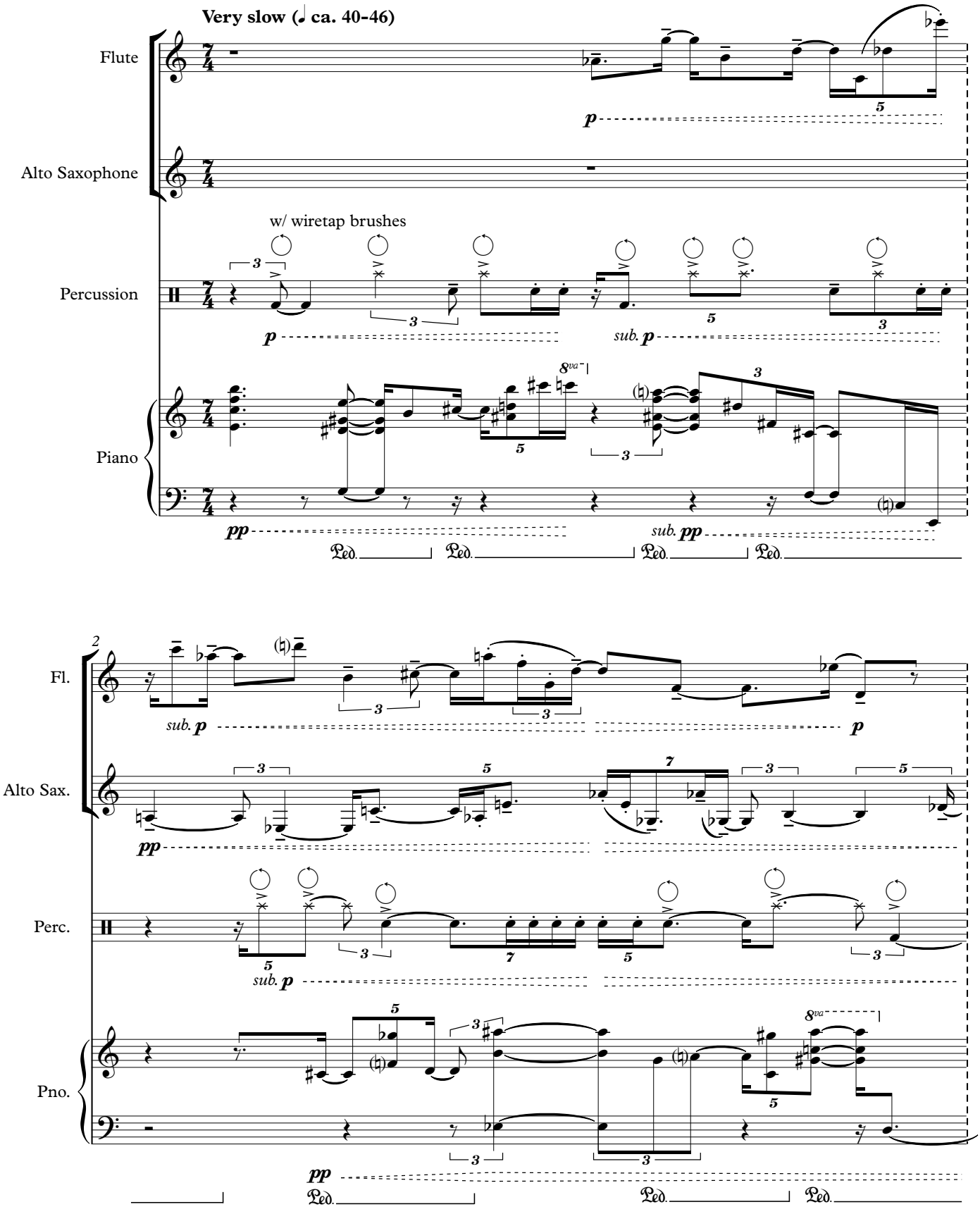
 = sweeping with wiretap brushes

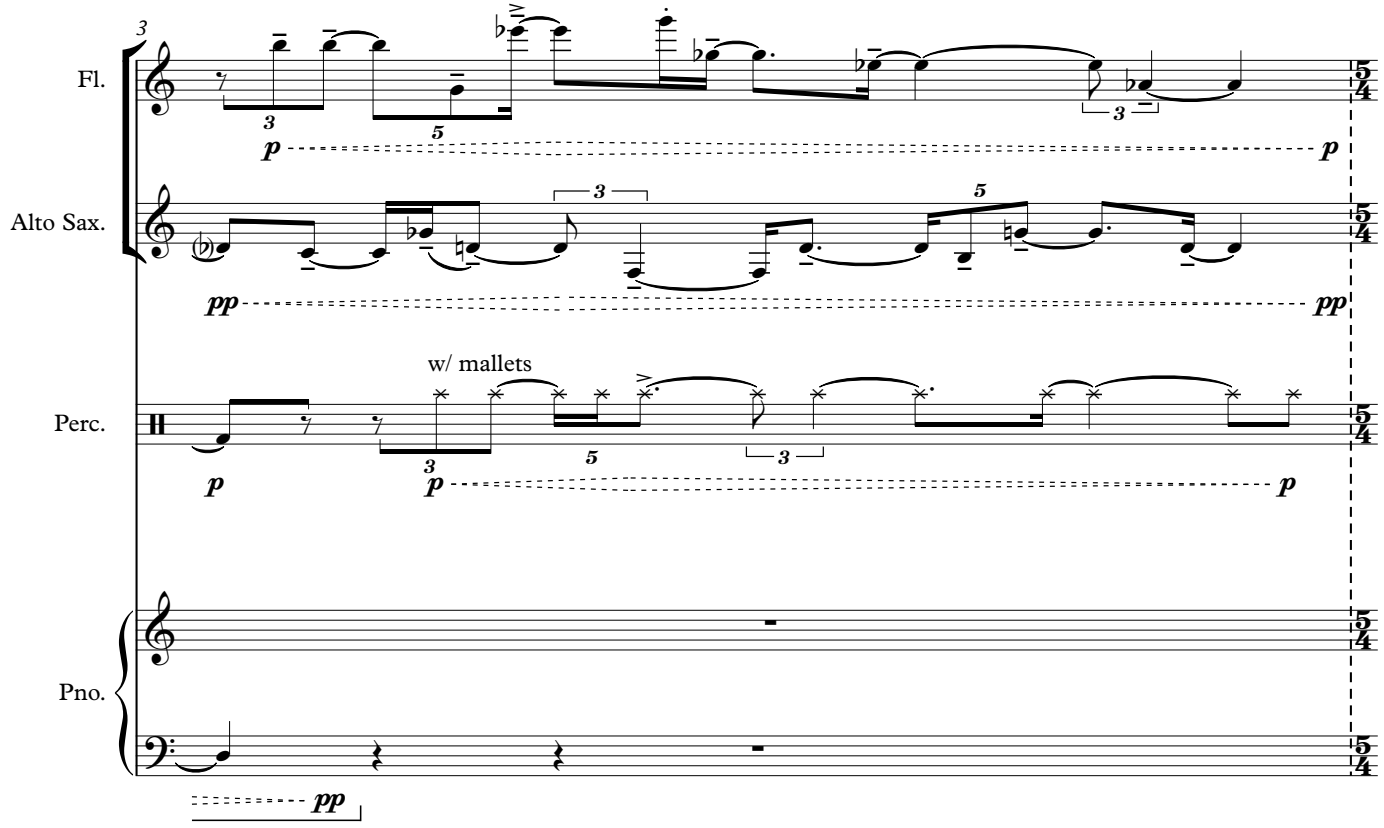
All tremolos should be played as fast as possible

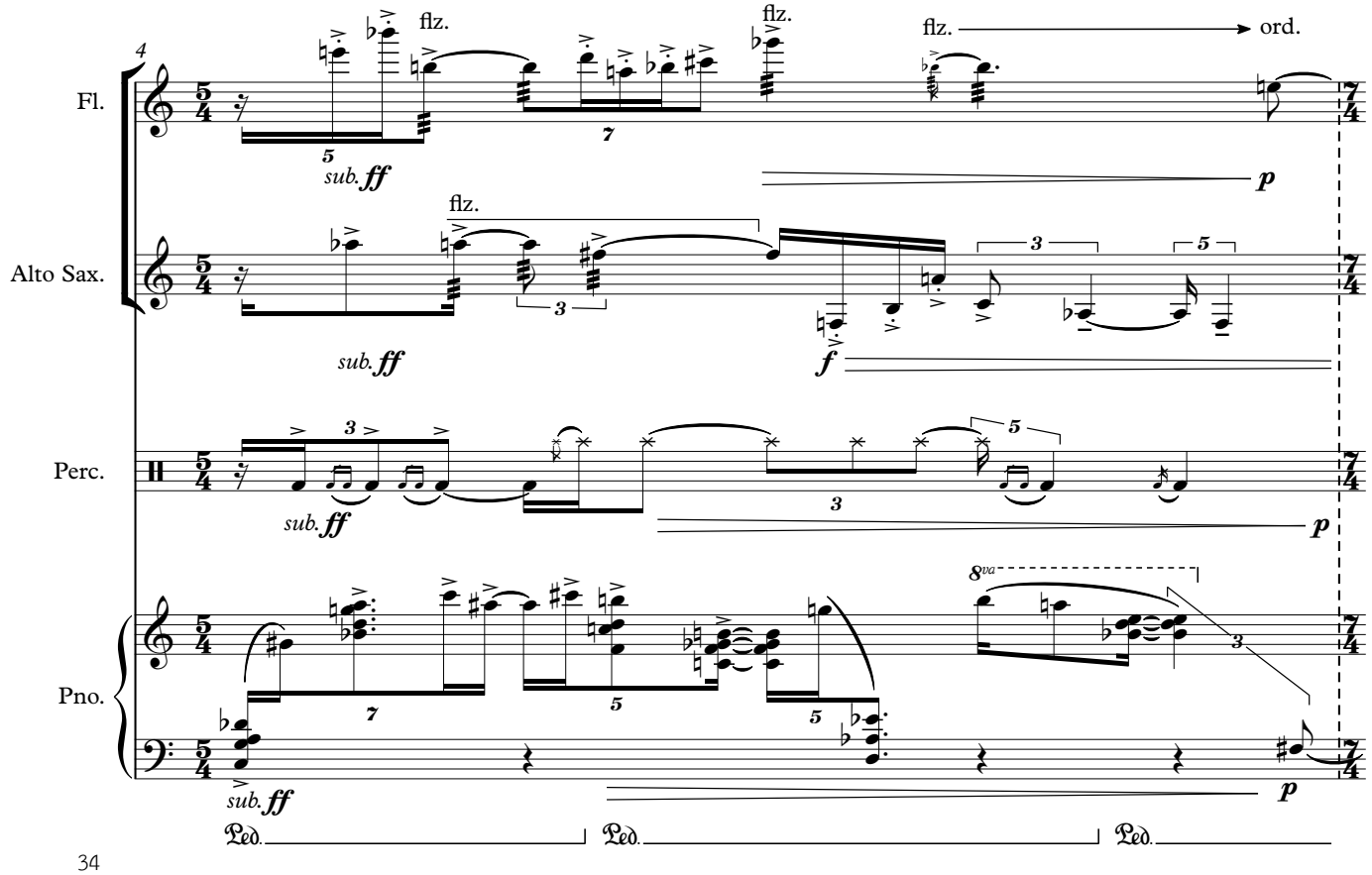
Natural Currents

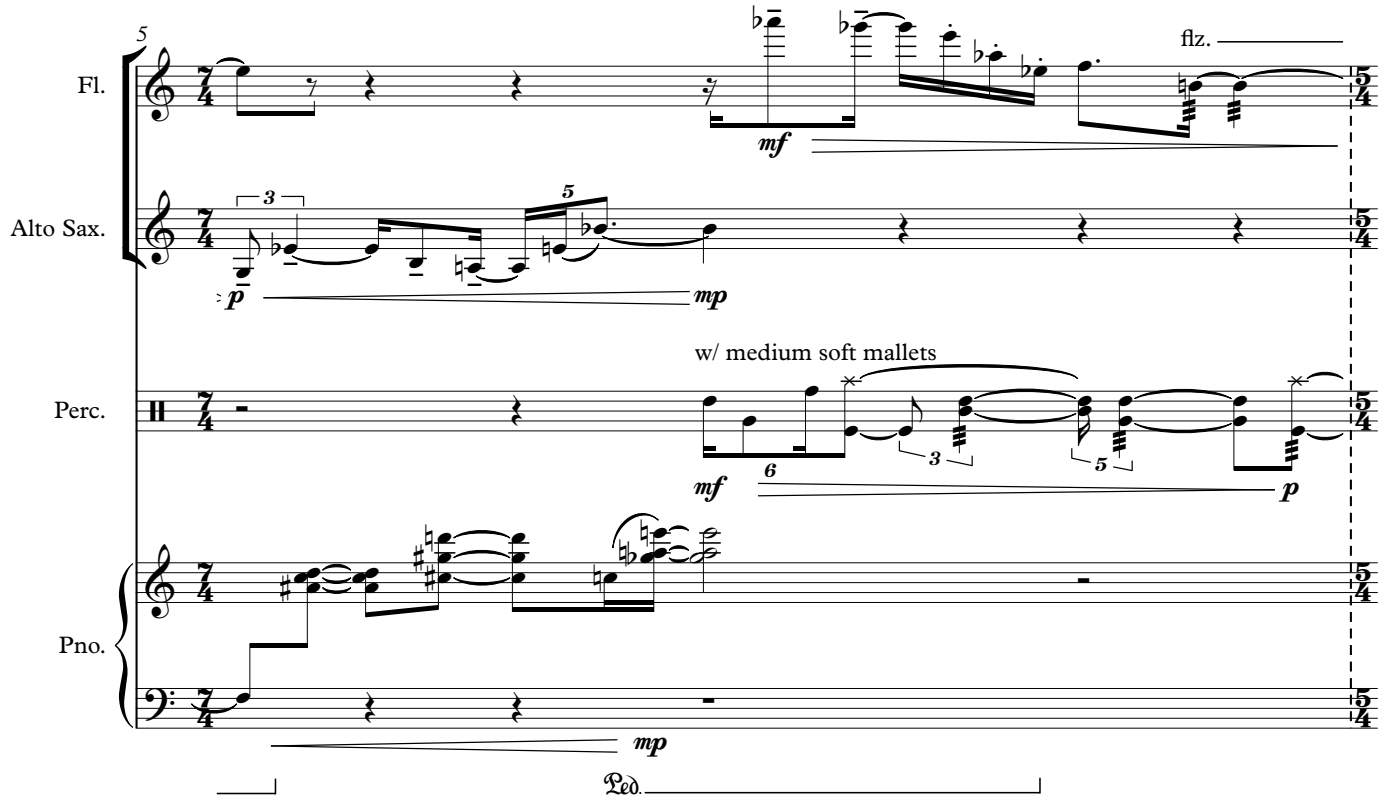
for flute, alto saxophone, percussion, and piano

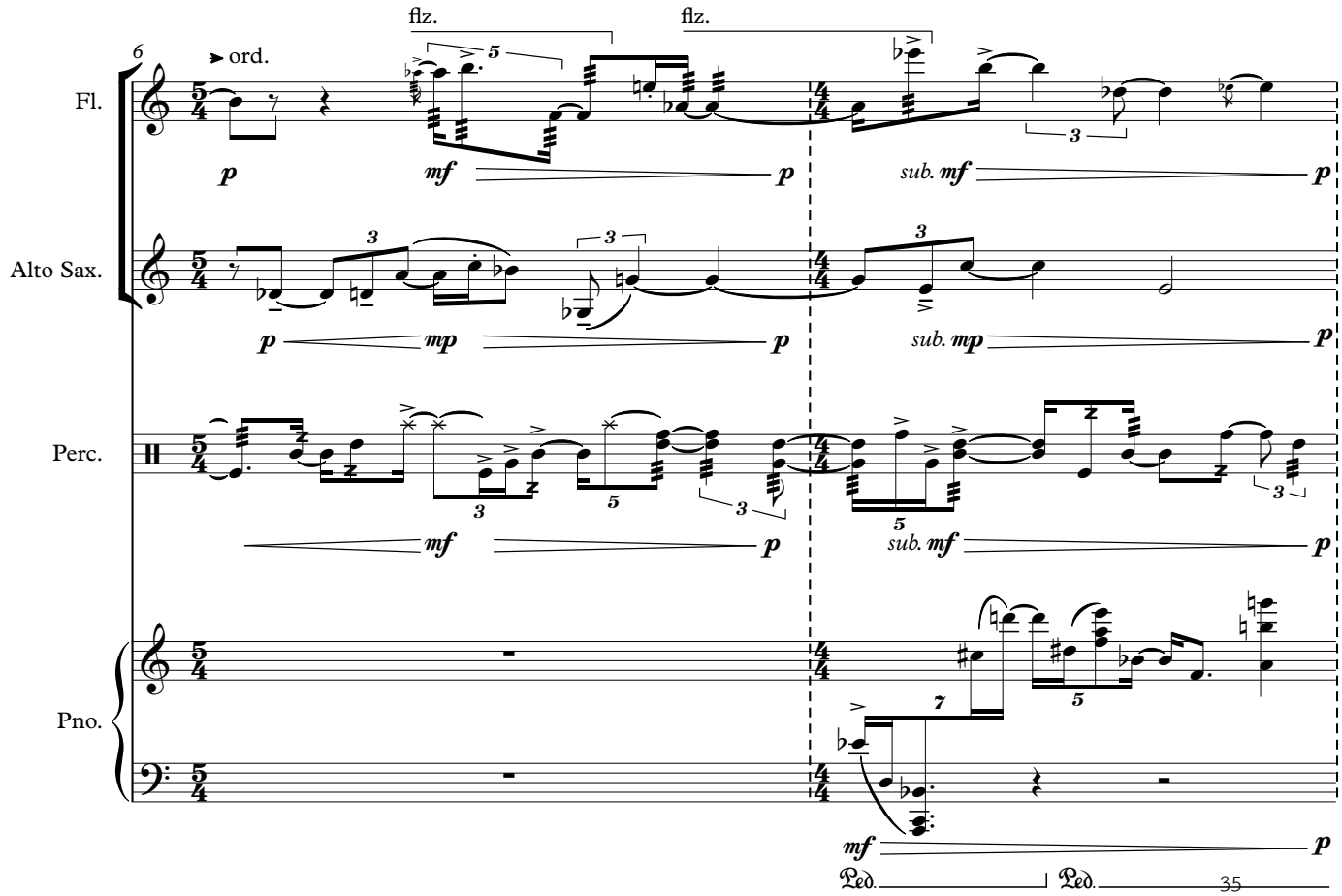
Poumpak Charuprakorn (2017)

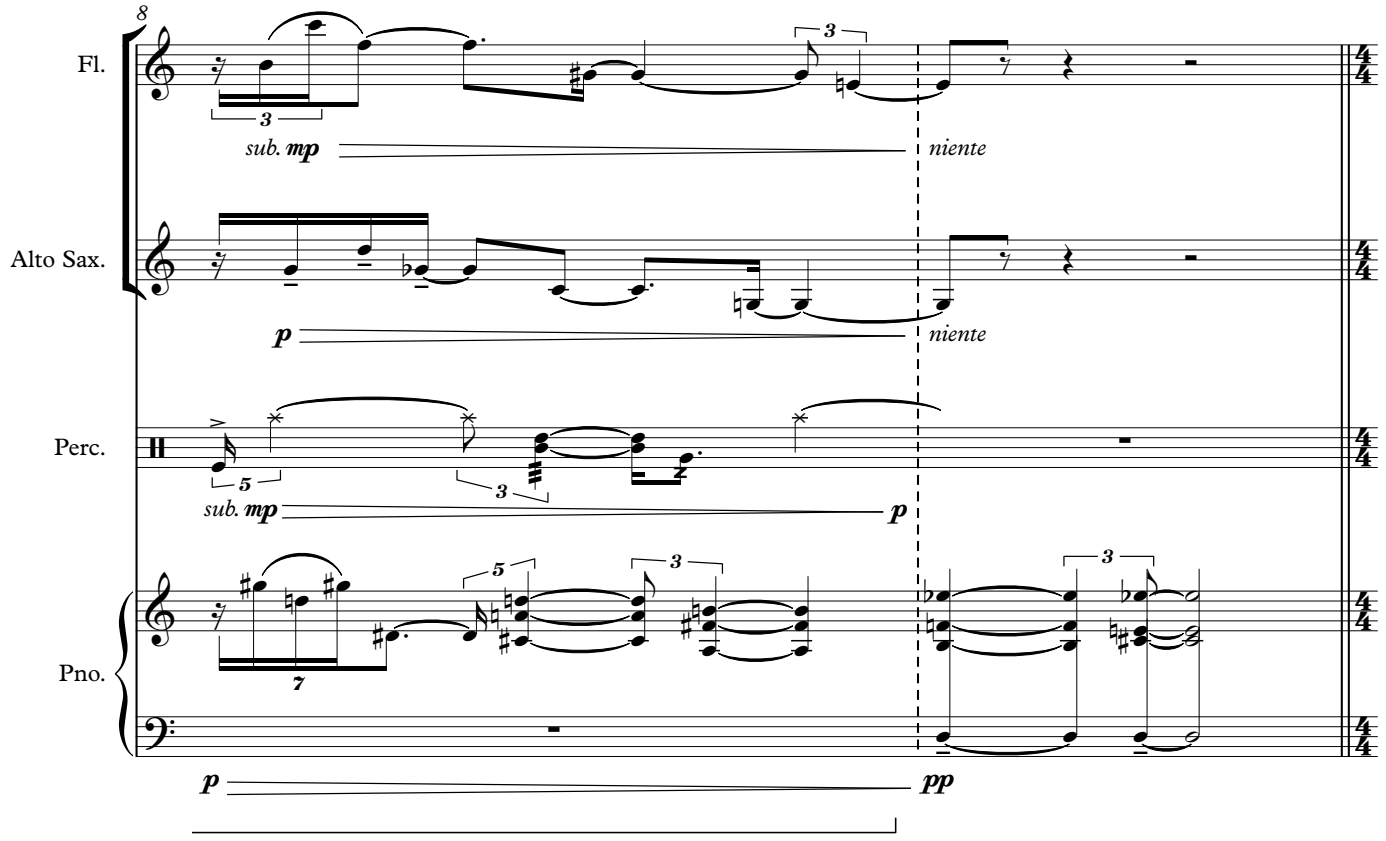


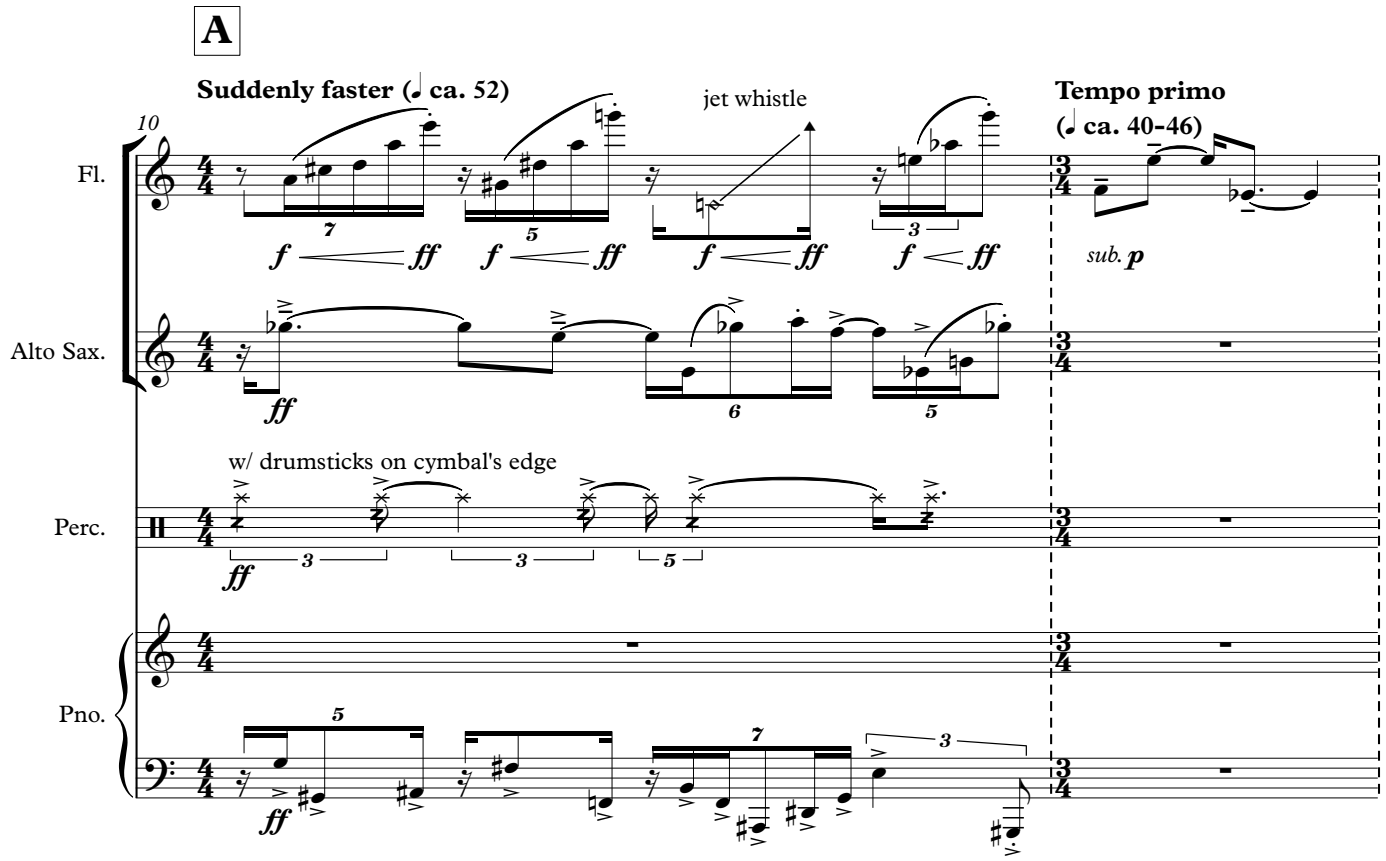

3
Fl.
Alto Sax.
Perc.
Pno.
w/ mallets
p
pp

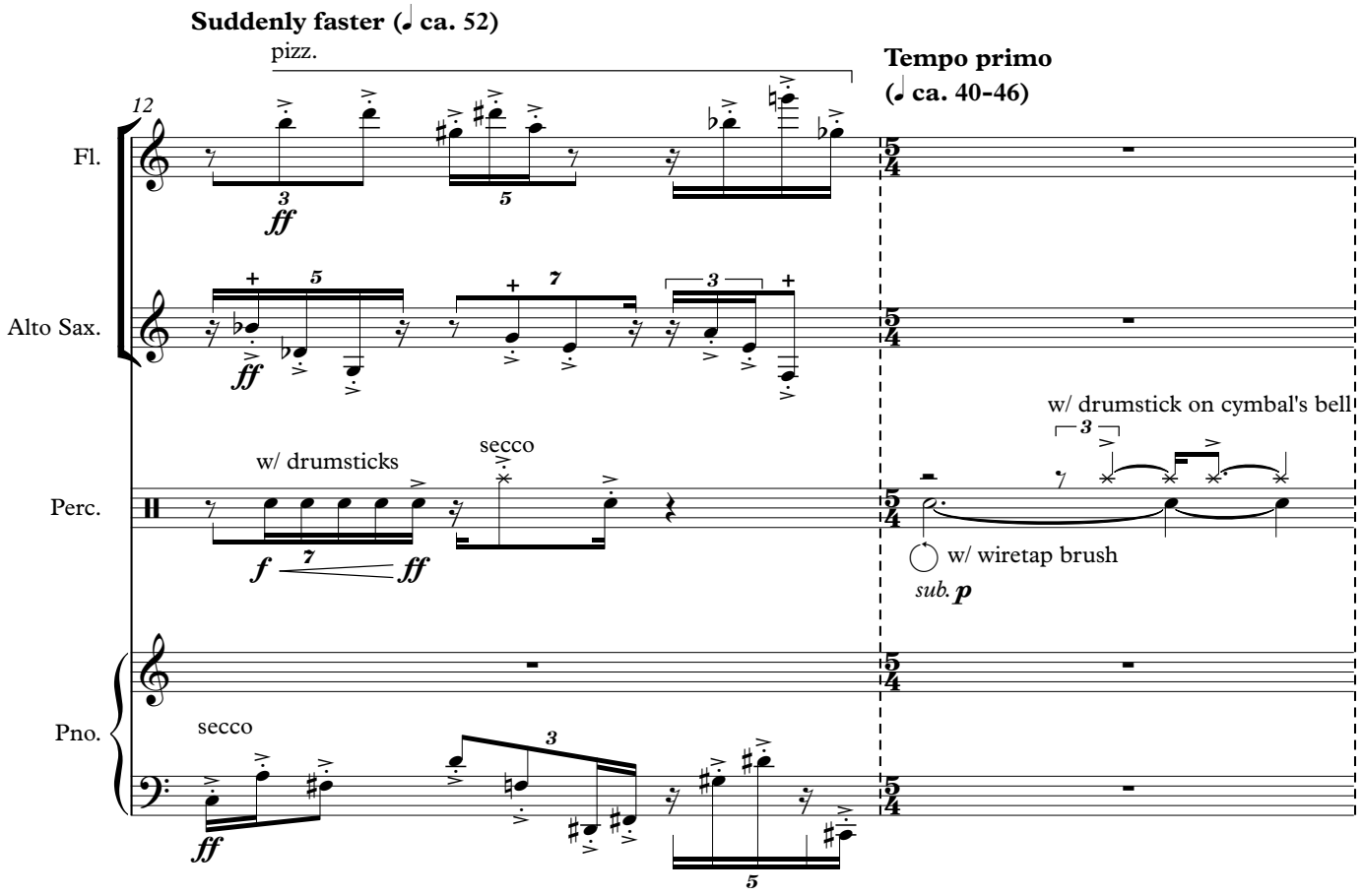

4
Fl.
Alto Sax.
Perc.
Pno.
flz.
ord.
sub. ff
f
p
8va
Ped.

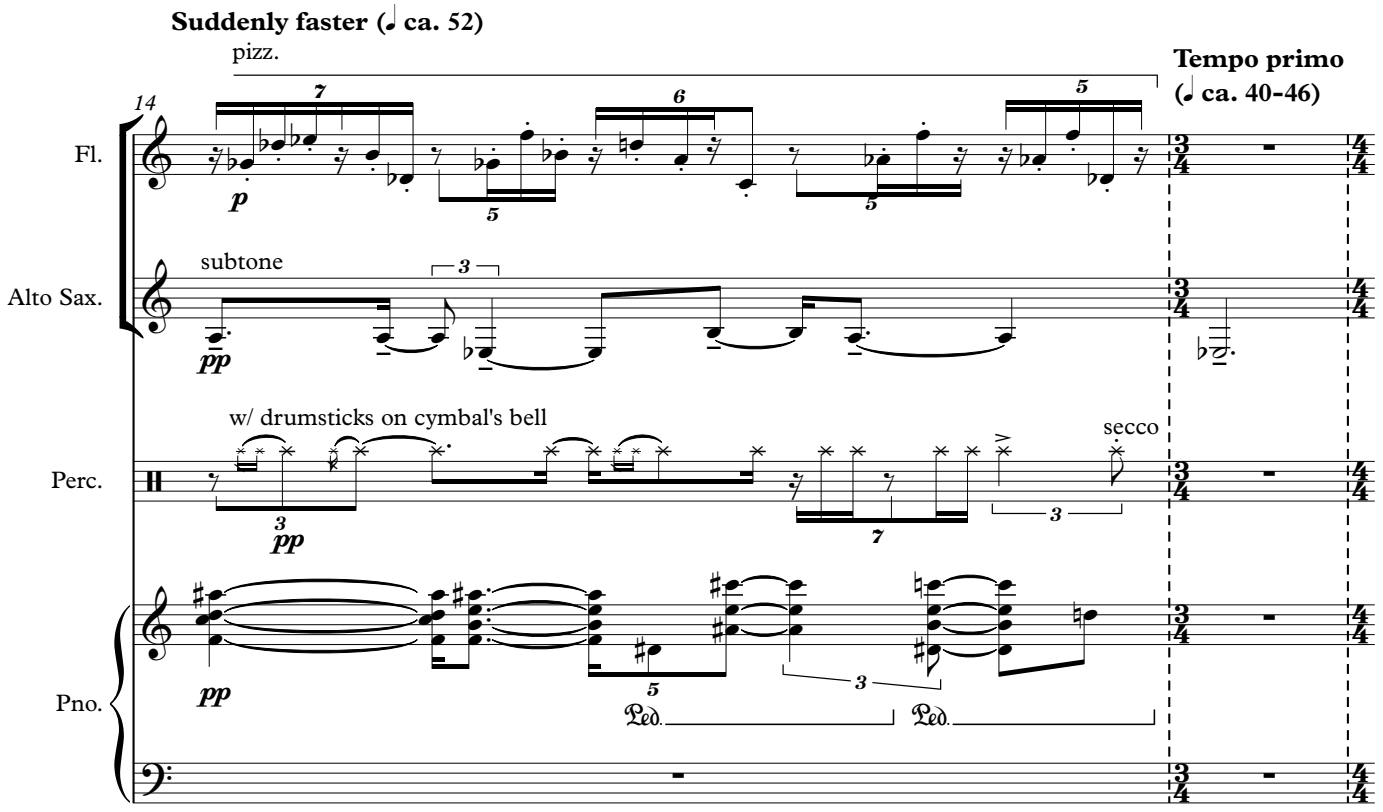

5
Fl.
flz.
mf
Alto Sax.
p
mp
w/ medium soft mallets
Perc.
mf
p
Pno.
mp
Ped.

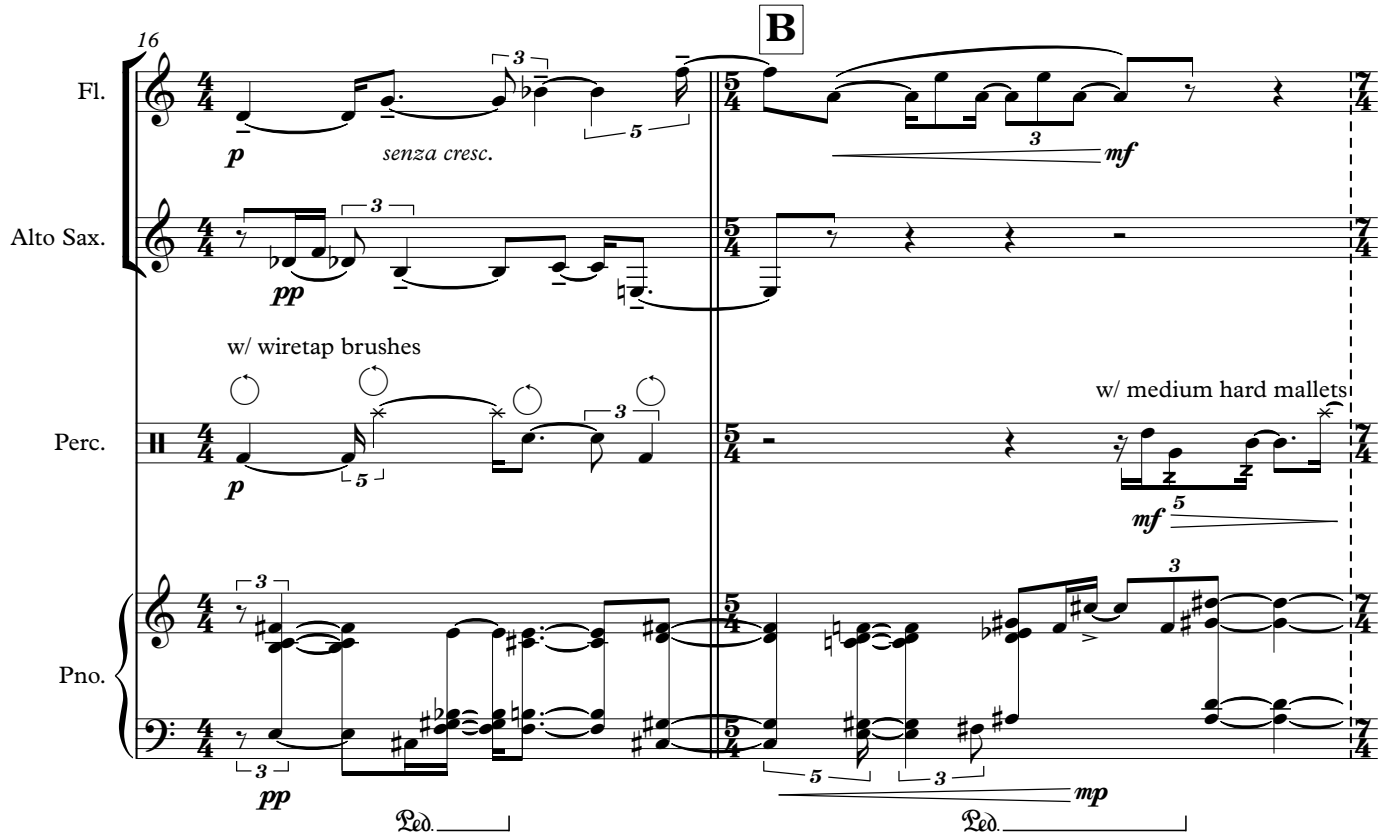

6
ord.
flz.
flz.
Fl.
p
mf
p
sub. mf
p
Alto Sax.
p
mp
p
sub. mp
p
Perc.
mf
p
sub. mf
p
Pno.
mf
p
Ped.
Ped.

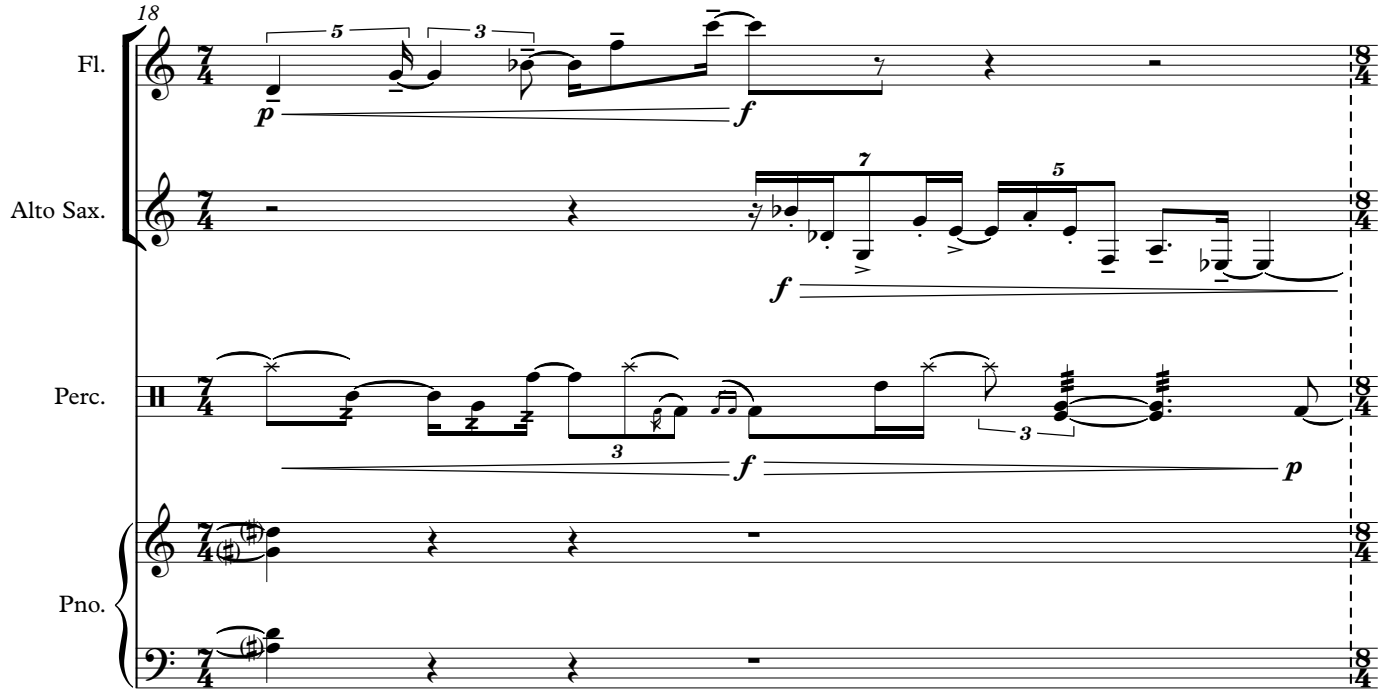

8
Fl.
Alto Sax.
Perc.
Pno.
sub. mp
niente
p
niente
sub. mp
p
p
pp

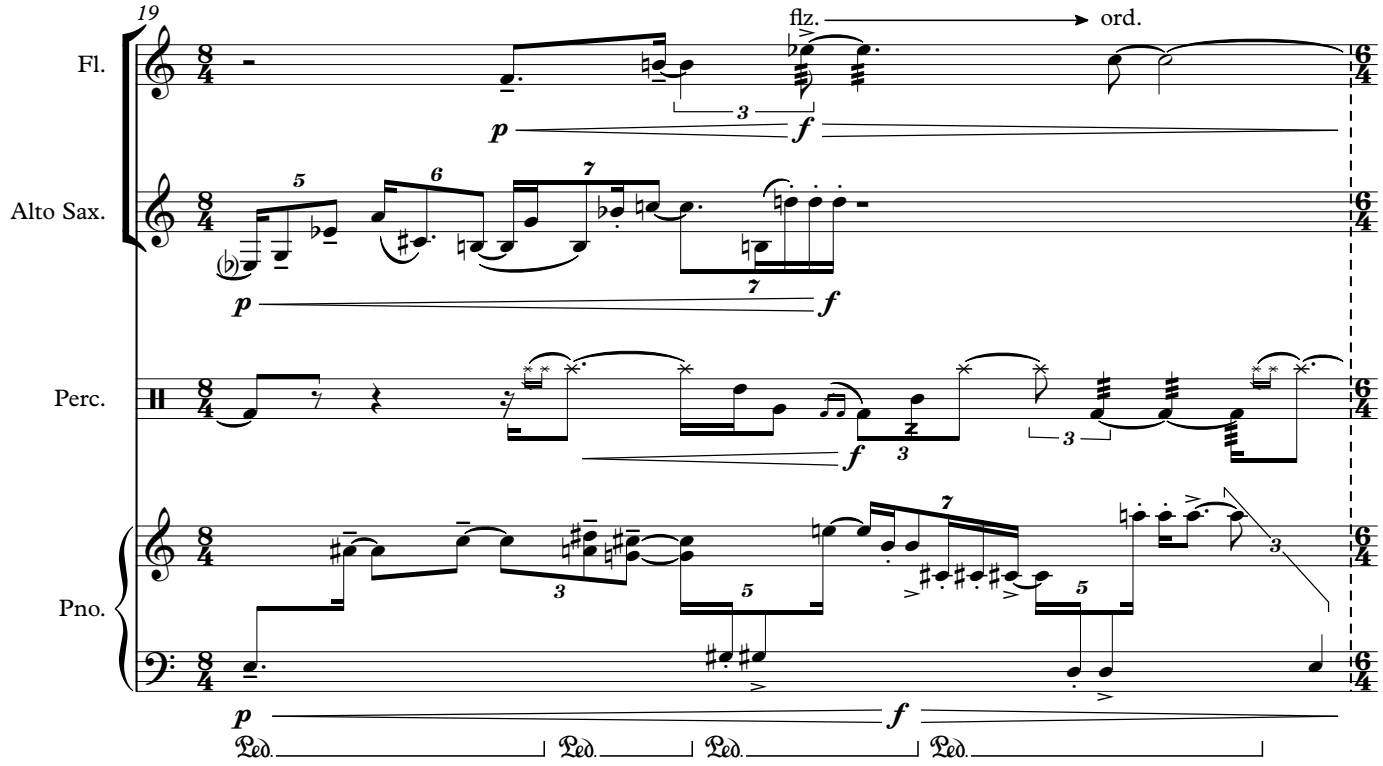

A
Suddenly faster (♩ ca. 52)
jet whistle
Tempo primo
(♩ ca. 40-46)
10
Fl.
Alto Sax.
Perc.
Pno.
w/ drumsticks on cymbal's edge
sub. p

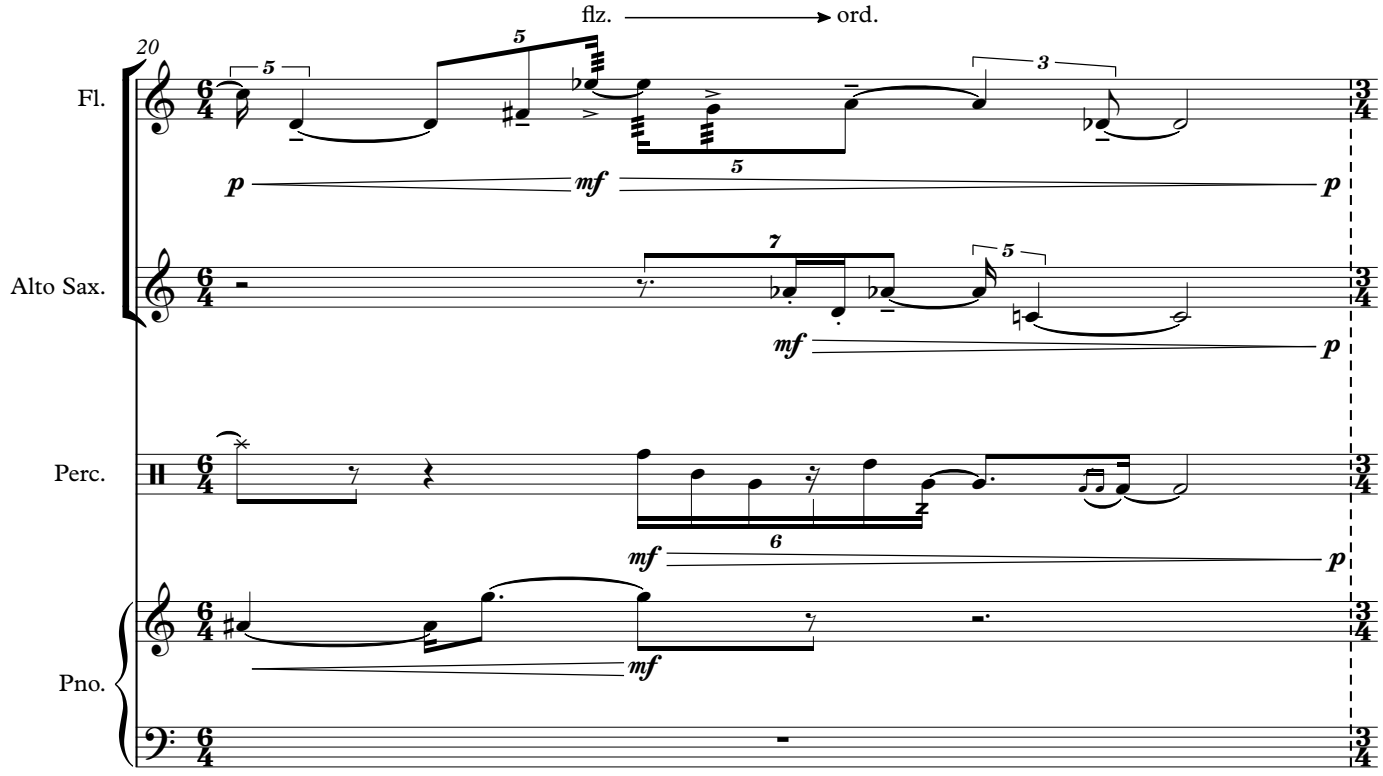

Suddenly faster (♩ ca. 52)
pizz.
Tempo primo
(♩ ca. 40-46)
12
Fl.
Alto Sax.
Perc.
Pno.
w/ drumsticks
secco
w/ drumstick on cymbal's bell
w/ wiretap brush
sub. p
secco

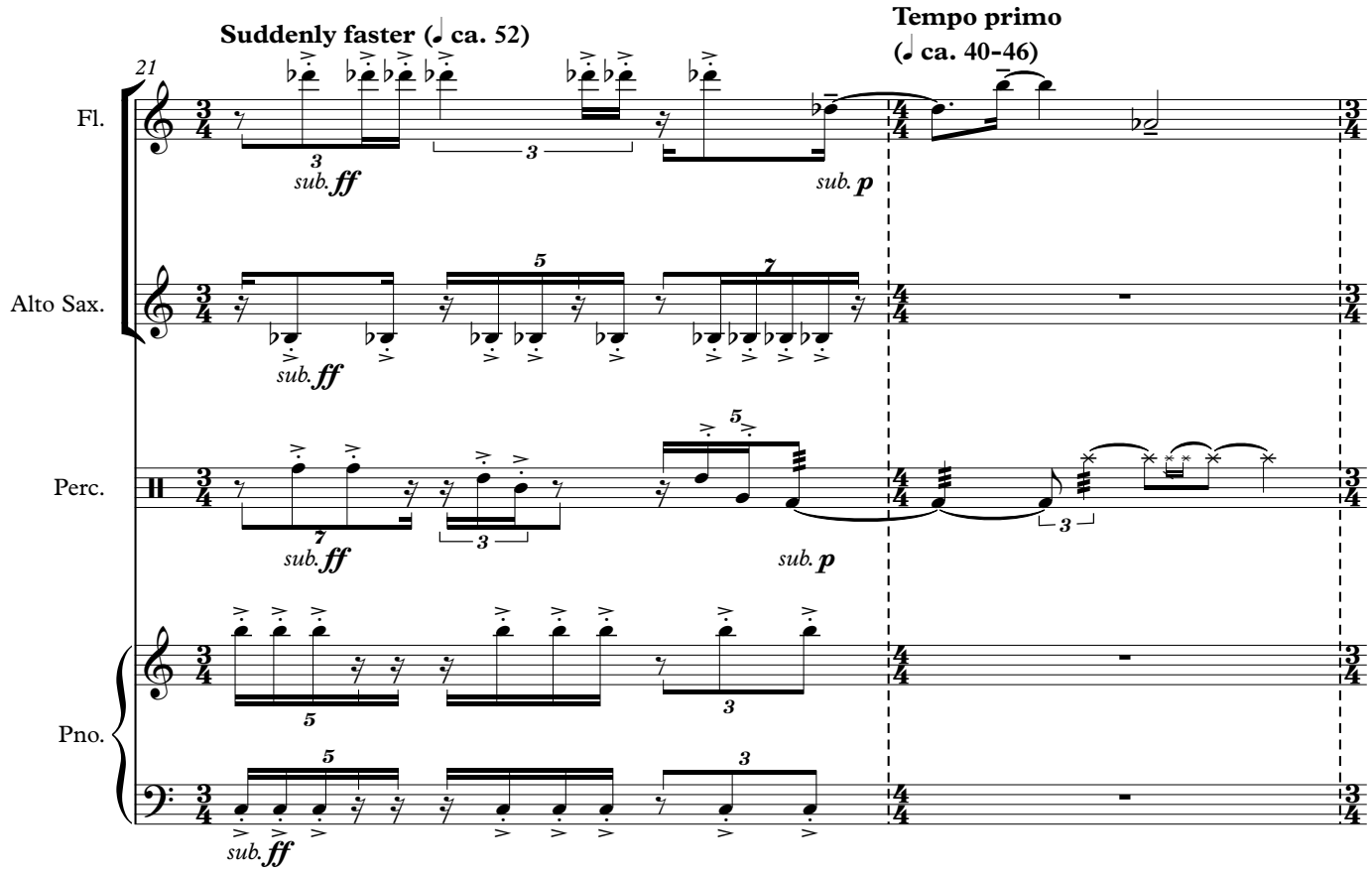

Suddenly faster (♩ ca. 52)
pizz.
Tempo primo
(♩ ca. 40-46)
14
Fl.
Alto Sax.
Perc.
Pno.
subtone
w/ drumsticks on cymbal's bell
secco
Ped.
Ped.

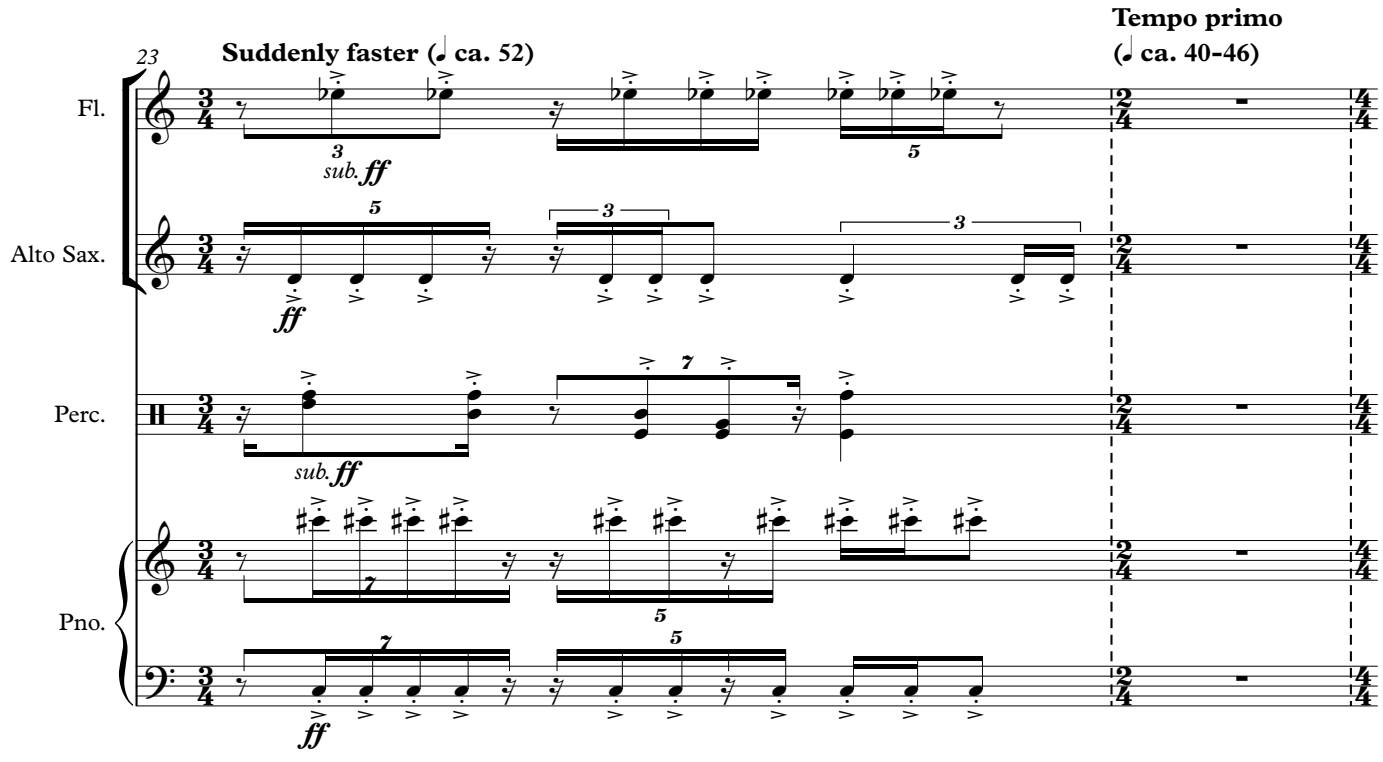

16
B
Fl.
Alto Sax.
Perc.
Pno.
p
senza cresc.
mf
pp
w/ wiretap brushes
w/ medium hard mallets
mf
pp
mp
Ped.
Ped.

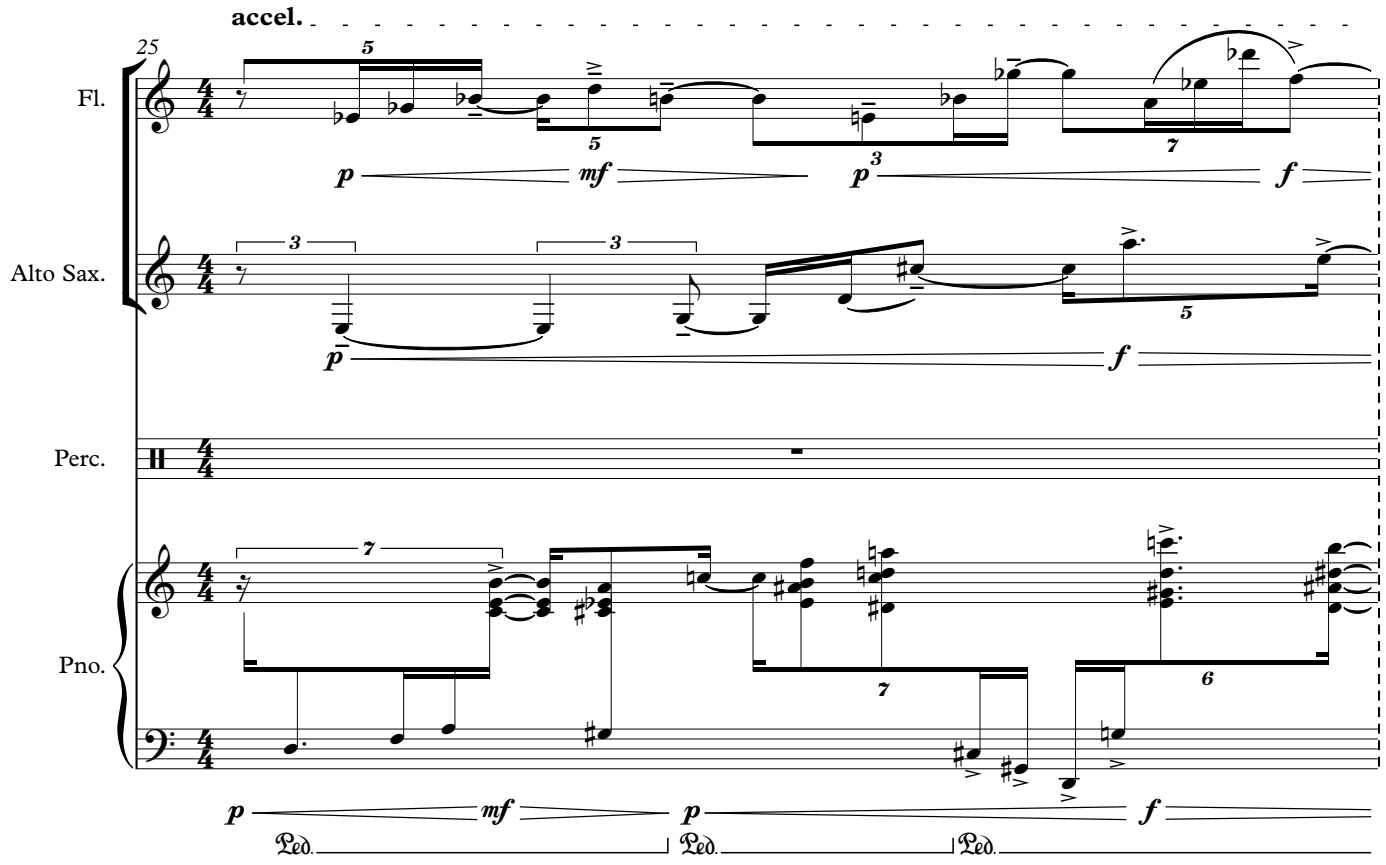

18
Fl.
Alto Sax.
Perc.
Pno.
p
f
f
f
p

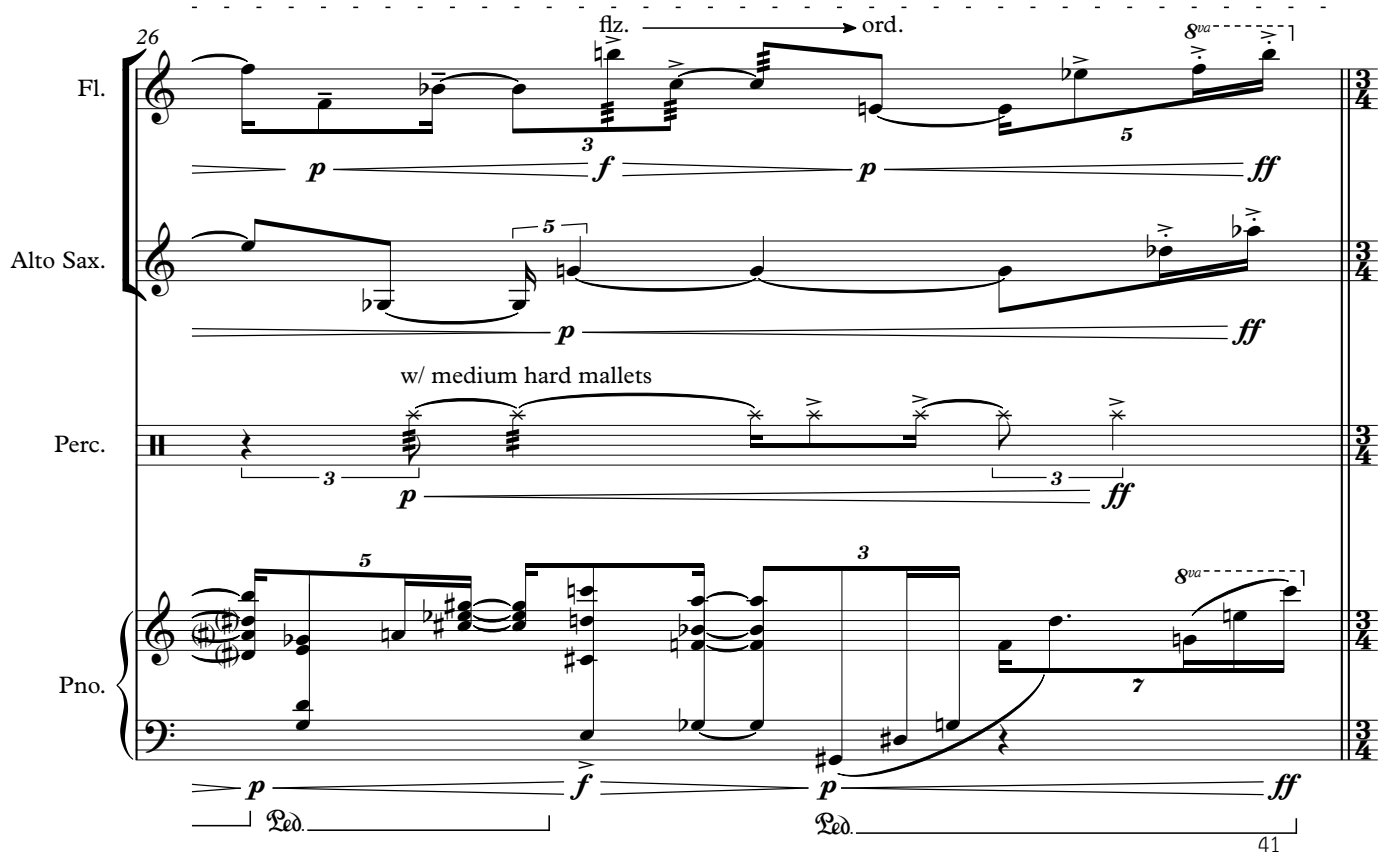

19
flz.
ord.
Fl.
Alto Sax.
Perc.
Pno.
p
f
Ped.

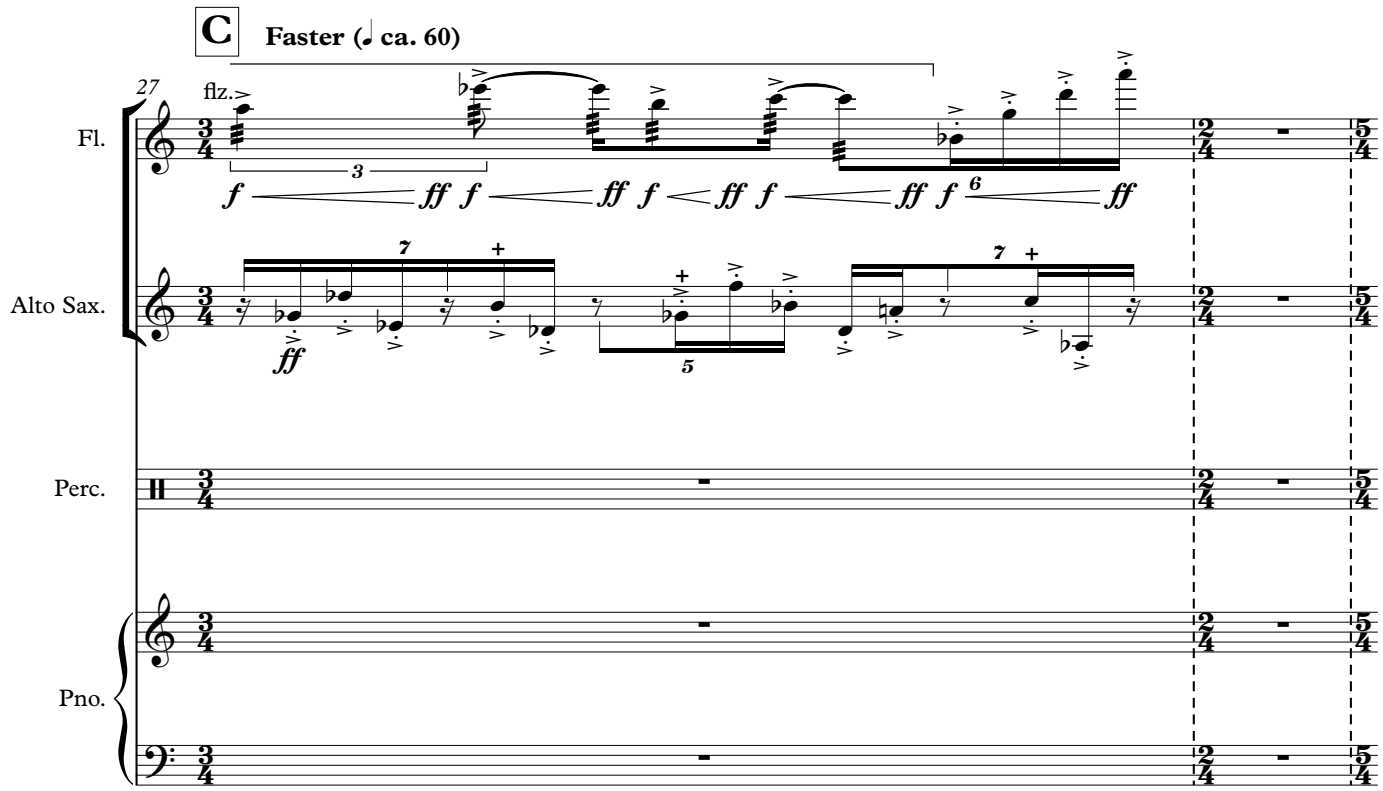

20
flz.
ord.
Fl.
Alto Sax.
Perc.
Pno.
p
mf

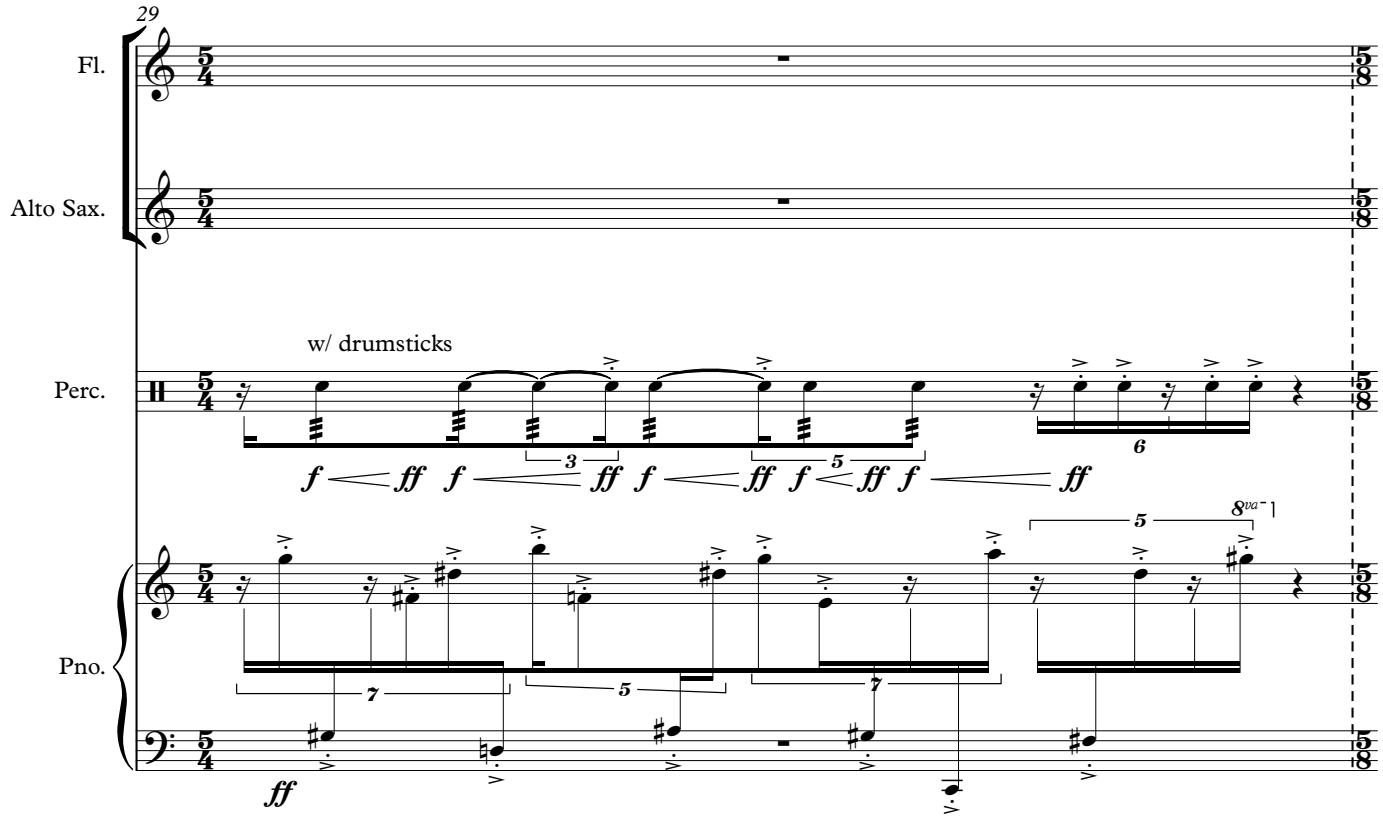

Suddenly faster (𝅗𝅥 ca. 52)
Tempo primo
(𝅗𝅥 ca. 40-46)
21
Fl.
Alto Sax.
Perc.
Pno.
sub. ff
sub. p

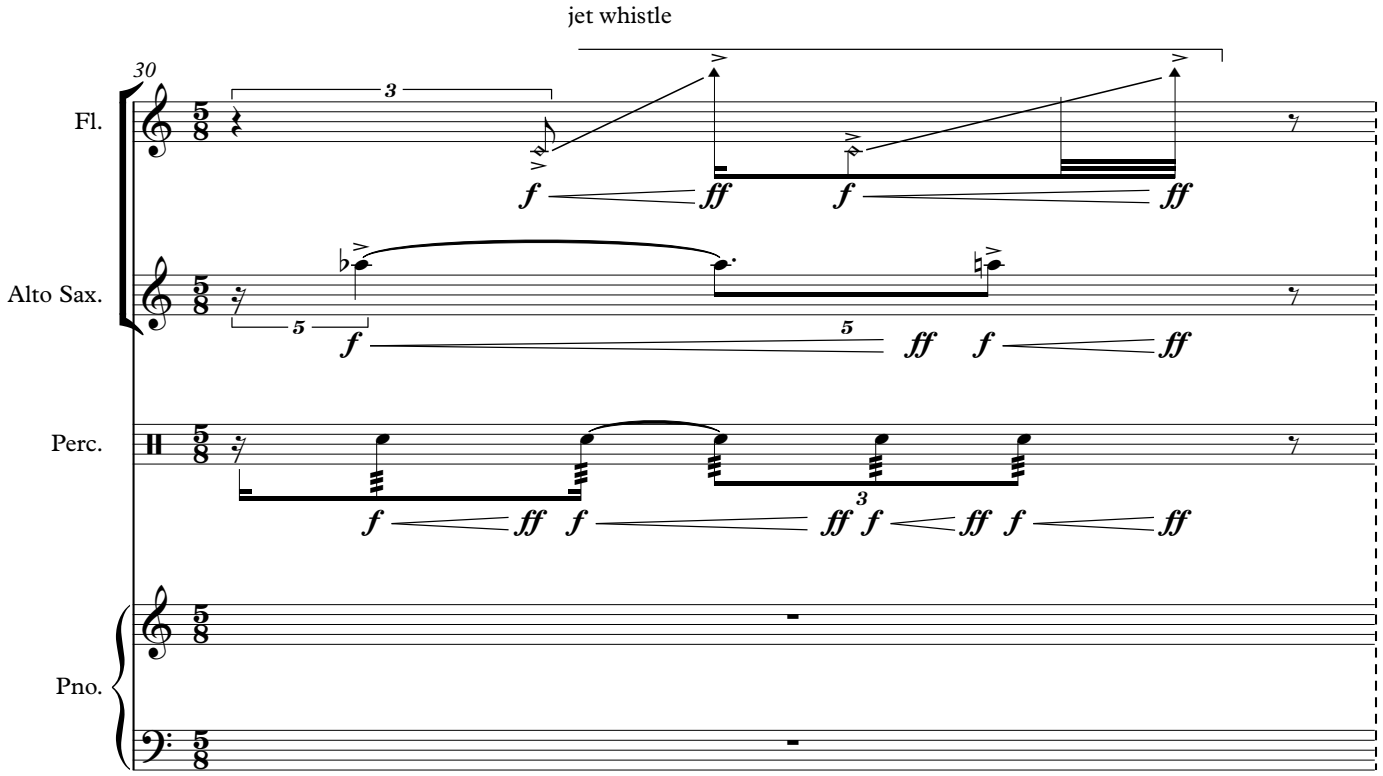

Suddenly faster (𝅗𝅥 ca. 52)
Tempo primo
(𝅗𝅥 ca. 40-46)
23
Fl.
Alto Sax.
Perc.
Pno.
sub. ff
ff

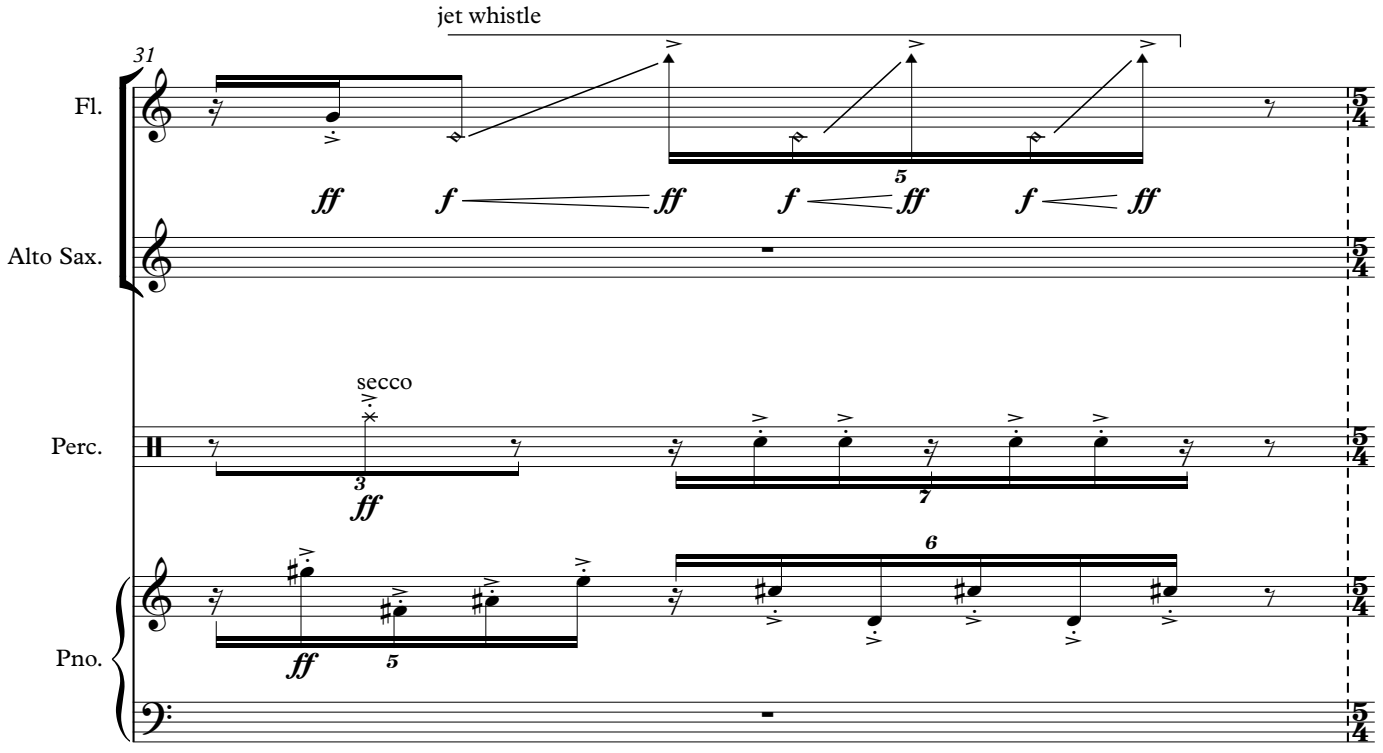

accel.
25
Fl.
Alto Sax.
Perc.
Pno.
p
mf
f
Ped.

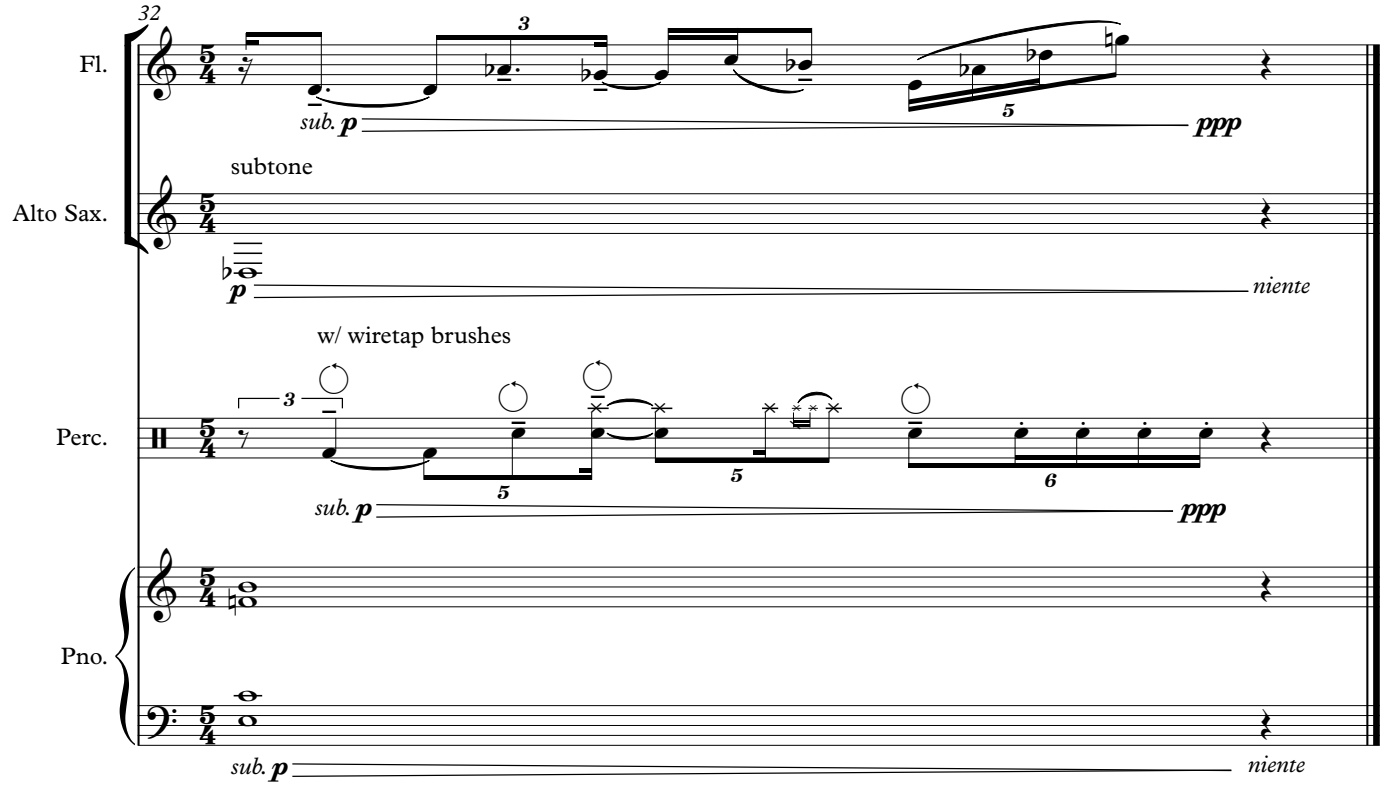

26
flz.
ord.
Fl.
Alto Sax.
w/ medium hard mallets
Perc.
Pno.
p
f
ff
Ped.


C
Faster (♩ ca. 60)
27
flz.
Fl.
Alto Sax.
Perc.
Pno.


29
Fl.
Alto Sax.
w/ drumsticks
Perc.
Pno.
8va


jet whistle
30
Fl.
Alto Sax.
Perc.
Pno.


jet whistle
31
Fl.
Alto Sax.
secco
Perc.
Pno.


32
Fl.
sub. p
ppp
subtone
Alto Sax.
p
niente
w/ wiretap brushes
Perc.
sub. p
ppp
Pno.
sub. p
niente

Quartet

for string quartet

Poumpak Charuprakorn (2017)

FULL SCORE

i

Quartet consists of twenty-two distinctive sections that vary in the sense of time, texture, density, range, dynamic, timbre, and harmony. The composer aims to explore the use of non-linear development and non-thematic musical material to create the essence of the composition.

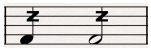
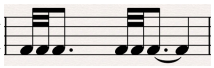
Performance Notes

Barlines and time signatures are only for pratical use and do not imply any strong beats

All pizzicatos should be let vibrate (l.v.)

All marcatos should be *secco*

All tremelos are unmeasured and should be played as fast as possible

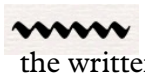
 = a short burst of tremelo only at the beginning of that note ()

 = quarter-tone sharp  = half-tone sharp  = three-quarter-tone sharp

 = quarter-tone flat  = half-tone flat  = three-quarter-tone flat

Roman numerals represent the strings; I and IV represent the highest and lowest strings respectively

Performers could use vibrato normally throughout the piece except the sections indicated *senza vibrato*

 means *molto vibrato*, the range of the vibrato could be up to a quarter-tone higher and lower than the written pitch. At the rehearsal marks 10 and 14, all notes without this sign should be *senza vibrato* to exaggerate the difference

Noteheads

A diamond notehead in brackets written with a natural harmonic is used to remind the player where to touch to create the sound; occasionally it is indicated by texts in brackets instead

A square notehead represents distorted and scratchy sound with audible pitch

Terms and Abbreviations

s.p. = *sul ponticello* s.t. = *sul tasto* ord. = normal bowing

crini+legno tratto = bowing with hair and wood

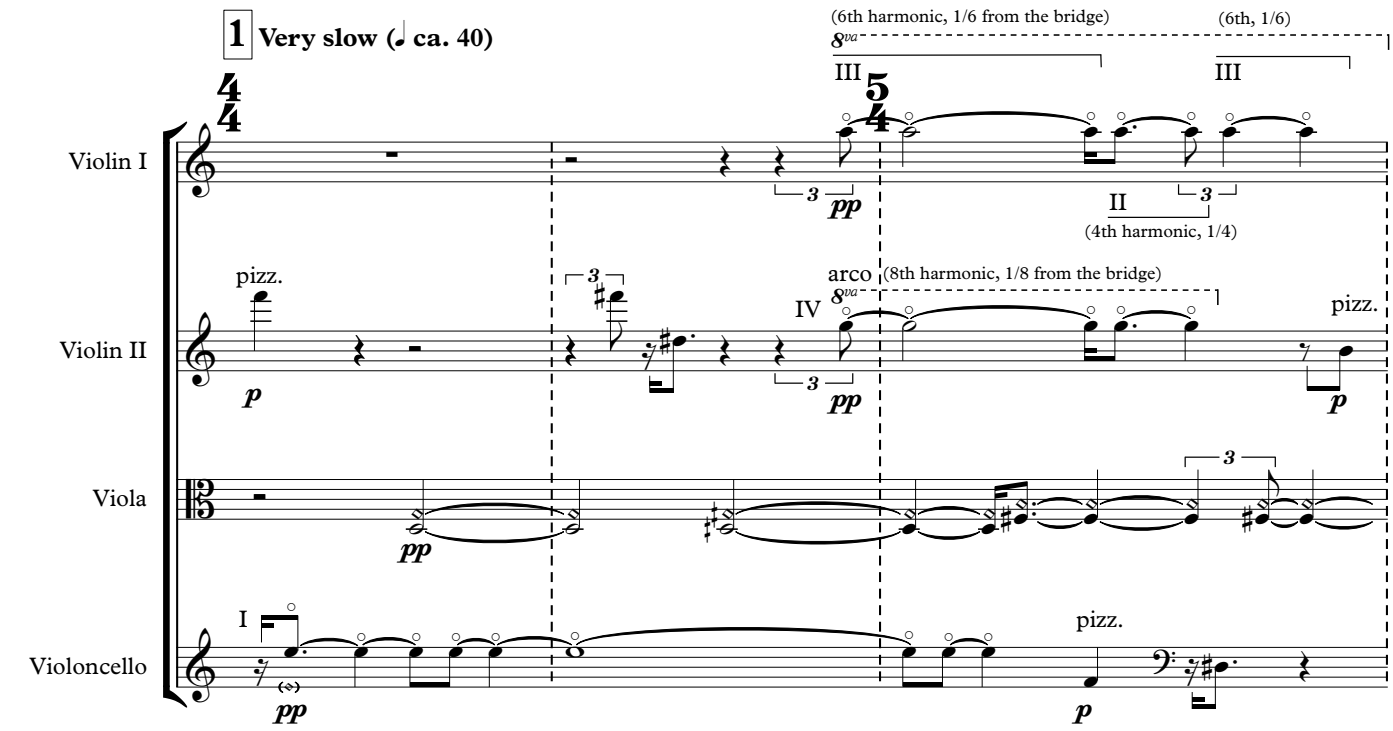
col legno tratto = bowing with wood only

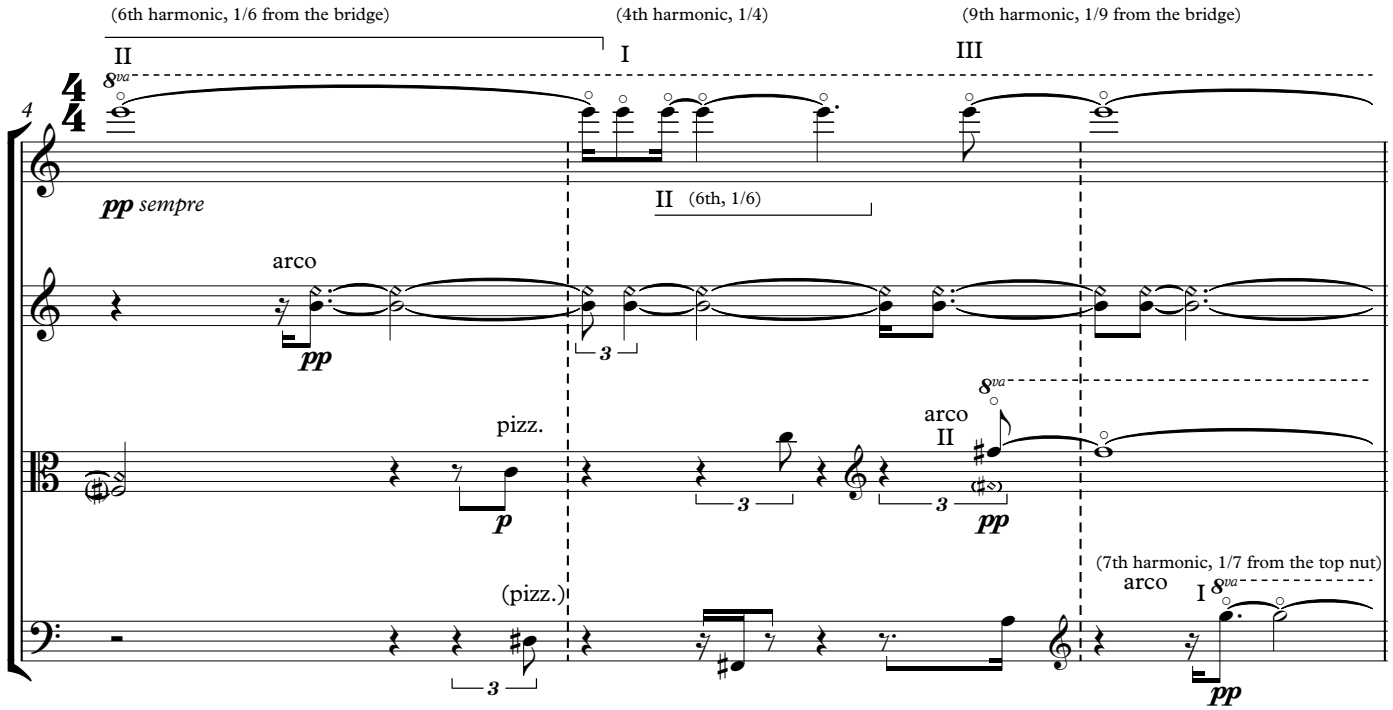
Duration: ca. 10 minutes

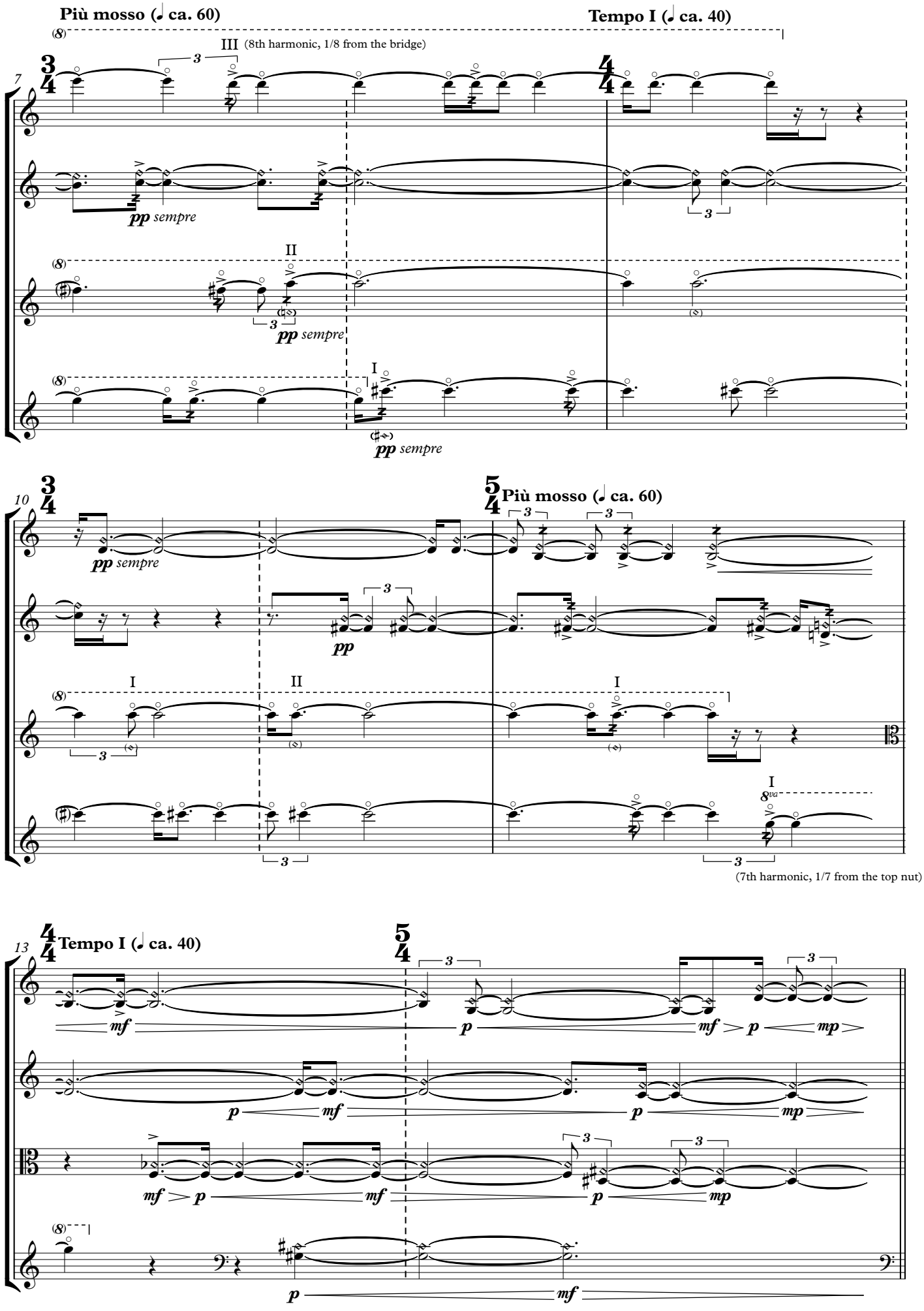
Quartet

for string quartet

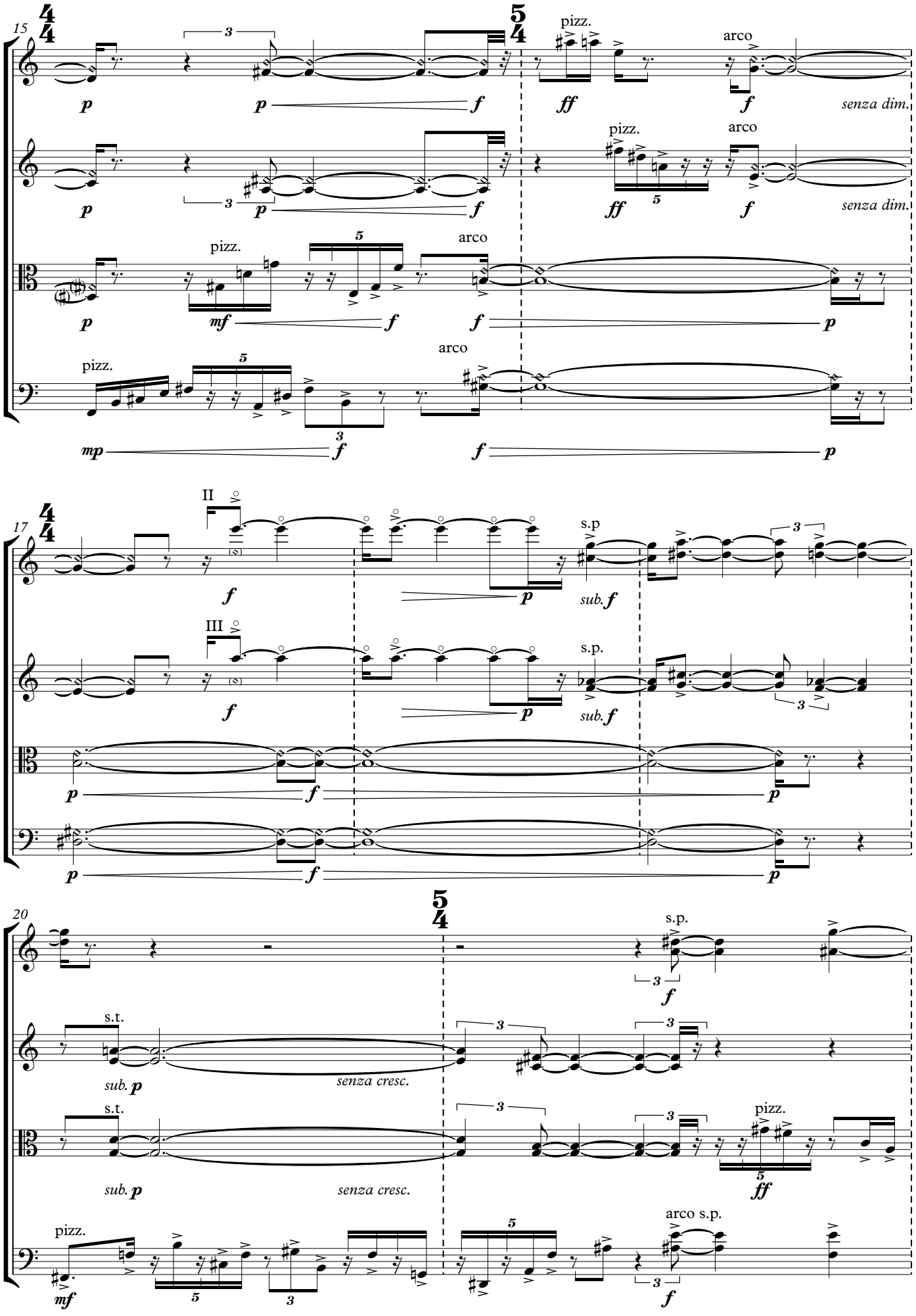
Poumpak Charuprakorn (2017)

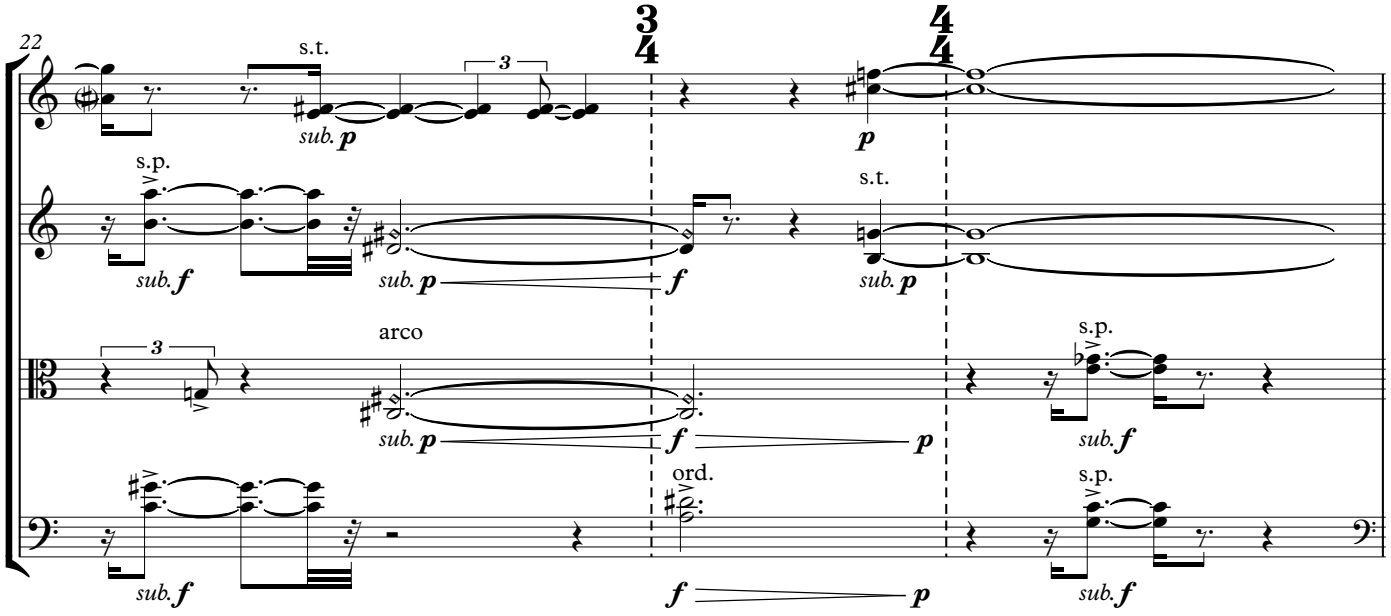




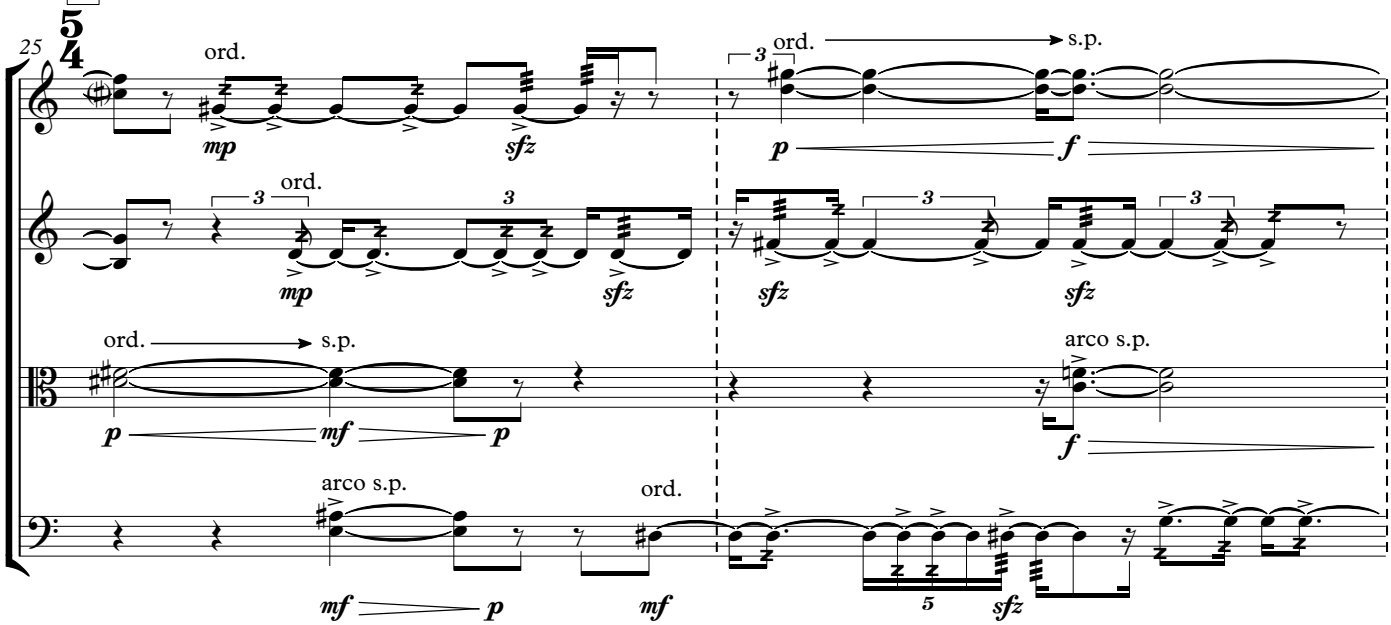

Più mosso (♩ ca. 60)
Tempo I (♩ ca. 40)
III (8th harmonic, 1/8 from the bridge)
pp sempre
II
I
7
10
13
(7th harmonic, 1/7 from the top nut)
8va
mf
p
mp

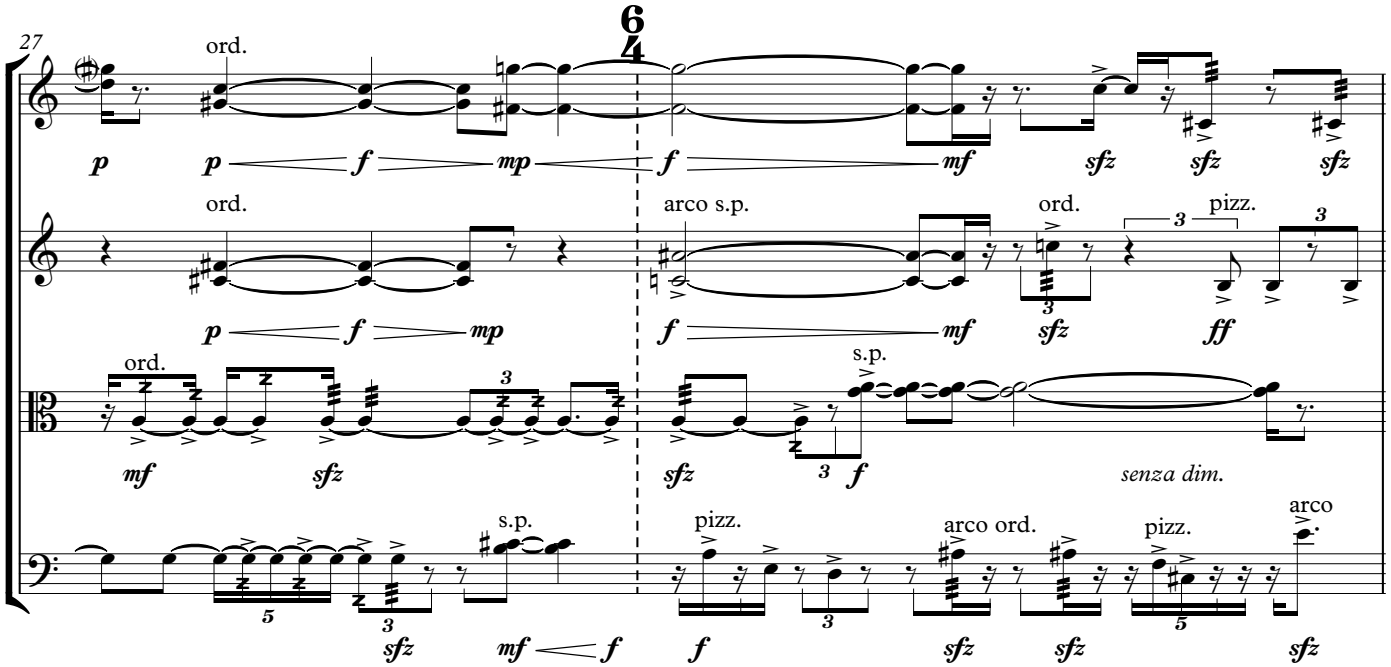
2 **Moderately fast (♩ ca. 72)**



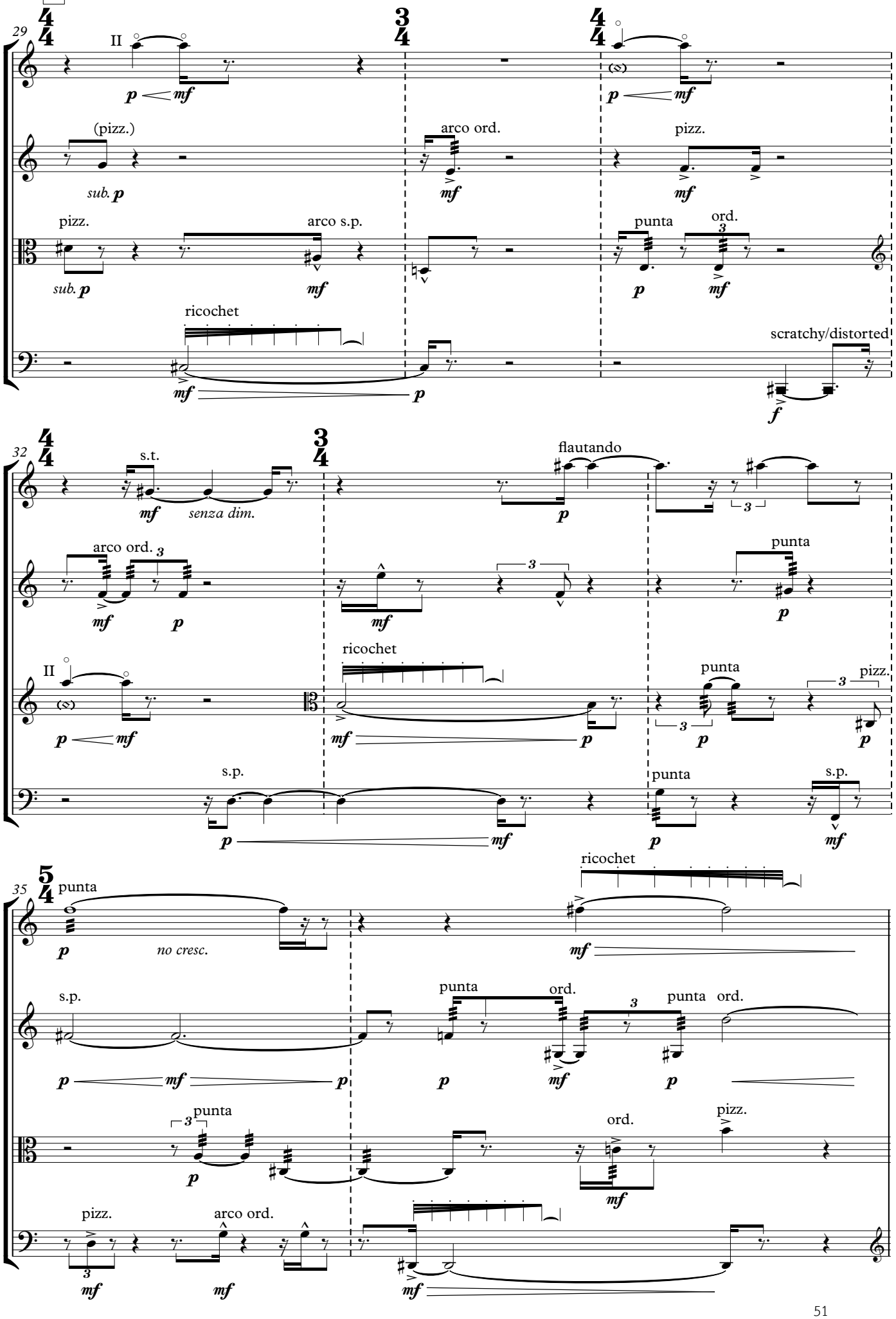


3 **Tempo I, very slow (𝅗𝅥 ca. 40)**

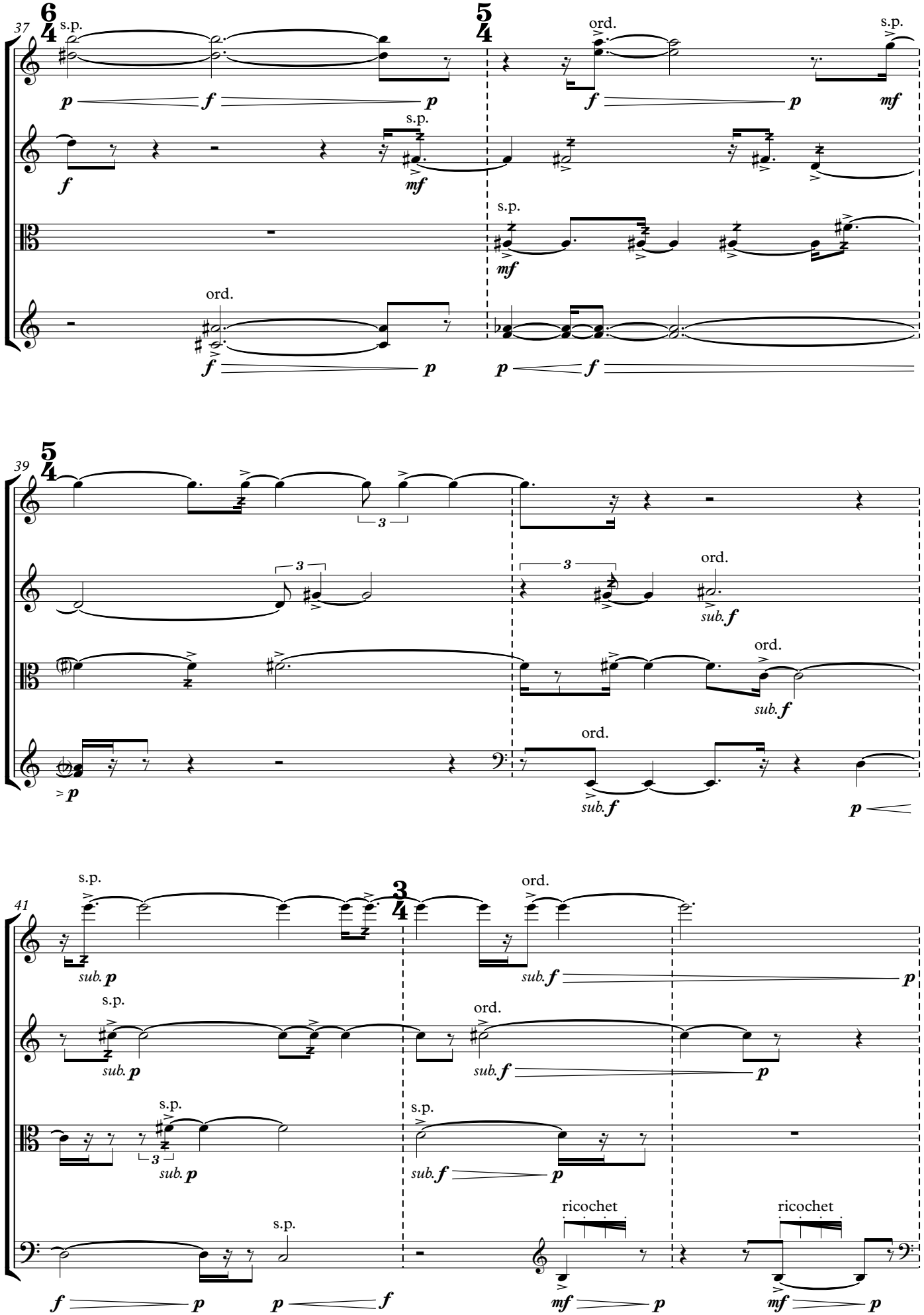


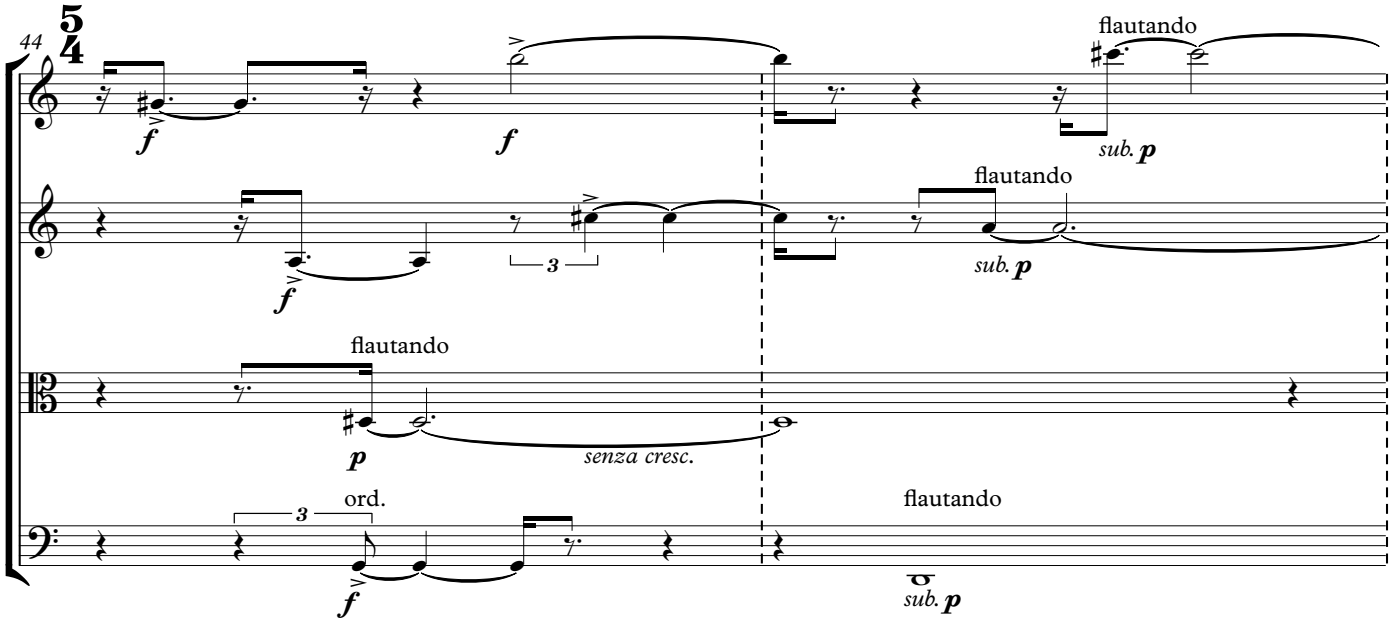


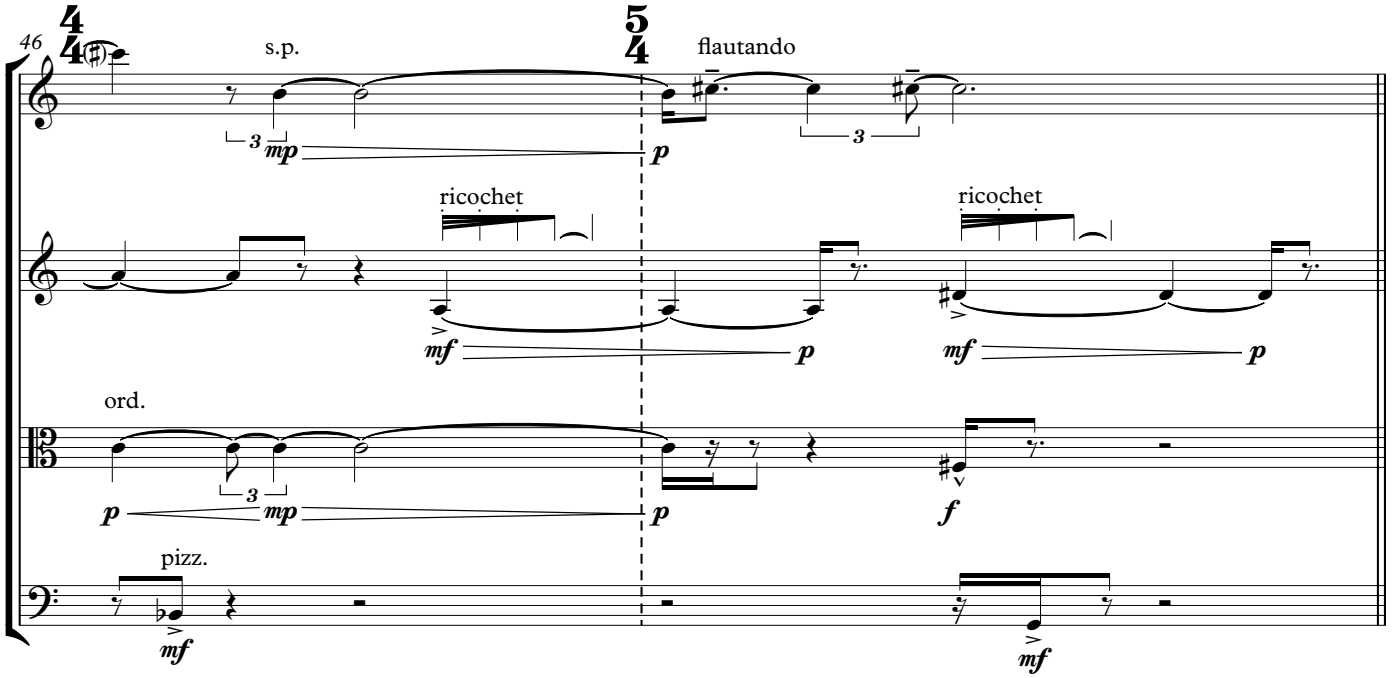
4 **Fast (♩ ca. 92)**


29
II
(pizz.)
sub. p
pizz.
sub. p
arco s.p.
mf
ricochet
mf
p
arco ord.
mf
pizz.
mf
punta
ord.
p
mf
scratchy/distorted
f
32
s.t.
mf
senza dim.
arco ord.
mf
p
flautando
p
mf
punta
p
II
p
mf
ricochet
mf
p
punta
p
pizz.
p
s.p.
p
mf
punta
p
s.p.
mf
35
punta
p
no cresc.
ricochet
mf
s.p.
p
mf
p
punta
p
ord.
mf
punta
ord.
p
punta
p
ord.
mf
pizz.
pizz.
mf
arco ord.
mf
mf

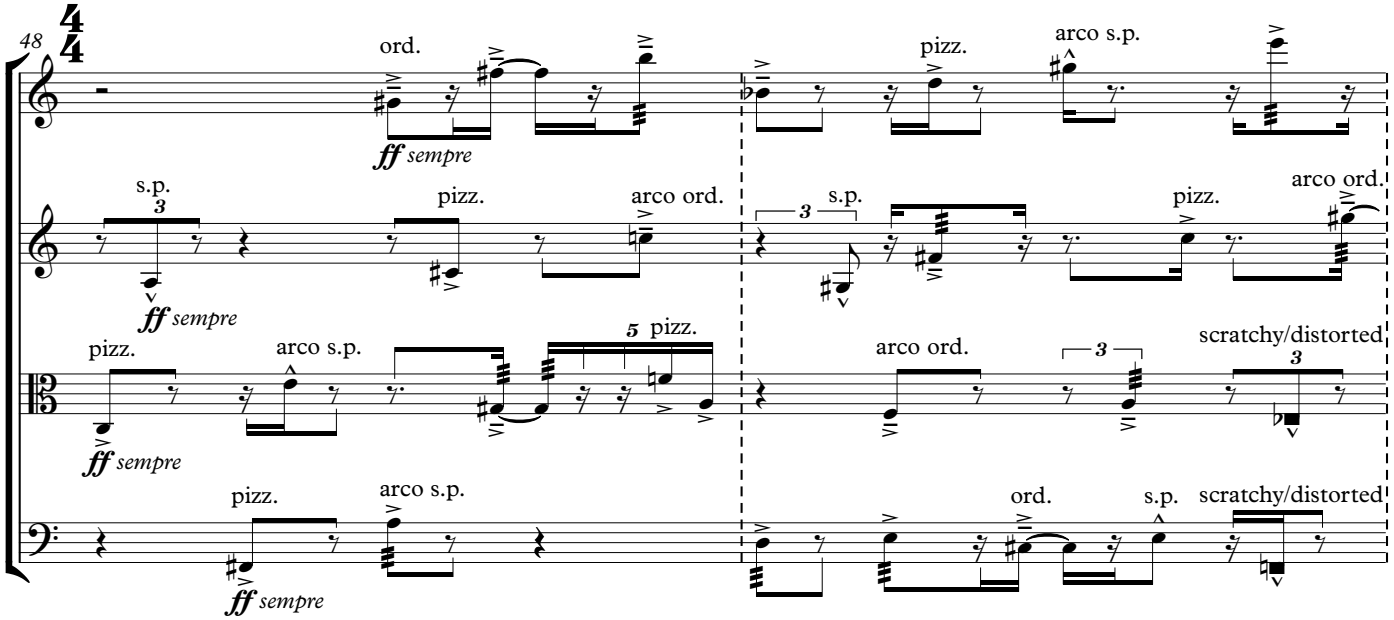
5 **Slower (♩ ca. 72-84)**

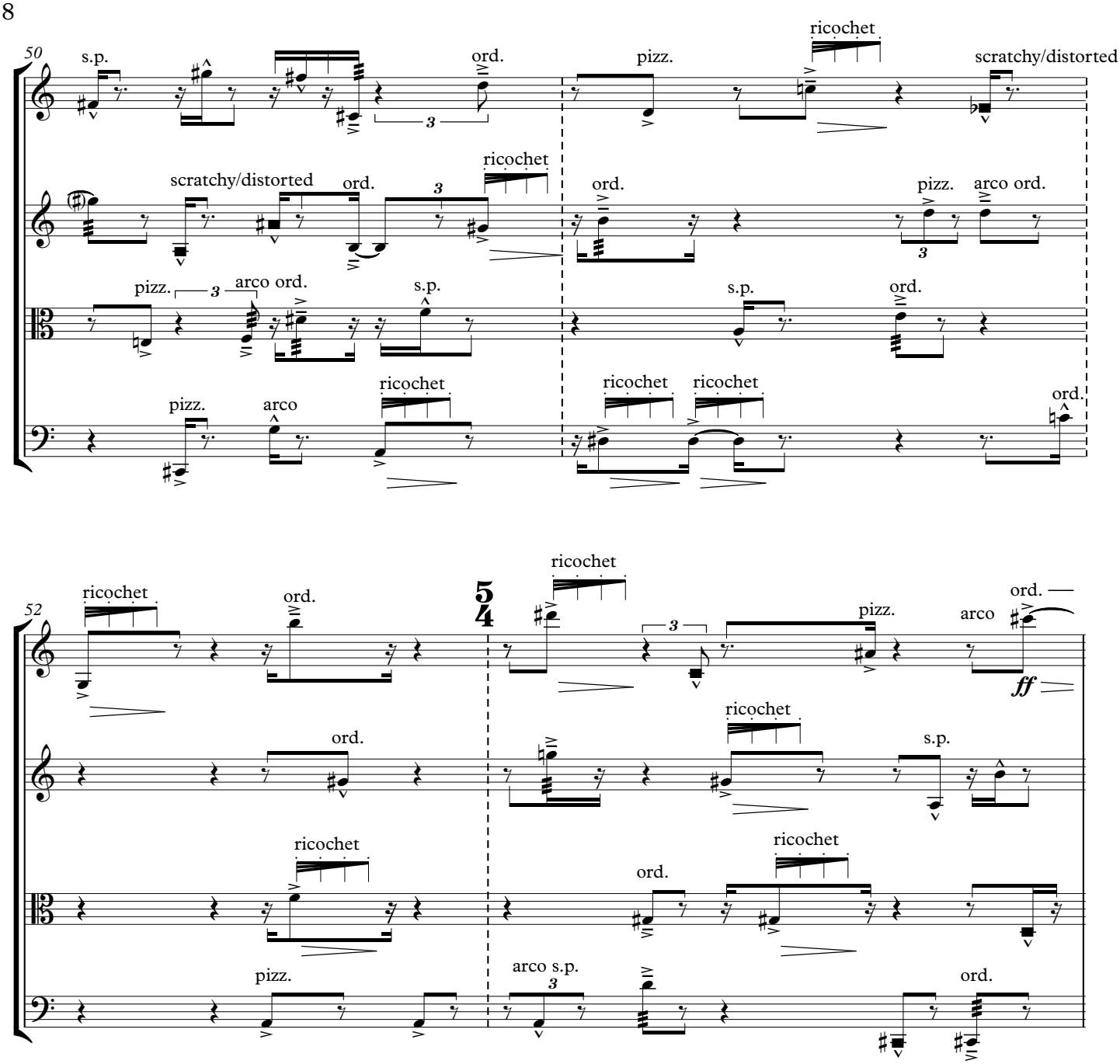



44
flautando
sub. p
flautando
sub. p
flautando
senza cresc.
ord.
flautando
sub. p

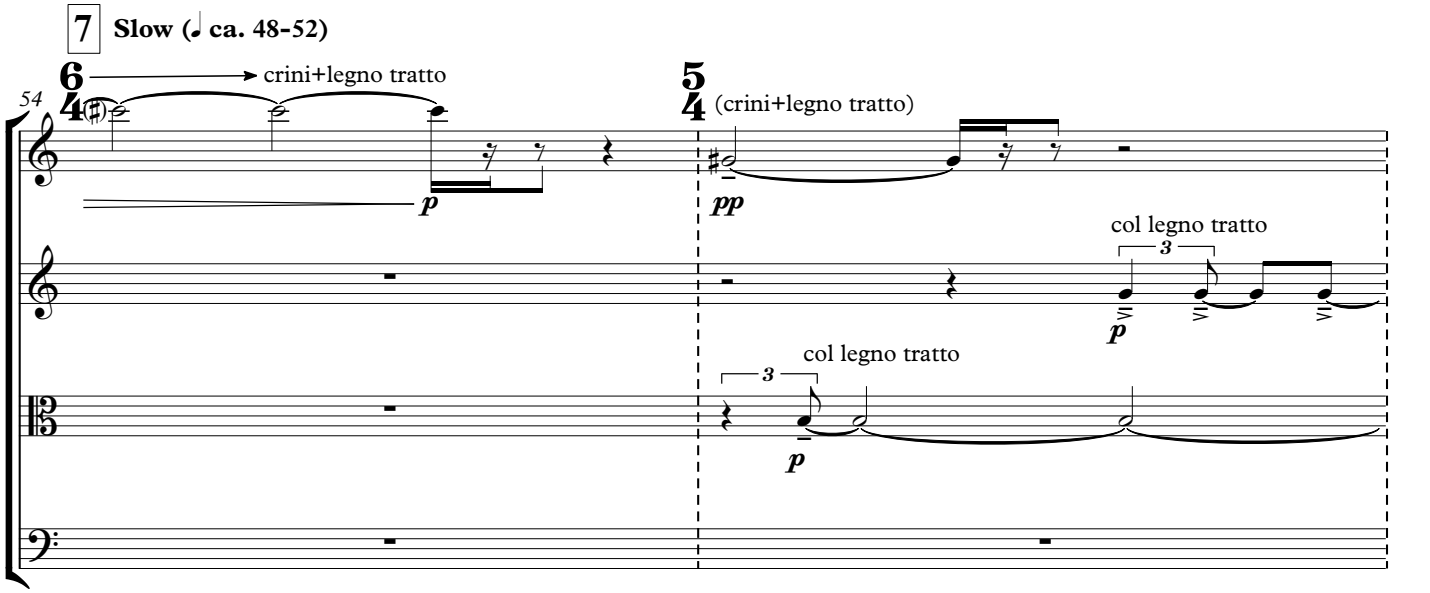

46
s.p.
flautando
ricochet
ricochet
ord.
pizz.

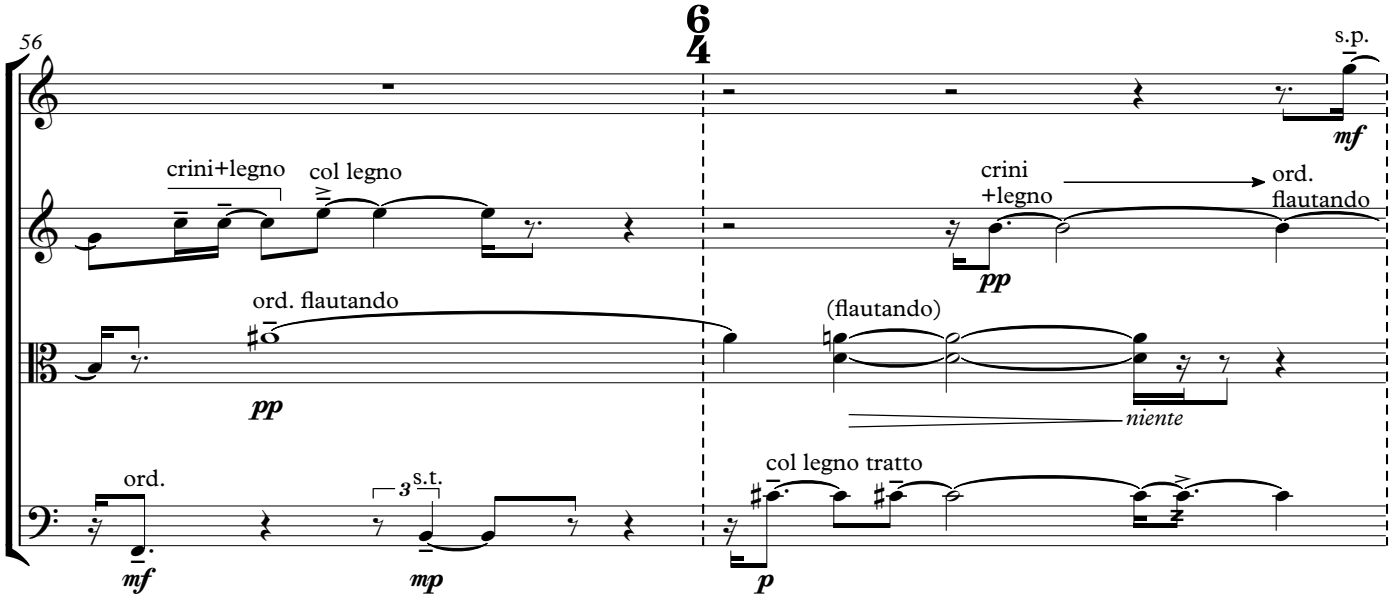
6 **Fast (♩ ca. 92)**

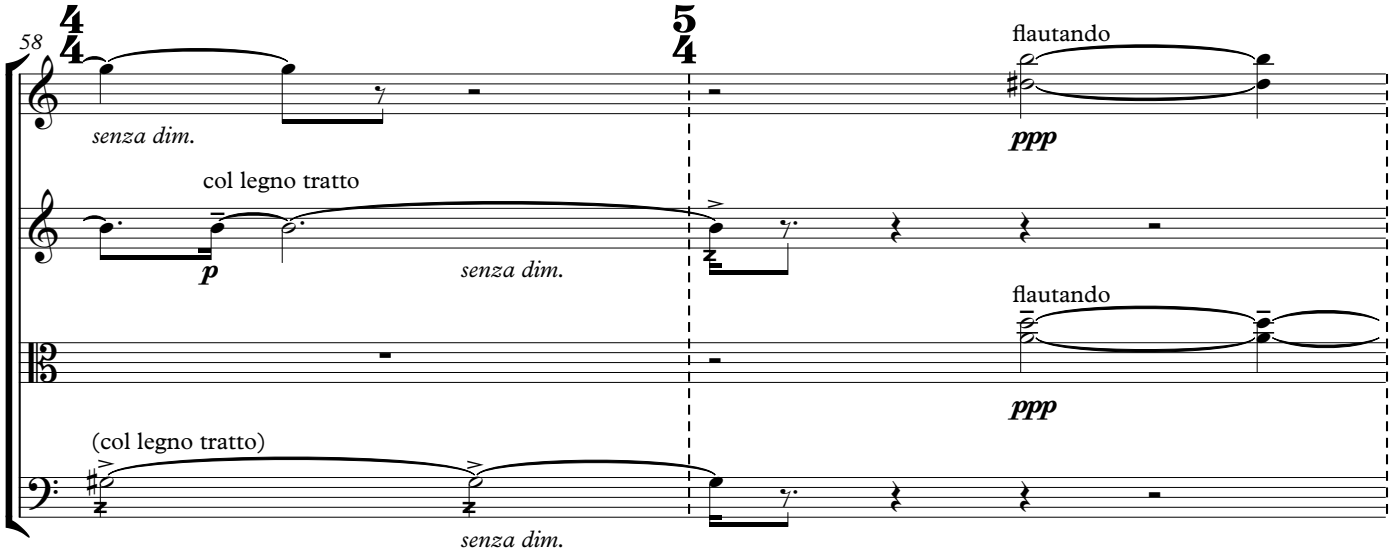

48
ord.
pizz.
arco s.p.
s.p.
pizz.
arco ord.
s.p.
pizz.
arco ord.
pizz.
arco s.p.
pizz.
arco ord.
scratchy/distorted
pizz.
arco s.p.
ord.
s.p.
scratchy/distorted

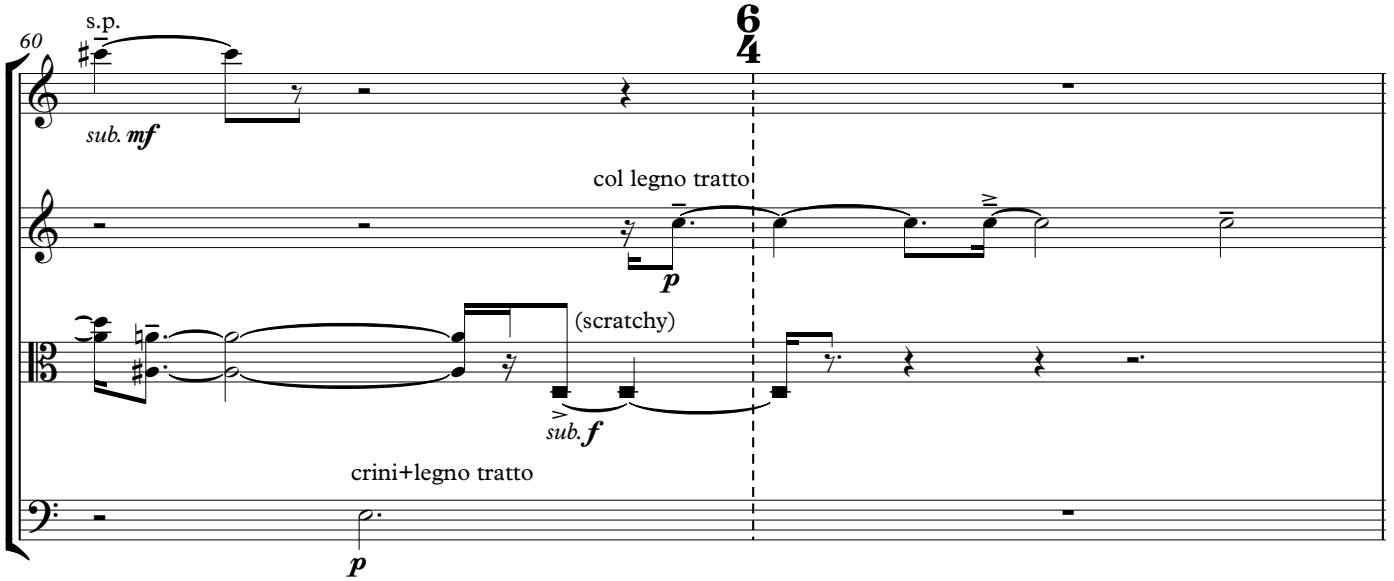

50
s.p.
ord.
pizz.
ricochet
scratchy/distorted
scratchy/distorted
ord.
ricochet
ord.
pizz.
arco ord.
pizz.
arco ord.
s.p.
s.p.
ord.
pizz.
arco
ricochet
ricochet
ricochet
ord.

52
ricochet
ord.
ricochet
pizz.
arco
ord.
ff
ord.
ricochet
s.p.
ricochet
ricochet
ord.
pizz.
arco s.p.
ord.

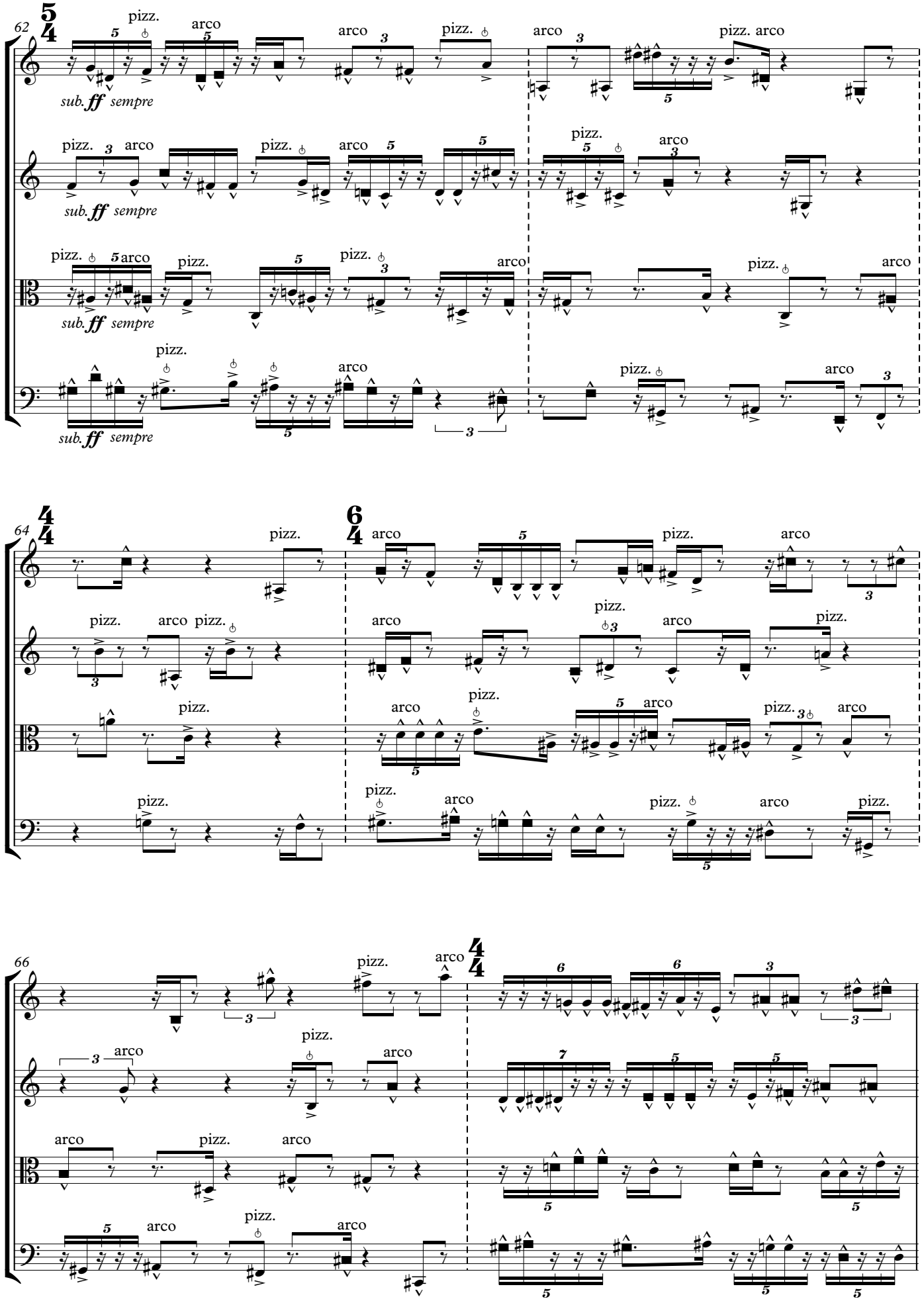

7 Slow (♩ ca. 48-52)
54
crini+legno tratto
p
(crini+legno tratto)
pp
col legno tratto
p
col legno tratto
p


56
6/4
s.p.
mf
crini+legno
col legno
crini
+legno
ord.
flautando
pp
ord. flautando
(flautando)
pp
niente
ord.
mf
3
s.t.
mp
col legno tratto
p

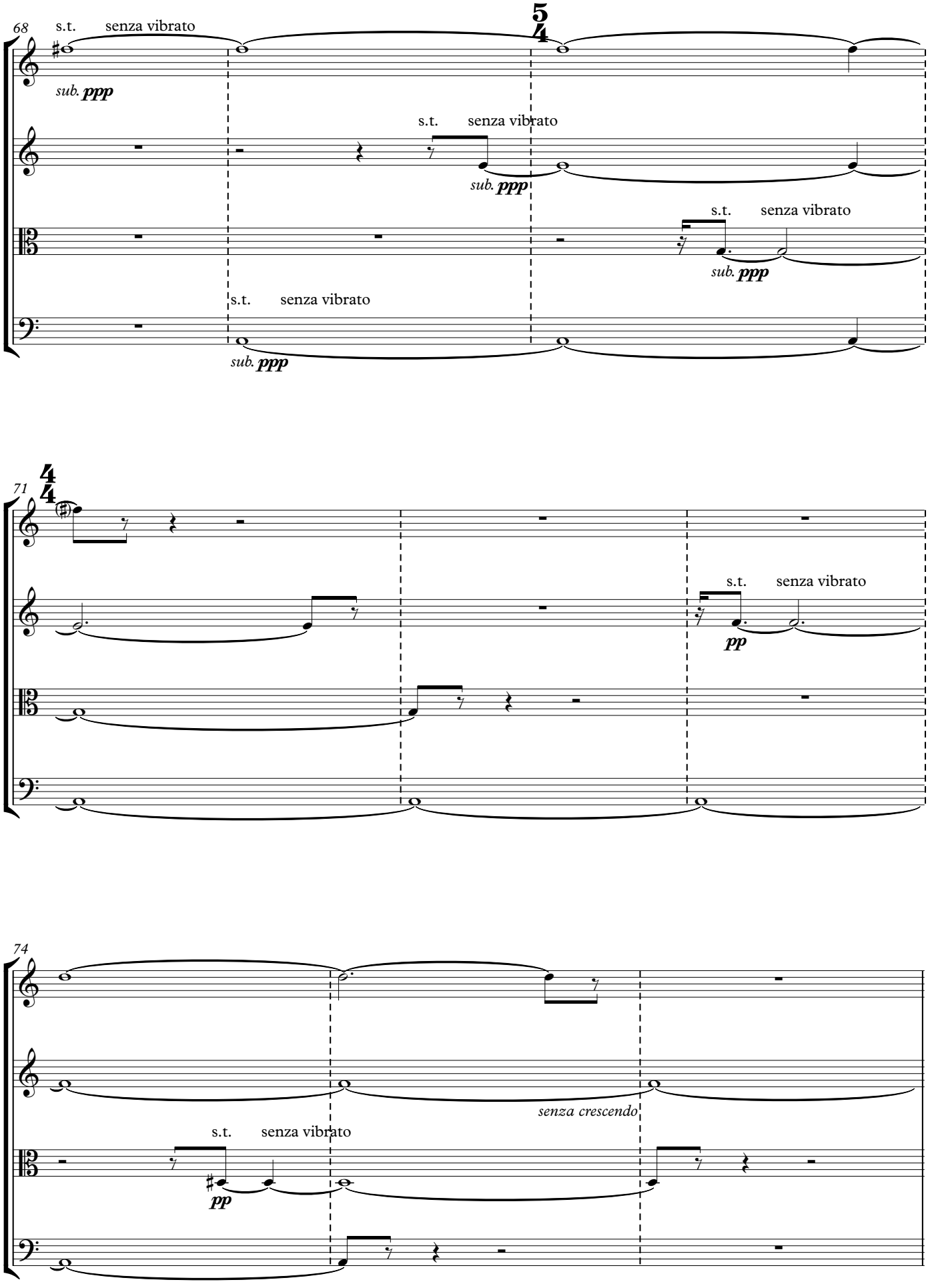

58
4/4
5/4
flautando
senza dim.
ppp
col legno tratto
p
senza dim.
flautando
ppp
(col legno tratto)
senza dim.


60
s.p.
6/4
sub. mf
col legno tratto
p
(scratchy)
sub. f
crini+legno tratto
p

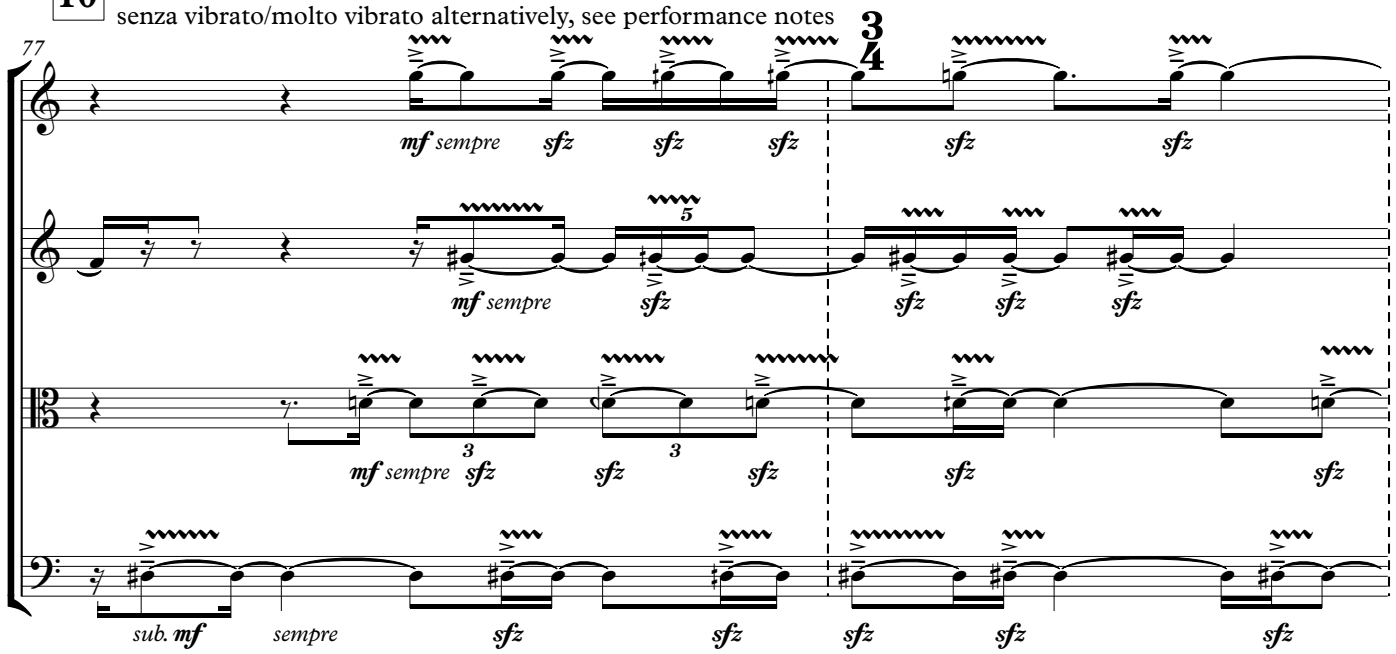
8 **Moderately fast (♩ ca. 72)**

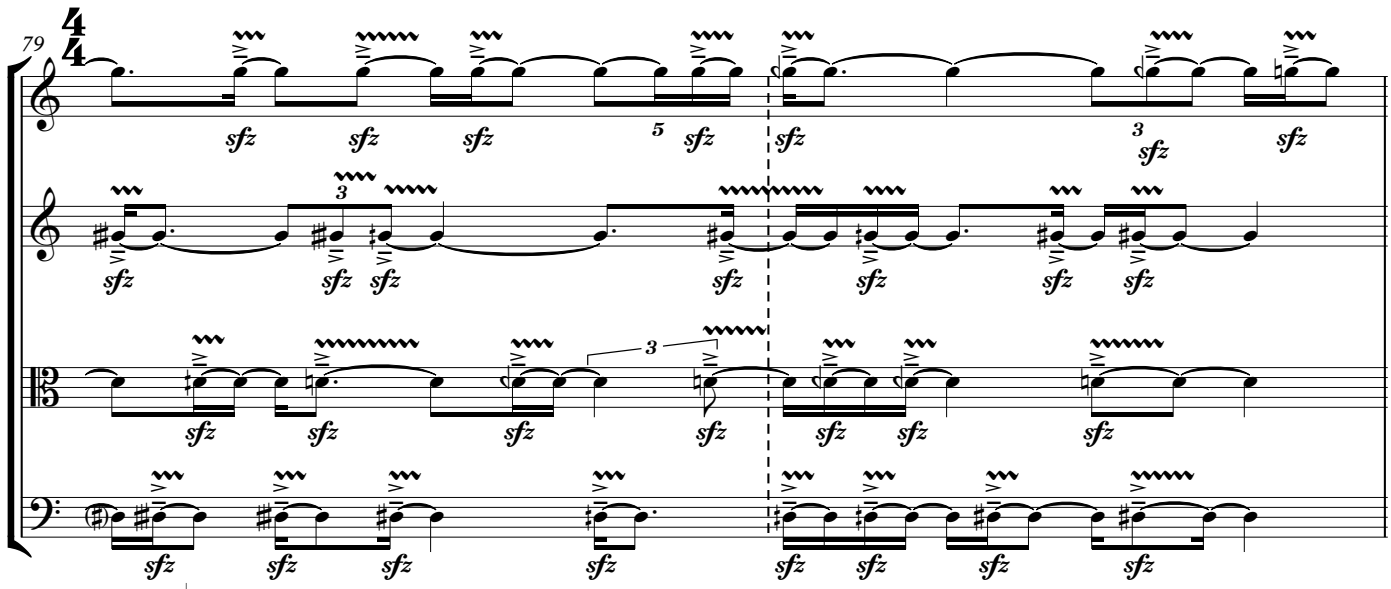


9 **Slow (♩ ca. 52-60)**



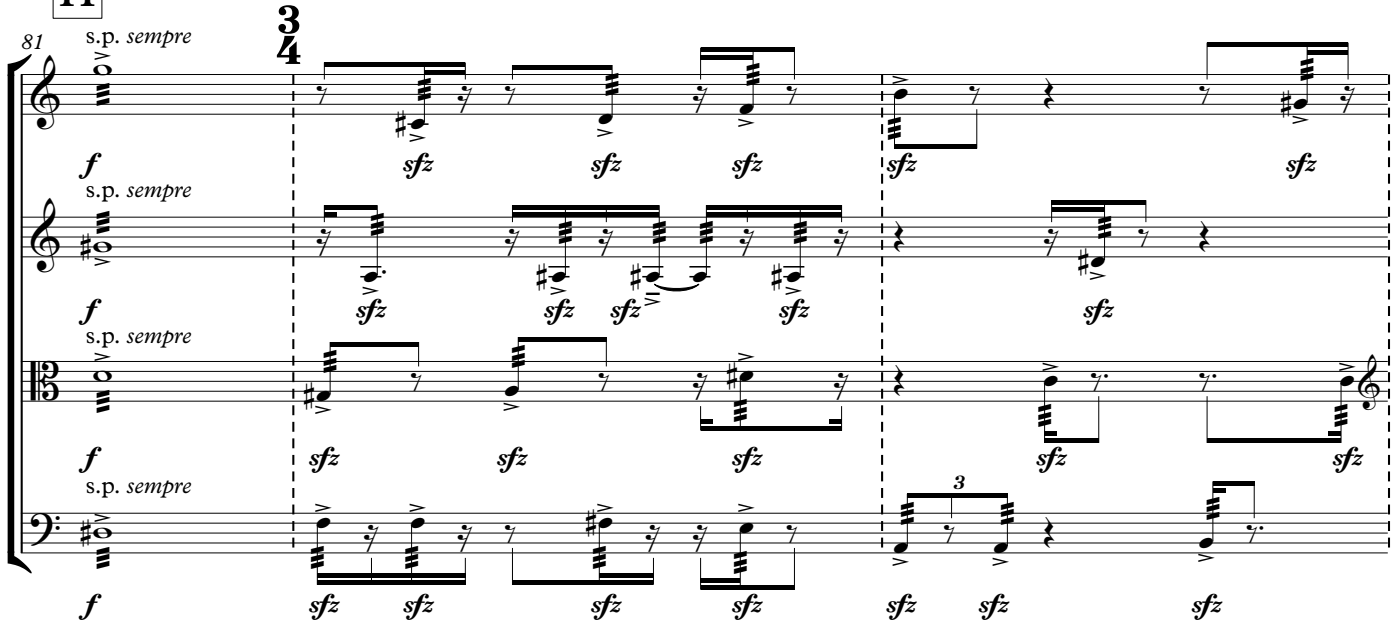
10 **Very slow (♩ ca. 40)**
senza vibrato/molto vibrato alternatively, see performance notes

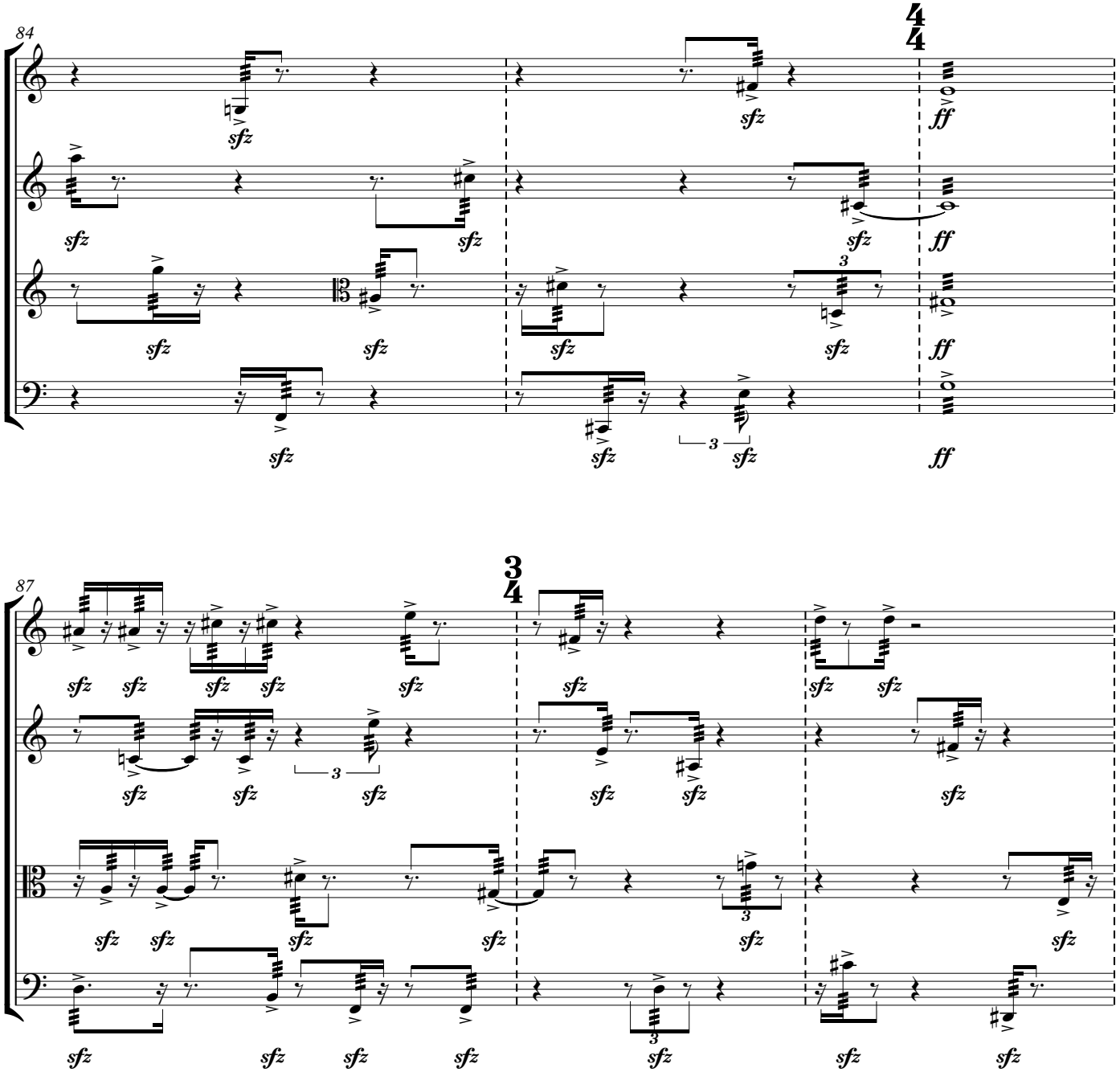




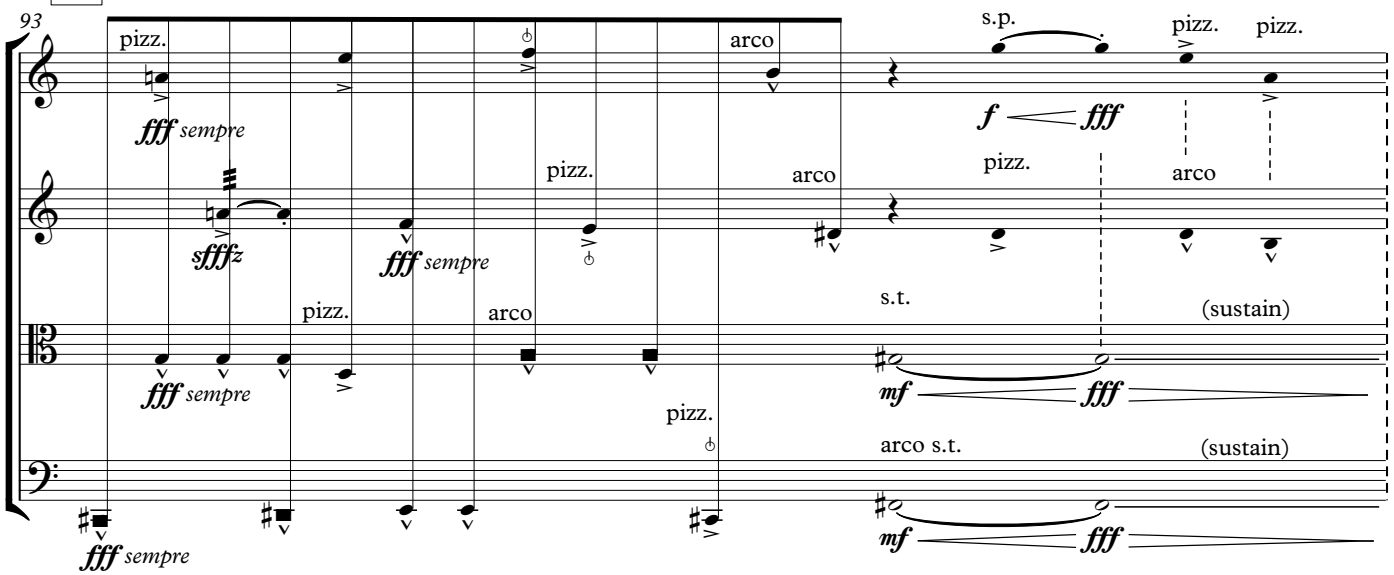
Fast (♩ ca. 92)

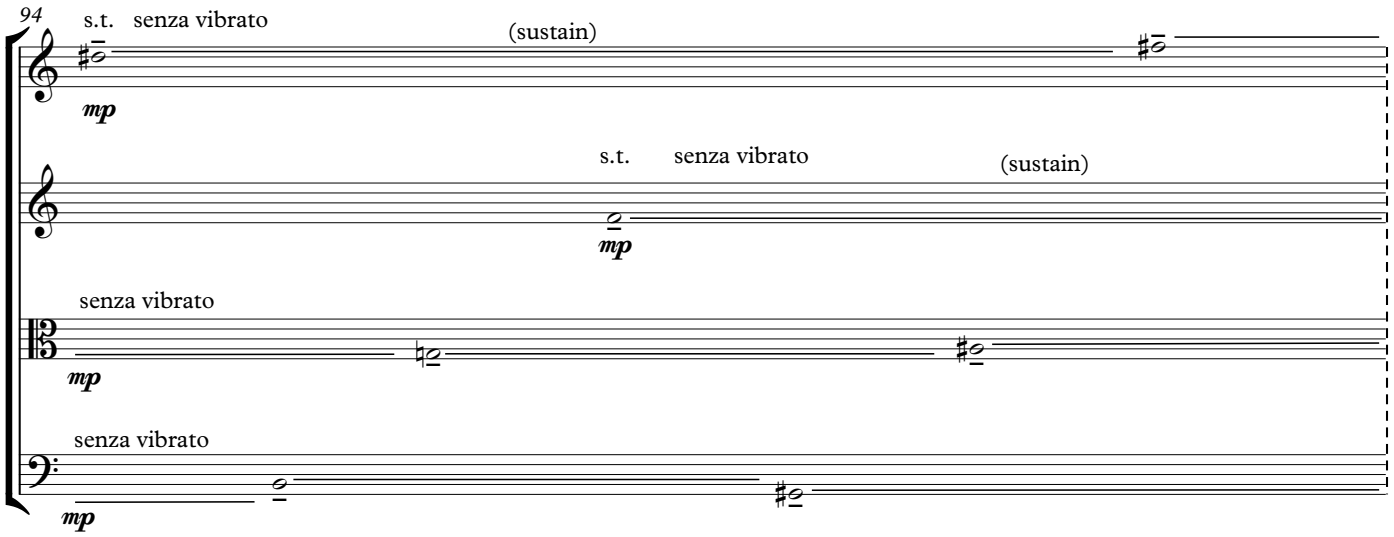
11

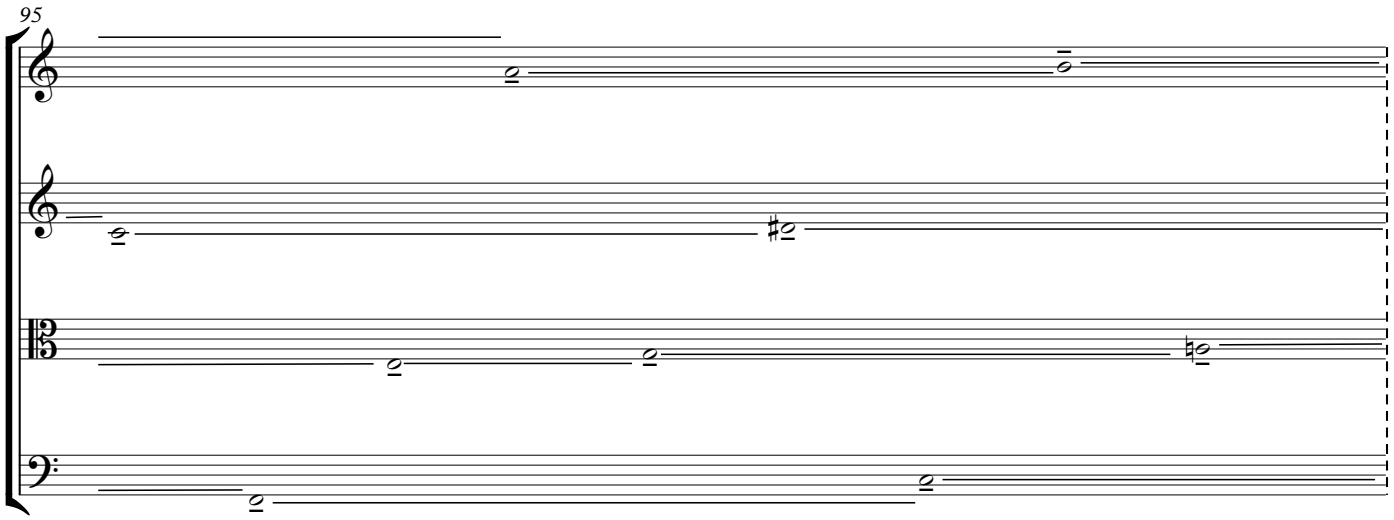


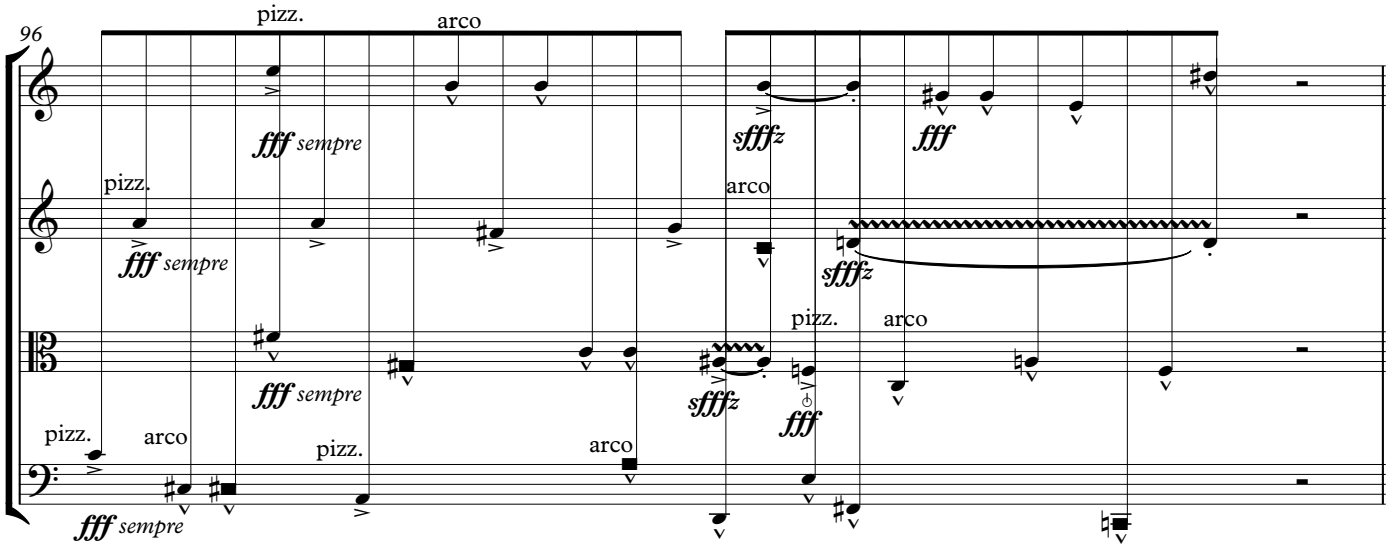

84
4/4
sfz
ff
3
87
3/4
90
4/4
fff

14 **12** **Senza tempo** (this whole section lasts circa 40 seconds)

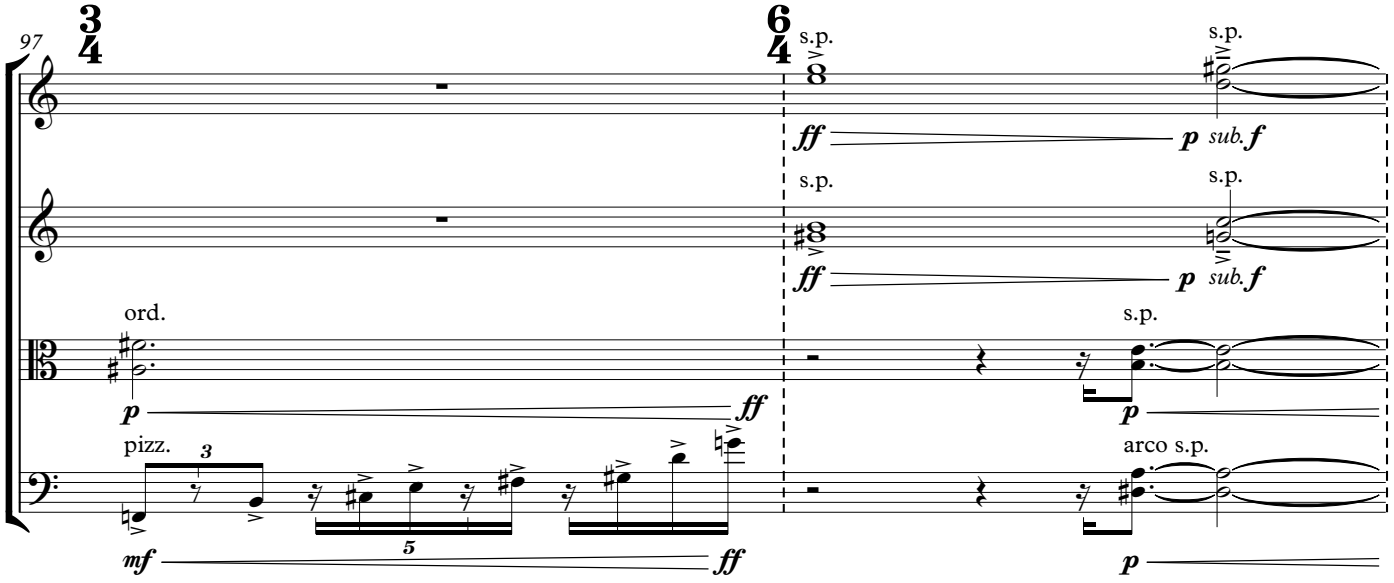


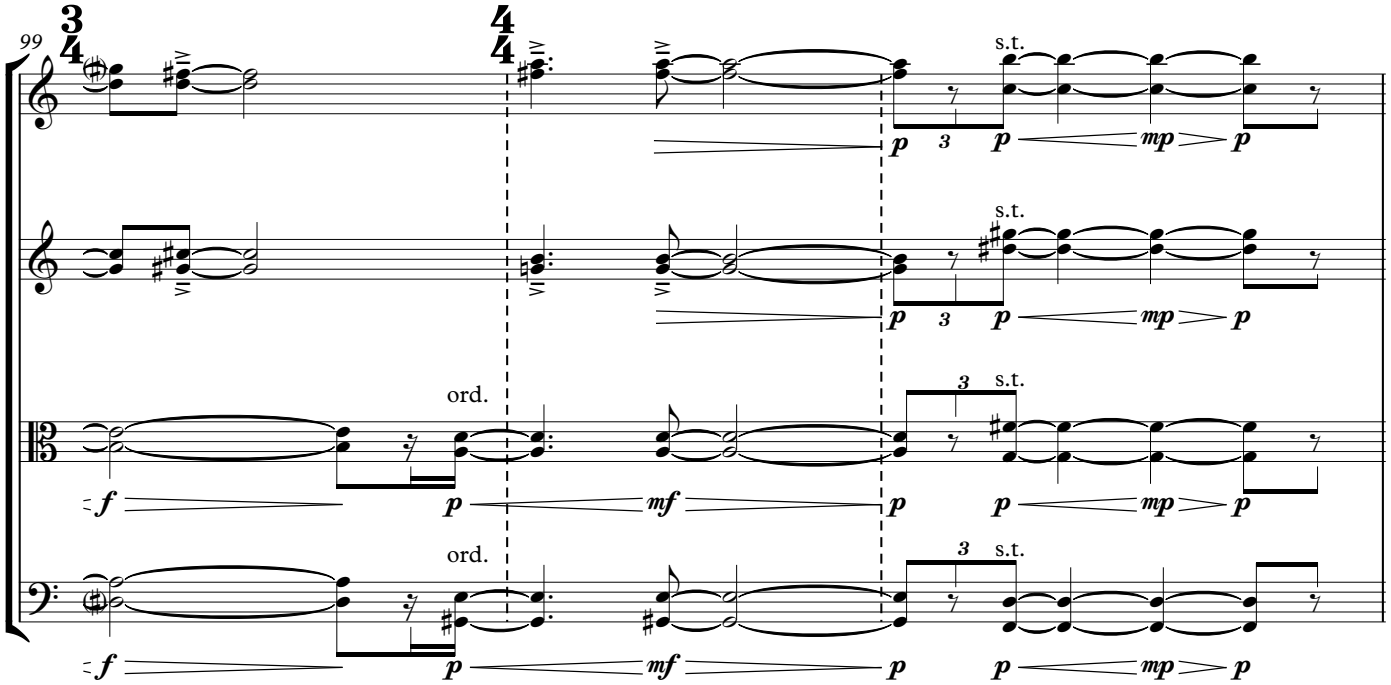




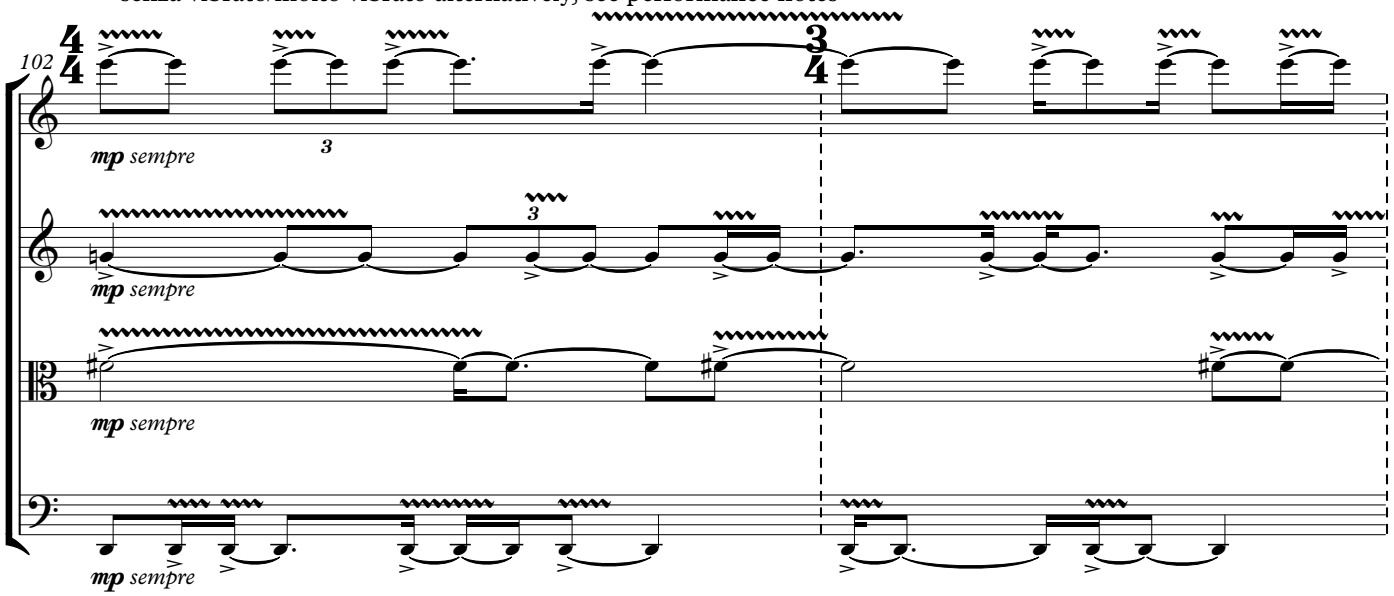


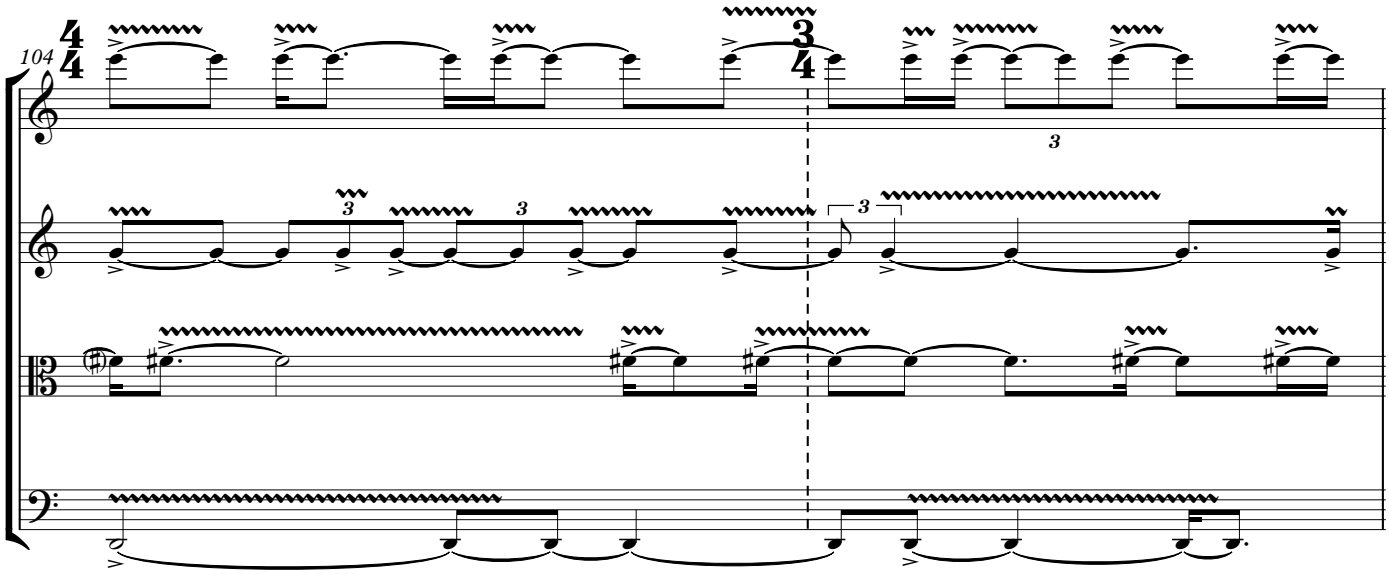
13 **Moderately fast (♩ ca. 72)**



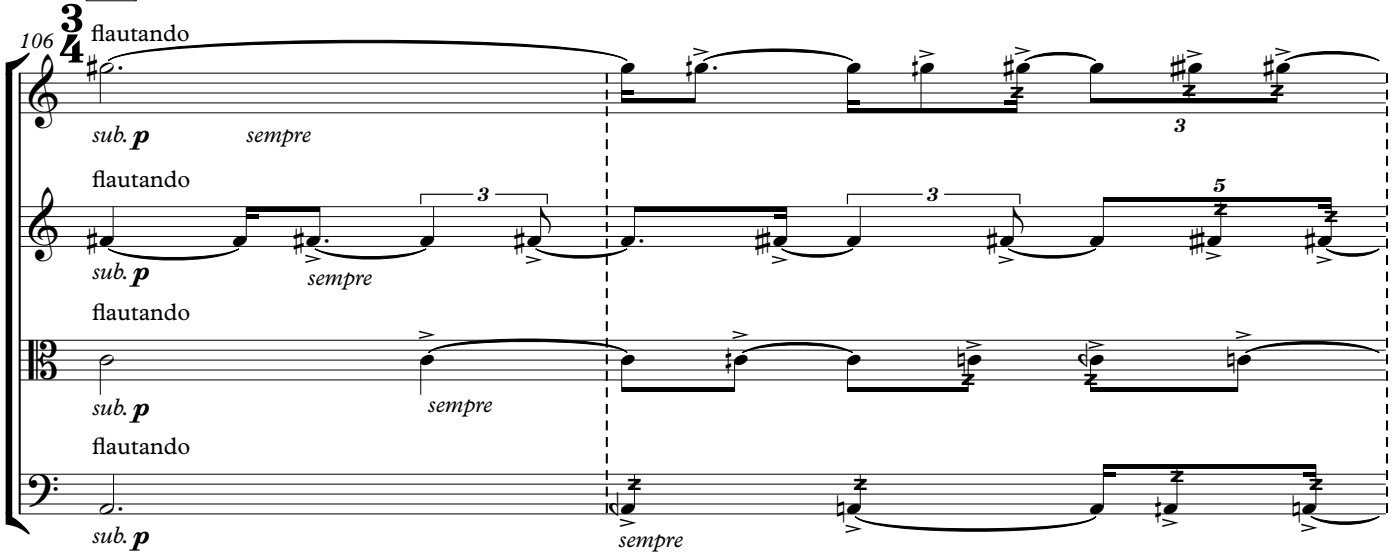


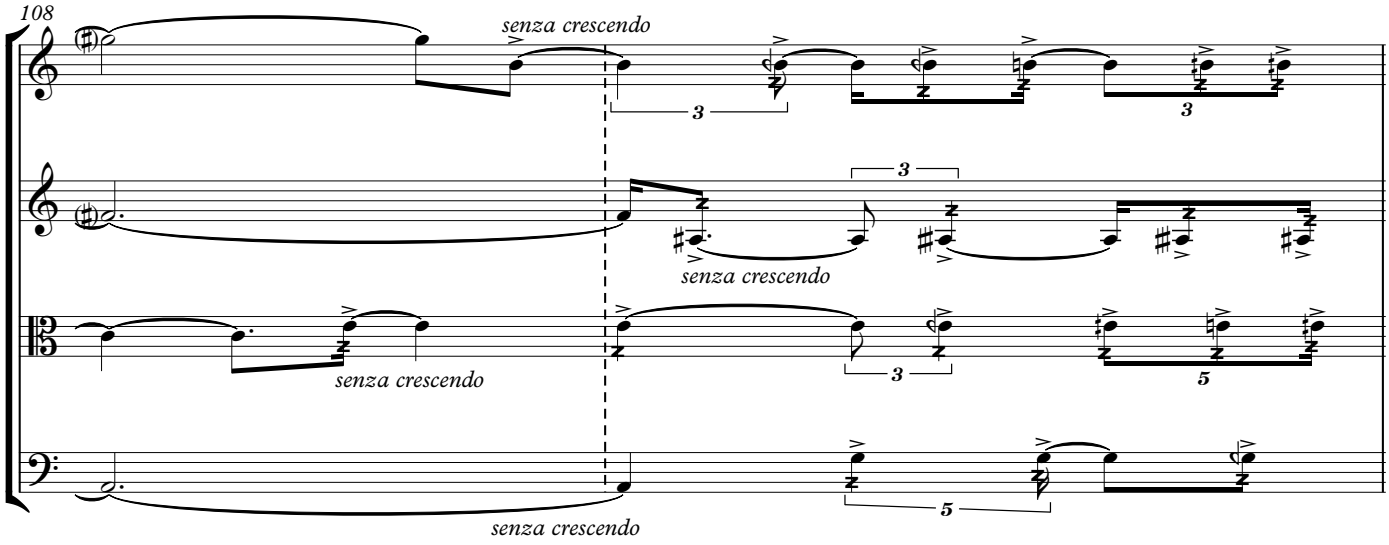
14 **Fast (♩ ca. 92)**
senza vibrato/molto vibrato alternatively, see performance notes



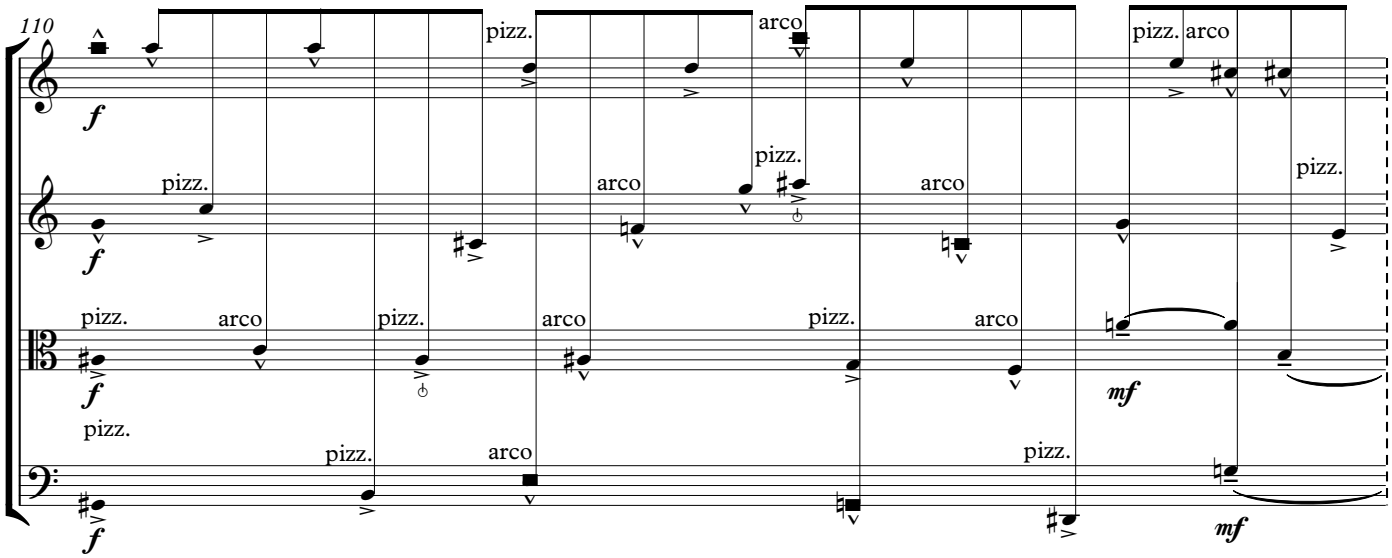


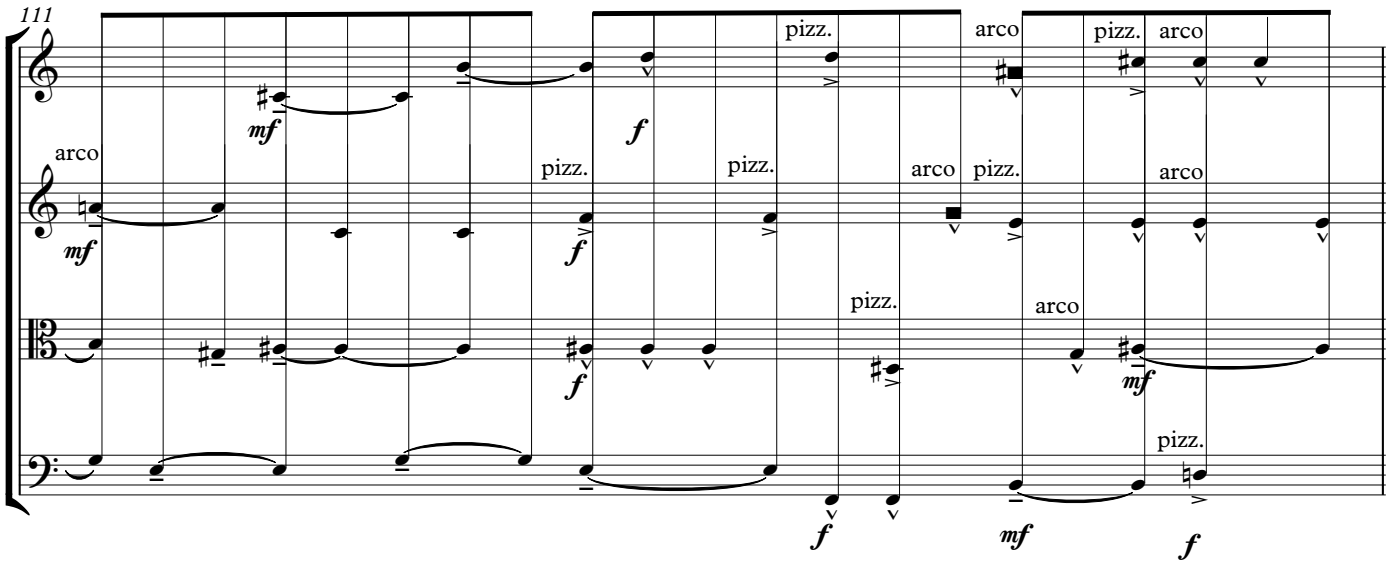
15 **Moderately fast (♩ ca. 72)**



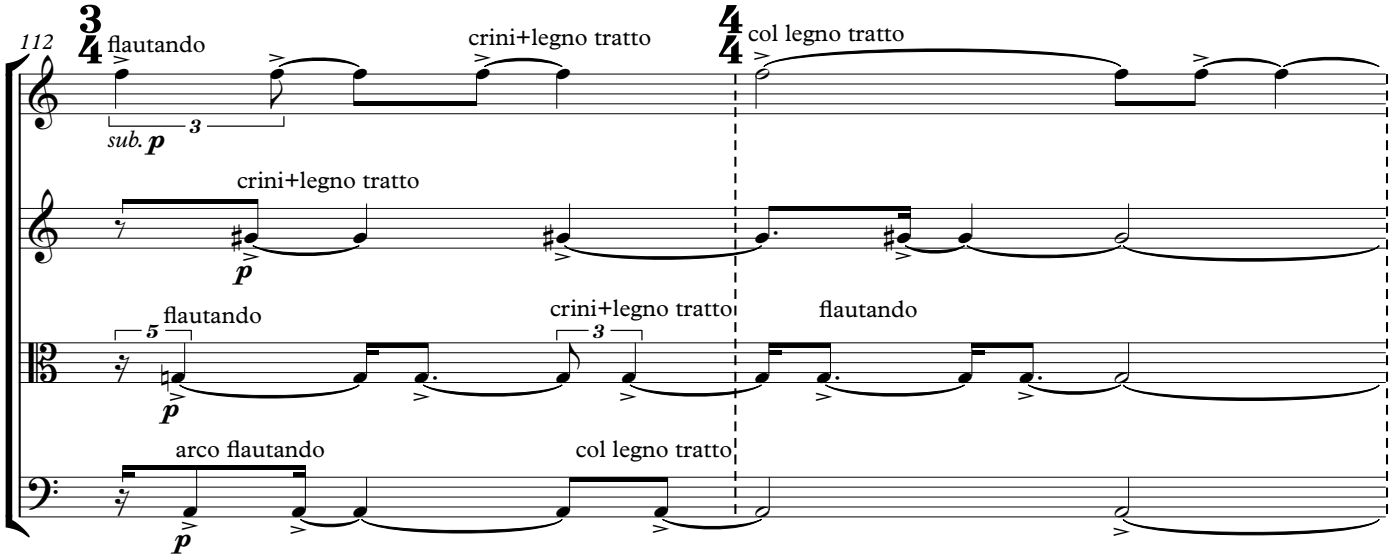


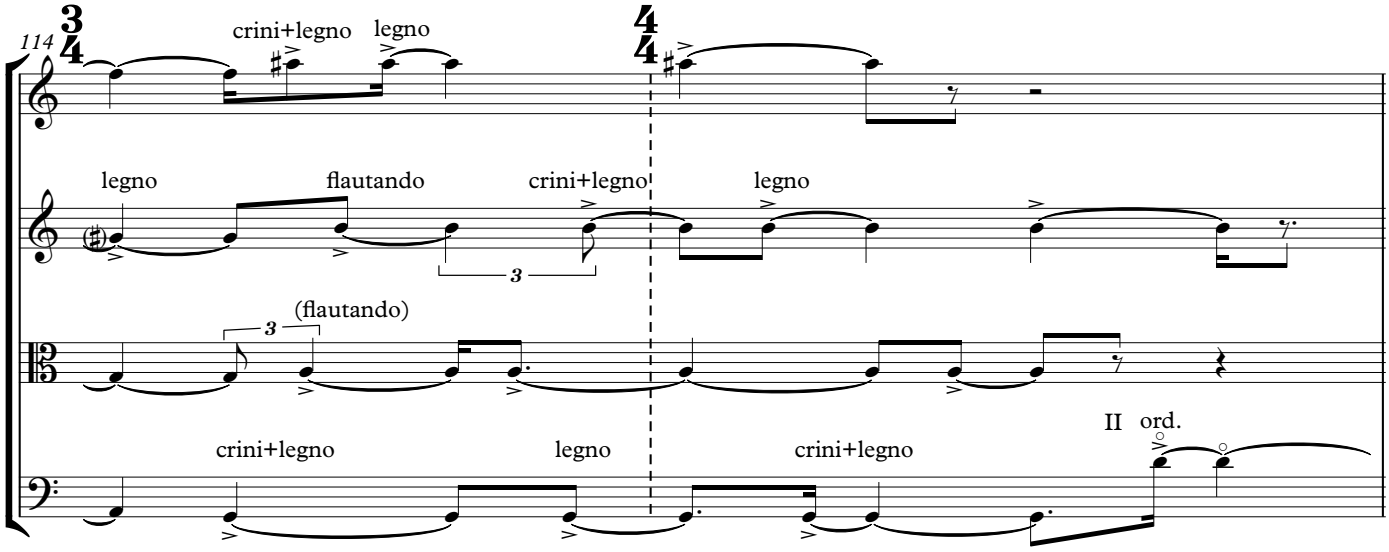
16 **Senza tempo** (this section lasts circa 10 seconds)



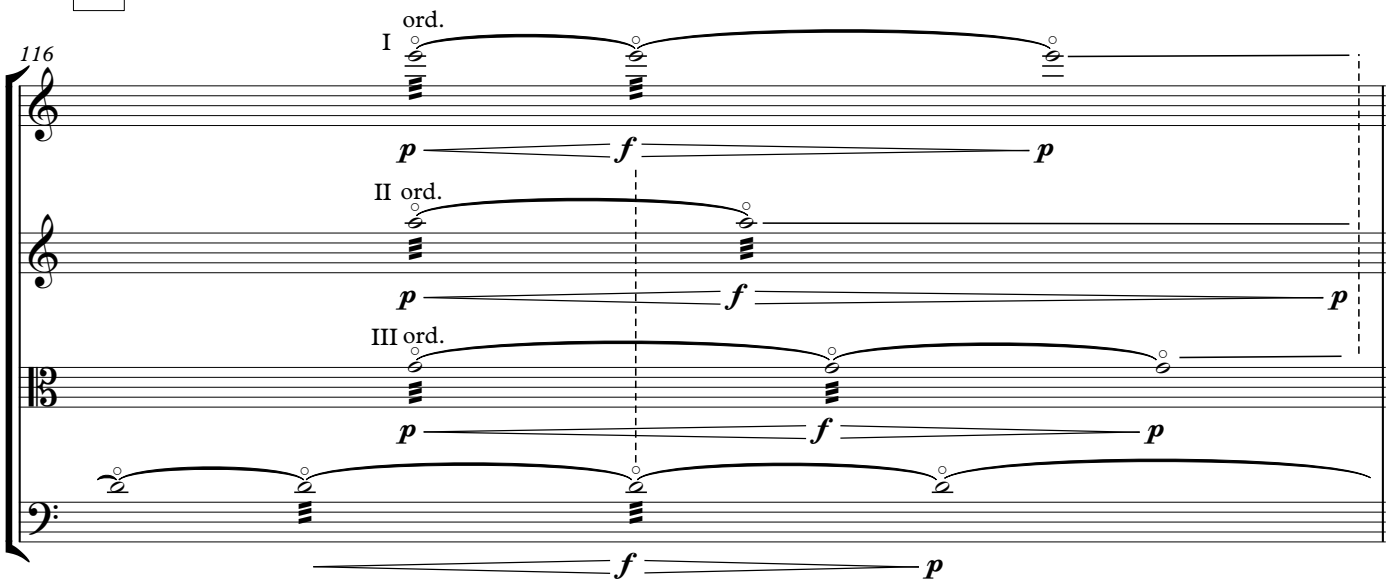


17 **Moderately fast (♩ ca. 72)**

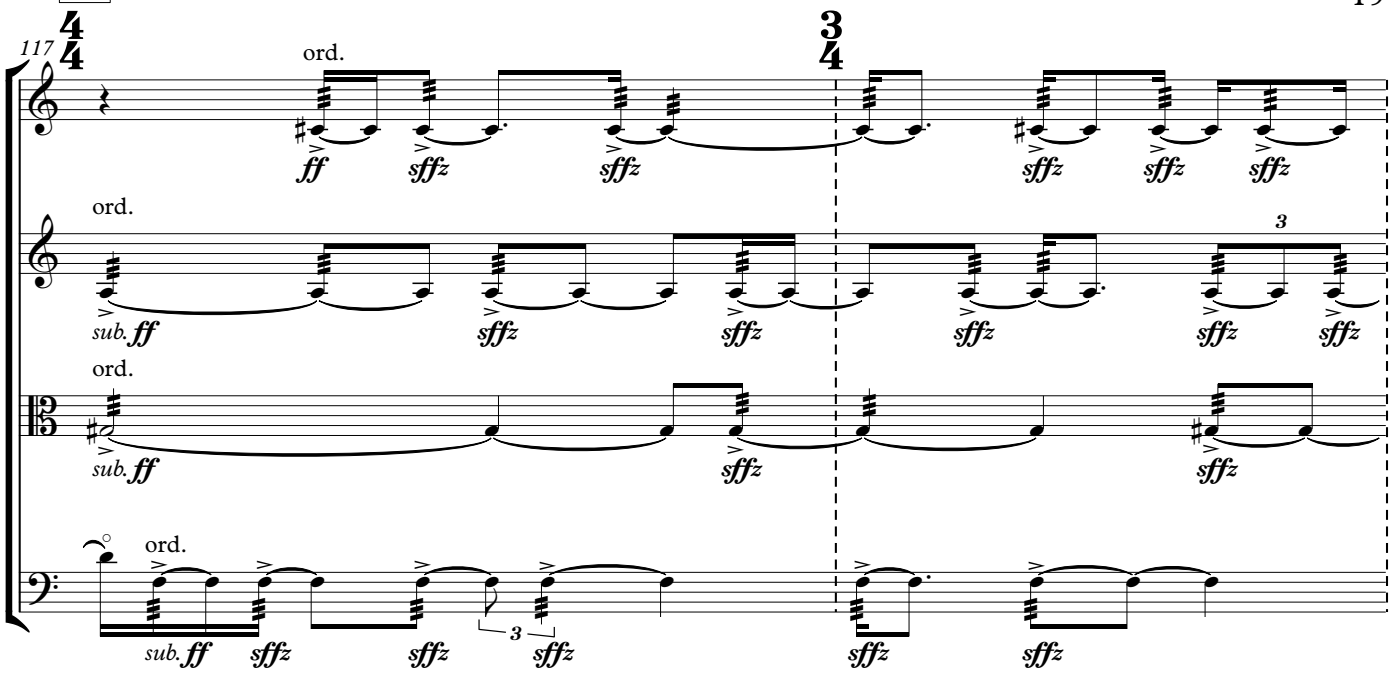


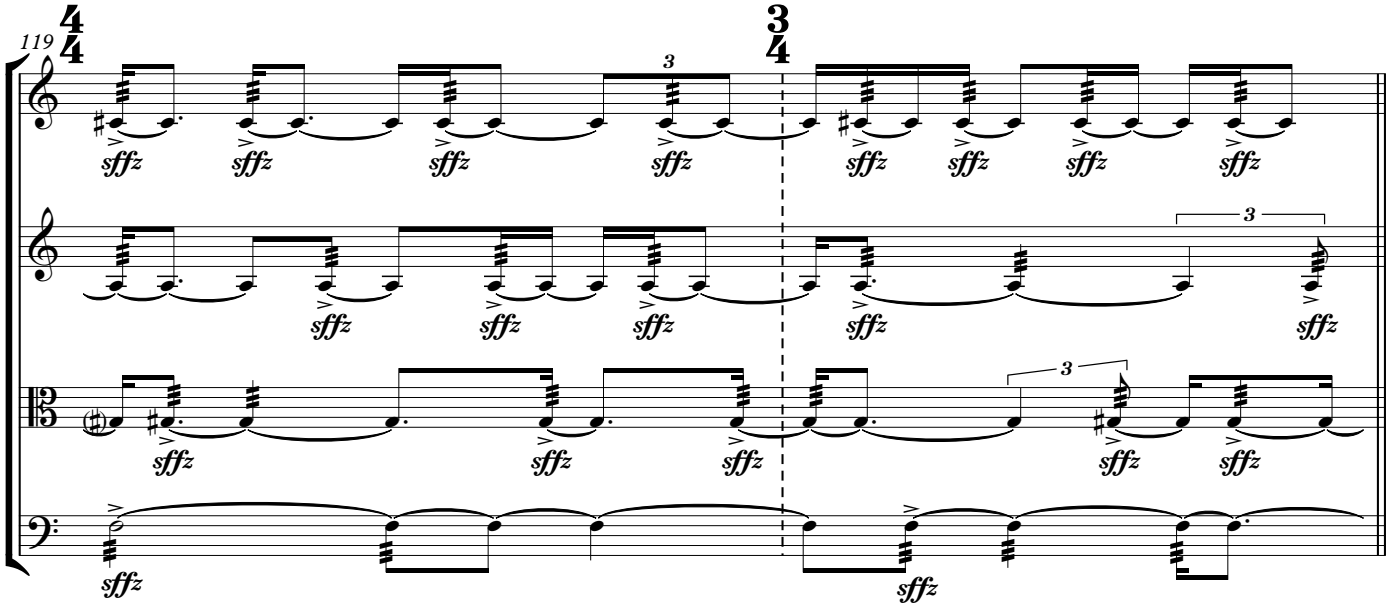


18 **Senza tempo** (circa 10 seconds)

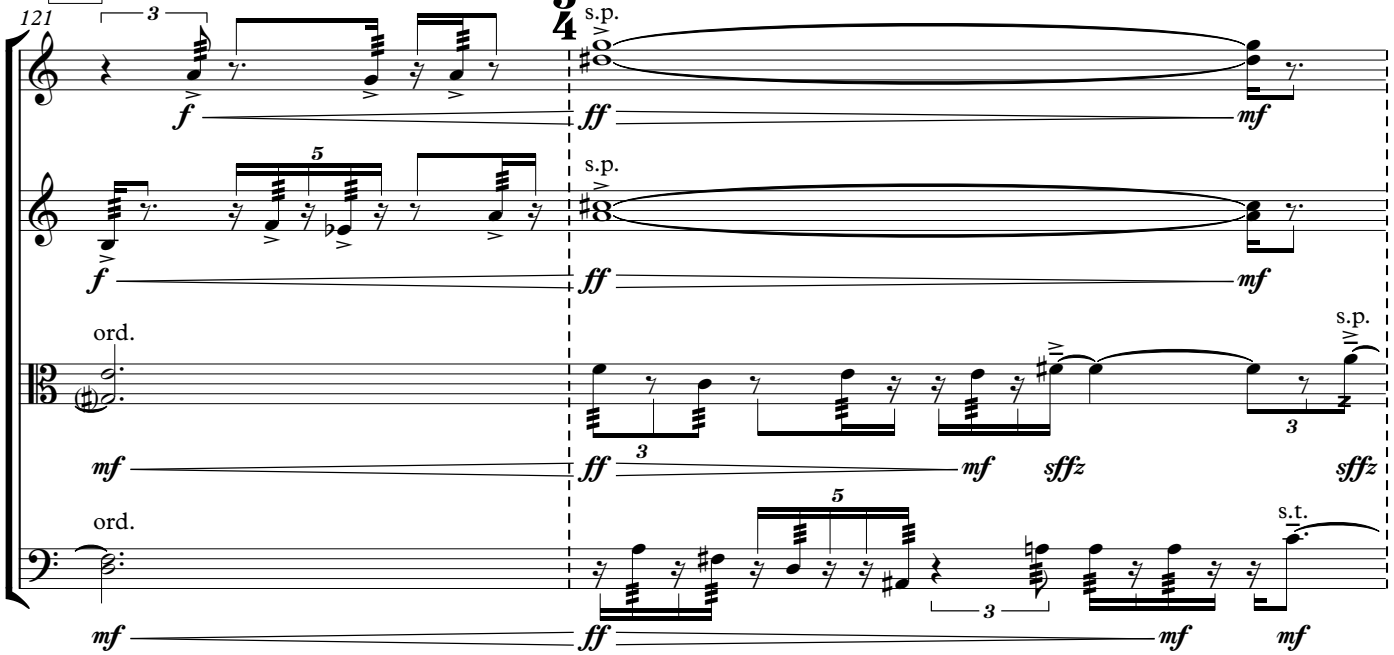


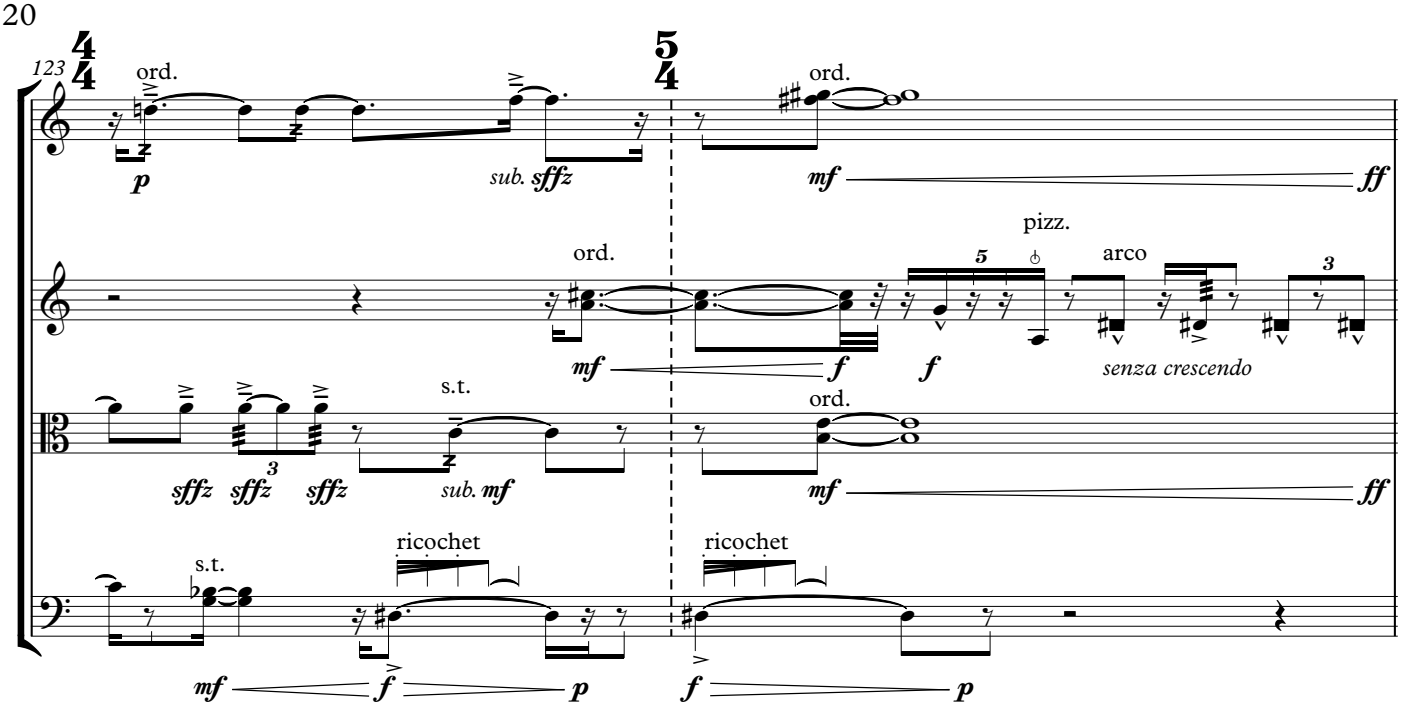
19 **Tempo III (♩ ca. 92)**



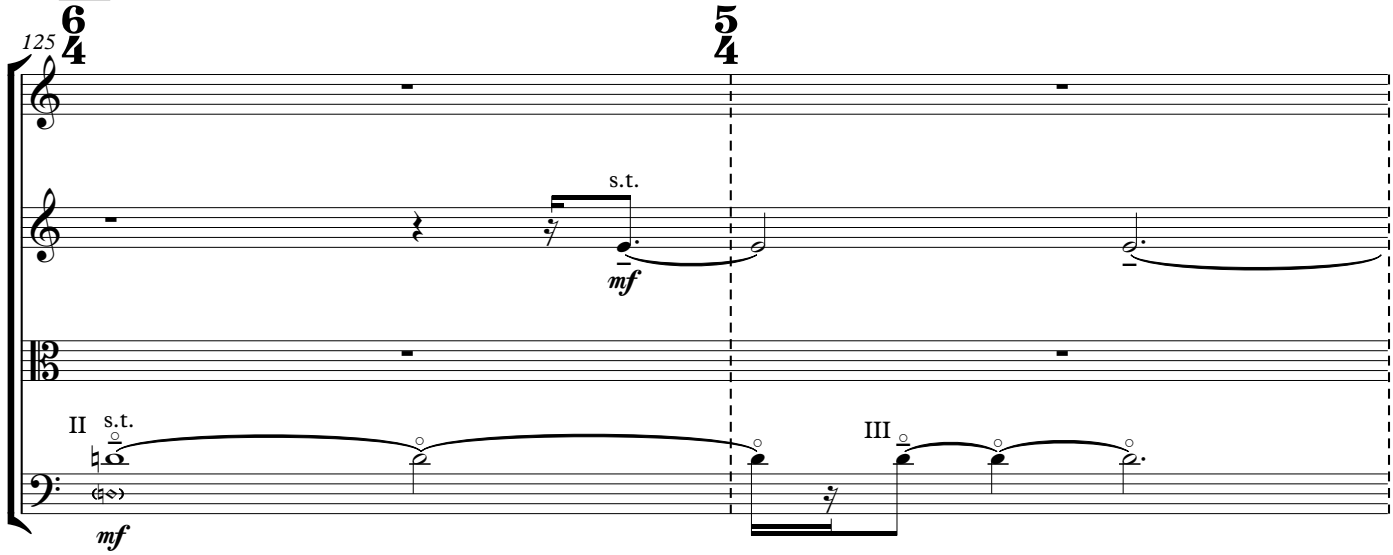


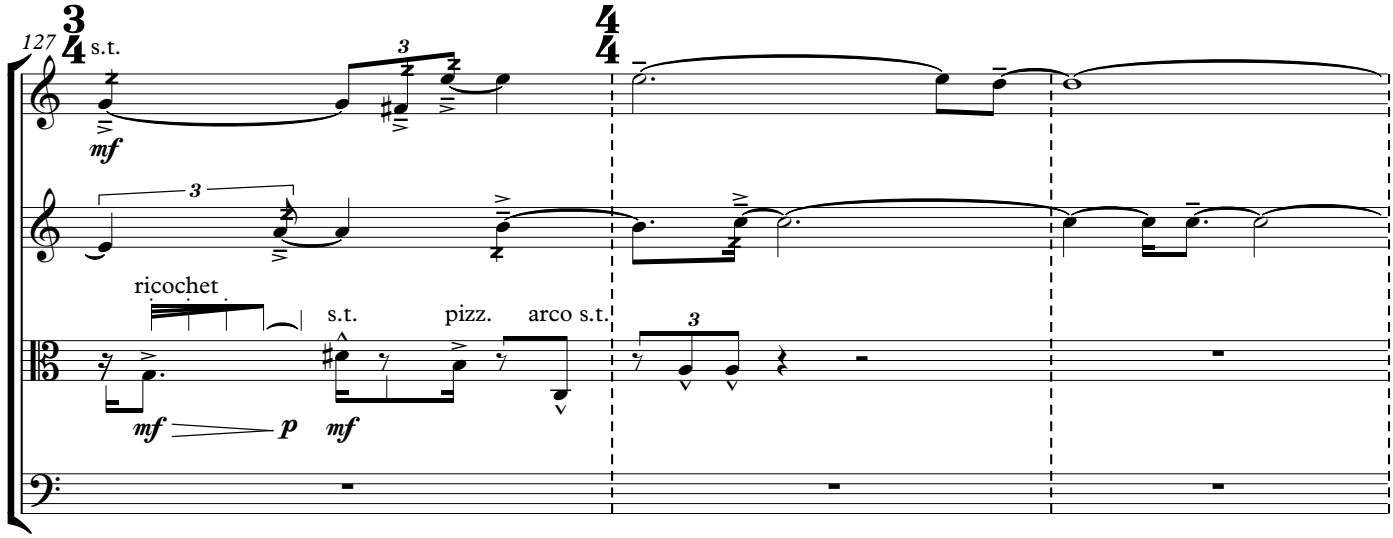
20 **Slow (♩ ca. 52-60)**

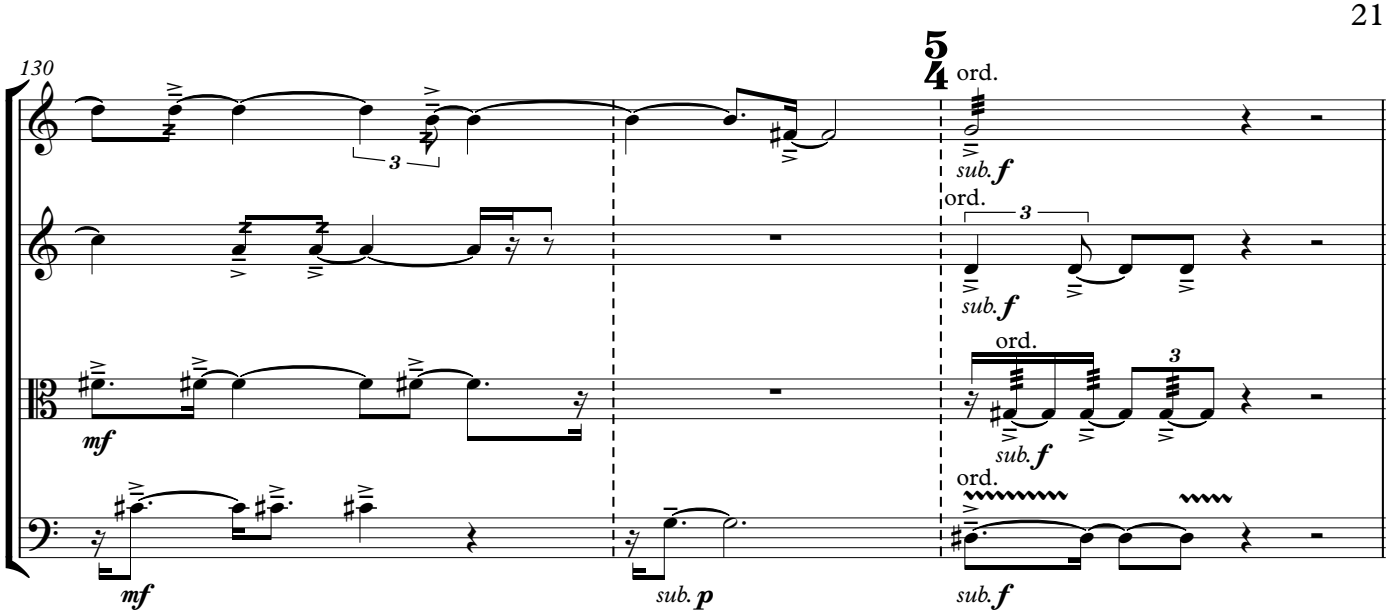




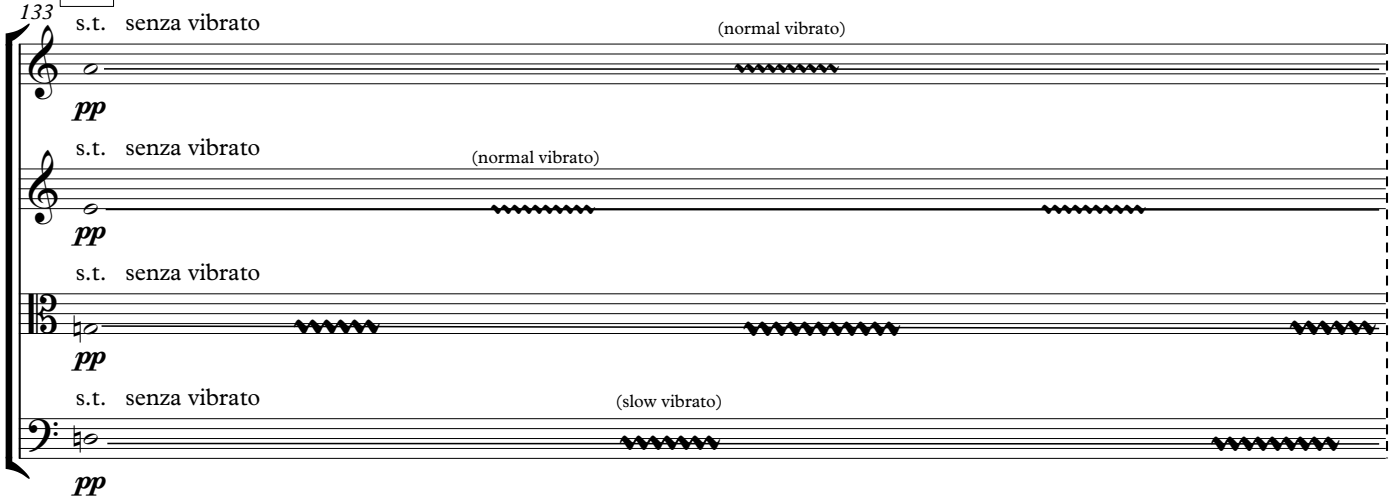
21 **Moderately fast (♩ ca. 72)**

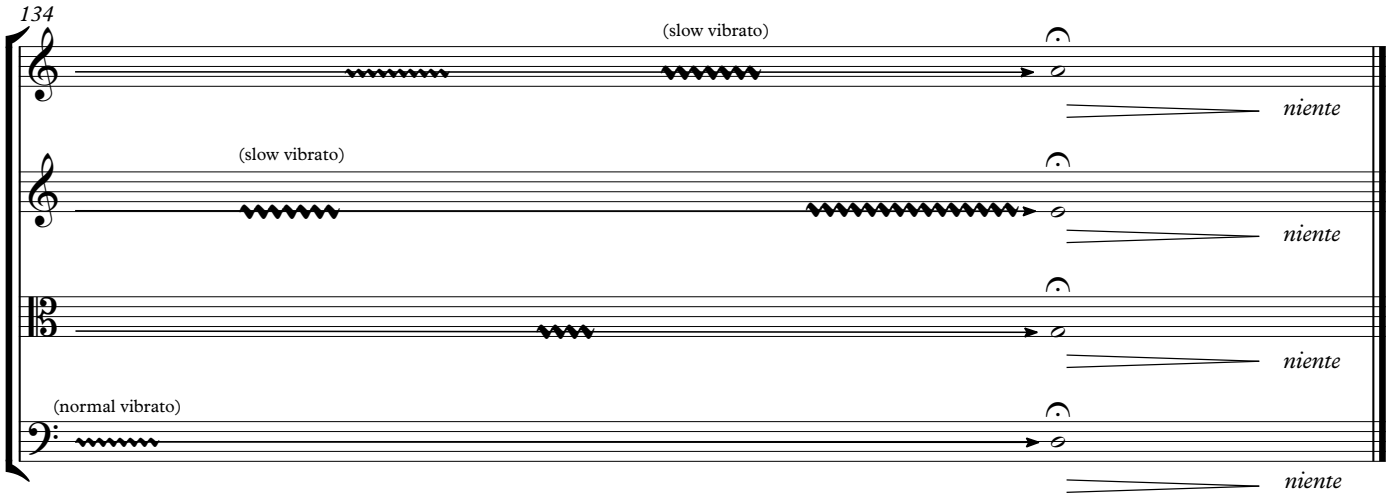






22 **Senza tempo** (circa 40 seconds)





A piece for household items

for six performers

Poumpak Charuprakorn (2019)

FULL SCORE

i

A piece for household items requires each performer to choose, up to, two items of their choice that can create short and long sounds; the items can be idiophonic, aerophonic, electrophonic, or even membranophonic and chordophonic. The composition focuses on different combinations of sounds from each performer through the organisation of their entries. Unisons and alternations between sounds in various degrees are explored throughout the piece while repetitive rhythmic patterns periodically feature in juxtaposition. A variety of timbres and their interactions with one another are the features of the composition. Although the order of sonic events is determined, the sonorities vary according to the objects chosen specially for each performance.

The piece was composed in collaboration with *The Hooting Cow Collective*, an ensemble based in Cardiff. The founding members are Poumpak Charuprakorn, Ana Beatriz Ferreira, Richard McReynolds, Laura Shipsey, Thomas Pitt, and Jerry Yue Zhuo.

The first performance took place at St. Martin's Church (Caerphilly, Wales) on 5 April 2019. It was performed by the members of *The Hooting Cow Collective*: Poumpak Charuprakorn (a tuba mouthpiece and a big stapler), Ana Beatriz Ferreira (a thermos), Richard McReynolds (a glass bottle), Magdalena Pasternak (keys and a small stapler), Laura Shipsey (a saucepan lid), and Jerry Yue Zhuo (a box of toothpicks and a shoe brush).

Instrumentation

6 performers with any items that produce short and long sounds

Preparation

- Each performer needs to have one or two objects that can create short and long sounds (it can be 1 object for both sounds)
- The objects can be anything from musical instruments to random household items
- A long sound that an item creates can be either sustained or resonated sounds

Duration: circa 5 minutes

Performance Notes

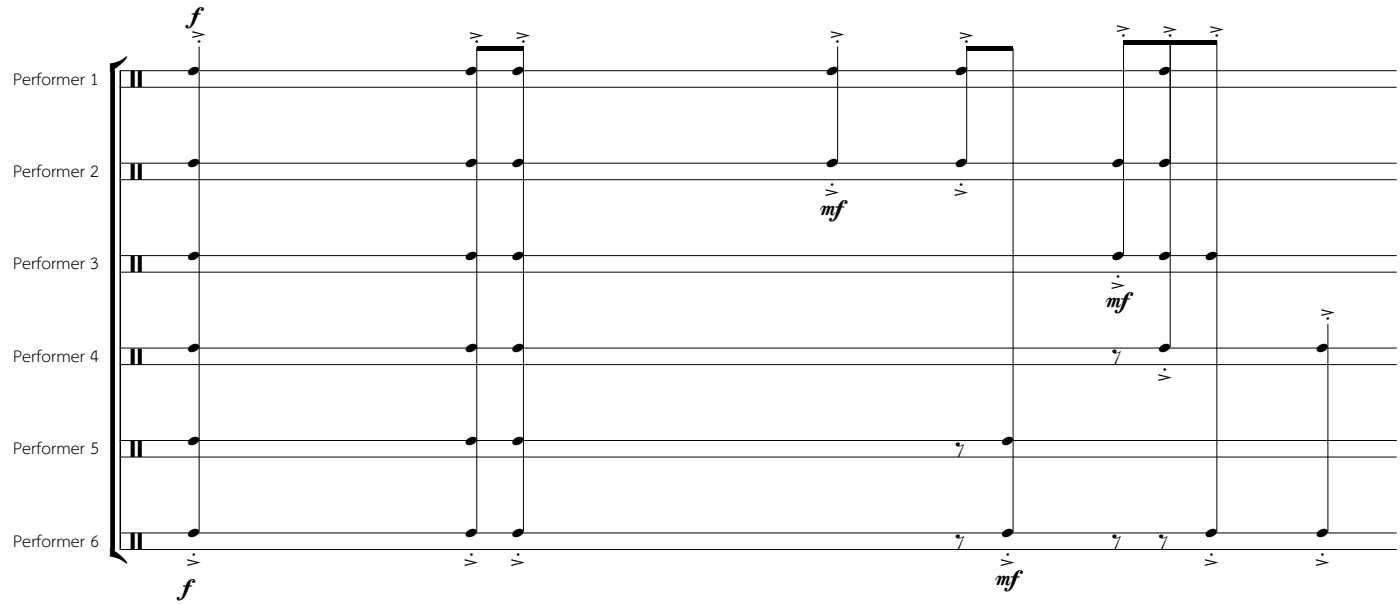
- Performers should perform from a full score
- The notation is proportional and there should be no fixed pulse; performers can appoint group leaders to be in charge of giving cues when needed
- The top and bottom lines of each part are for short and long sounds respectively
- Noteheads which share a stem should be played simultaneously; their dynamic and articulation are also shared
- Always let long sounds resonate as long as possible (unless indicated otherwise)
- A boxed motif (with an arrow) has to be repeated according to its instruction; each group can play the motif at any speed as long as it is different from other groups
- A boxed motif containing minims should be played in a slow tempo

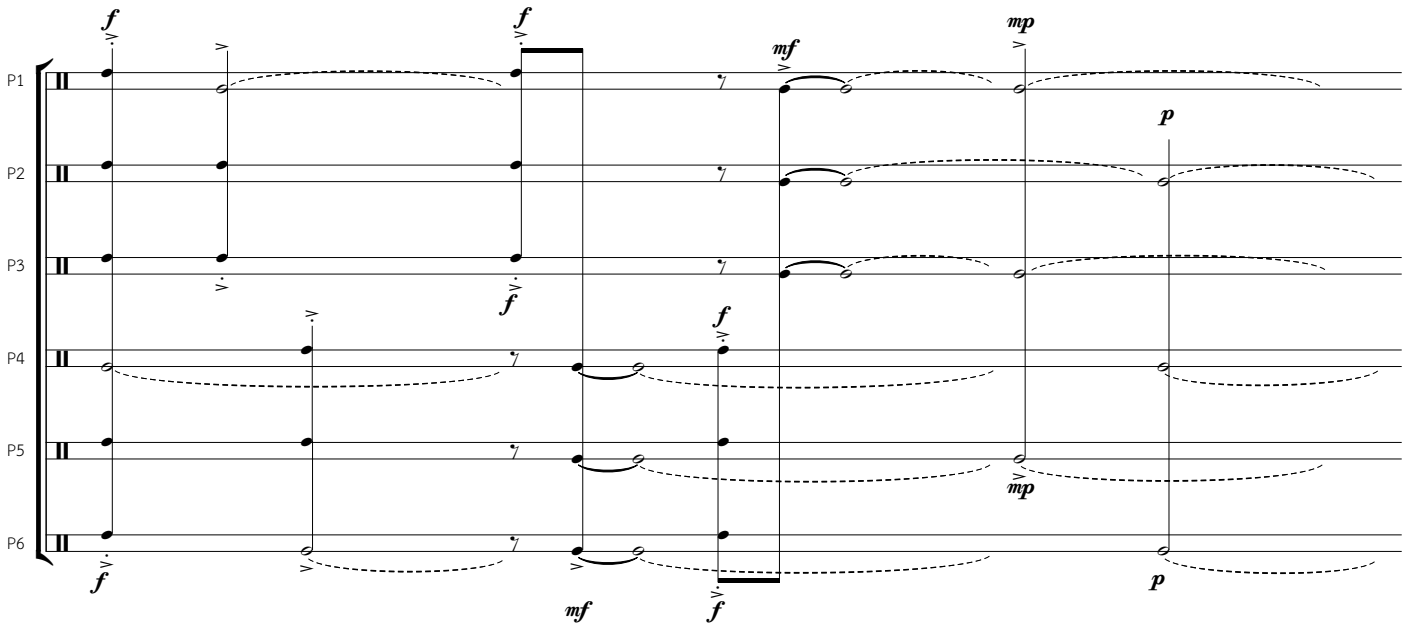
In collaboration with the Hooting Cow Collective

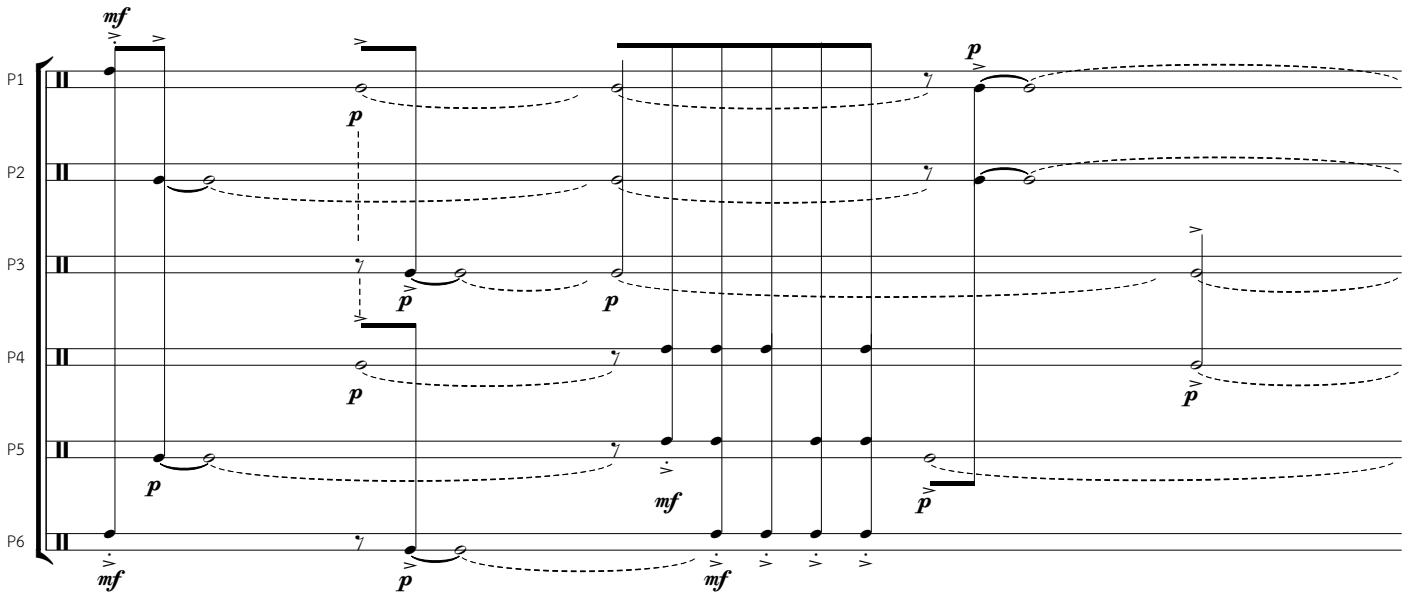
A piece for household items

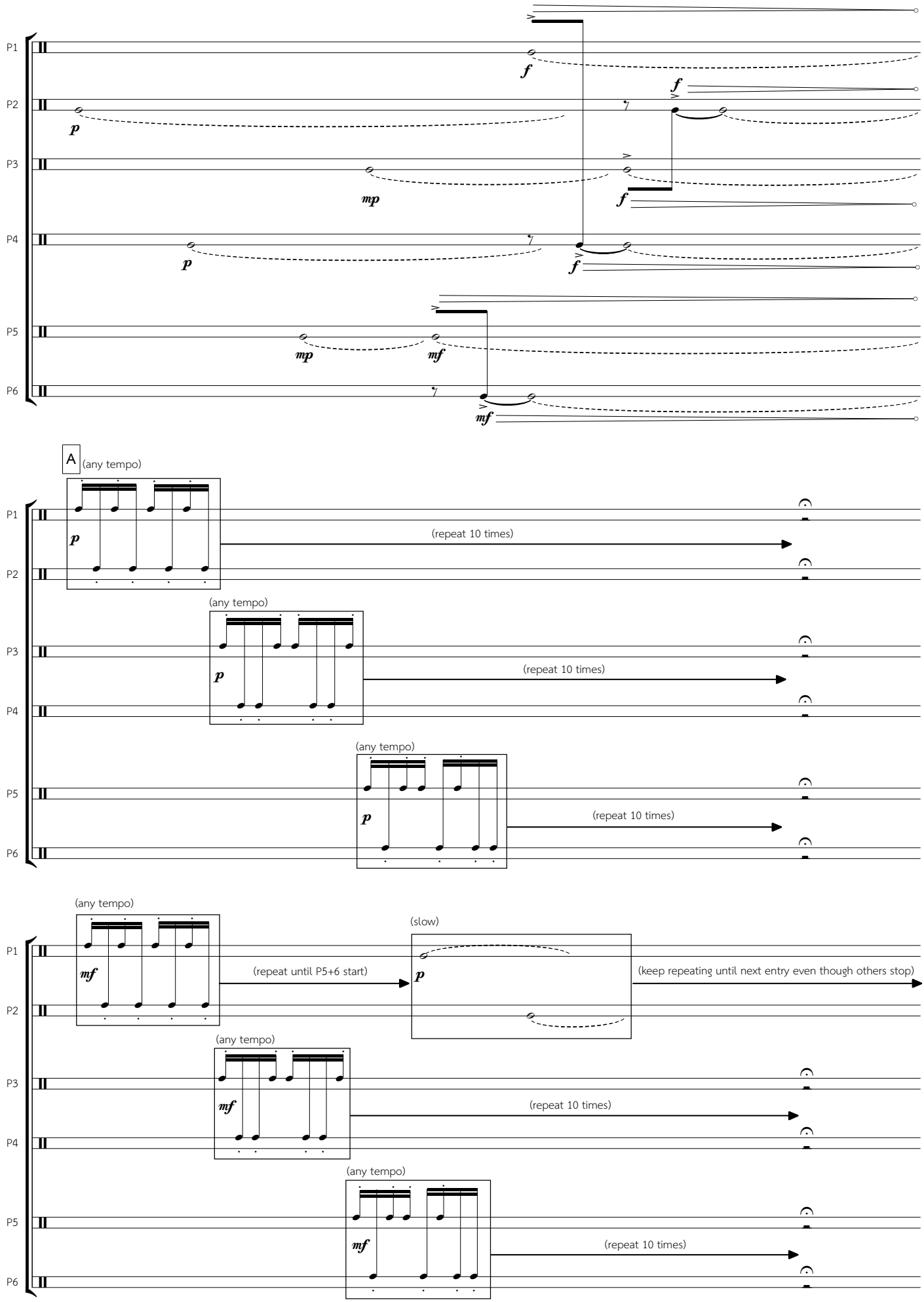
for six performers

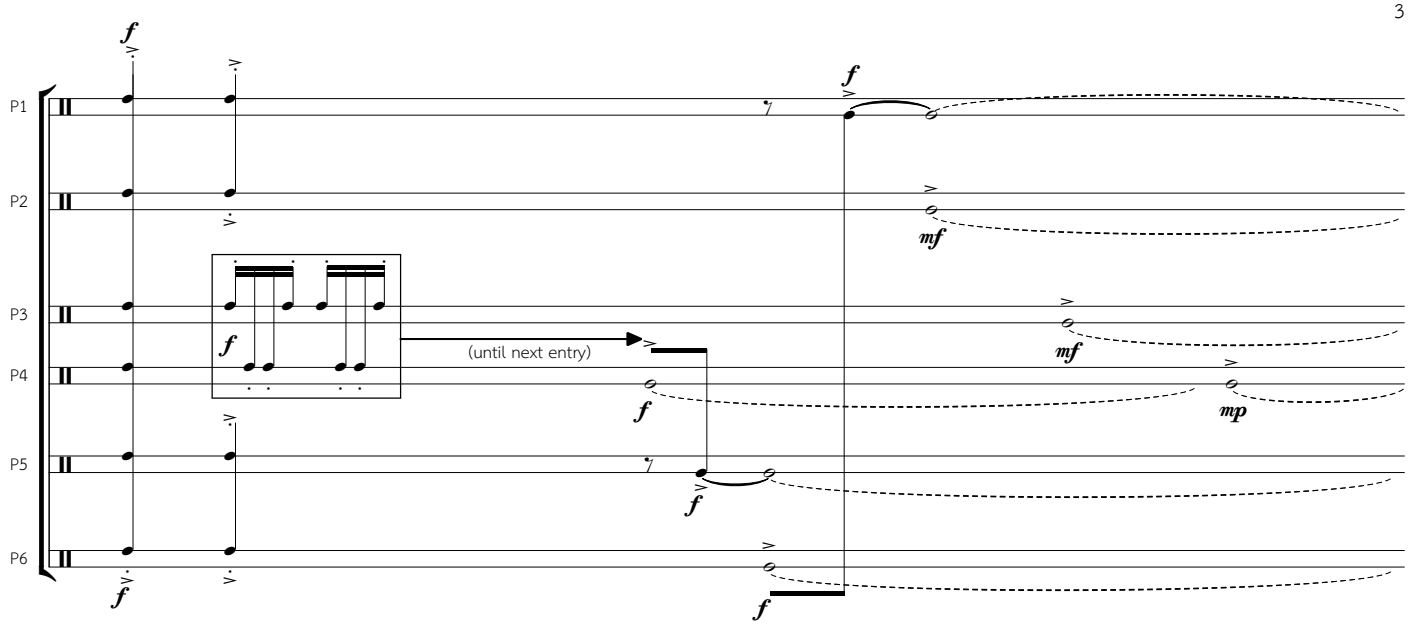
Poumpak Charuprakorn (2019)

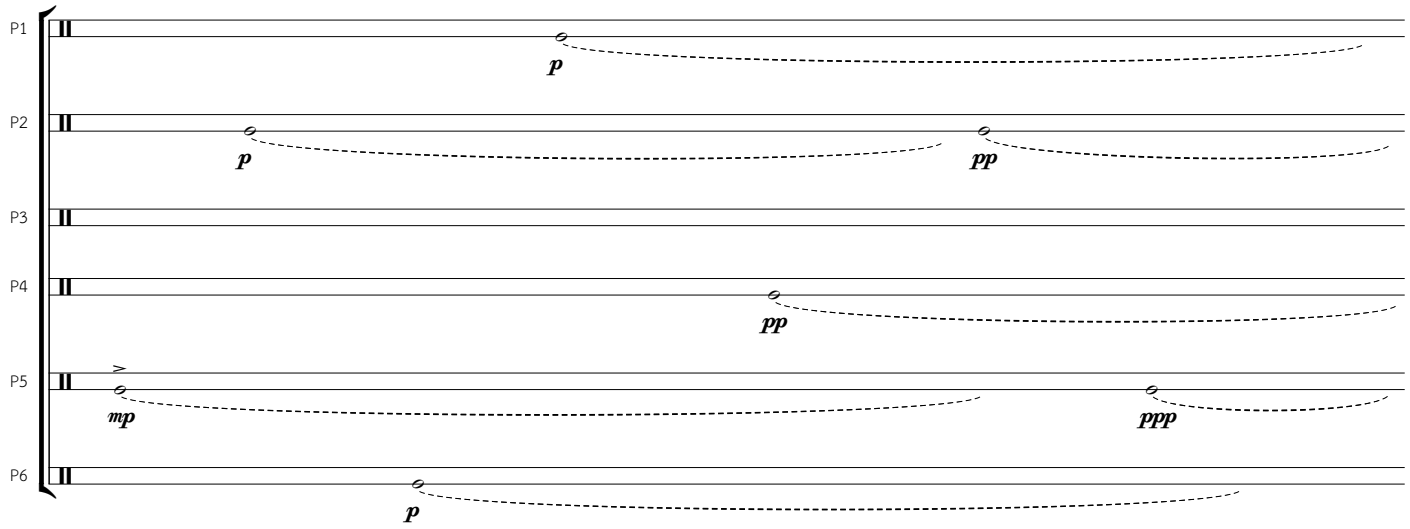


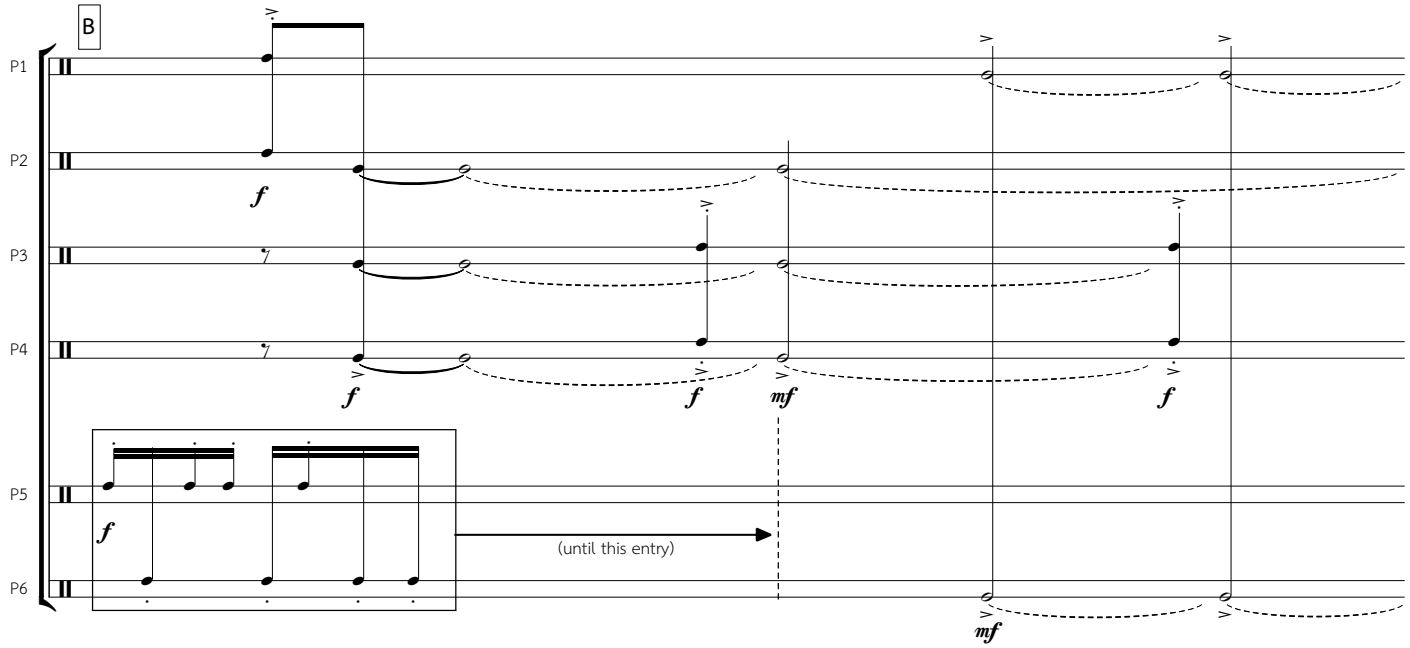


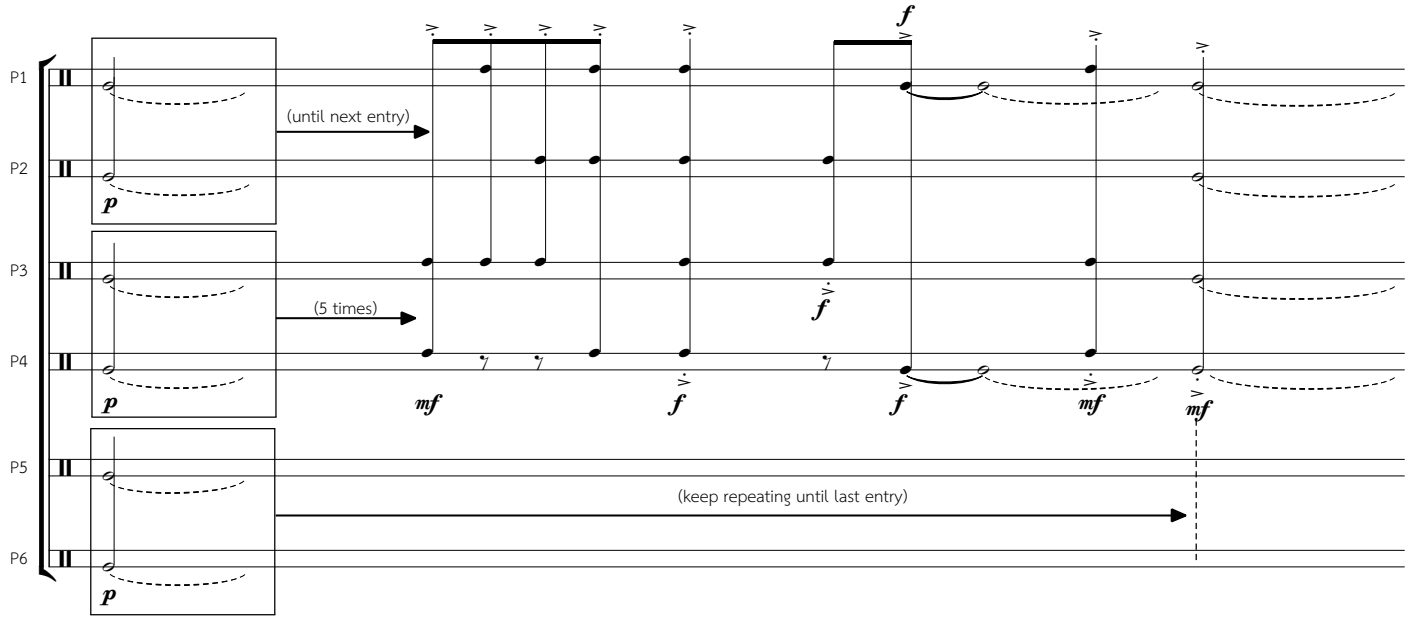


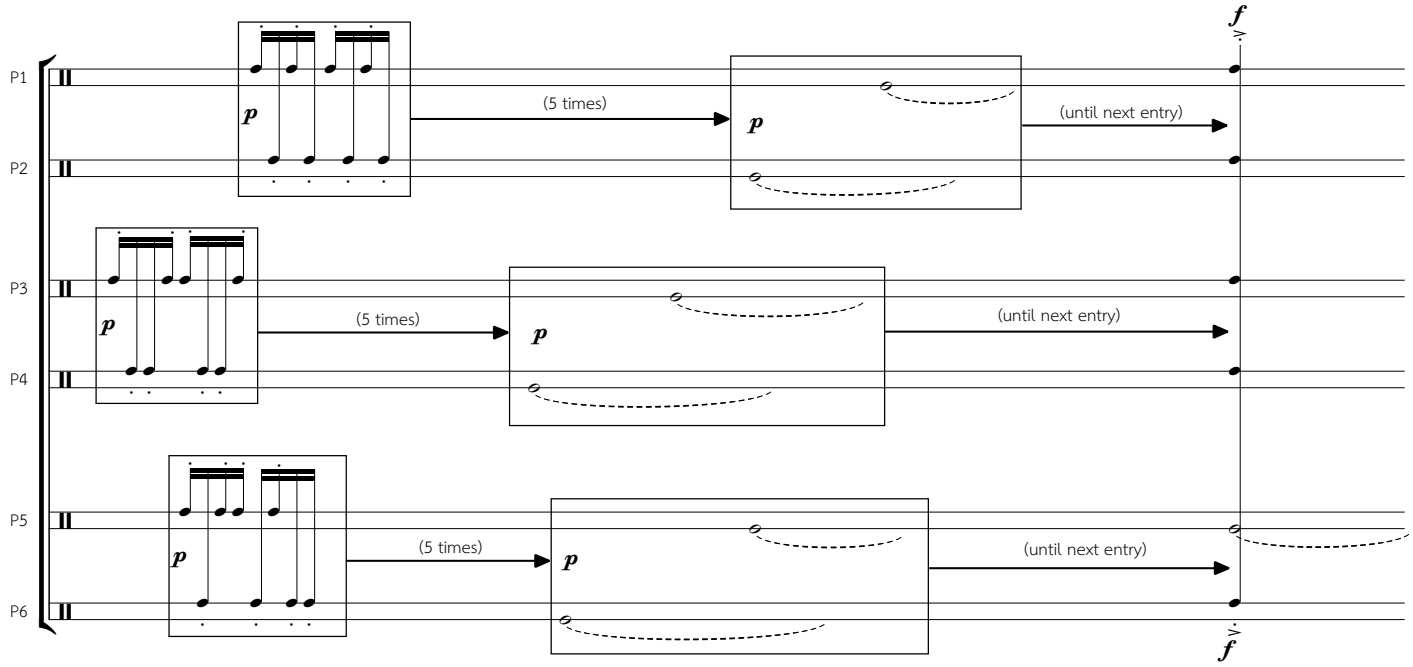

P1
P2
P3
P4
P5
P6
f
p
mp
mf
A
(any tempo)
(repeat 10 times)
(slow)
(repeat until P5+6 start)
(keep repeating until next entry even though others stop)

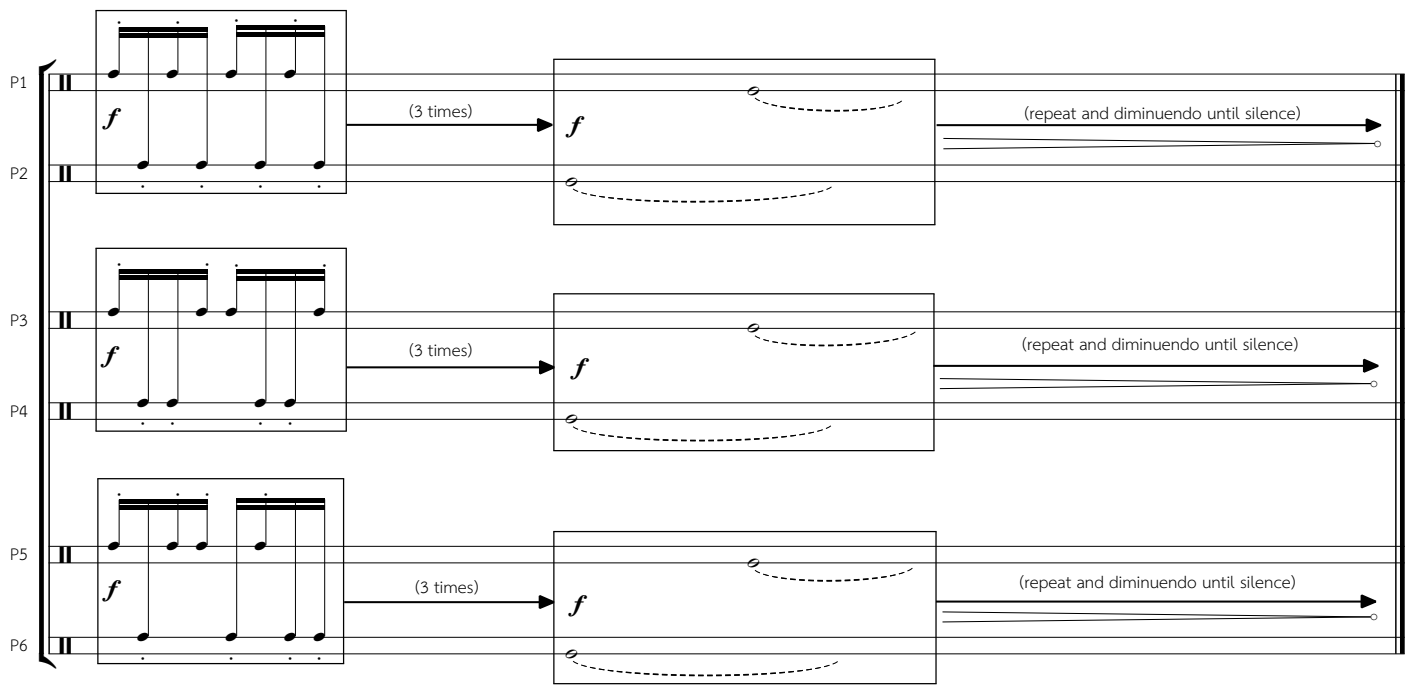

P1
P2
P3
P4
P5
P6
(until next entry)


P1
P2
P3
P4
P5
P6


B
P1
P2
P3
P4
P5
P6
(until this entry)


P1
P2
P3
P4
P5
P6
(until next entry)
(5 times)
(keep repeating until last entry)


P1
P2
P3
P4
P5
P6
(5 times)
(until next entry)


P1
P2
P3
P4
P5
P6
(3 times)
(repeat and diminuendo until silence)

Fanfare
for brass quintet

Poumpak Charuprakorn (2018)

FULL SCORE IN C

INSTRUMENTATION

2 Trumpets in B♭ (with straight mutes)

Horn in F (straight mute optional)

Trombone (with straight mute)

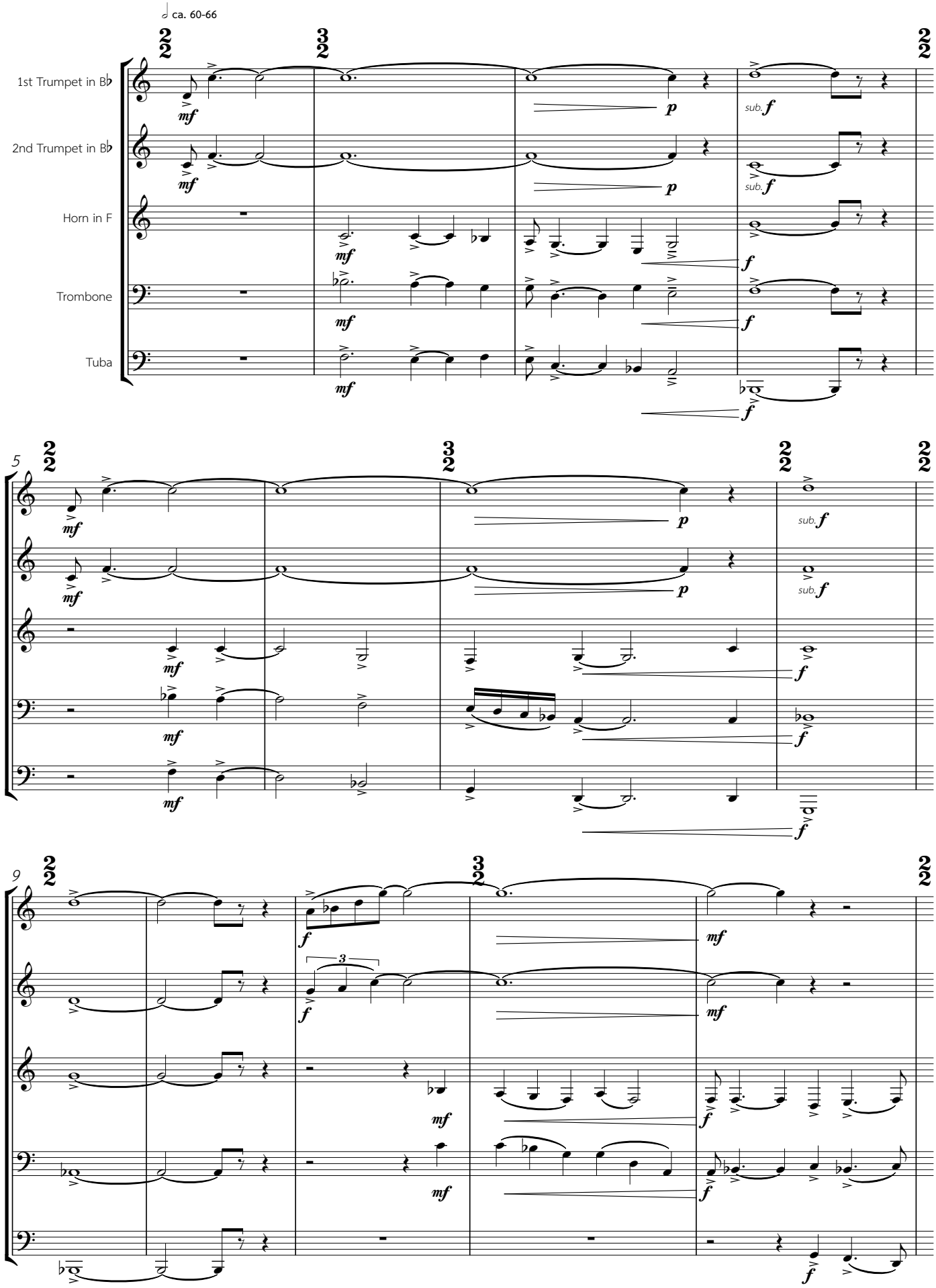
Tuba (straight mute optional)

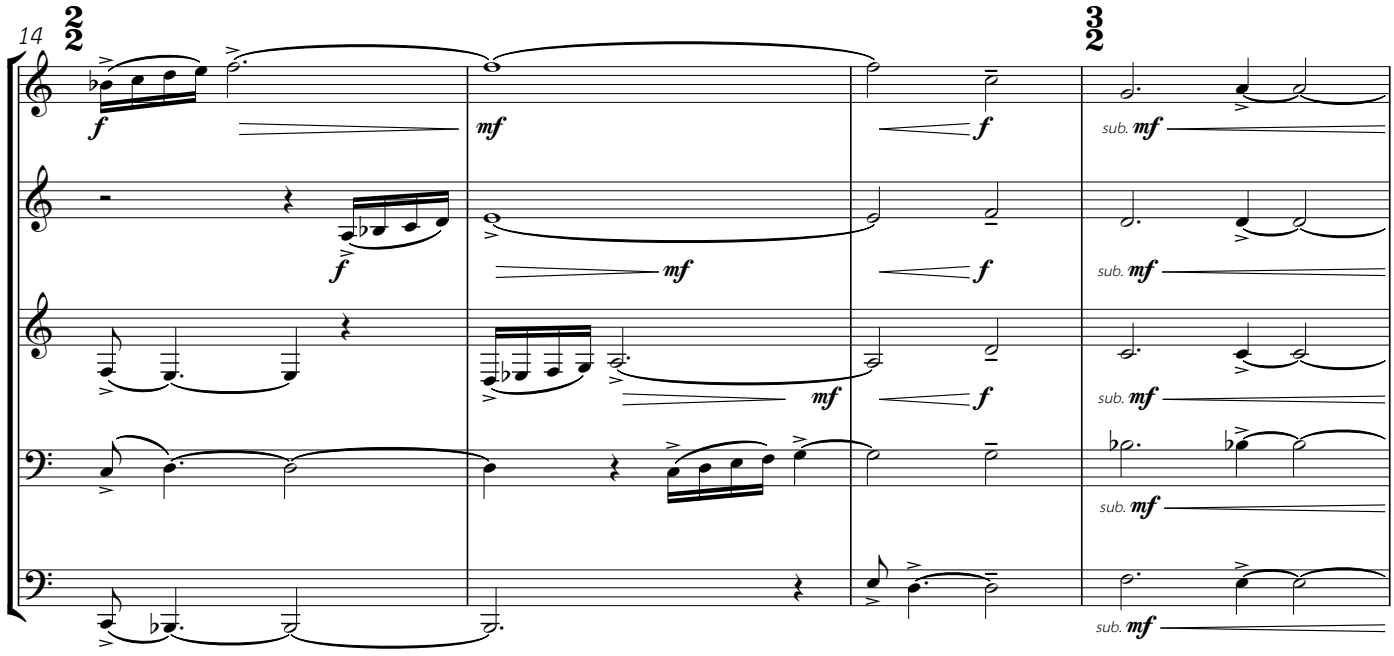
Duration: ca. 4 minutes

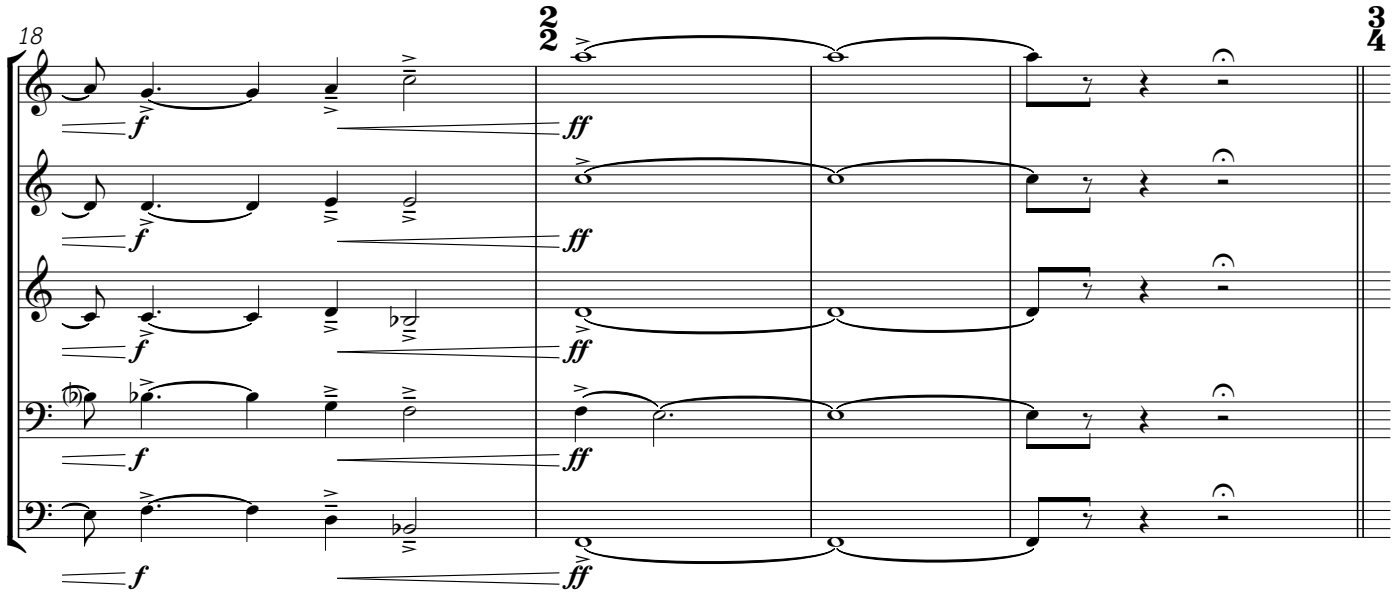
Fanfare

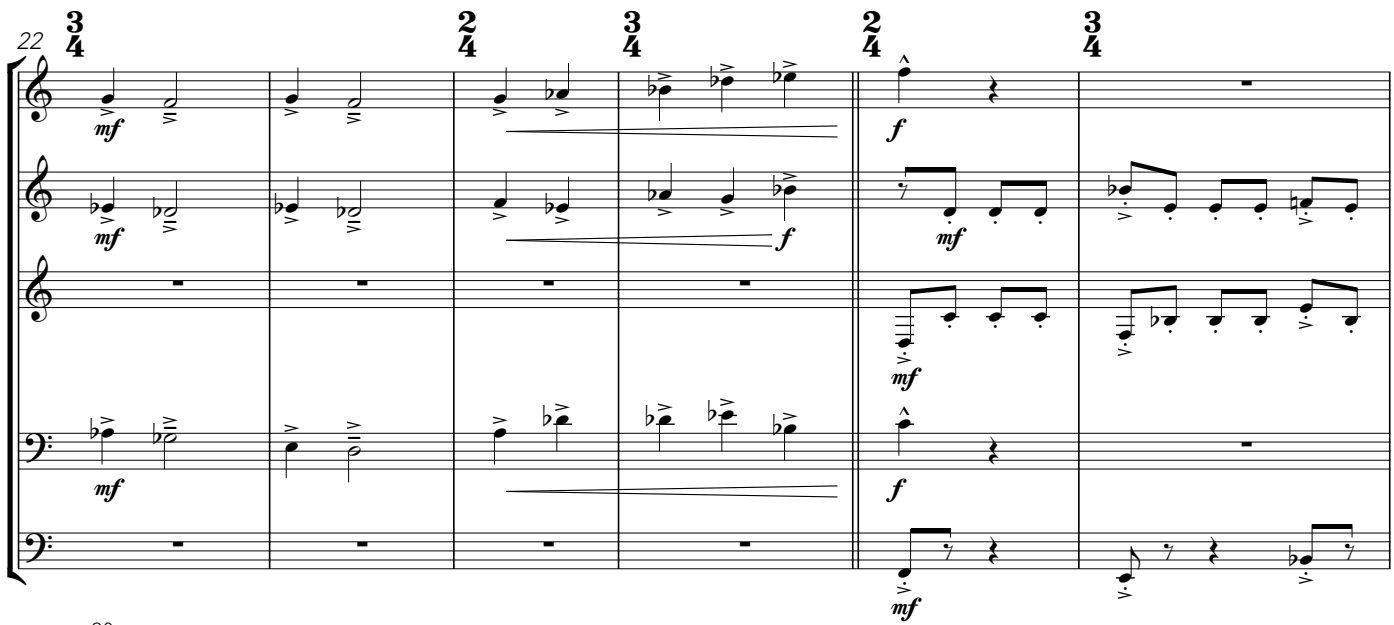
for brass quintet

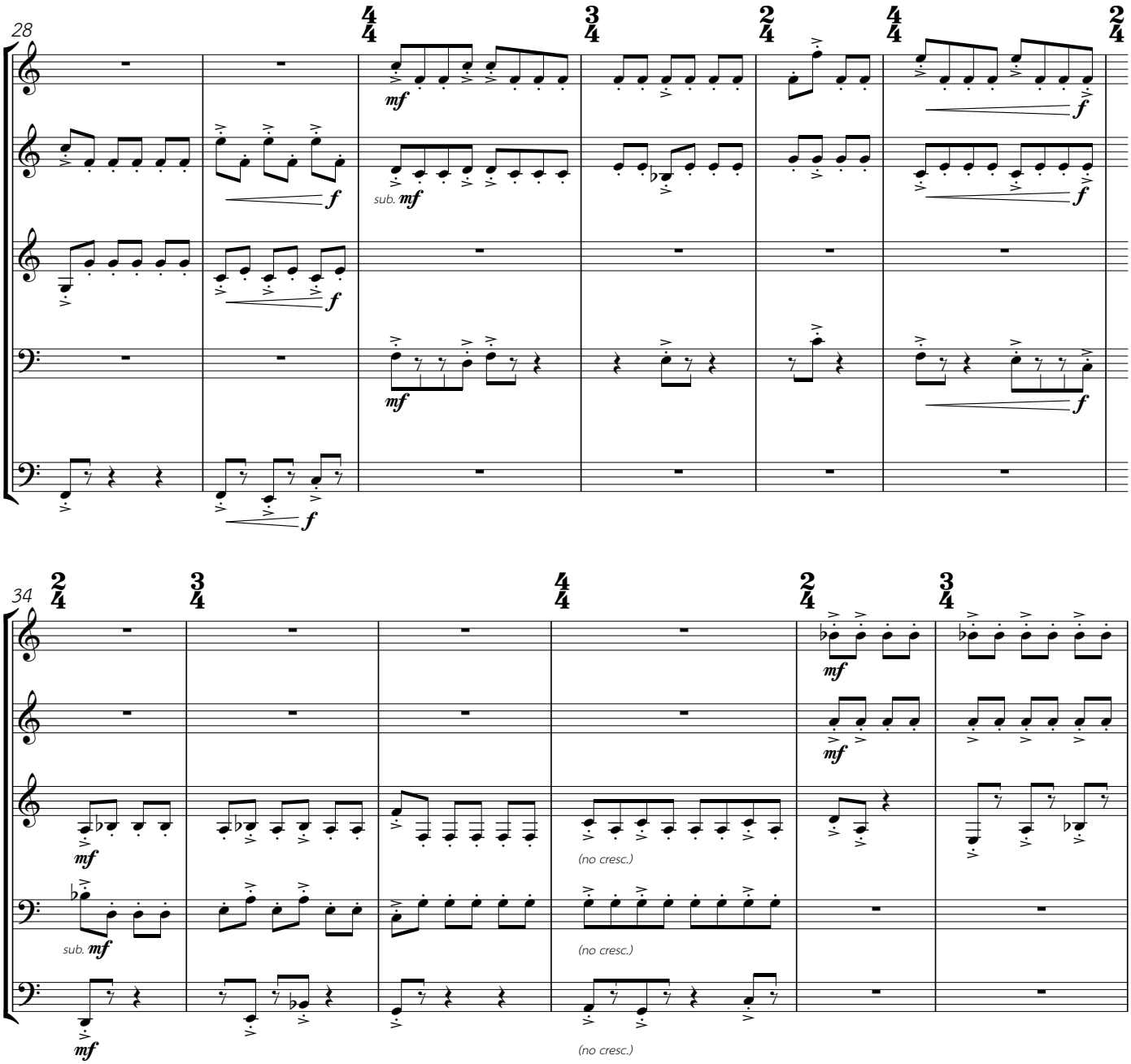
Poumpak Charuprakorn (2018)



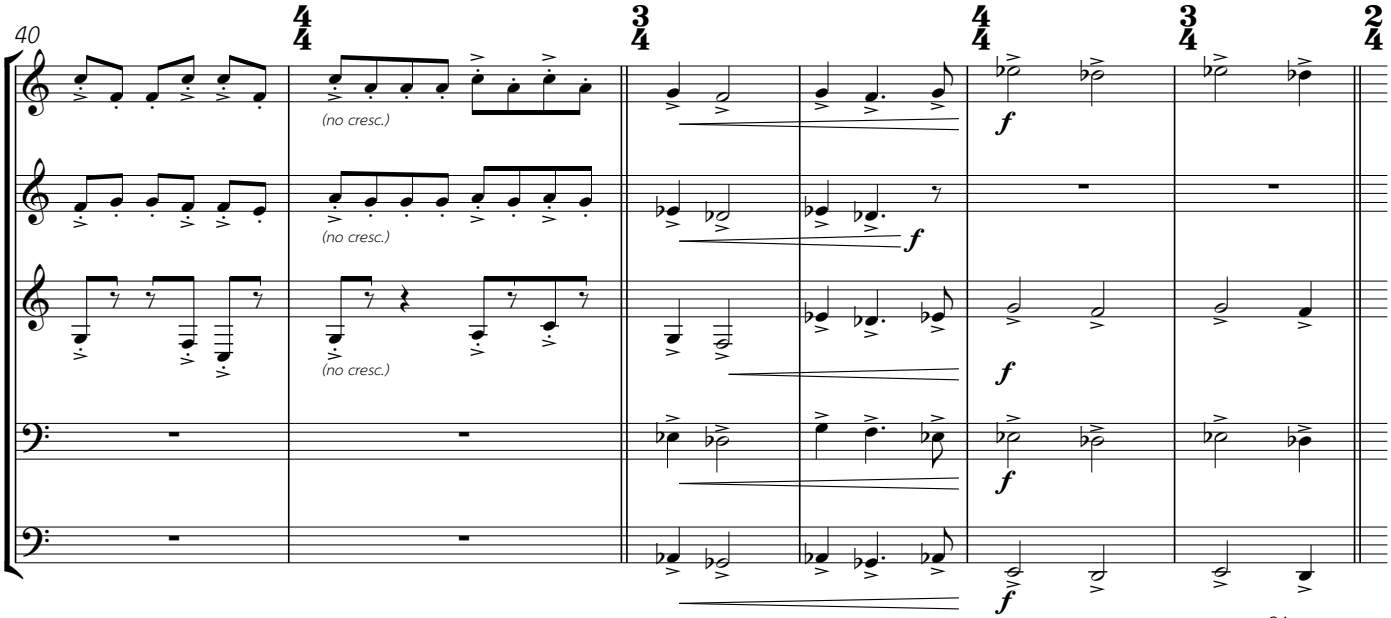

14
sub. mf

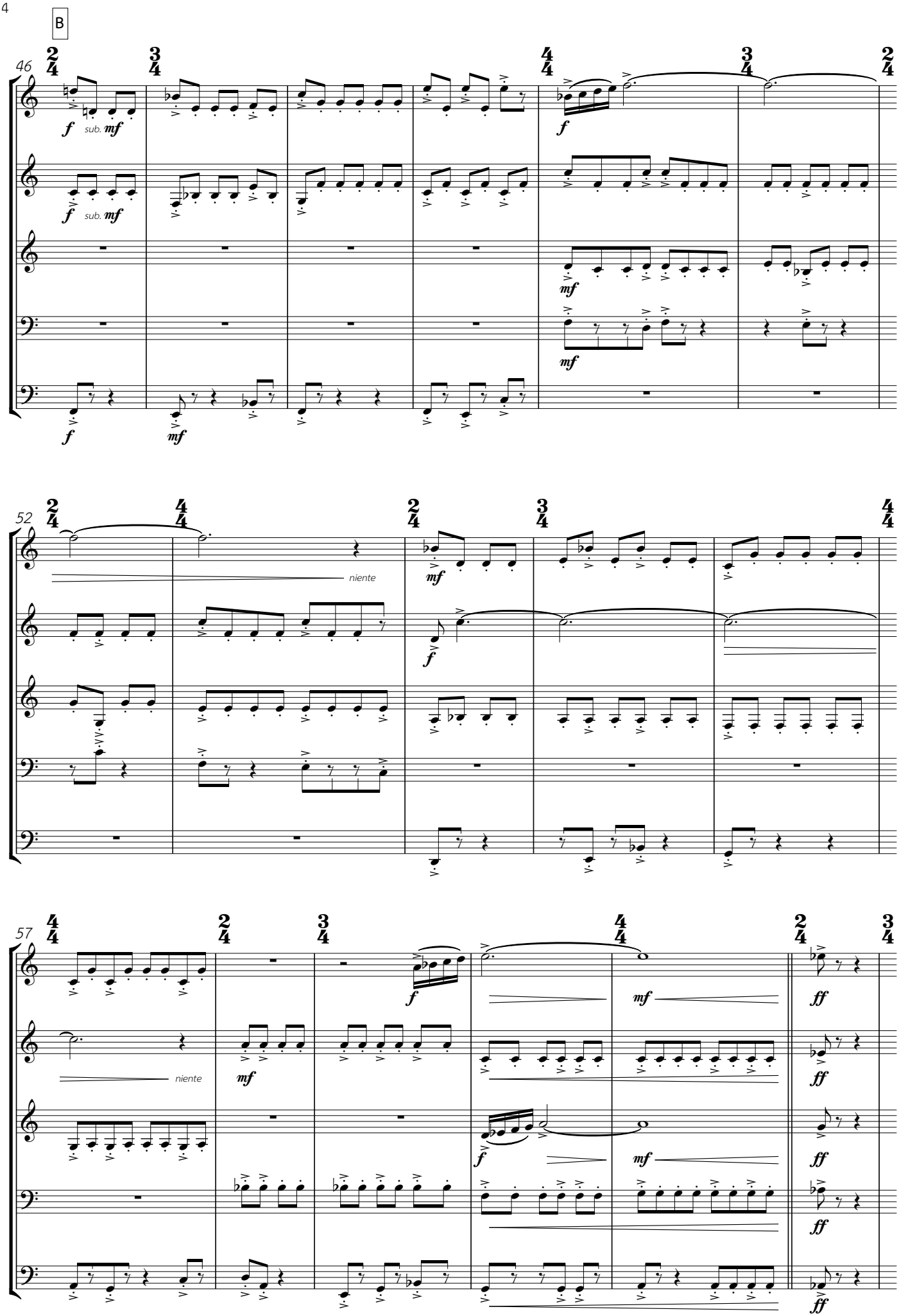

18
ff

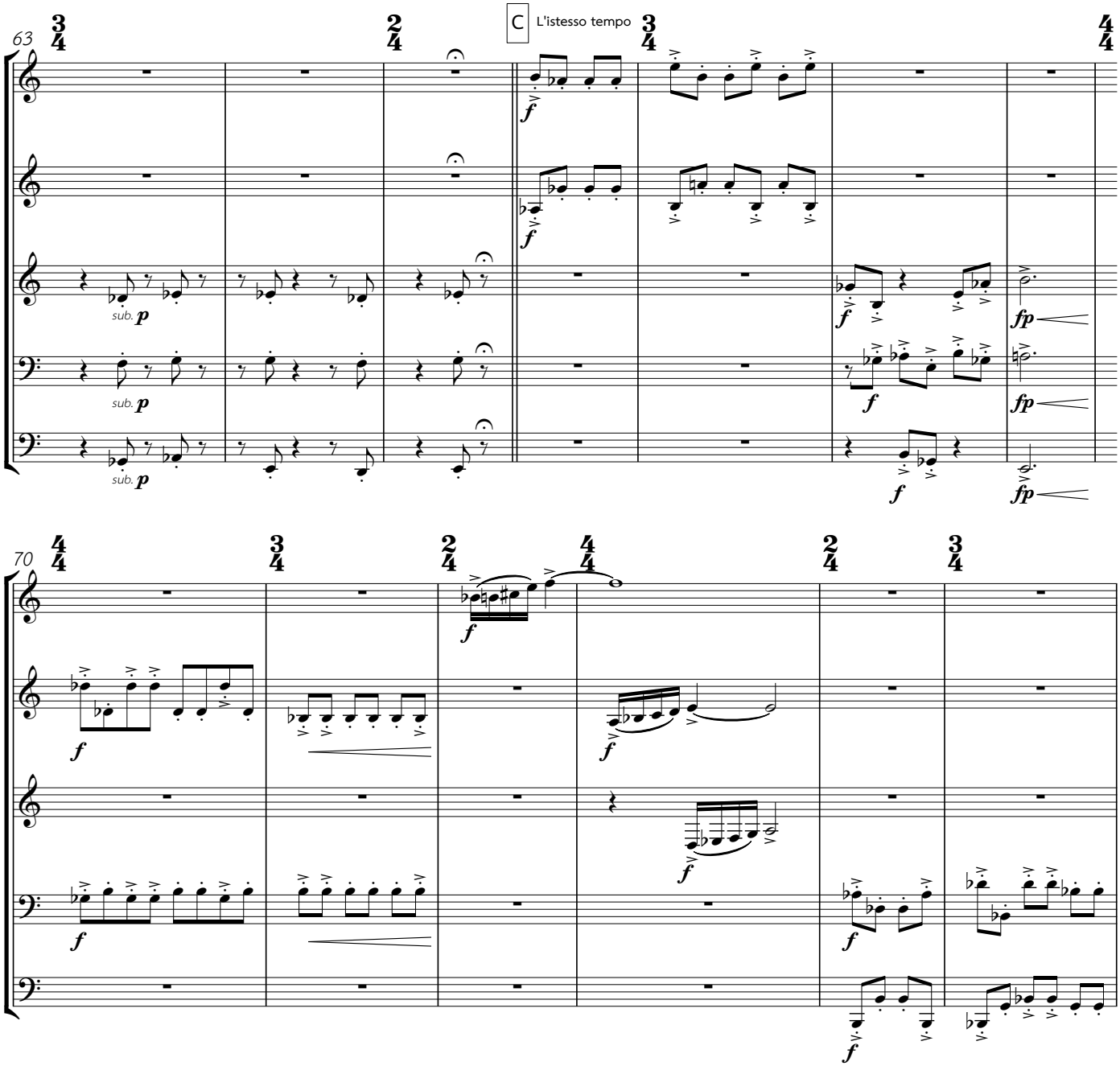

A L'istesso tempo
22


28
4/4
3/4
2/4
4/4
2/4
mf
f
sub. mf
mf
f
f
f
f

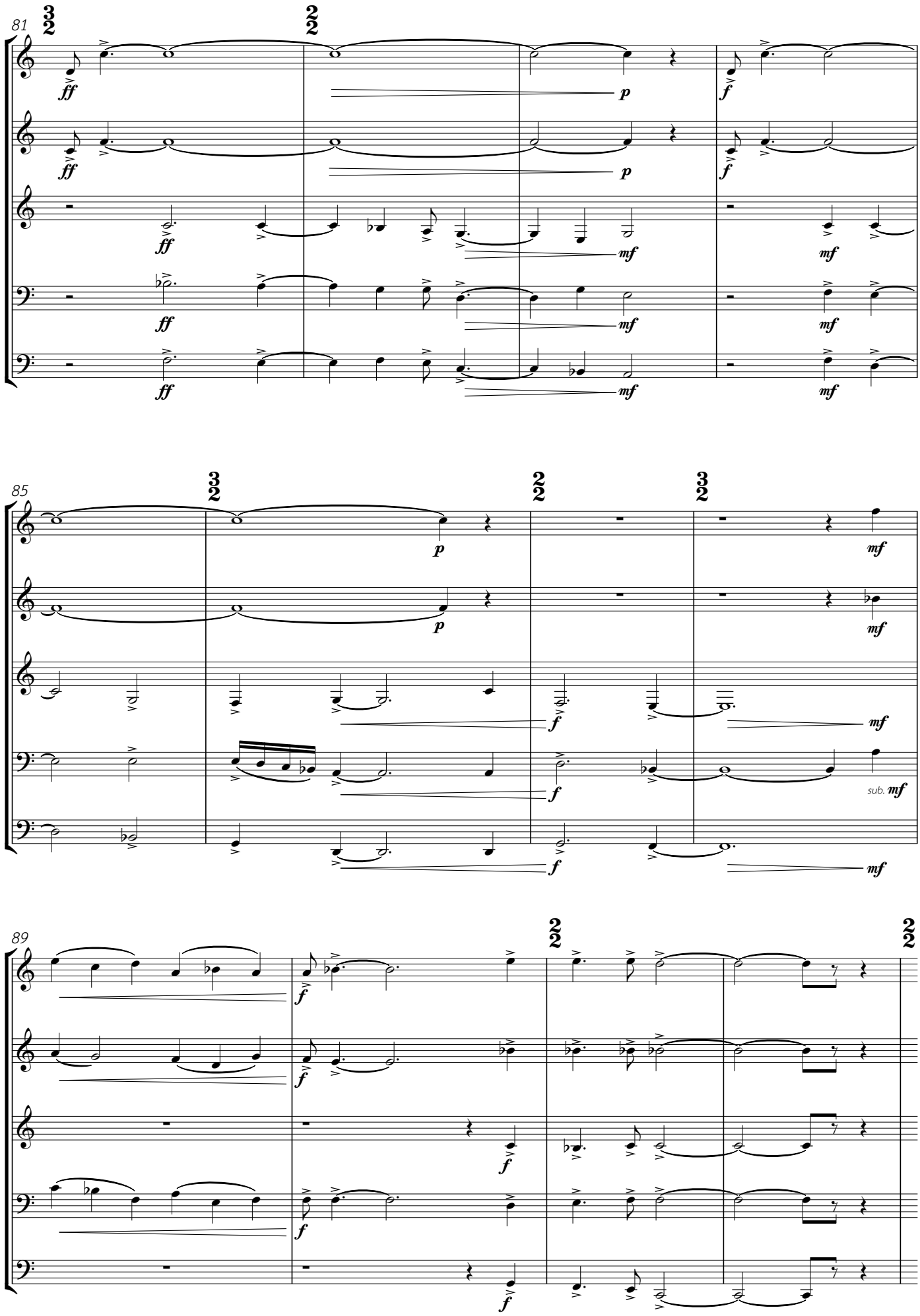
34
2/4
3/4
4/4
2/4
3/4
mf
mf
mf
sub. mf
mf
(no cresc.)
(no cresc.)
(no cresc.)

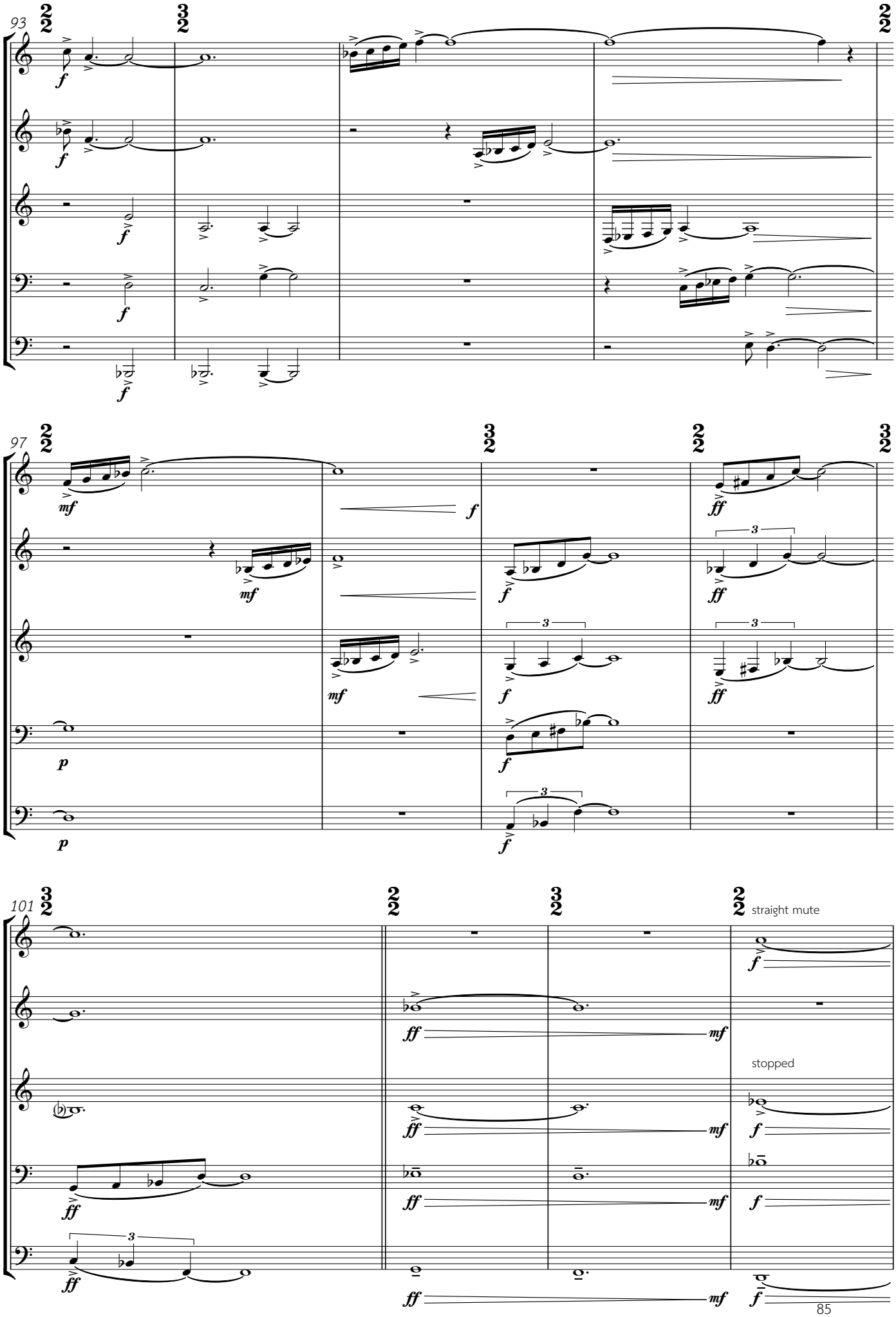

40
4/4
3/4
4/4
3/4
2/4
(no cresc.)
(no cresc.)
(no cresc.)
f
f
f
f

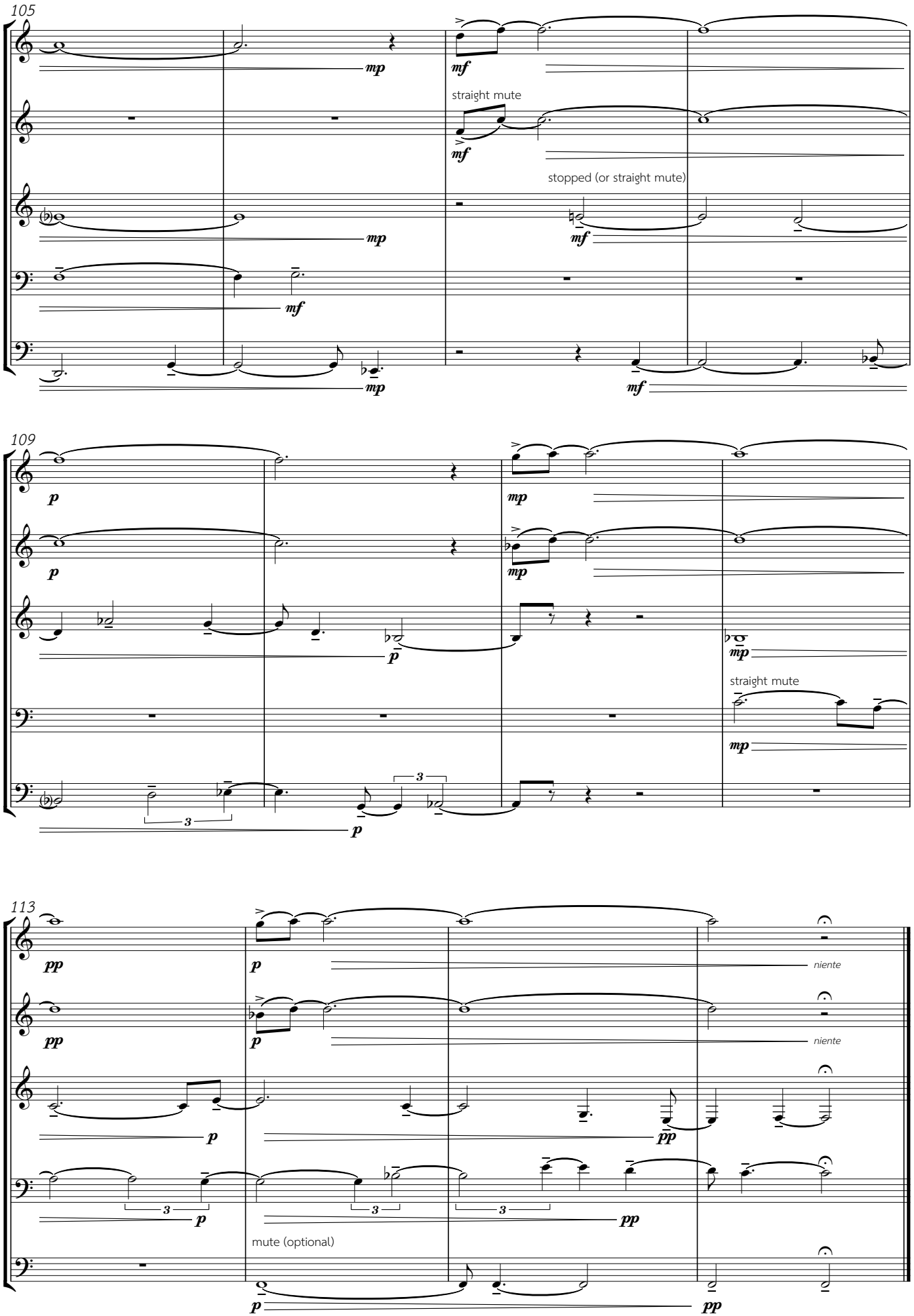

B
46
sub. mf
sub. mf
mf
mf
52
niente
mf
f
57
niente
mf
f
mf
f
mf
ff
ff
ff
ff


63
C
L'istesso tempo
sub. p
f
fp
70
76
rit.
mf
ff

D Tempo primo, ♩ ca. 60-66




93
97
101
straight mute
stopped


105
straight mute
stopped (or straight mute)
109
straight mute
113
mute (optional)
niente
niente

Monologic Dialogue

for violin and live electronics

Poumpak Charuprakorn (2018)

FULL SCORE

The composition was composed for Dr Mieko Kanno for Valencia International Performance Academy and Festival 2018.

The first performance took place at Conservatorio Superior de Musica Joaquin Rodrigo Auditorium on 20 July 2018 in Valencia, Spain.

Duration: circa 10 minutes

Instrumentation

Violin

Electronics

- A computer with Max/MSP
- One microphone
- Two speakers
- Midi Controller (Korg NanoKONTROL 2)

Please contact the composer for the patch

Performance Notes

Violin

- An accidental only has an effect on the note it precedes
- Barlines and time signatures do not imply any strong beats
- s.p. = sul ponticello
- s.t. = sul tasto
- A black arrow (violin) = a gradual change from one bowing technique to another
- All notes are with no vibrato

Electronics

- Dashed arrow (electronics) = sustain the level of the dynamic
- Graphics on electronics part at rehearsal marks C, E, and F are approximate and do not accurately represent the sound of the electronics

Shortcuts (keyboard)

- backspace/delete = reset everything
- spacebar = trigger next cue
- 1 = trigger 'effect' (rehearsal mark D)
- 2 = next harmony (HARMONISER, rehearsal mark E)
- 3 = next set of overtones (rehearsal mark F)
- Main audio toggle, knobs, and sliders can be controlled by mouse

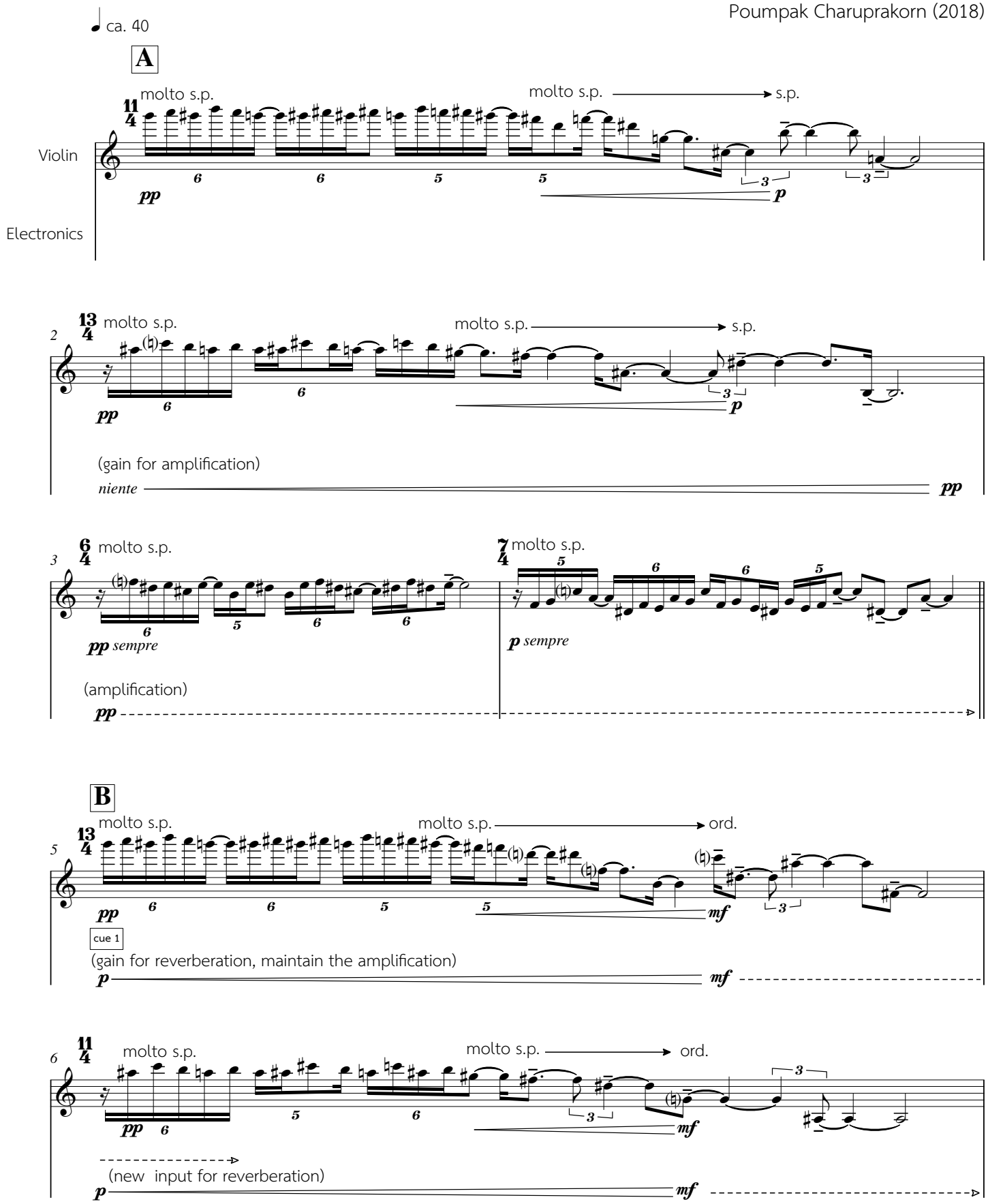
Midi Controller (Korg NanoKONTROL 2)

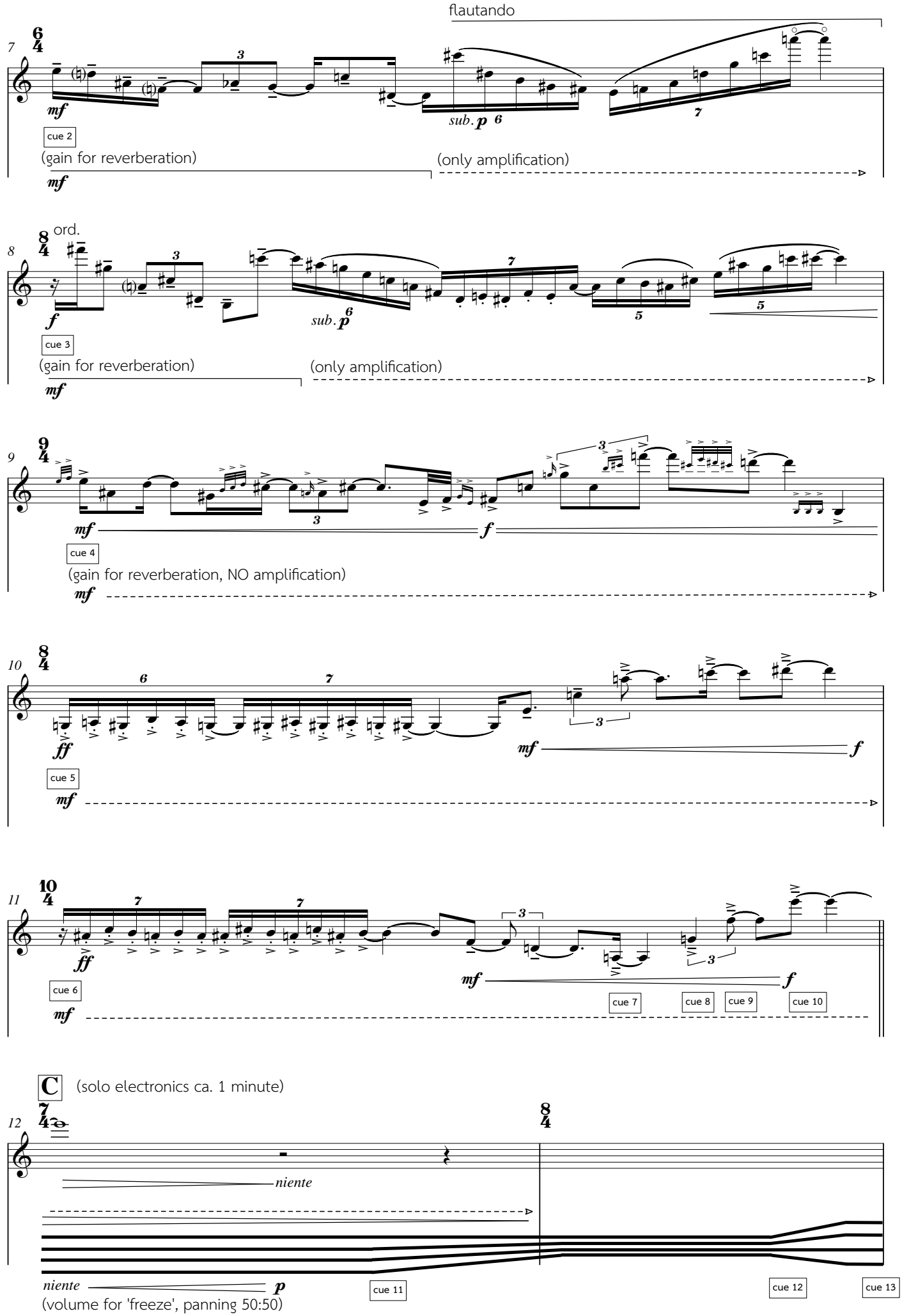
- Position of all sliders is inverse (main output is controlled by the first one on the right)
- Knobs needed at the rehearsal mark C are the fourth and fifth (two in the middle)
- Cycle button = audio on/off
- Left track = reset everything
- Right marker = trigger next cue
- Record button = trigger 'effect' (rehearsal mark D)
- Rewind button = next harmony (HARMONISER, rehearsal mark E)
- Stop button = next set of overtones (rehearsal mark F)

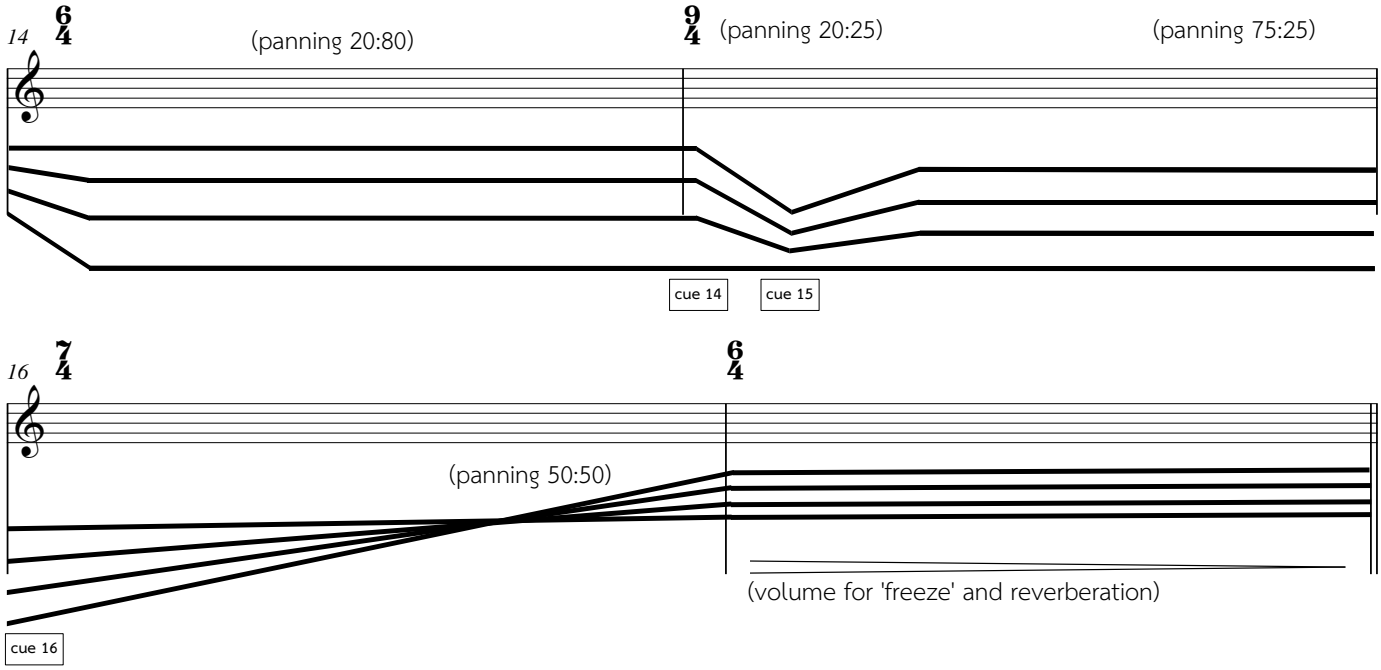
Monologic Dialogue

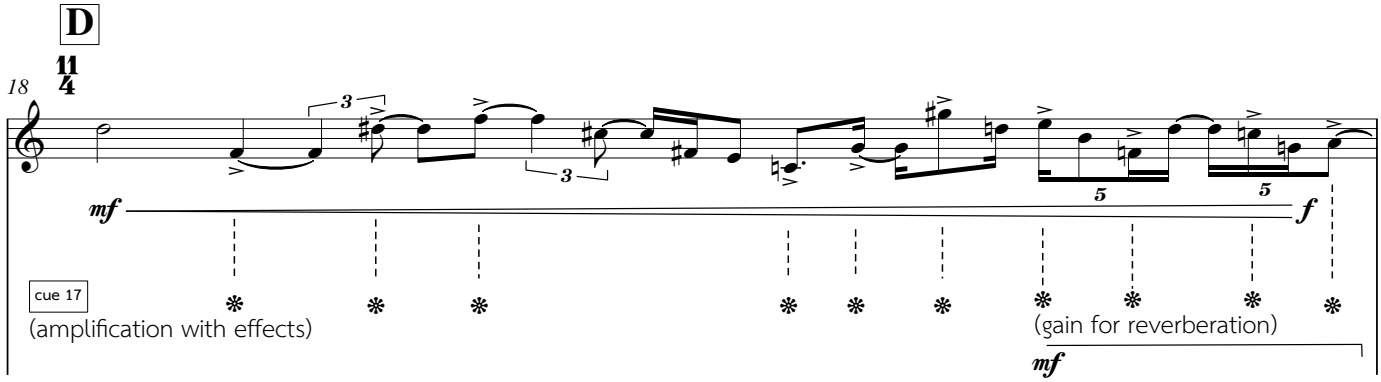
for violin and live electronics

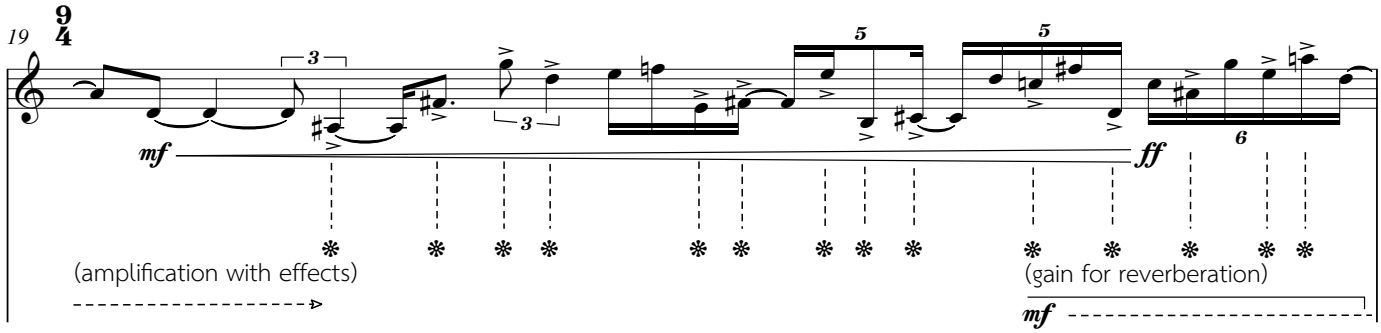
Poumpak Charuprakorn (2018)

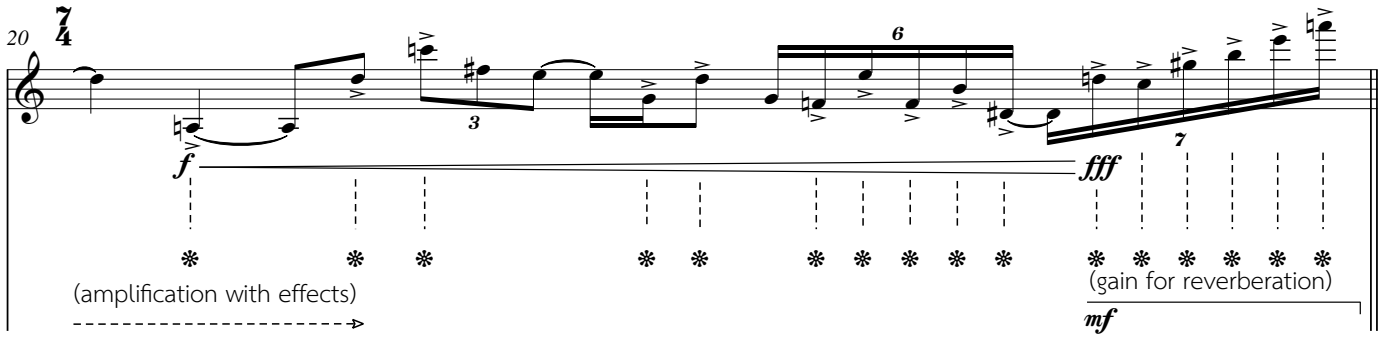



flautando
7
6/4
mf
sub. p
cue 2
(gain for reverberation)
(only amplification)
mf
ord.
8
8/4
f
sub. p
cue 3
(gain for reverberation)
(only amplification)
mf
9
9/4
mf
f
cue 4
(gain for reverberation, NO amplification)
mf
10
8/4
ff
mf
f
cue 5
mf
11
10/4
ff
mf
f
cue 6
cue 7
cue 8
cue 9
cue 10
mf
C
(solo electronics ca. 1 minute)
12
7/4
8/4
niente
niente
p
(volume for 'freeze', panning 50:50)
cue 11
cue 12
cue 13


14
6/4
(panning 20:80)
9/4
(panning 20:25)
(panning 75:25)
cue 14
cue 15
16
7/4
6/4
(panning 50:50)
(volume for 'freeze' and reverberation)
cue 16


D
18
11/4
mf
f
cue 17
(amplification with effects)
(gain for reverberation)
mf


19
9/4
mf
ff
(amplification with effects)
(gain for reverberation)
mf


20
7/4
f
fff
(amplification with effects)
(gain for reverberation)
mf

E

21 7/4

sub. *mp* — *mf*

cue 18

(harmoniser with reverberation)

HARMONISER numbers 2-7

22 11/4

p — *mf*

HARMONISER numbers 8-21

23 13/4 s.t. *sempre*

p — *mp*

HARMONISER numbers 22-27

24

pp — *p*

HARMONISER numbers 28-33

F (play very softly to generate artificial overtones in electronics)

25 4/4 s.t. *sempre* — 6/4

ppp sempre

cue 19

pp — *p* | *pp* — *mp* | *pp* — *p* — *pp*

(Maintain ca. 30% gain for amplification, LEFT volume for artificial overtones, 28 NO gain for reverberation)

Overtones number 2 (RIGHT gain)

Overtones number 3 (LEFT gain)

4/4

mp — *pp*

Overtones number 4 (RIGHT gain)

p — *pp*

Overtones number 5 (LEFT gain)

30 8/4

pp — p — pp

Overtones number 6

(LEFT gain)

31

pp — mp — pp

Overtones number 7

(LEFT gain)

32 6/4 | 7/4

pp — mp | pp — p

Overtones number 8 | Overtones number 9

(LEFT gain) | (RIGHT gain)

34 10/4

pp — p

Overtones number 10

(LEFT gain)

35

pp — p

Overtones number 11

(RIGHT gain)

36 14/4

(gain for amplification)

niente

niente

Quintet II

for woodwind quintet

Poumpak Charuprakorn (2017)

FULL SCORE IN C

i

Instrumentation

Alto flute

Oboe (doubling cor anglais)

Clarinet in Bb

Horn in F

Bassoon

Duration: circa 7 minutes

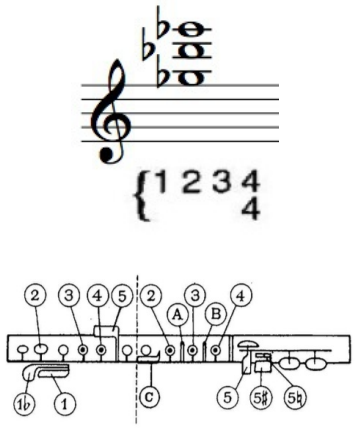
Performance Notes

Time signatures and barlines do not imply any strong beats

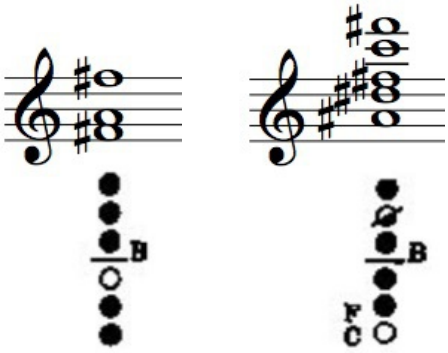
All tremolos should be played as fast as possible

Multiphonics fingering chart

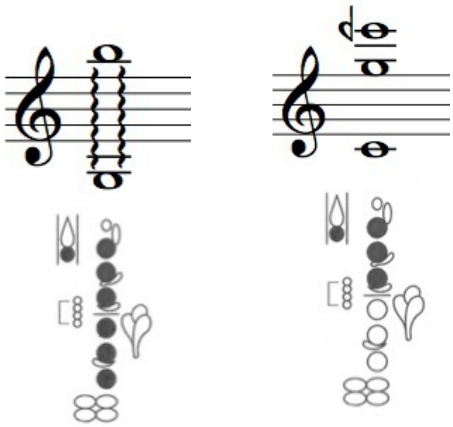
Alto flute (transposed)



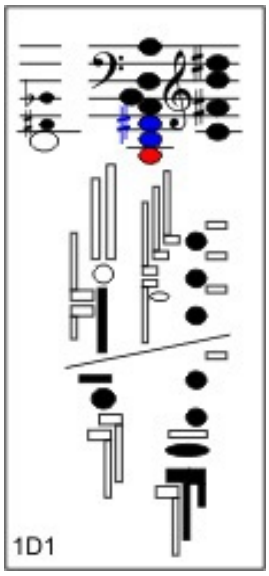
Oboe



Clarinet (transposed)



Bassoon

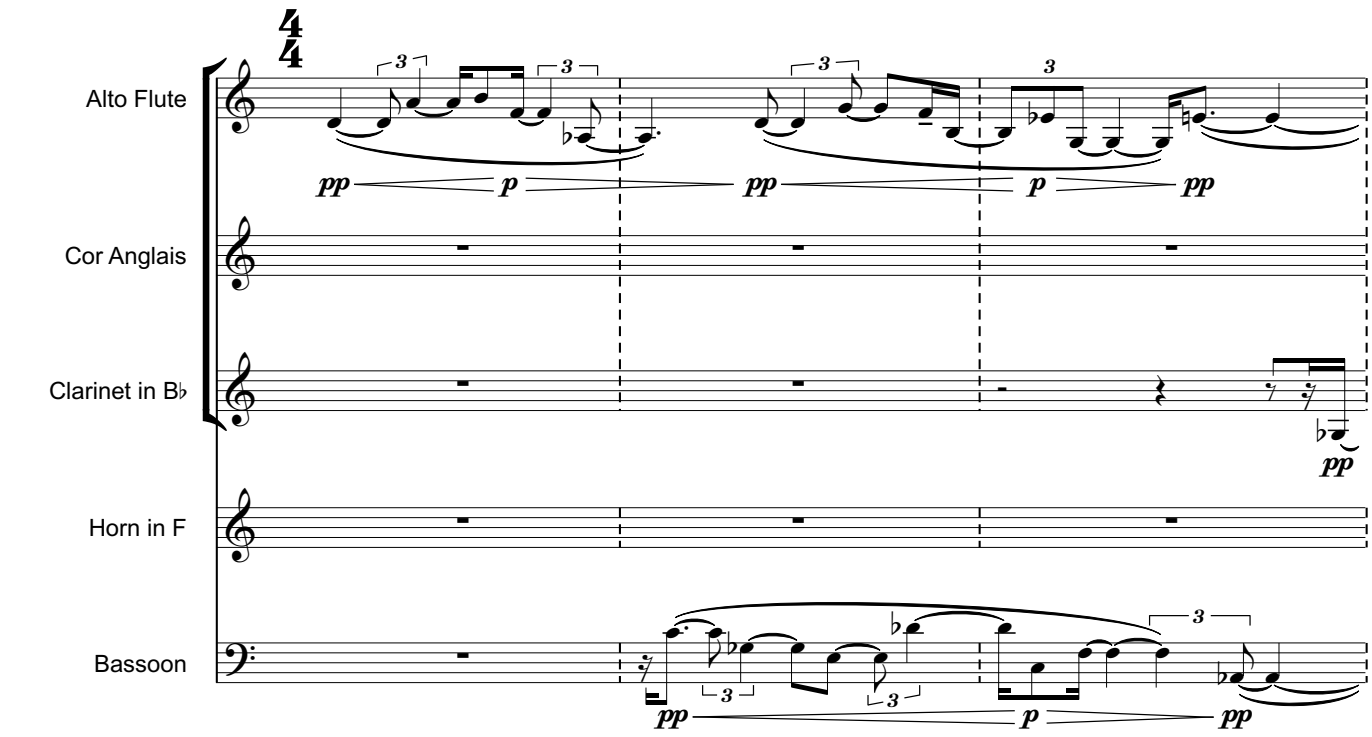


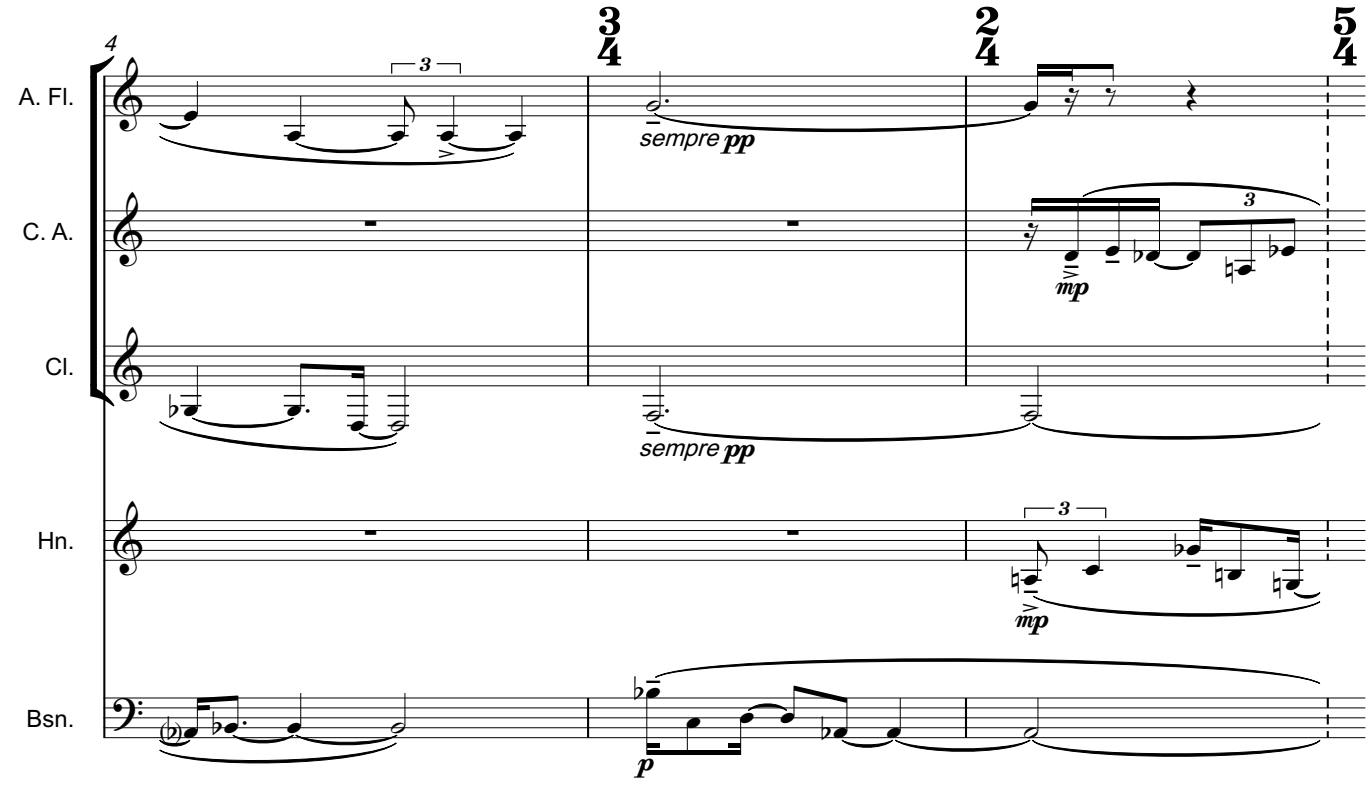
Full Score in C

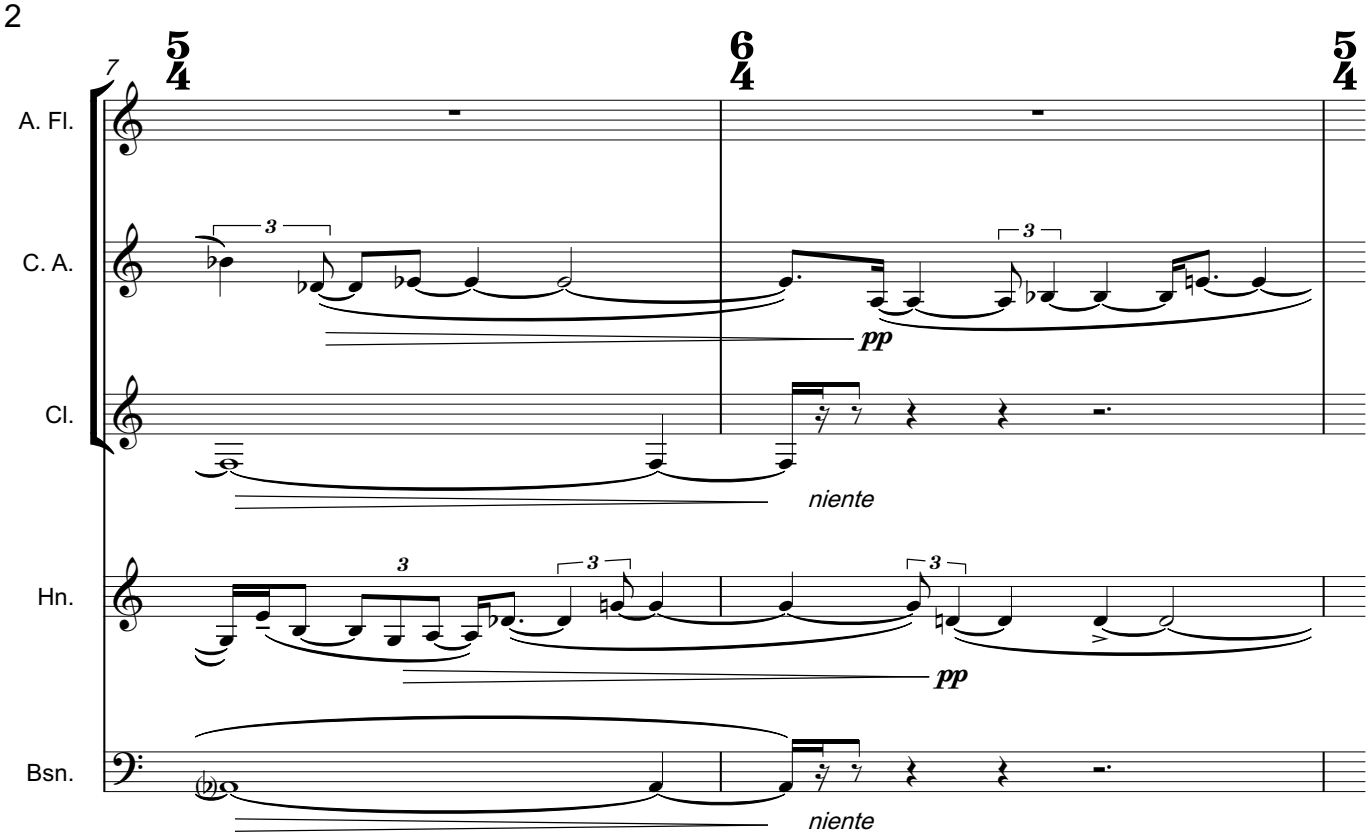
Quintet II

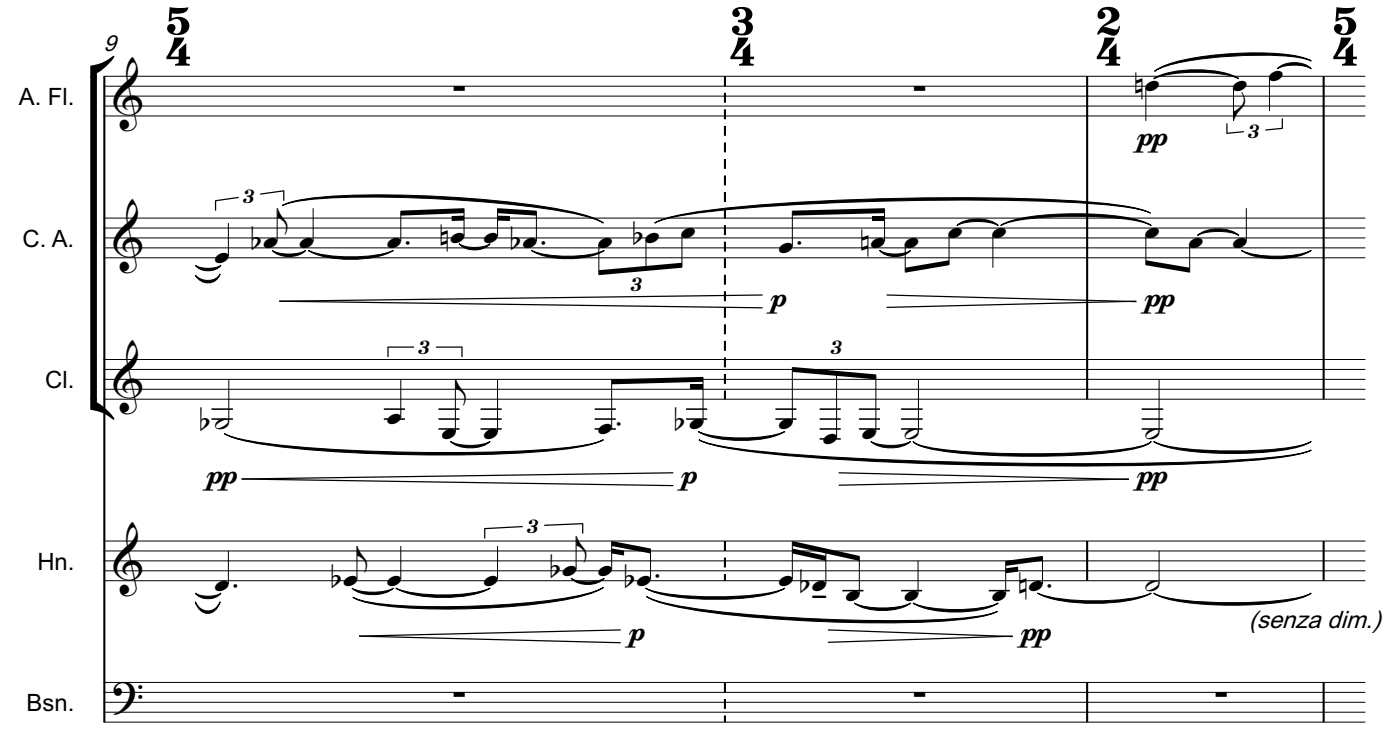
♩ ca. 40-46

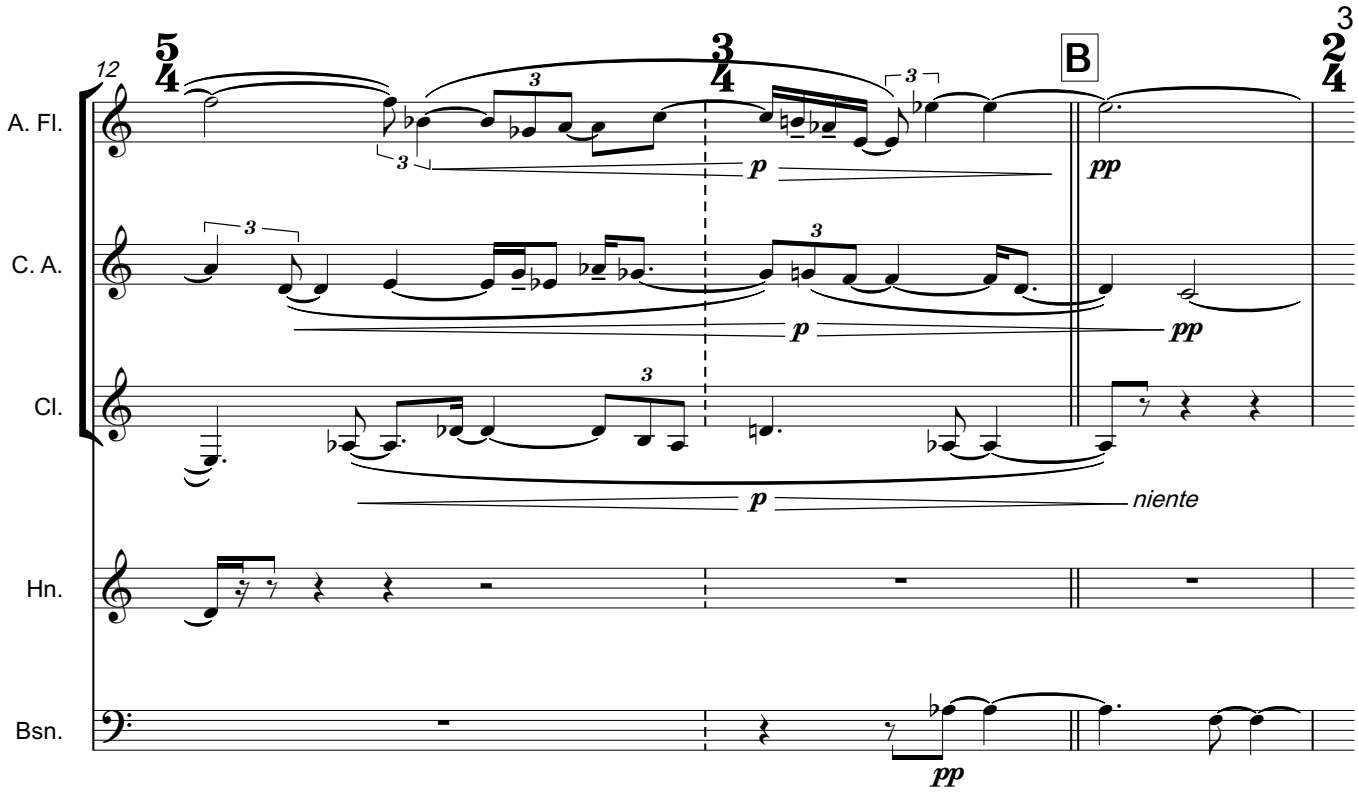
Poumpak Charuprakorn (2017)

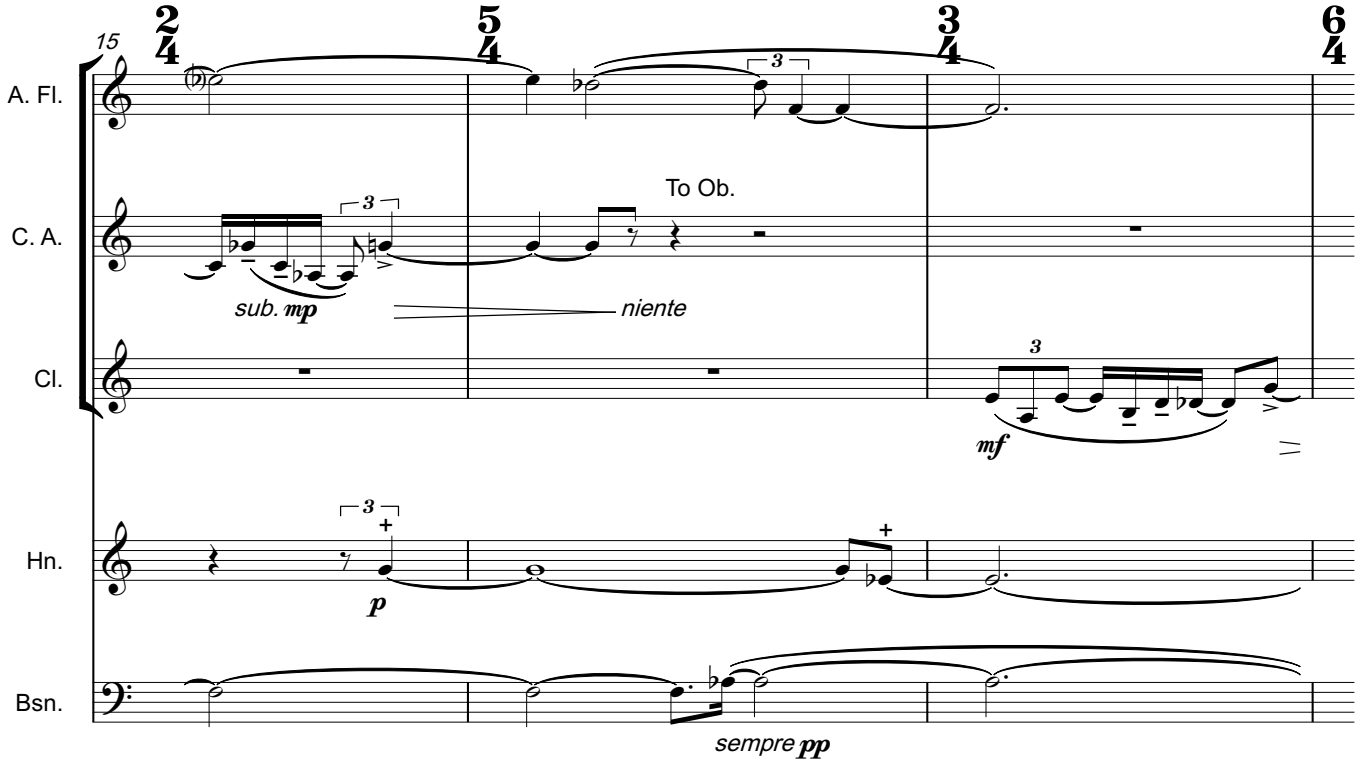


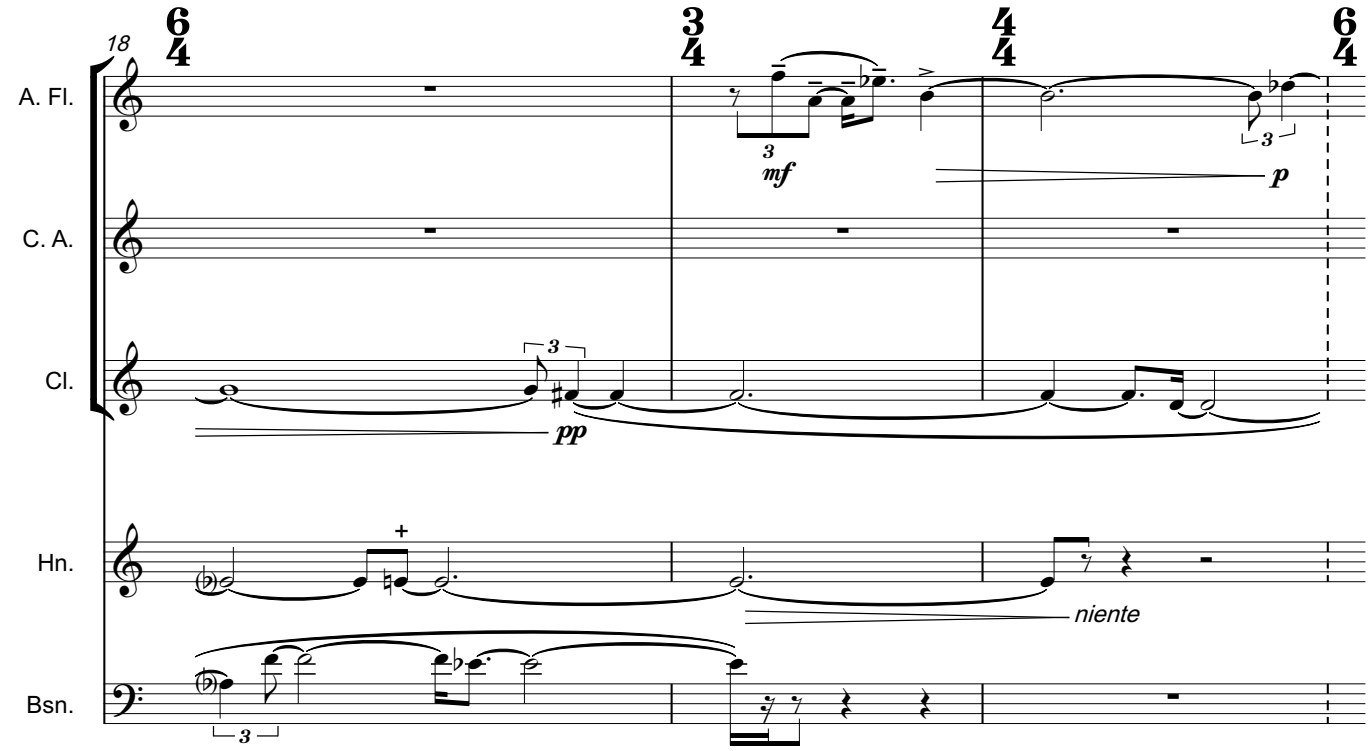


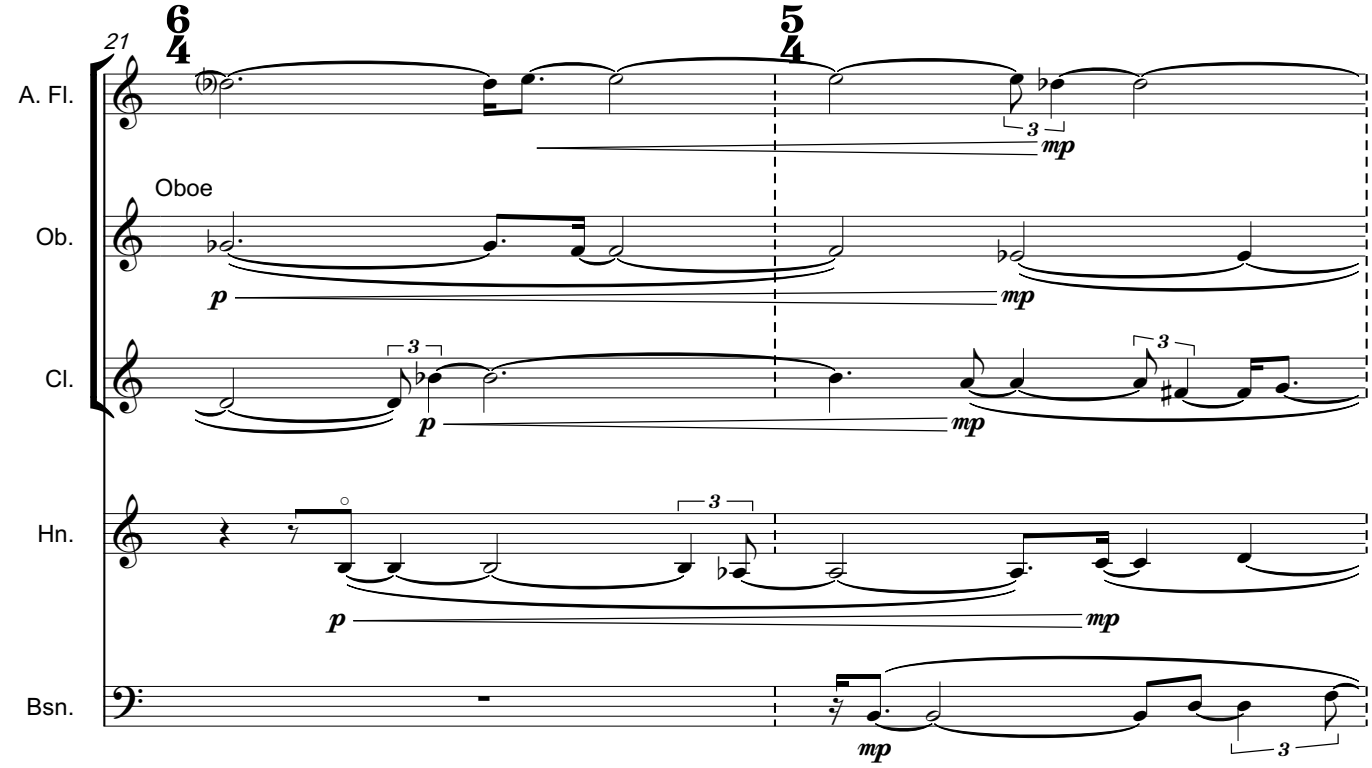

7
A. Fl.
C. A.
Cl.
Hn.
Bsn.
pp
niente
pp
niente

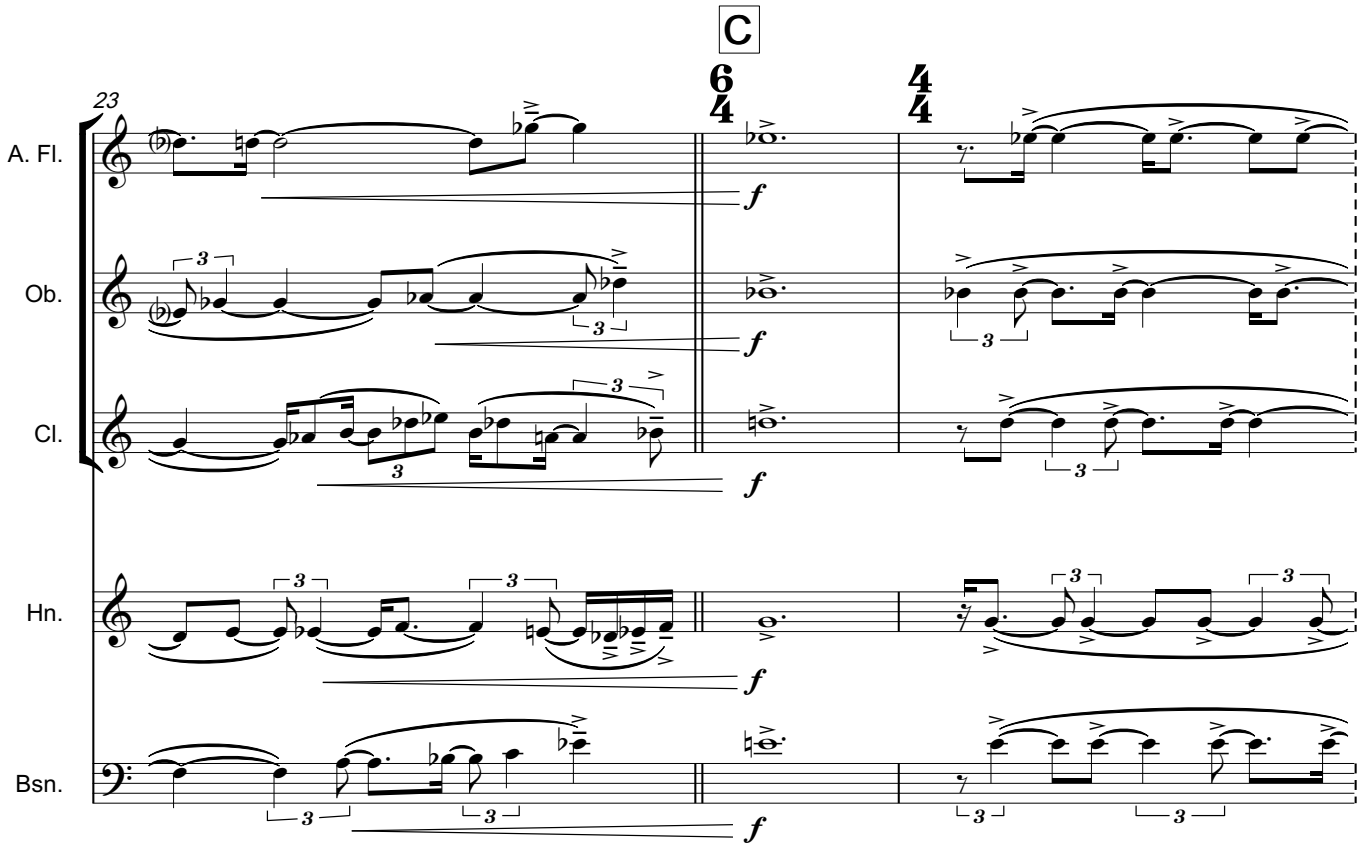

9
A. Fl.
C. A.
Cl.
Hn.
Bsn.
pp
p
pp
pp
p
pp
p
pp
(senza dim.)

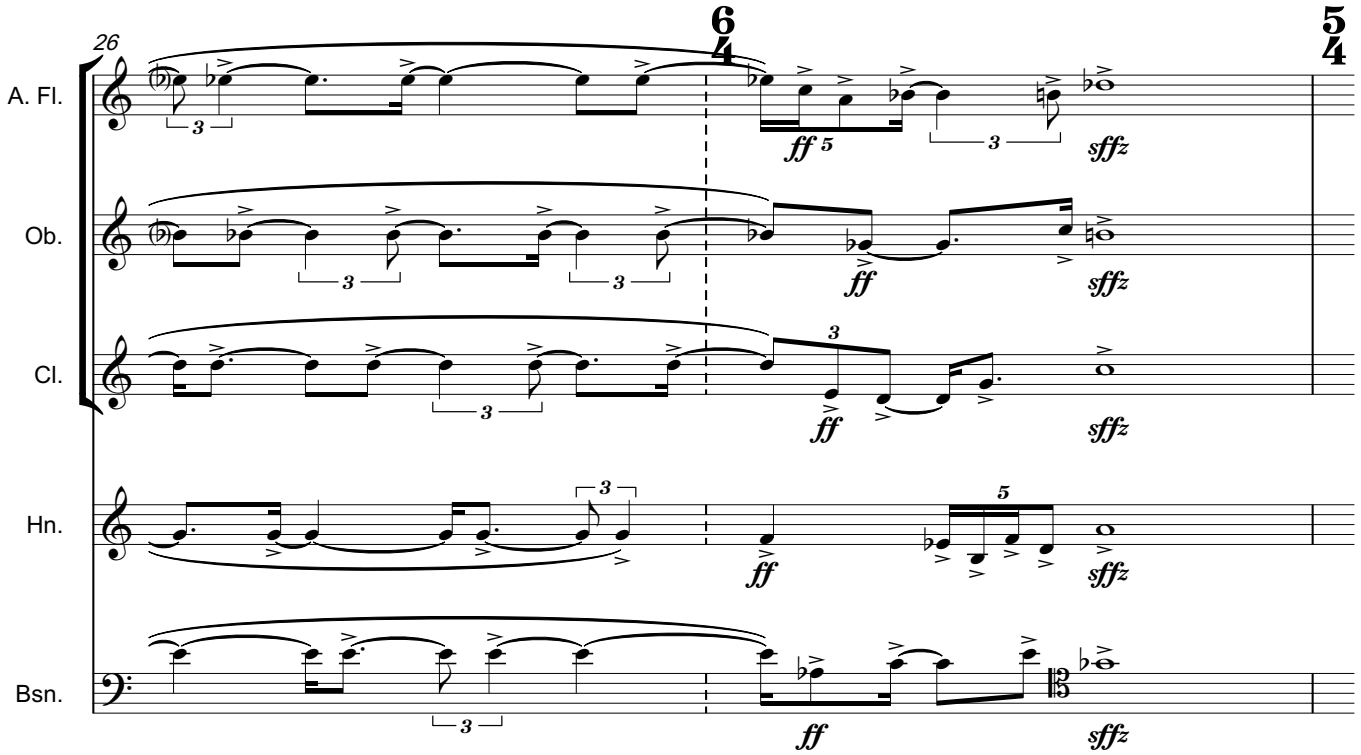

12
5/4
3/4
B
2/4
A. Fl.
C. A.
Cl.
Hn.
Bsn.
p
pp
niente

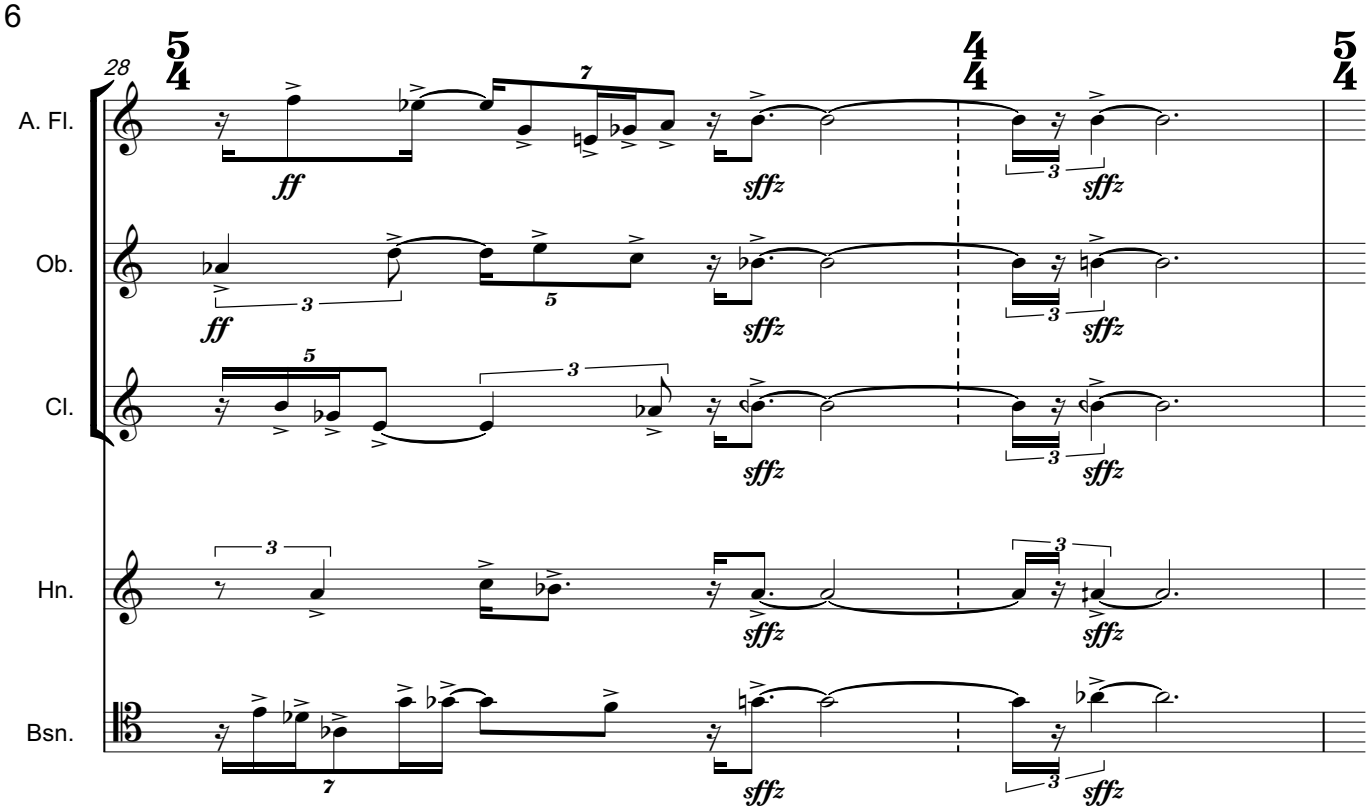

15
2/4
5/4
3/4
6/4
A. Fl.
C. A.
Cl.
Hn.
Bsn.
To Ob.
sub. mp
niente
mf
p
sempre pp

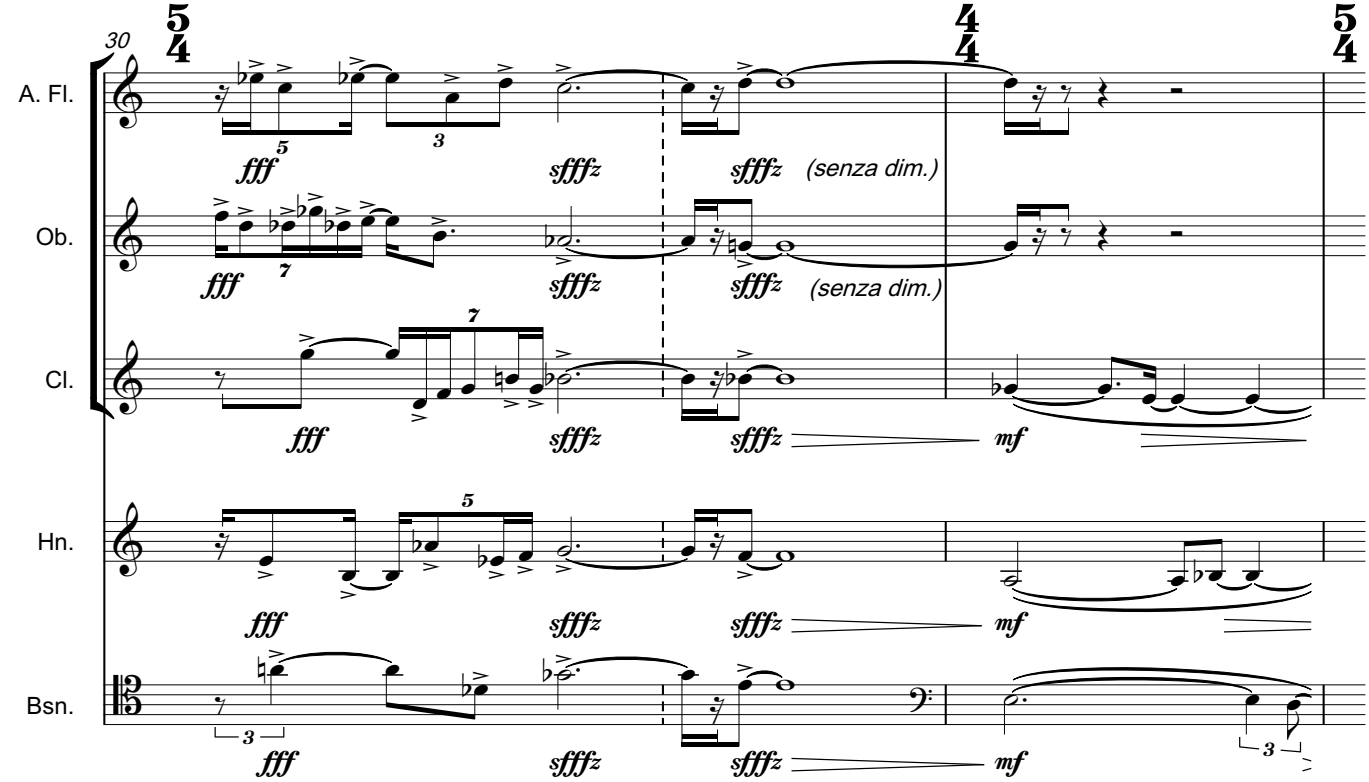

18
A. Fl.
C. A.
Cl.
Hn.
Bsn.
mf
p
pp
niente

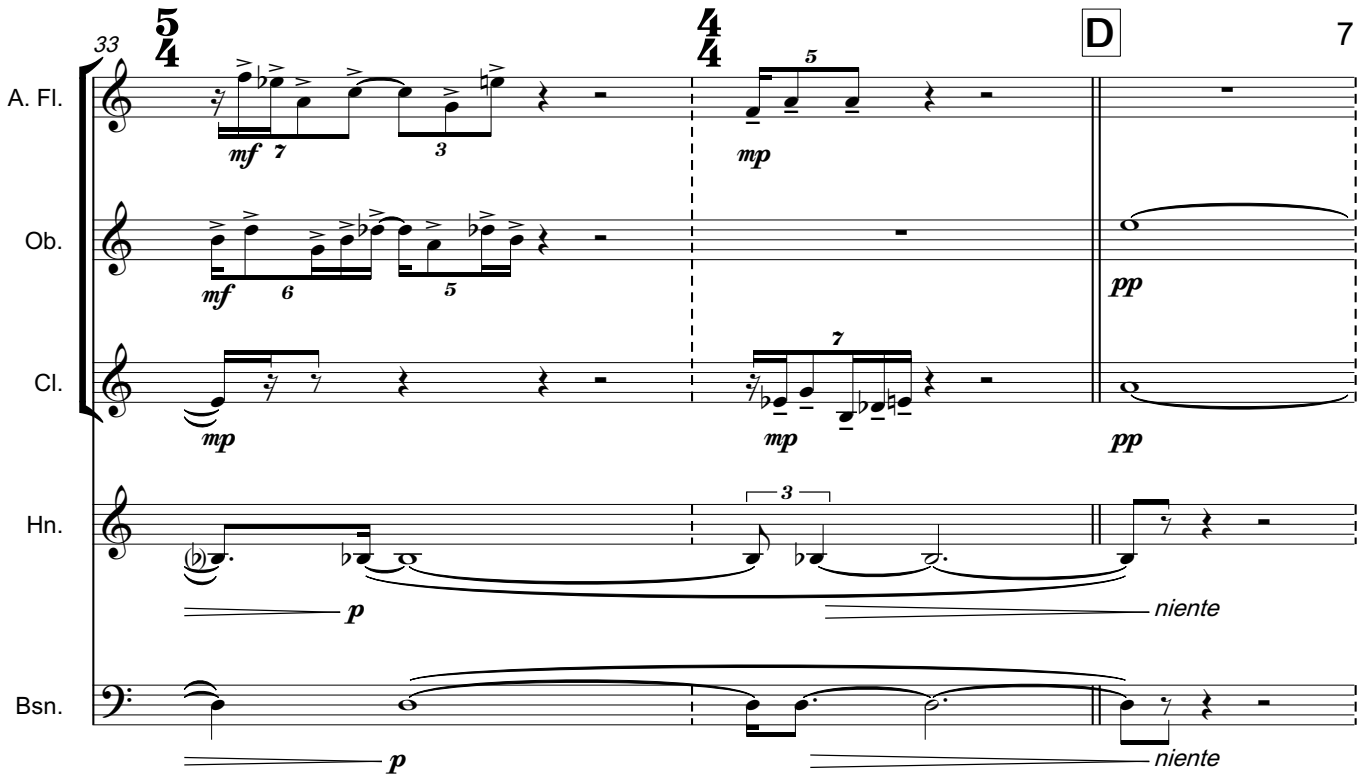

21
A. Fl.
Oboe
Ob.
Cl.
Hn.
Bsn.
mp


C
23
A. Fl.
Ob.
Cl.
Hn.
Bsn.
f

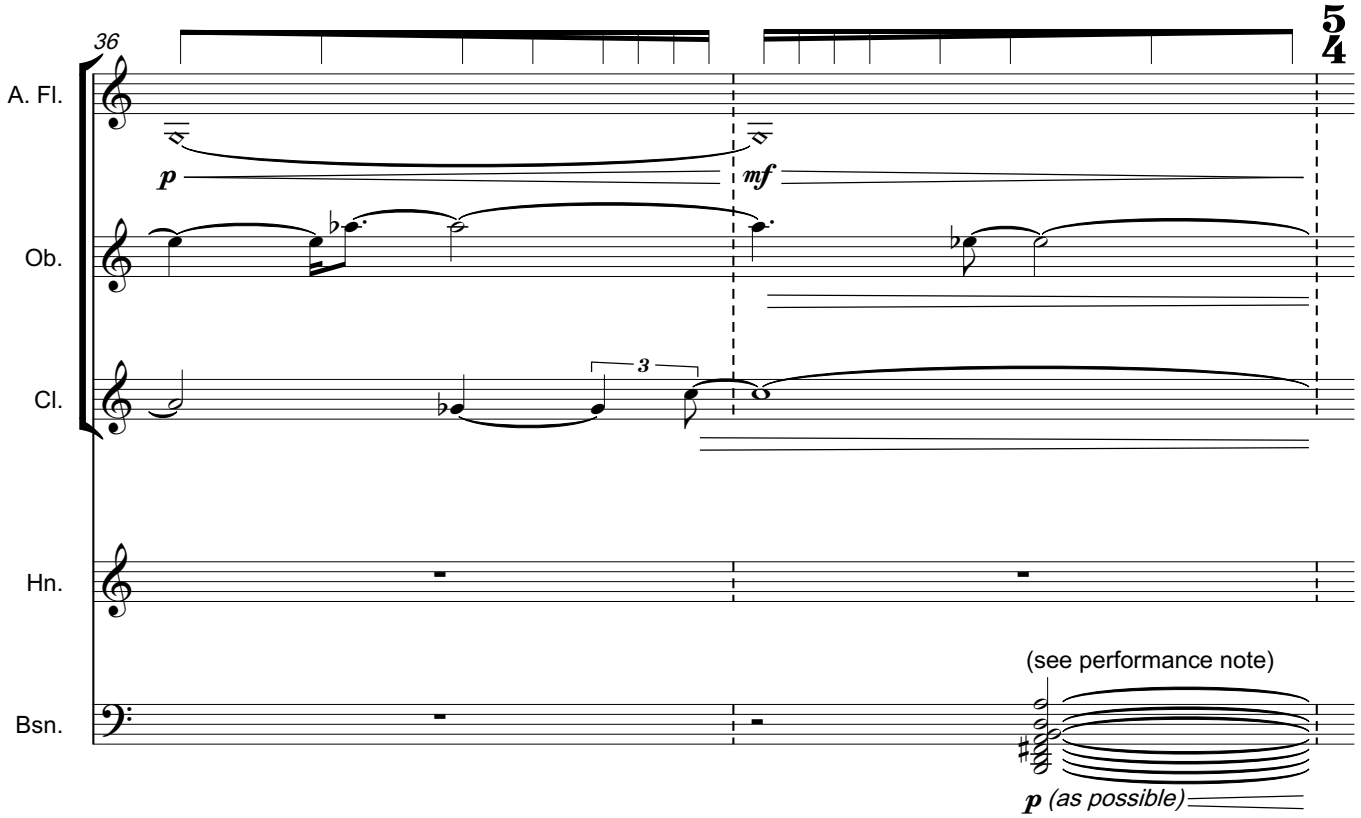

26
A. Fl.
Ob.
Cl.
Hn.
Bsn.
ff
sffz

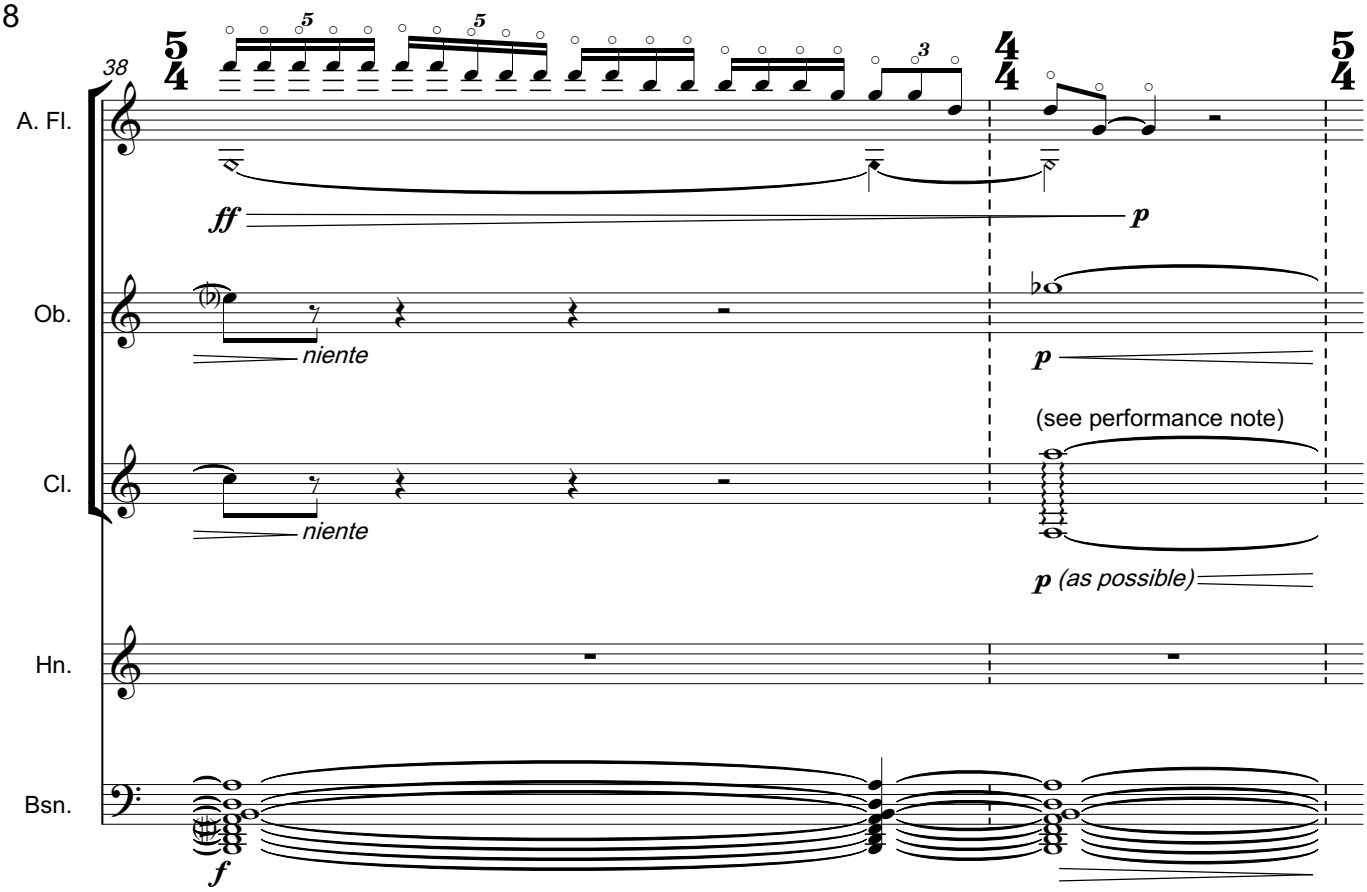

28
A. Fl.
Ob.
Cl.
Hn.
Bsn.
ff
sffz

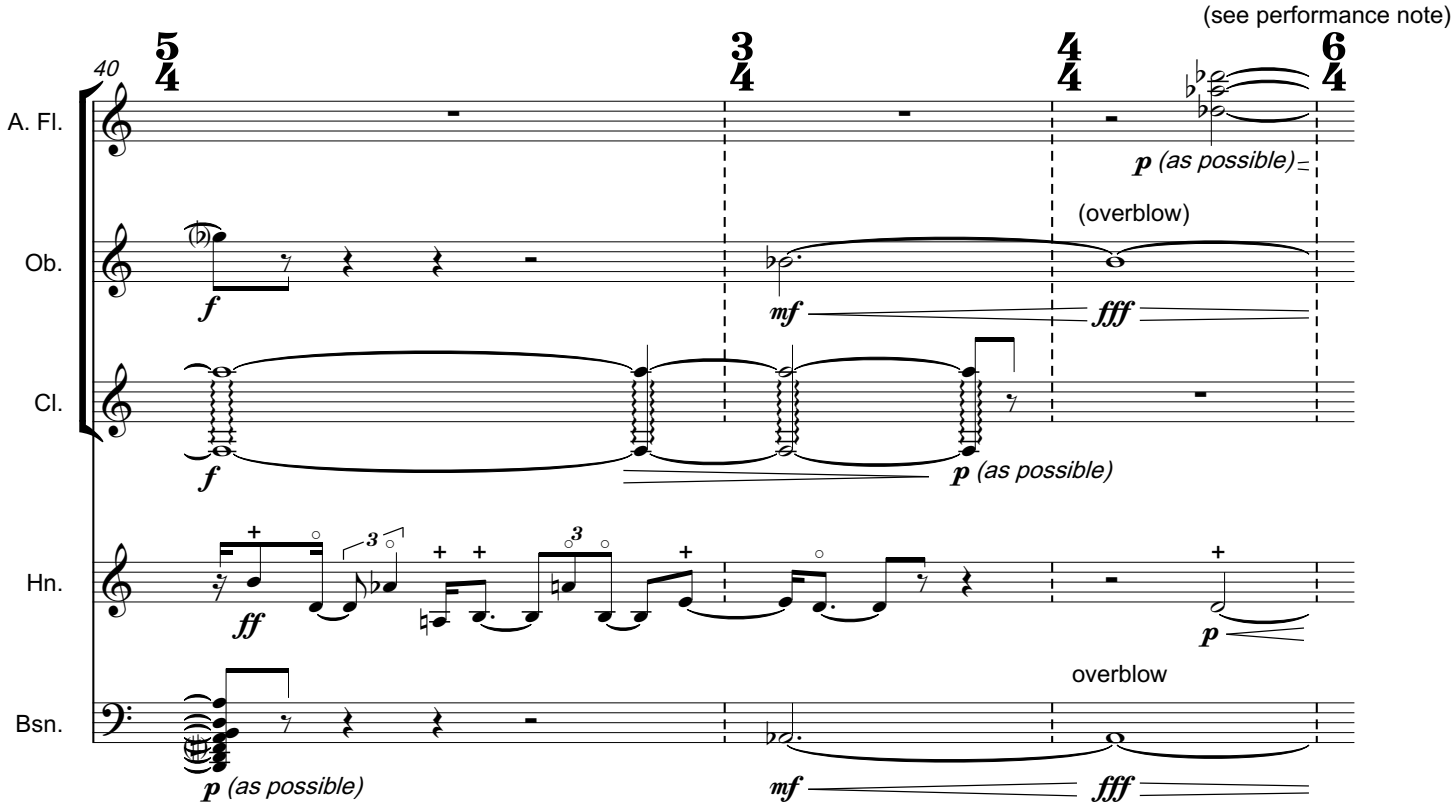

30
A. Fl.
Ob.
Cl.
Hn.
Bsn.
fff
sfffz
(senza dim.)
mf

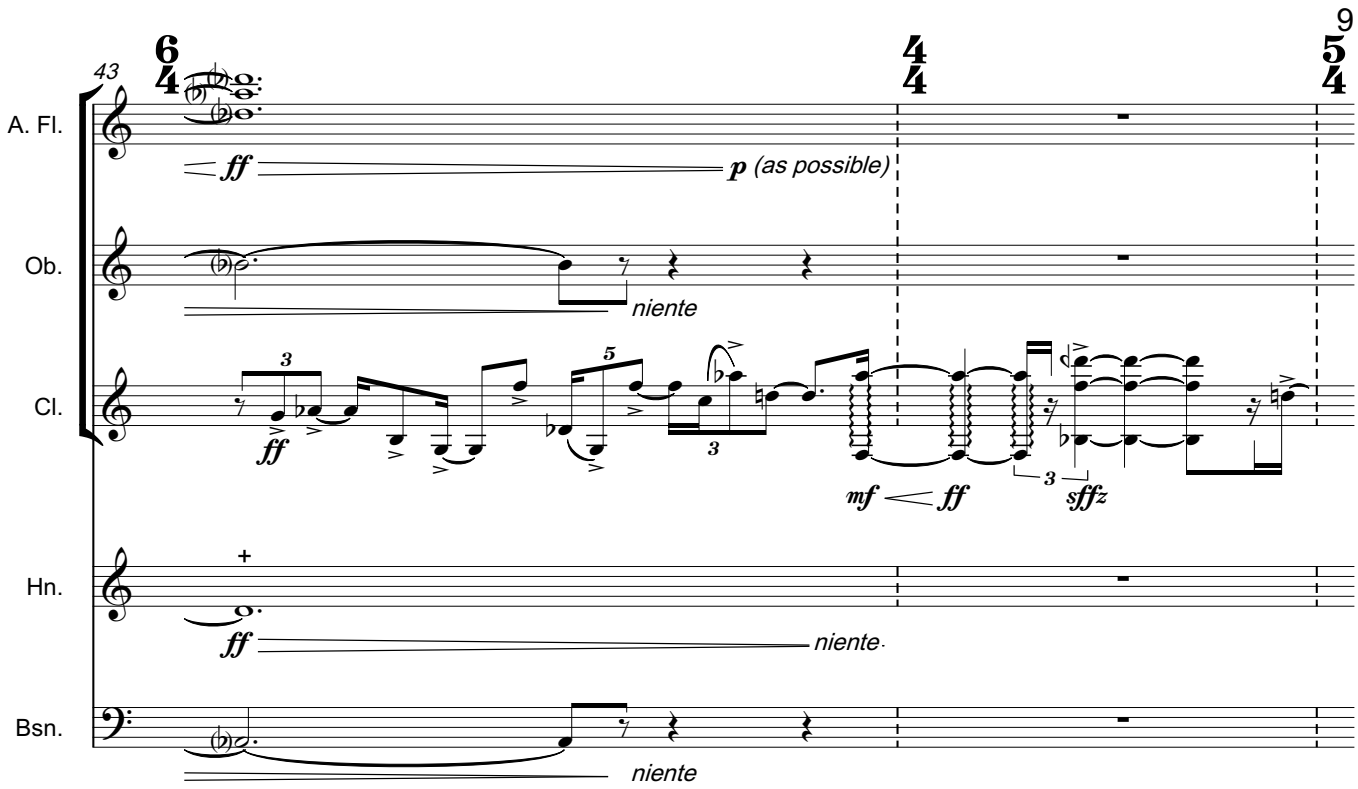


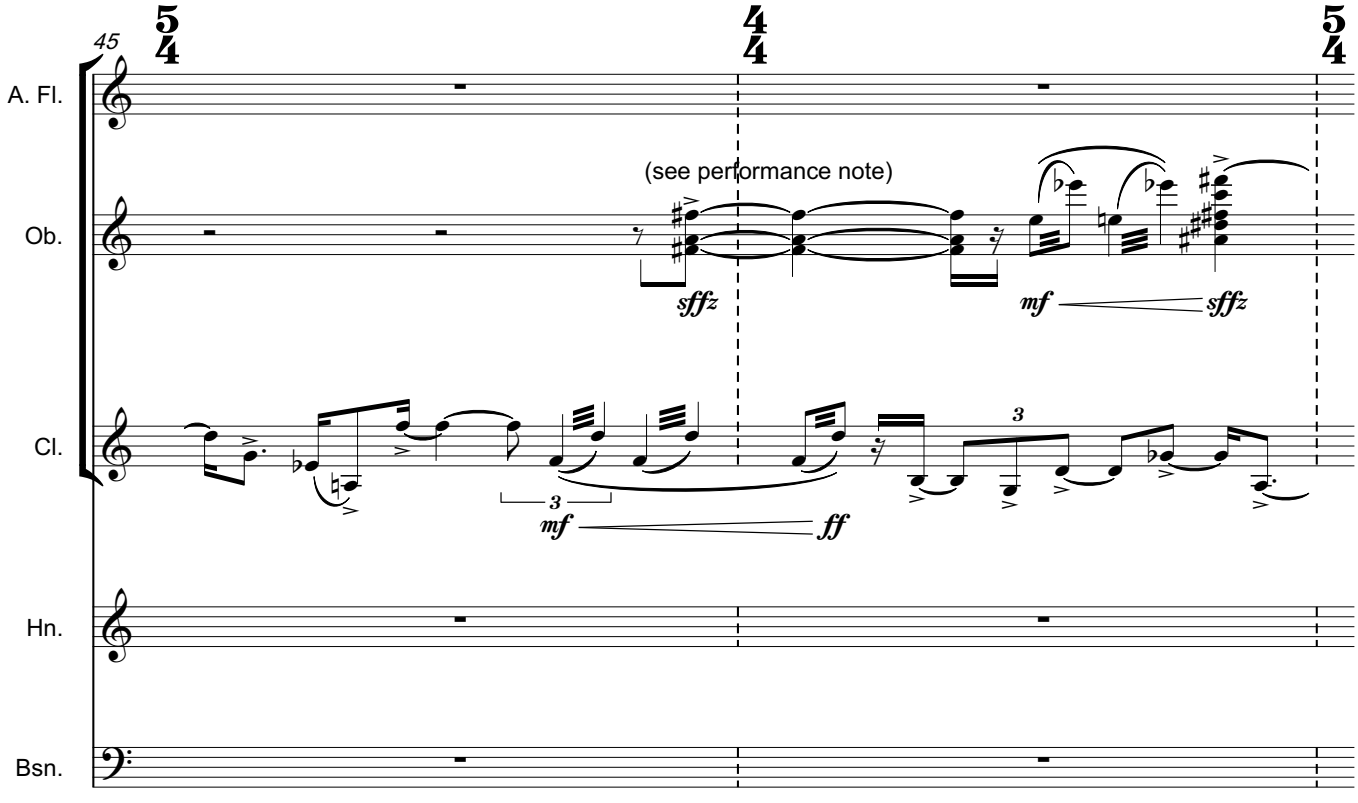
(play whistle sounds freely with the written fingering)

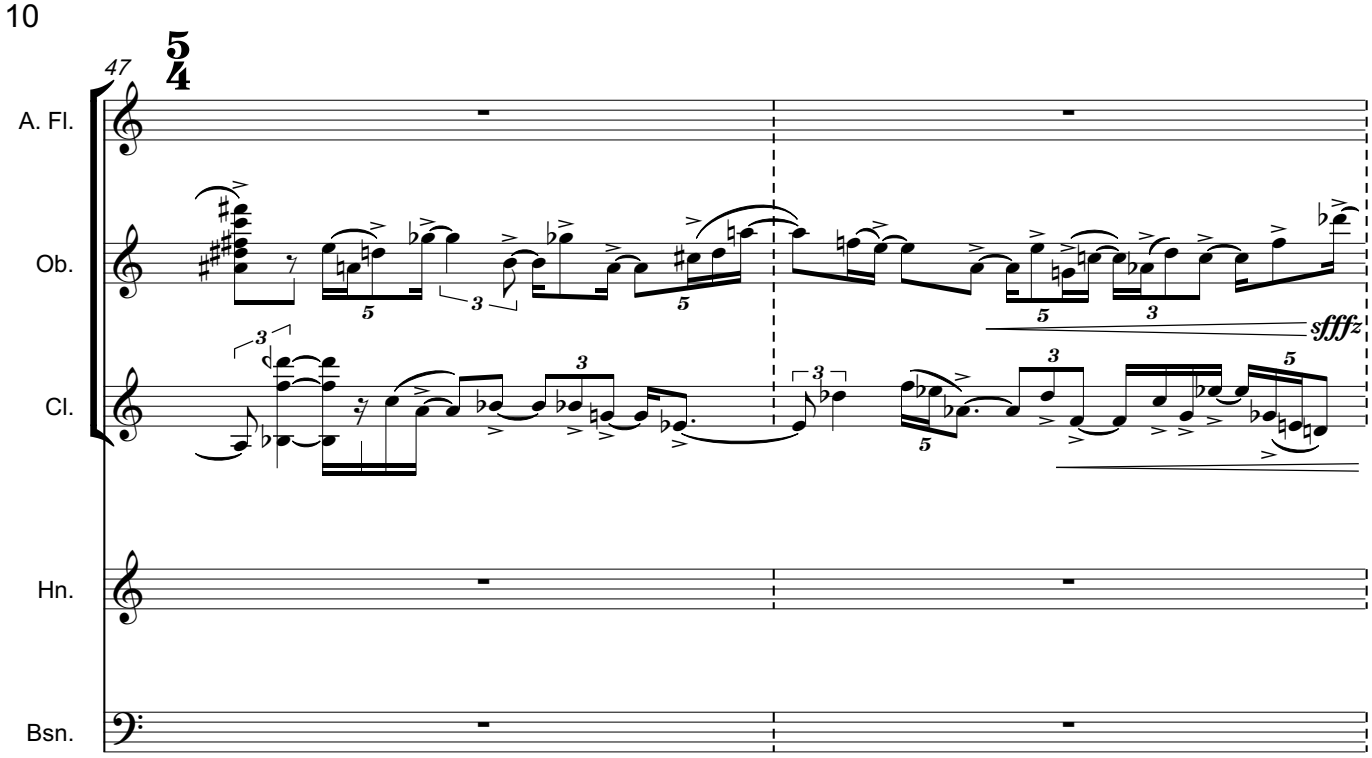


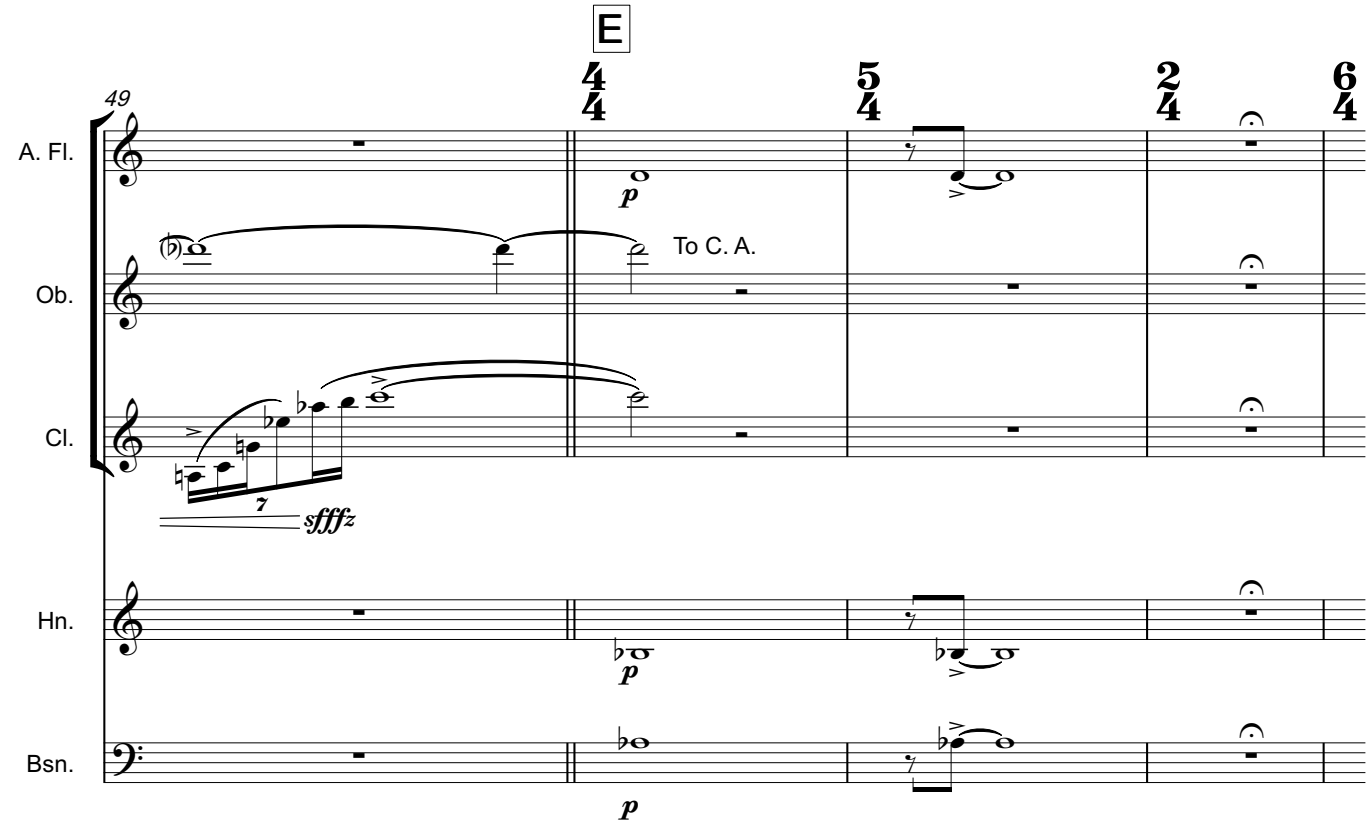

38
A. Fl.
Ob.
Cl.
Hn.
Bsn.
ff
p
niente
niente
(see performance note)
p (as possible)
f

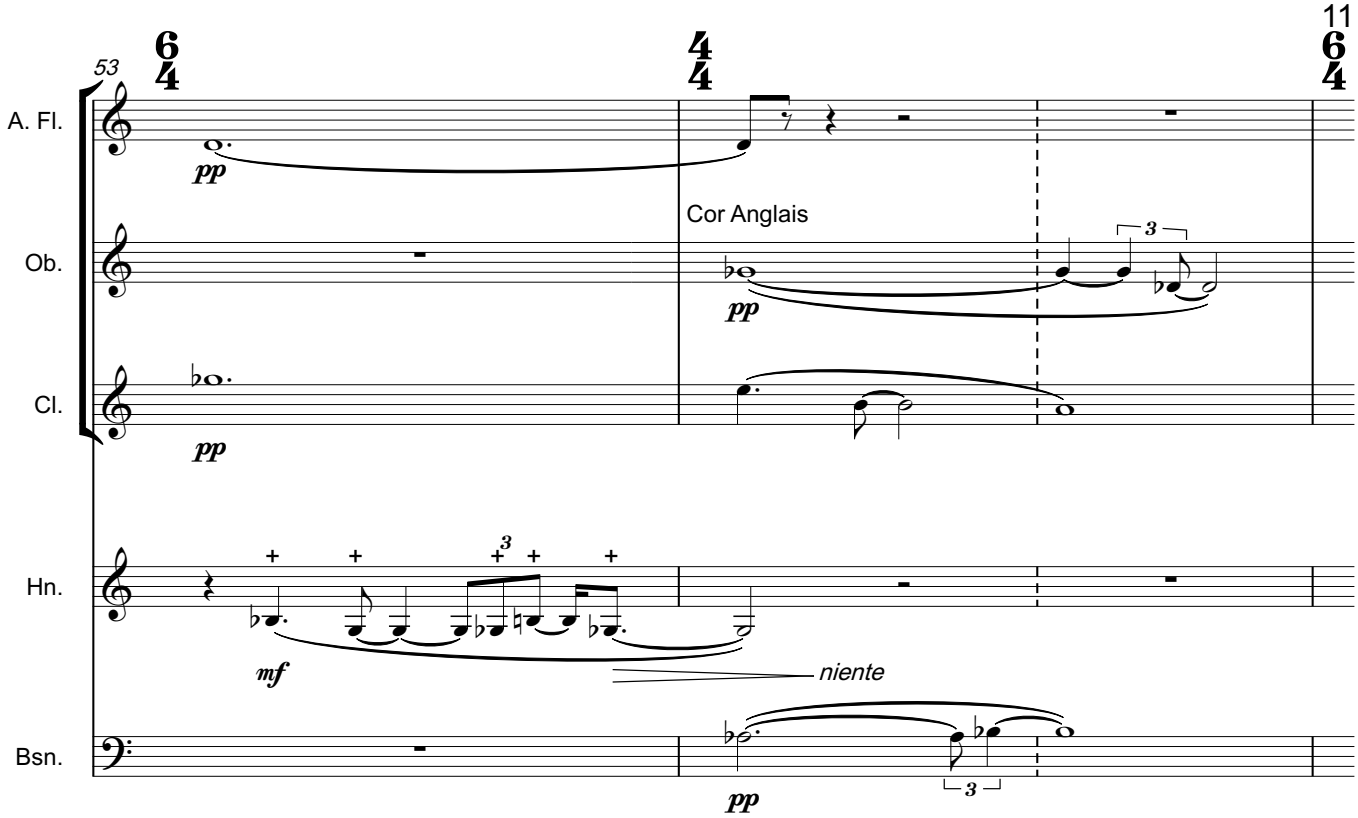

(see performance note)
40
A. Fl.
Ob.
Cl.
Hn.
Bsn.
p (as possible)
(overblow)
f
mf
fff
p (as possible)
ff
p
overblow
p (as possible)
mf
fff

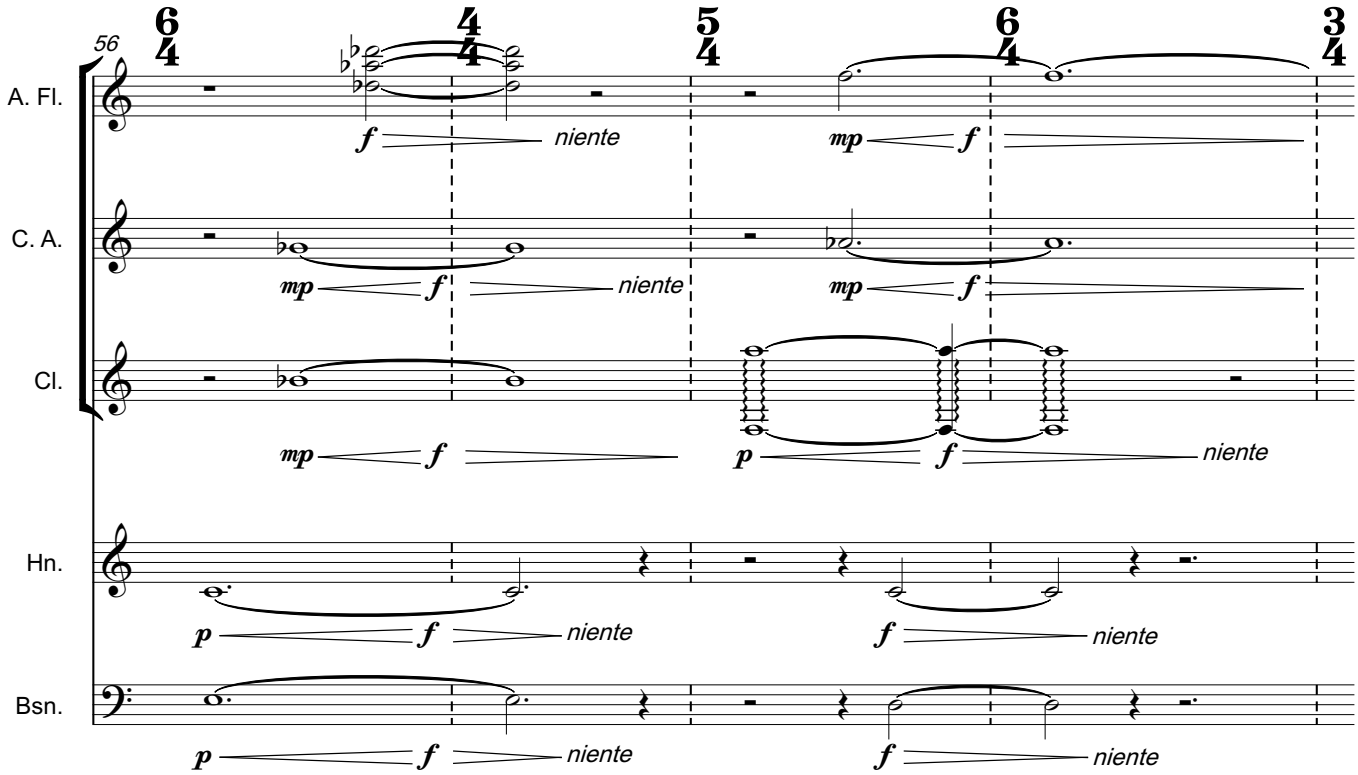

43
A. Fl.
Ob.
Cl.
Hn.
Bsn.
ff
p (as possible)
niente
mf
ff
sffz

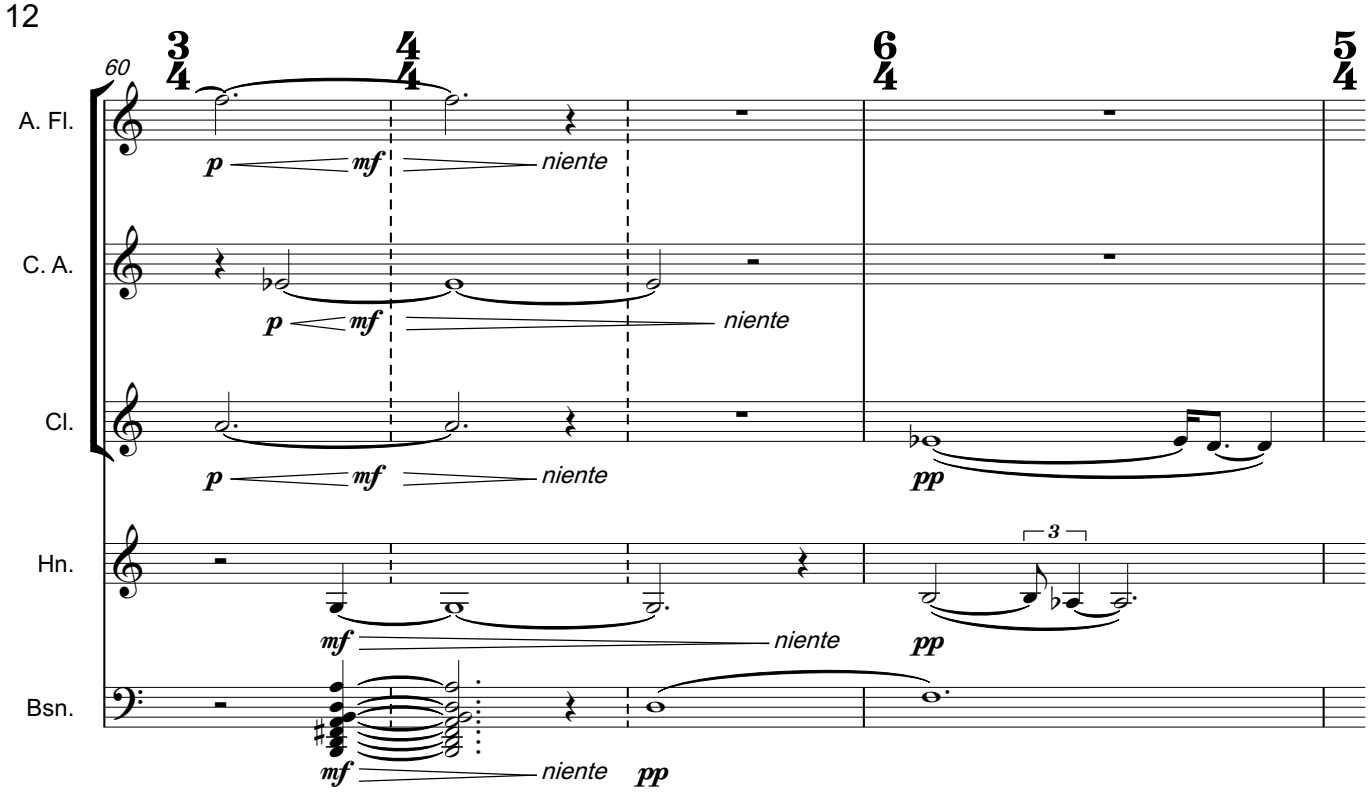

45
A. Fl.
Ob.
Cl.
Hn.
Bsn.
(see performance note)
sffz
mf
ff

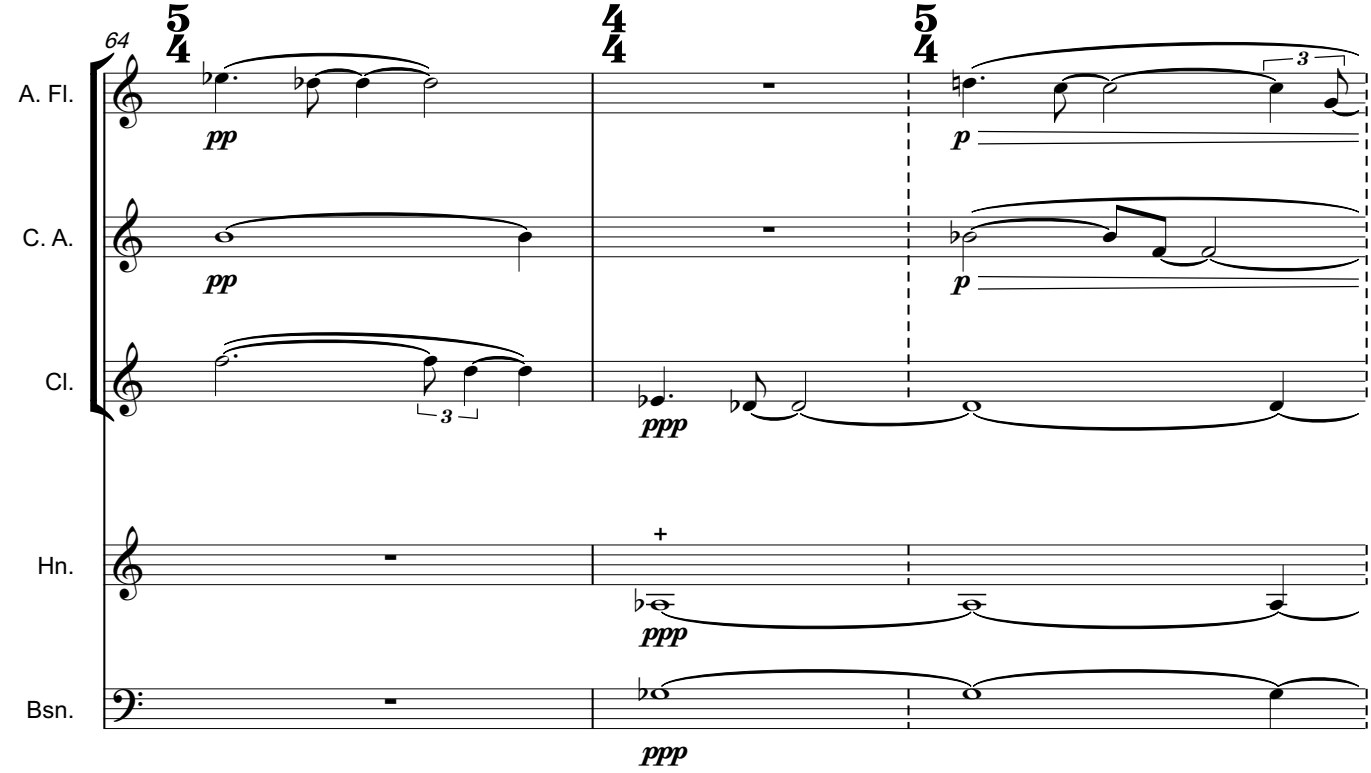

47
A. Fl.
Ob.
Cl.
Hn.
Bsn.
sfffz

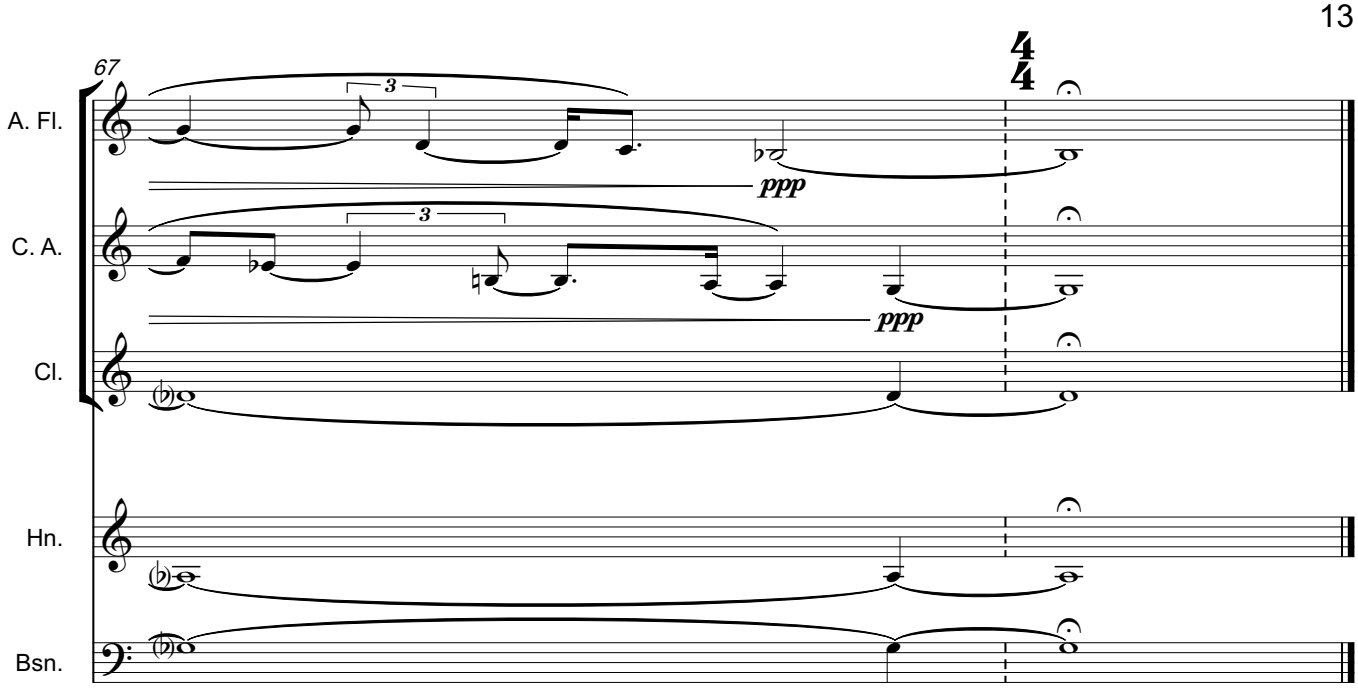

E
49
A. Fl.
Ob.
Cl.
Hn.
Bsn.
To C. A.
sfffz
p


53
A. Fl.
Ob.
Cl.
Hn.
Bsn.
Cor Anglais
pp
mf
niente
3


56
A. Fl.
C. A.
Cl.
Hn.
Bsn.
f
niente
mp
p
3


60
A. Fl.
C. A.
Cl.
Hn.
Bsn.
p
mf
niente
pp
3


64
A. Fl.
C. A.
Cl.
Hn.
Bsn.
pp
p
ppp
3
+


67
A. Fl.
C. A.
Cl.
Hn.
Bsn.
3
3
ppp
ppp
4
4

Inching Phase

for flute, viola, and harp

Poumpak Charuprakorn (2018)

FULL SCORE

Instrumentation

Flute

Viola

Harp

Duration: ca. 6 minutes

Performance Notes

Barlines and time signatures do not imply strong beats

Tremolo should be played as fast as possible

Tempos

♩ ca. 44 ♩ ca. 66 ♩ ca. 108

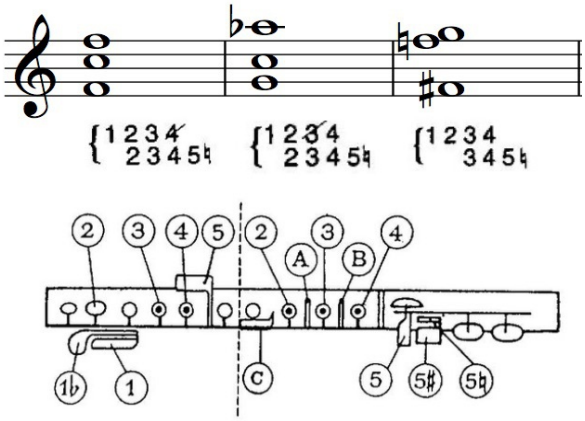
Pulses in some sections will be out of phase (only for a short period of time)
The pulses will be in sync again when stated '♩ ca. ... (all)'
Time signatures in the section will be different as well
(measures 12-15, 21-23, 41-43, 46, 49, 51, 54, 56, 58)

Bar numbers

Due to multiple tempos and time signatures, extra measures are added as follows:
46a (between 46 and 47) on flute and viola
54a and 56a on viola and harp
58a on flute and harp

Flute

pizz. = pizzicato sound (percussive sound with pitch)
flz. = flutter tonguing
brth. = breathy sound (half tone, half air)



(slashed numbers mean partially closed)

Viola

s.p. = sul ponticello
s.t. = sul tasto

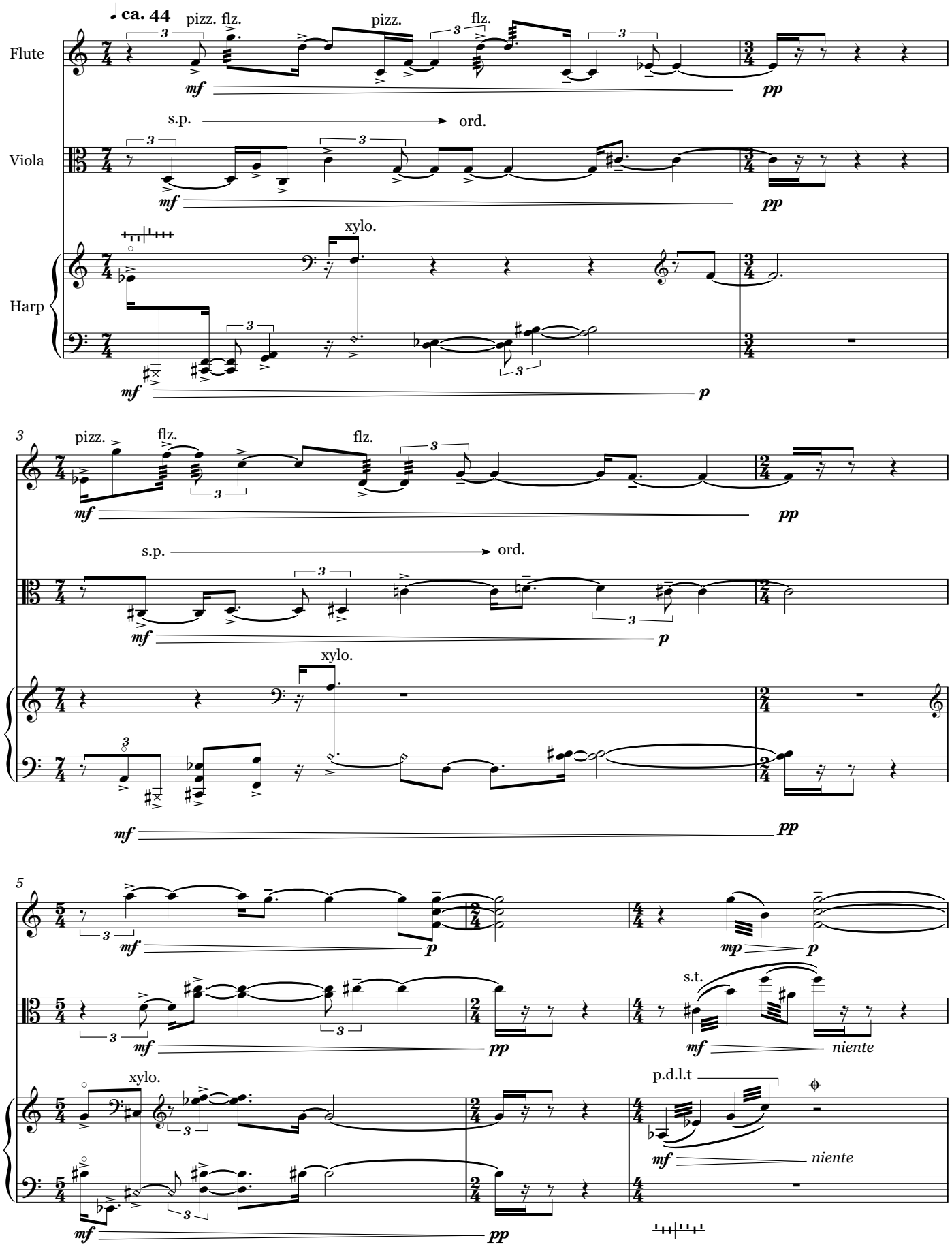
Harp

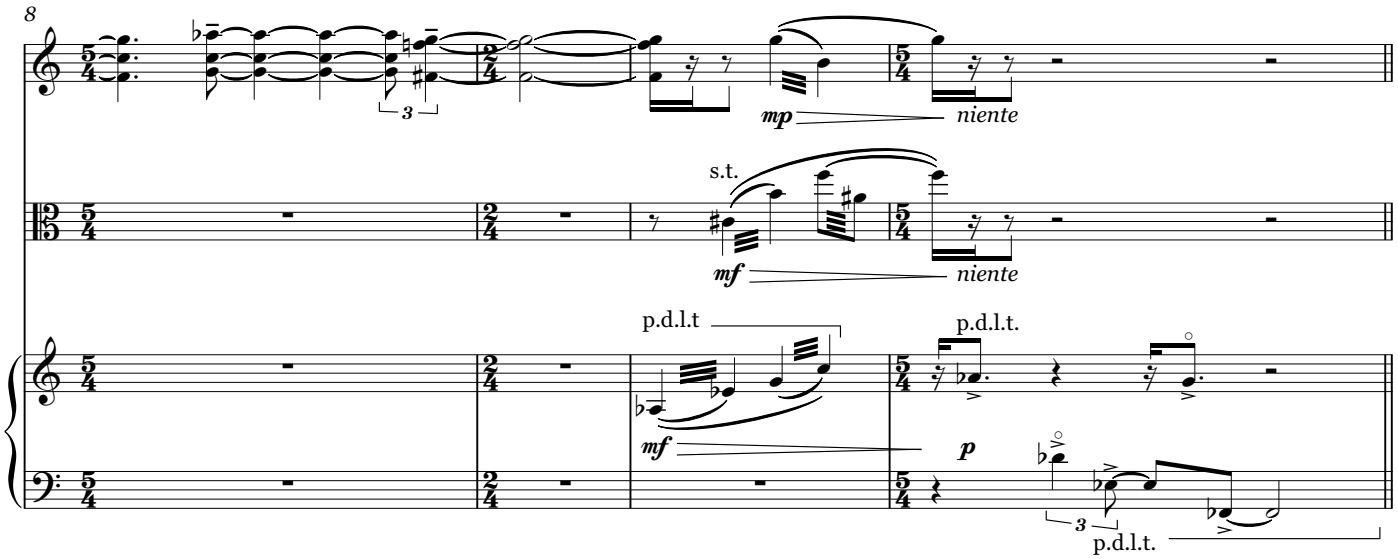
crossed notehead = Bartok's pizzicato
xylo. = xylophonic sound
p.d.l.t = pres de la table (only the notes it is attached to)

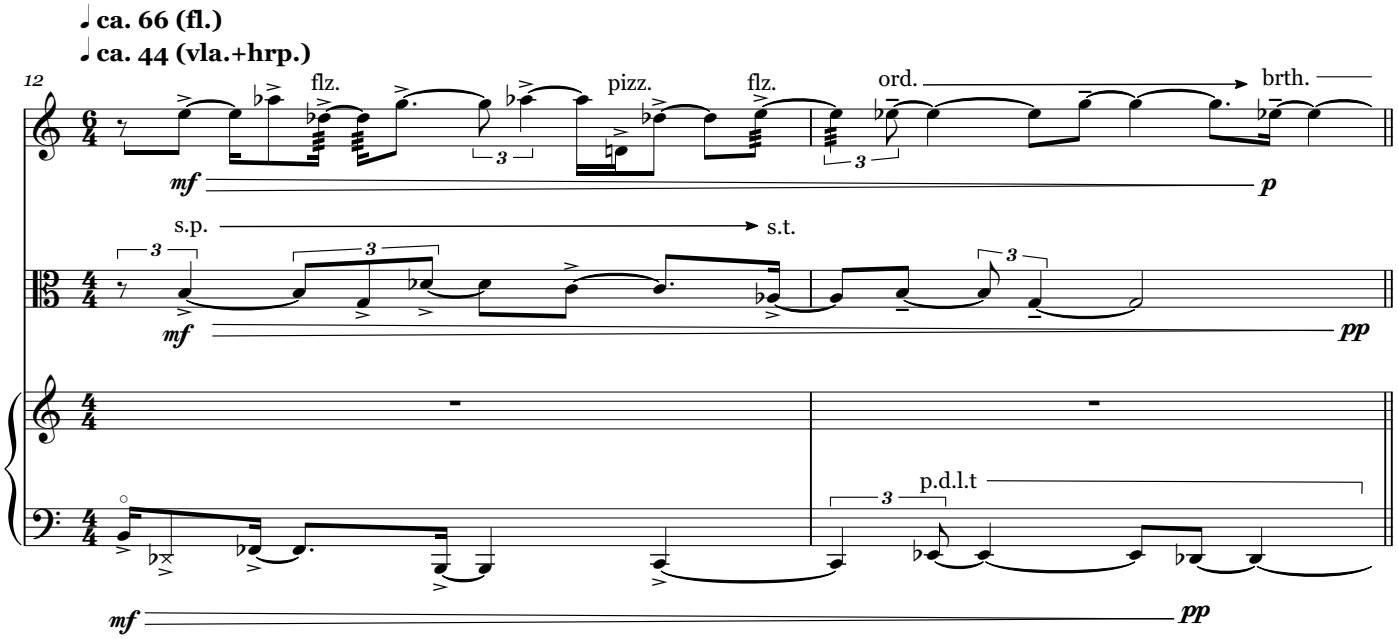
Inching Phase

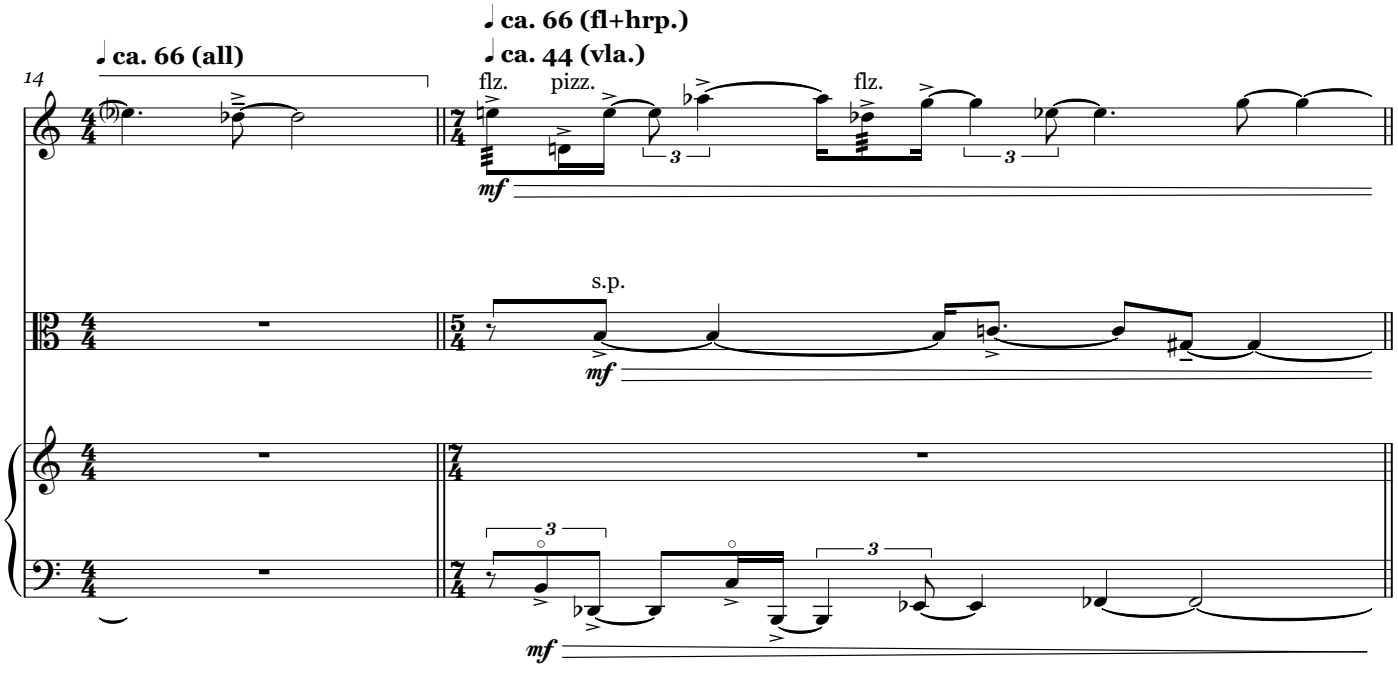
for flute, viola, and harp

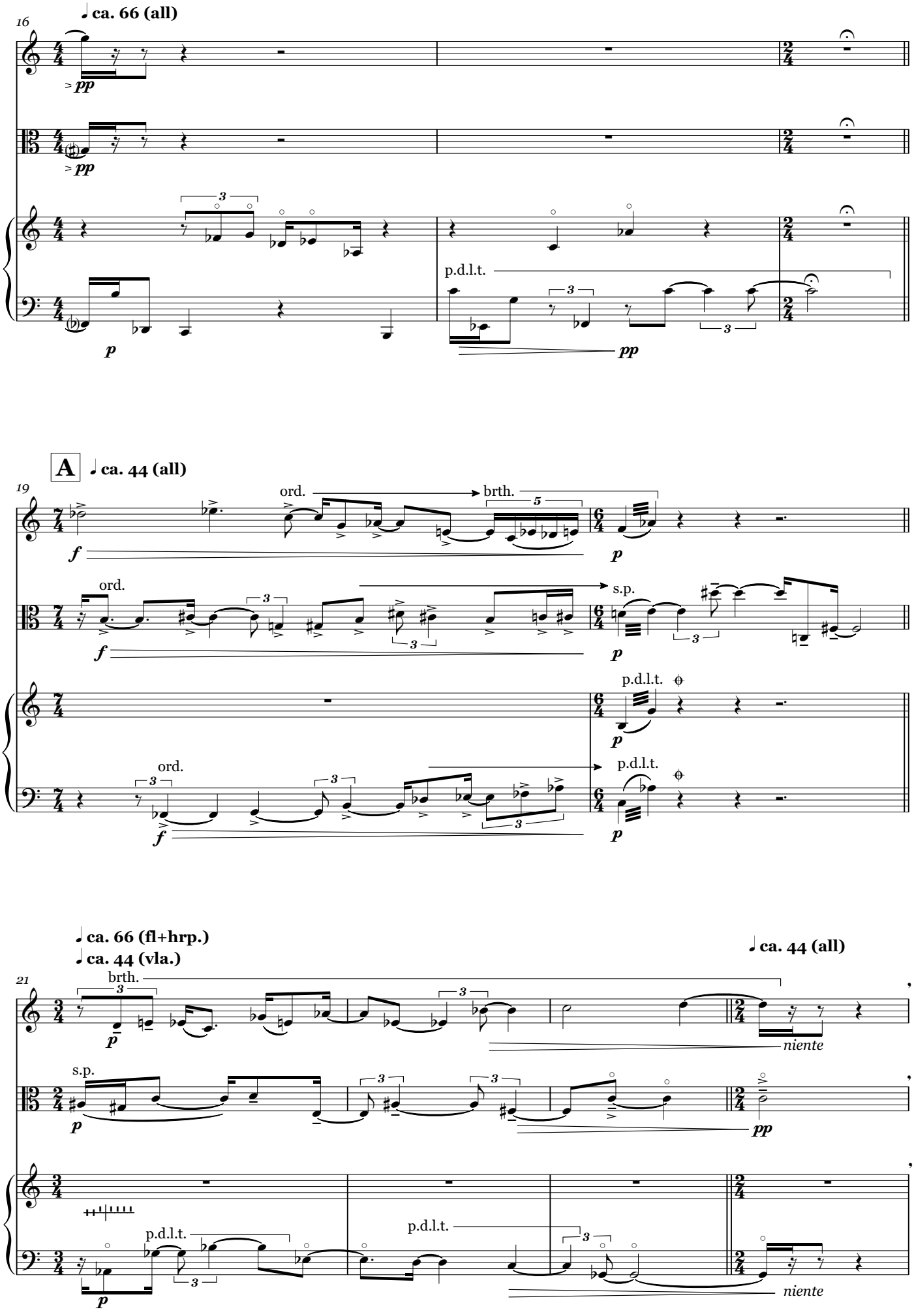
Poumpak Charuprakorn (2018)

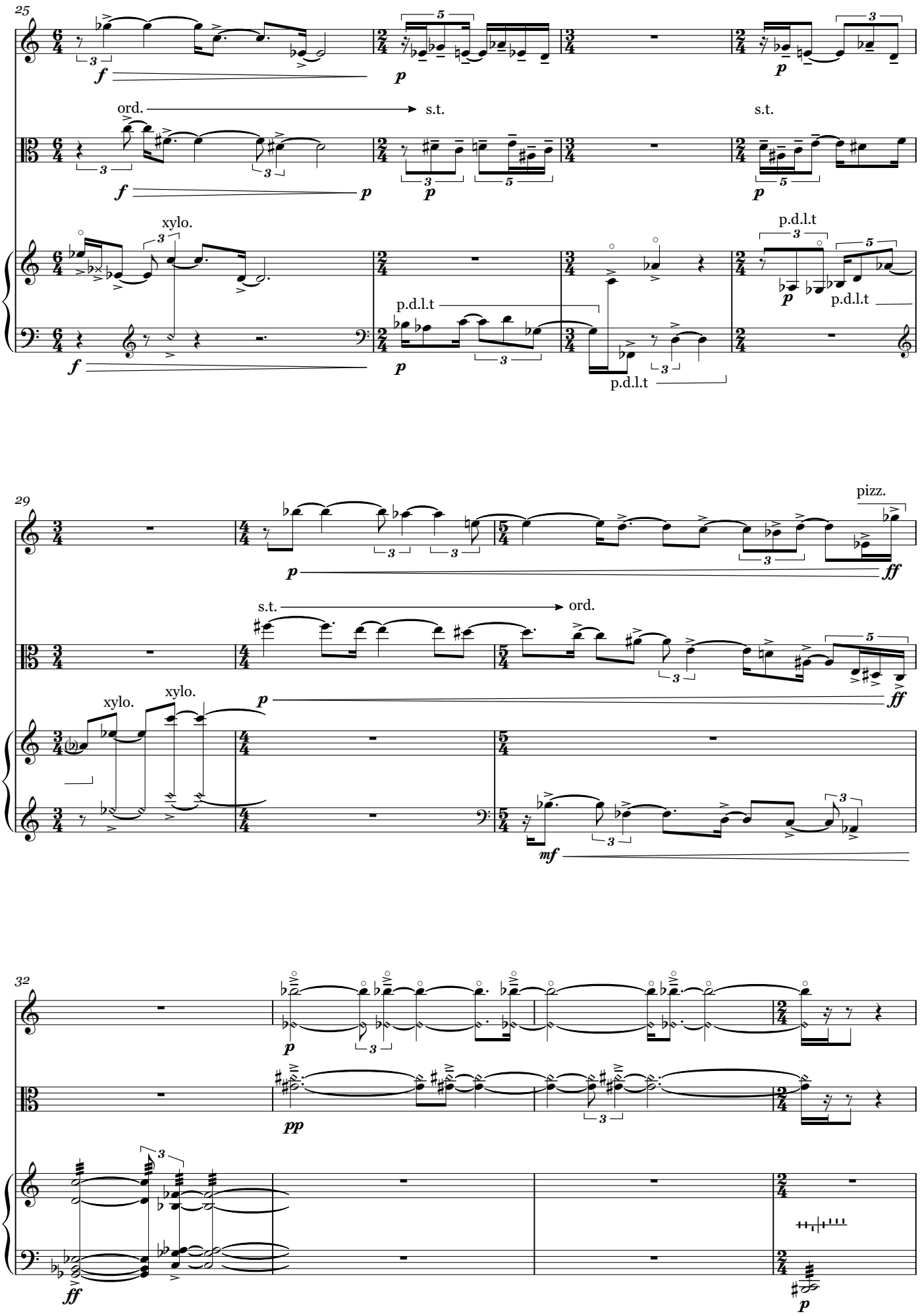


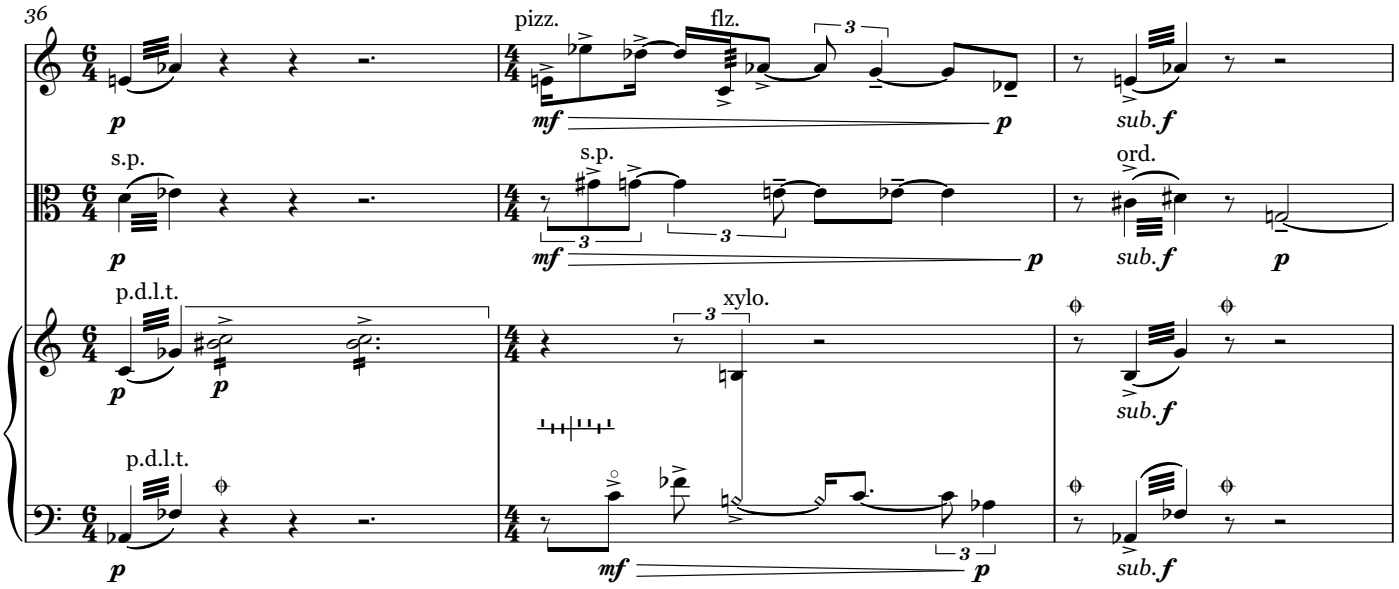

8
mp
niente
s.t.
mf
niente
p.d.l.t
mf
p.d.l.t.
p
3
p.d.l.t.

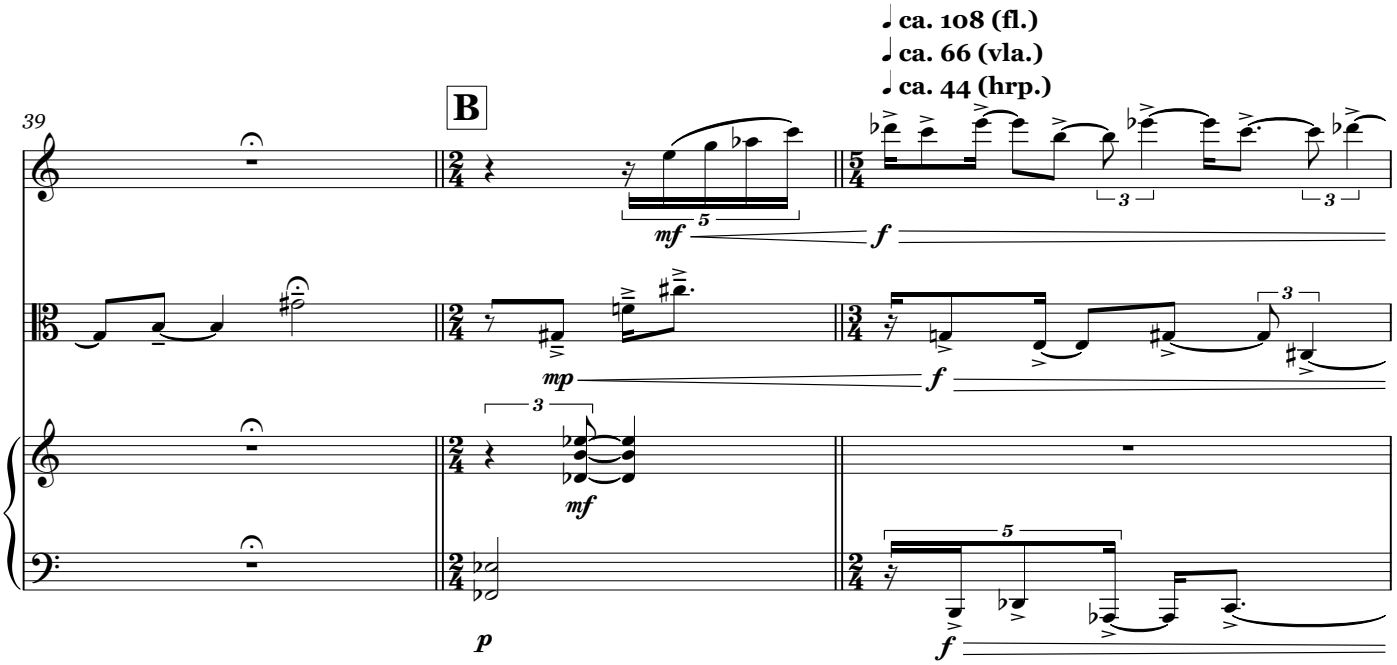

ca. 66 (fl.)
ca. 44 (vla.+hrp.)
12
flz.
pizz.
flz.
ord.
brth.
mf
p
s.p.
s.t.
mf
pp
p.d.l.t
mf
pp

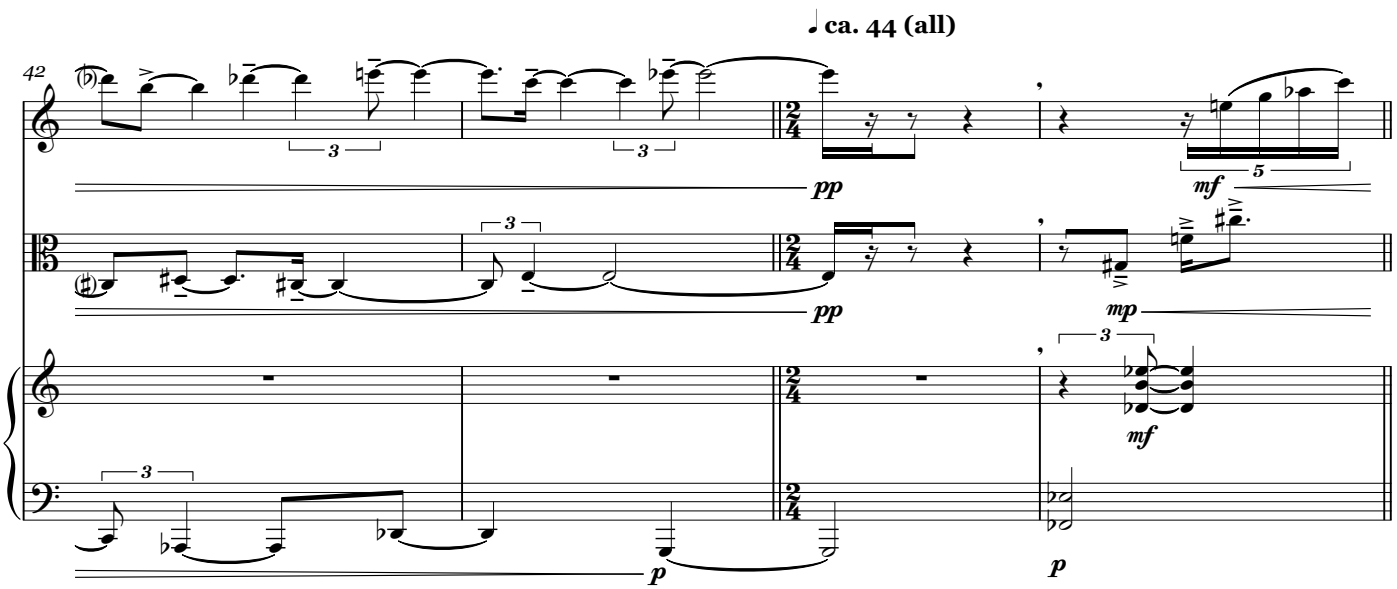

ca. 66 (all)
ca. 66 (fl+hrp.)
ca. 44 (vla.)
14
flz.
pizz.
flz.
mf
s.p.
mf
3
mf

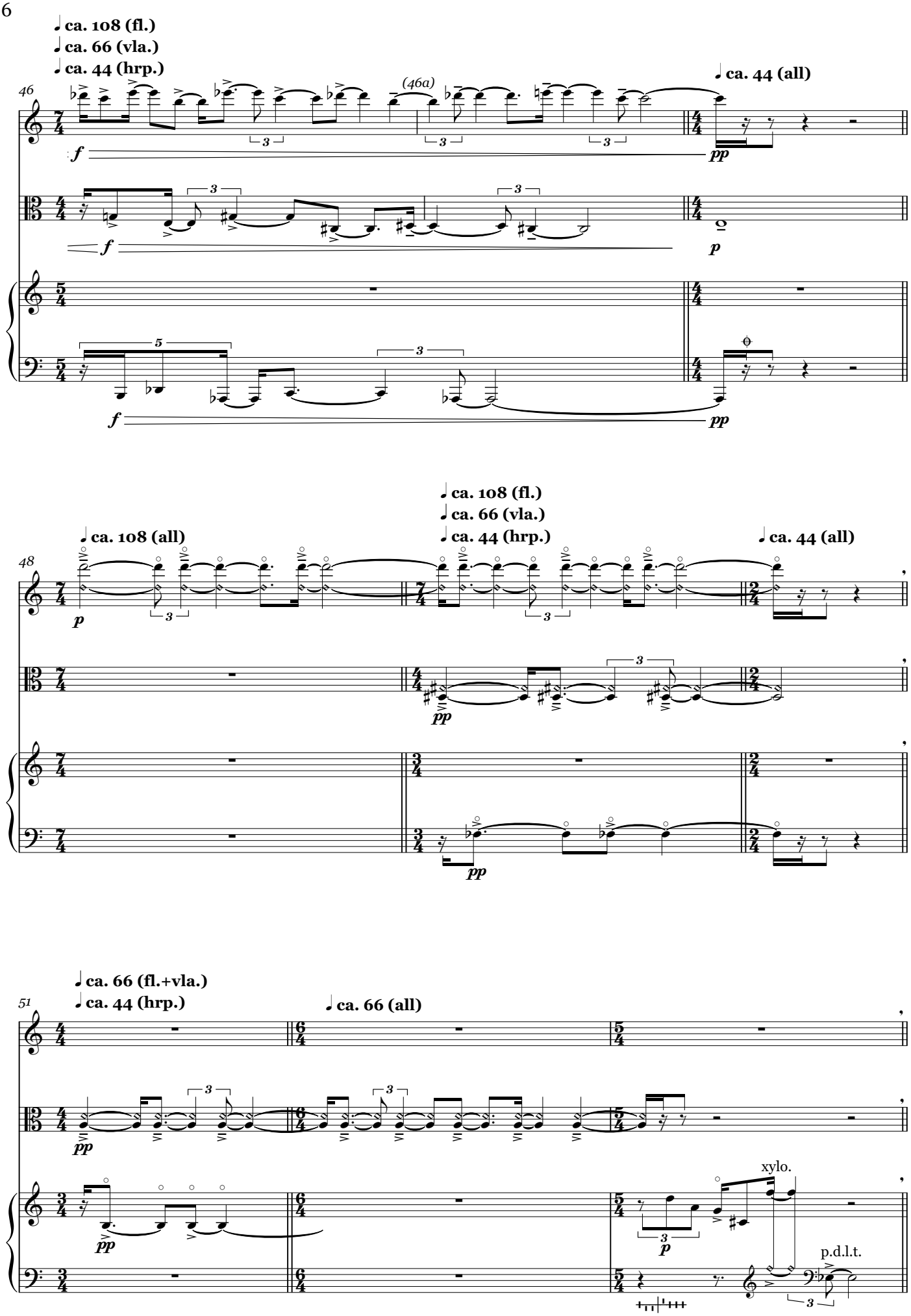

16
ca. 66 (all)
pp
pp
p
p.d.l.t.
pp
A
ca. 44 (all)
19
ord.
brth.
f
p
ord.
s.p.
f
p
p.d.l.t.
p
ord.
p.d.l.t.
f
p
ca. 66 (fl+hrp.)
ca. 44 (vla.)
ca. 44 (all)
21
brth.
p
niente
s.p.
p
pp
p.d.l.t.
p.d.l.t.
niente

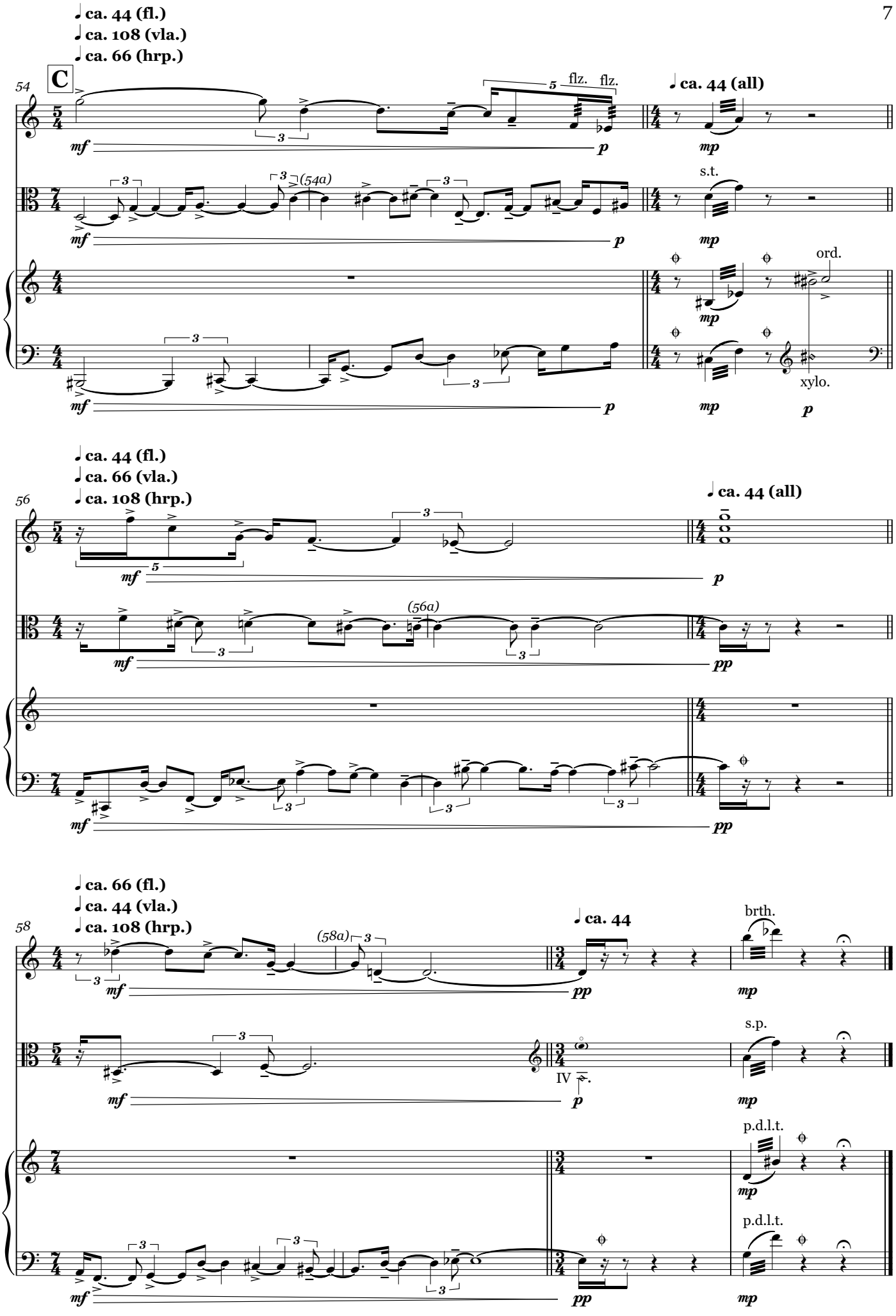

25
ord.
s.t.
s.t.
xylo.
p.d.l.t
p.d.l.t
p.d.l.t
29
pizz.
s.t.
ord.
xylo.
xylo.
32


36
pizz.
flz.
s.p.
s.p.
ord.
p.d.l.t.
xylo.
p.d.l.t.
sub.


39
B
ca. 108 (fl.)
ca. 66 (vla.)
ca. 44 (hrp.)


42
ca. 44 (all)


ca. 108 (fl.)
ca. 66 (vla.)
ca. 44 (hrp.)
46
(46a)
ca. 44 (all)
f
pp
p
48
ca. 108 (all)
ca. 108 (fl.)
ca. 66 (vla.)
ca. 44 (hrp.)
ca. 44 (all)
51
ca. 66 (fl.+vla.)
ca. 44 (hrp.)
ca. 66 (all)
xylo.
p.d.l.t.


♩ ca. 44 (fl.)
♩ ca. 108 (vla.)
♩ ca. 66 (hrp.)
54
C
flz.
flz.
♩ ca. 44 (all)
(54a)
s.t.
ord.
xylo.
♩ ca. 44 (fl.)
♩ ca. 66 (vla.)
♩ ca. 108 (hrp.)
56
♩ ca. 44 (all)
(56a)
♩ ca. 66 (fl.)
♩ ca. 44 (vla.)
♩ ca. 108 (hrp.)
58
(58a)
♩ ca. 44
brth.
s.p.
IV
p.d.l.t.
p.d.l.t.

Pivots

for horn, violin, violoncello, and piano

Poumpak Charuprakorn (2019)

FULL SCORE IN C

i

Performance Notes

- Barlines and time signatures do not imply any strong beats.
- Horn player has to sit or stand in front of the piano pointing the bell towards the inside of the piano (especially at rehearsal marks A and B).

Tempos

- Horn's tempo in measures 27 and 29 is faster than the rest of the ensemble; the time signature will be different from other instruments as well.

Horn

- A mute is needed (at rehearsal mark D).

Violin and Violoncello

- s.t. = sul tasto
- s.p. = sul ponticello
- Tremolos should be played as fast as possible.
- Harmonics at rehearsal mark C are 8th-12th natural harmonics near the bridge (Roman numerals for strings are given above the note).
- Mutes are needed (at rehearsal mark D).

Piano

- S.P. = sostenuto pedal
- Diamond noteheads = silently press the keys for resonance

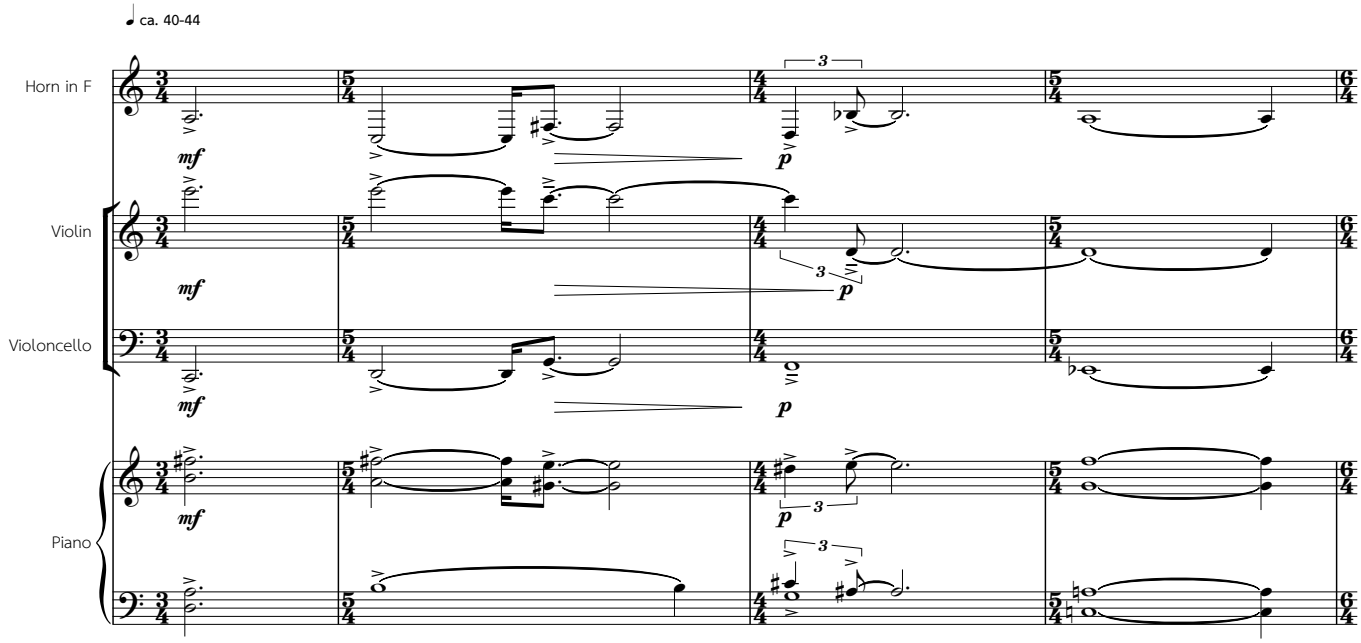
Duration: circa 5 minutes

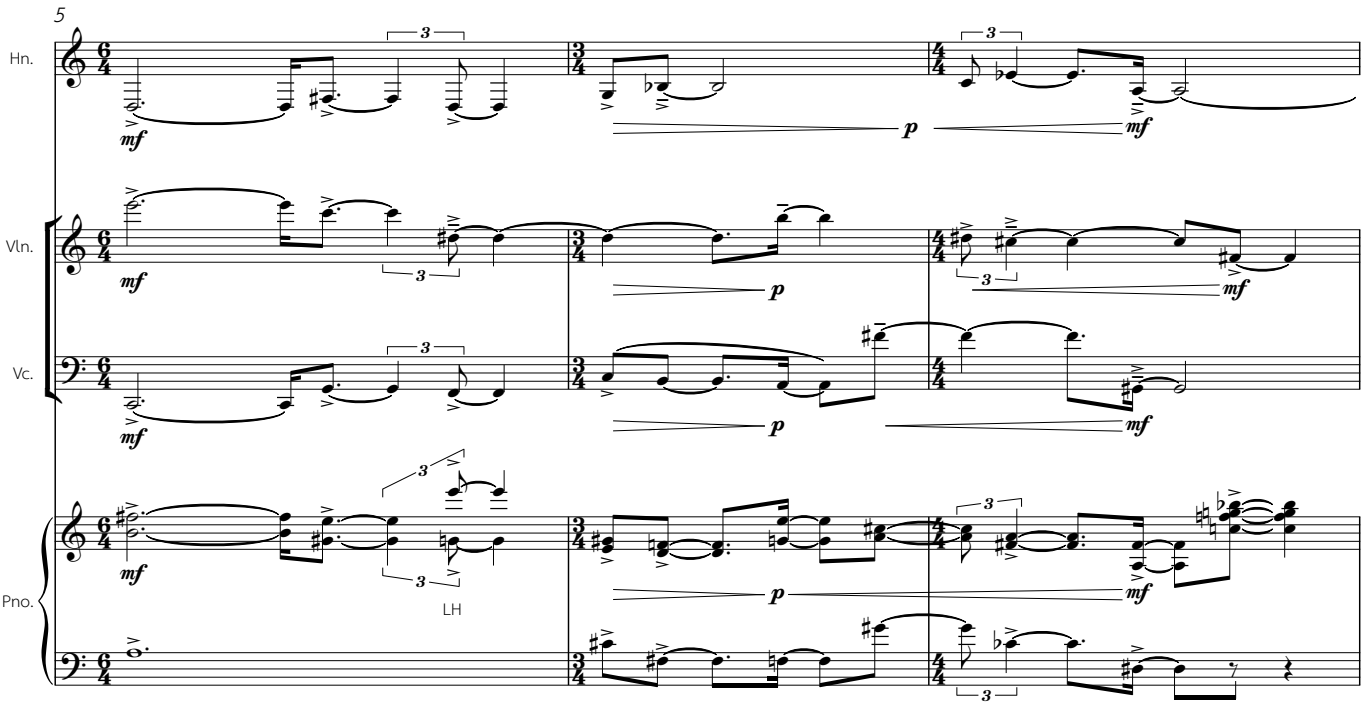
Notes: The recording accompanying this score is of an initial version. The only difference is in measures 27 and 29 on violin and cello.

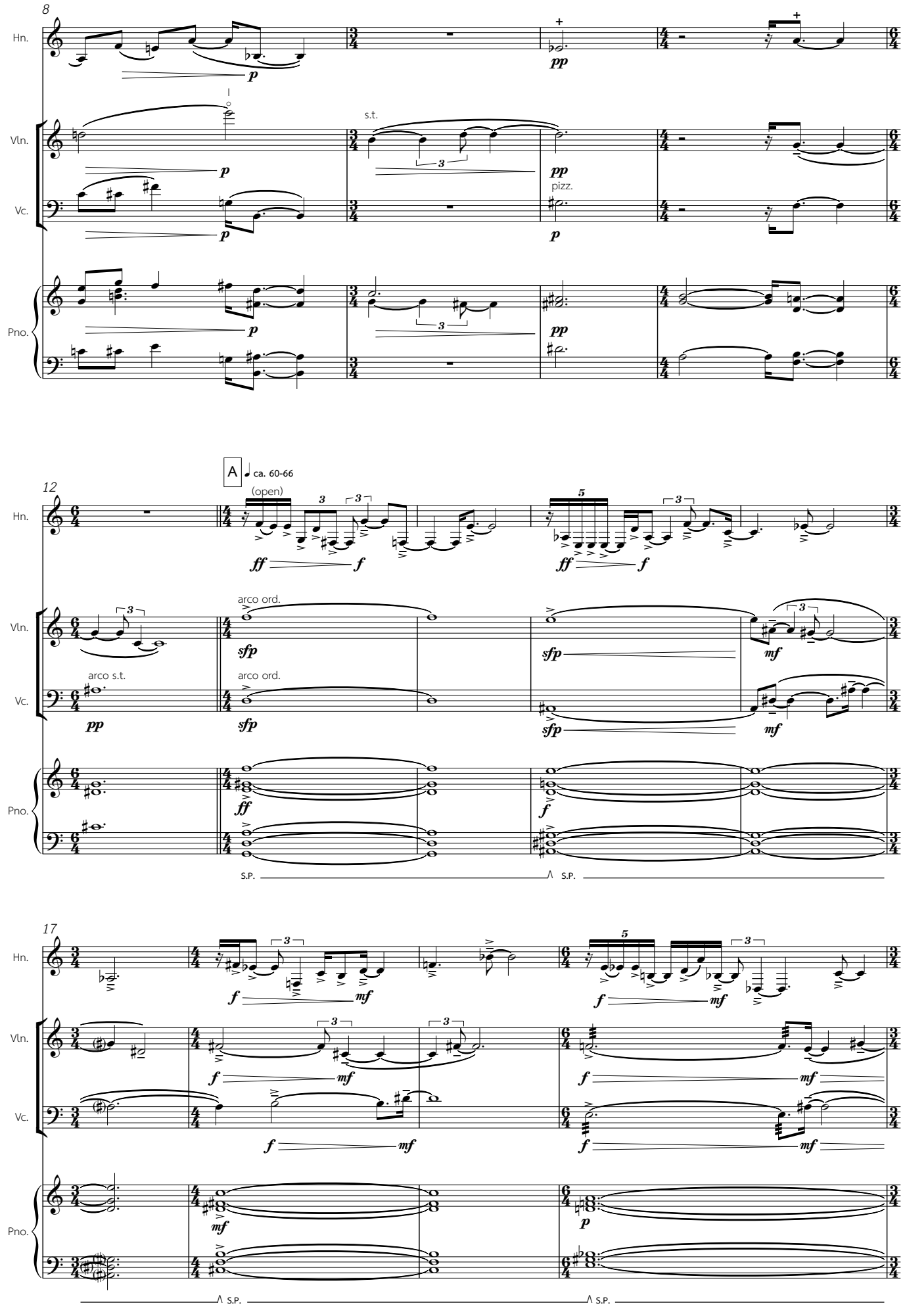
Pivots

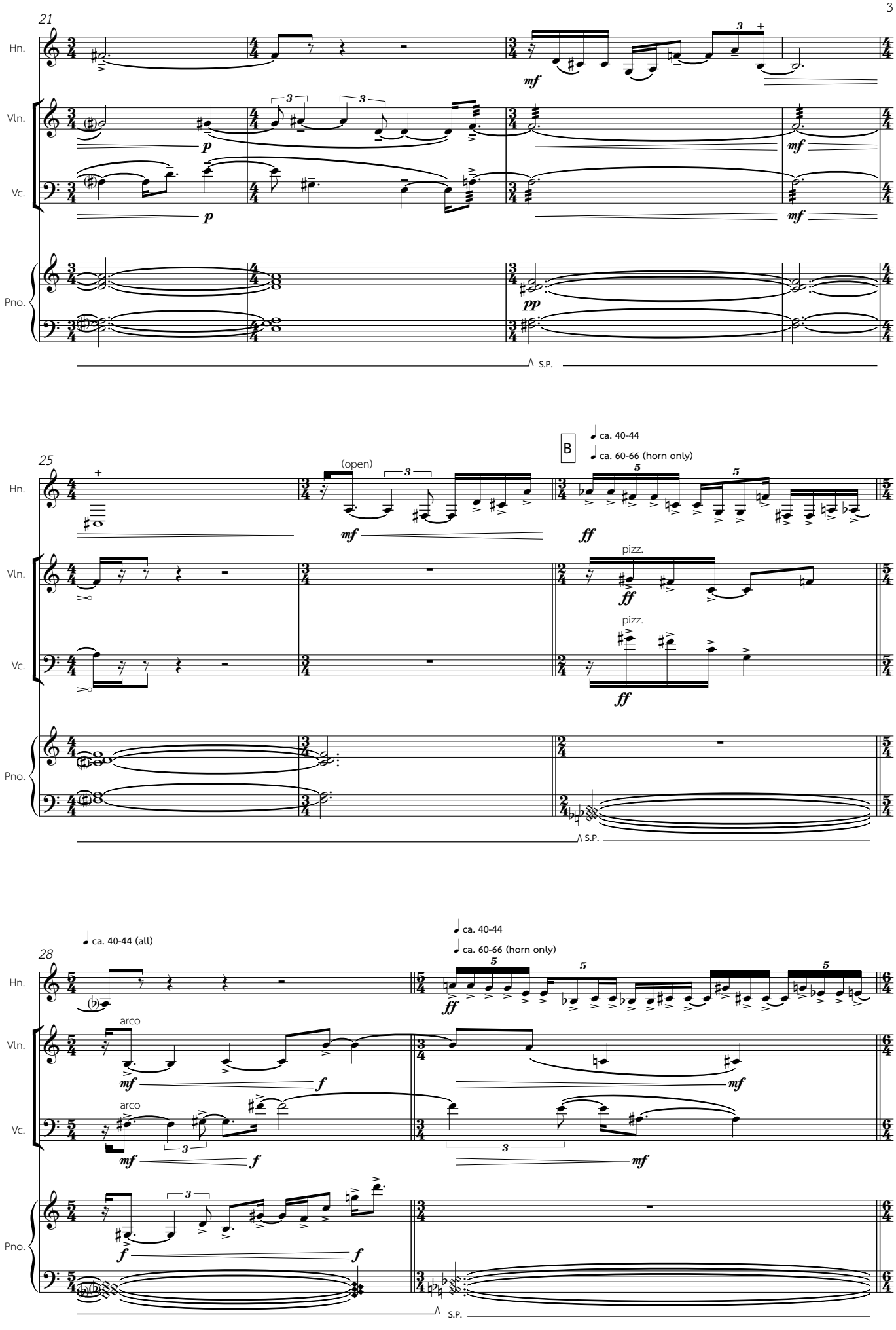
for horn, violin, violoncello, and piano

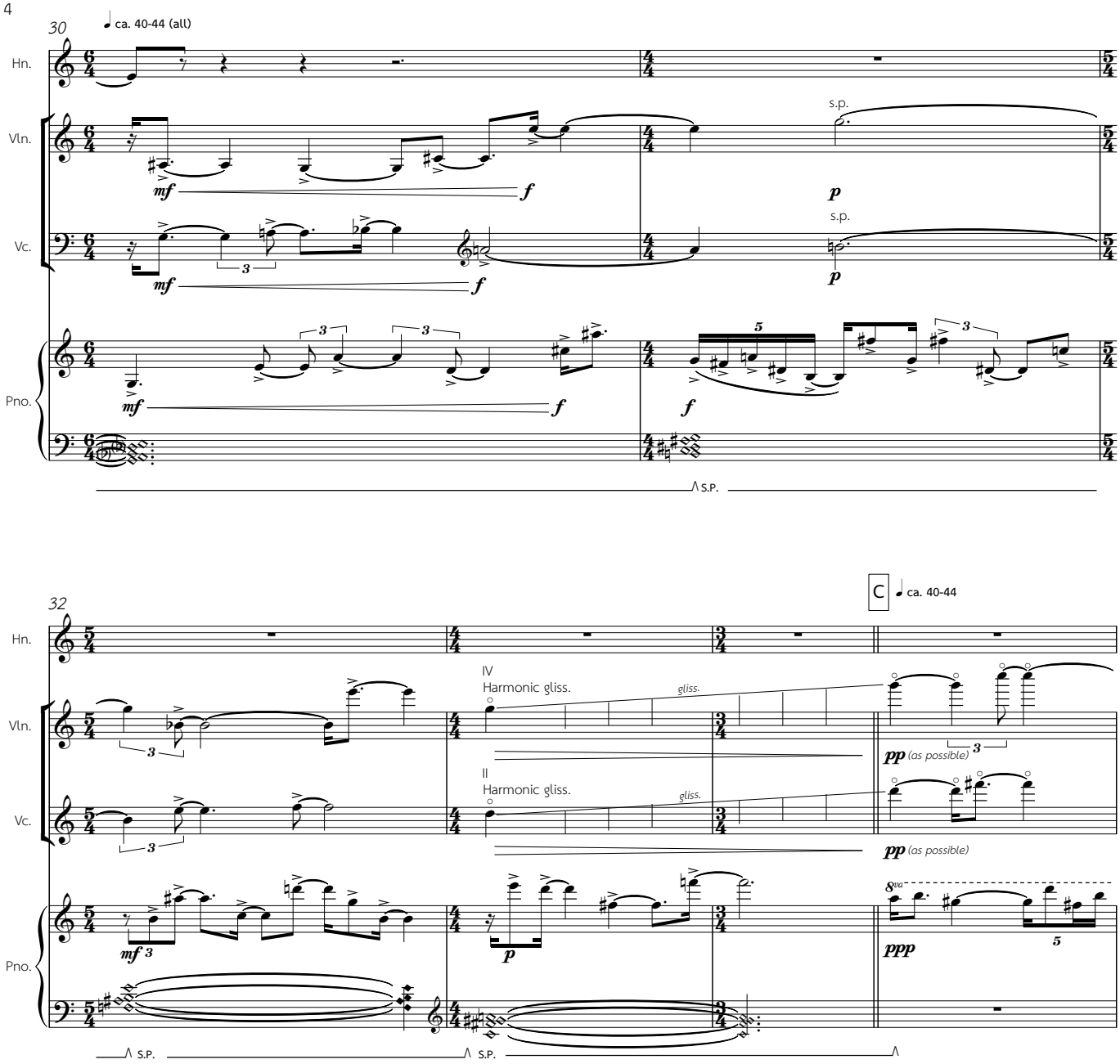
Poumpak Charuprakorn (2019)

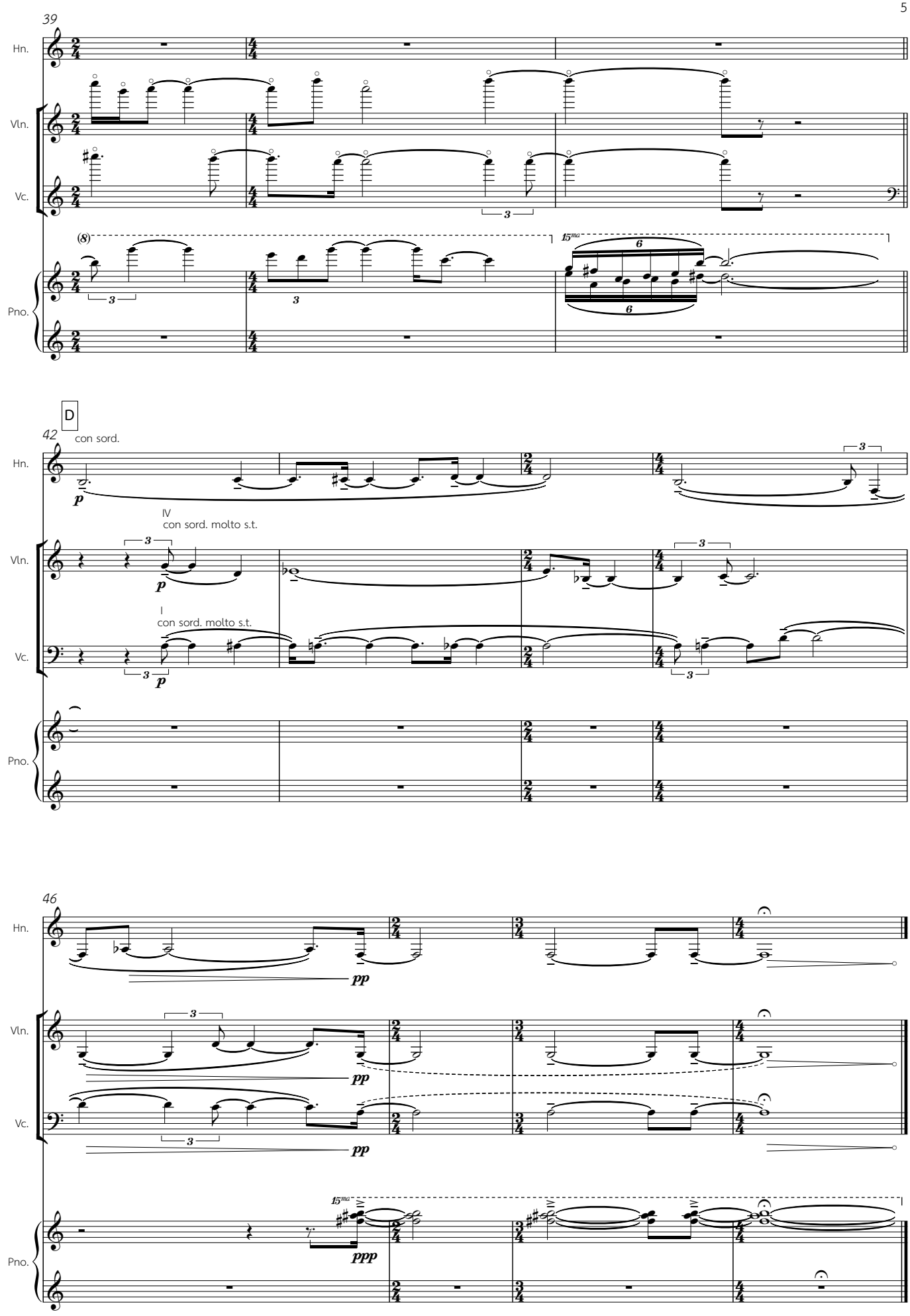





8
Hn.
Vln.
Vc.
Pno.
p
pp
s.t.
pizz.
12
A
ca. 60-66
(open)
ff
f
arco ord.
sfp
arco s.t.
mf
S.P.
17
mf


21
Hn.
Vln.
Vc.
Pno.
mf
p
pp
S.P.
25
(open)
B
ca. 40-44
ca. 60-66 (horn only)
ff
pizz.
28
ca. 40-44 (all)
arco
f


30
ca. 40-44 (all)
Hn.
Vln.
Vc.
Pno.
mf
f
p
s.p.
S.P.
32
C
ca. 40-44
IV
Harmonic gliss.
gliss.
II
Harmonic gliss.
gliss.
pp (as possible)
mf 3
p
8va
ppp
36
I
(8)


39
Hn.
Vln.
Vc.
Pno.
(8)
15ma
42
D
con sord.
p
IV
con sord. molto s.t.
I
con sord. molto s.t.
46
pp
ppp

Altered Exponents

for 37-key melodica and electronics

Poumpak Charuprakorn (2018)

Full Score

i

Altered Exponents is a composition for melodica and electronics that combines pre-recorded materials and live performance. The player is required to record sections II, III, and V before a performance in order to generate an accompanying tape track. The piece features five small distinctive segments that vary in length and also explores various sonorities, ranges, speeds, gestures, and characters of a melodica.

The first performance took place at Reardon Smith Theatre, Cardiff National Museum in Cardiff, Wales on 22 April 2018. The performer was Poumpak Charuprakorn, who also controlled the electronics.

The electronics part (including the recording patch) operates on Max/MSP. Please contact the composer for the patch.

Duration: 10 minutes

Performance Notes

- One system equals 1 minute
- The music is rhythmically free but should be proportional to its position in a system
- The beginning of each section has to be exact (at 0' 00", 1' 00", 2' 15", 4' 00", and 6' 30")
- Grace notes should be played as fast as possible
- All notes except grace notes should be sustained in proportion to other notes in the system
- When tremolo is indicated, hold the higher note and rapidly press/depress the other one below
- Bisbigliando = play the given note and rapidly press/depress other keys in 1-2 octaves above the main note
- Accidental only affects the note to which it is attached

Altered Exponents

Poumpak Charuprakorn (2018)

I

II

*always as **pp** as possible*

III

(2' 15")

bisbigliando

(4' 00")

IV

VI

bisbigliando

V

(6' 30")

Stretches

for 2 Gametrak controllers with MAX/MSP

Poumpak Charuprakorn (2019)

FULL SCORE

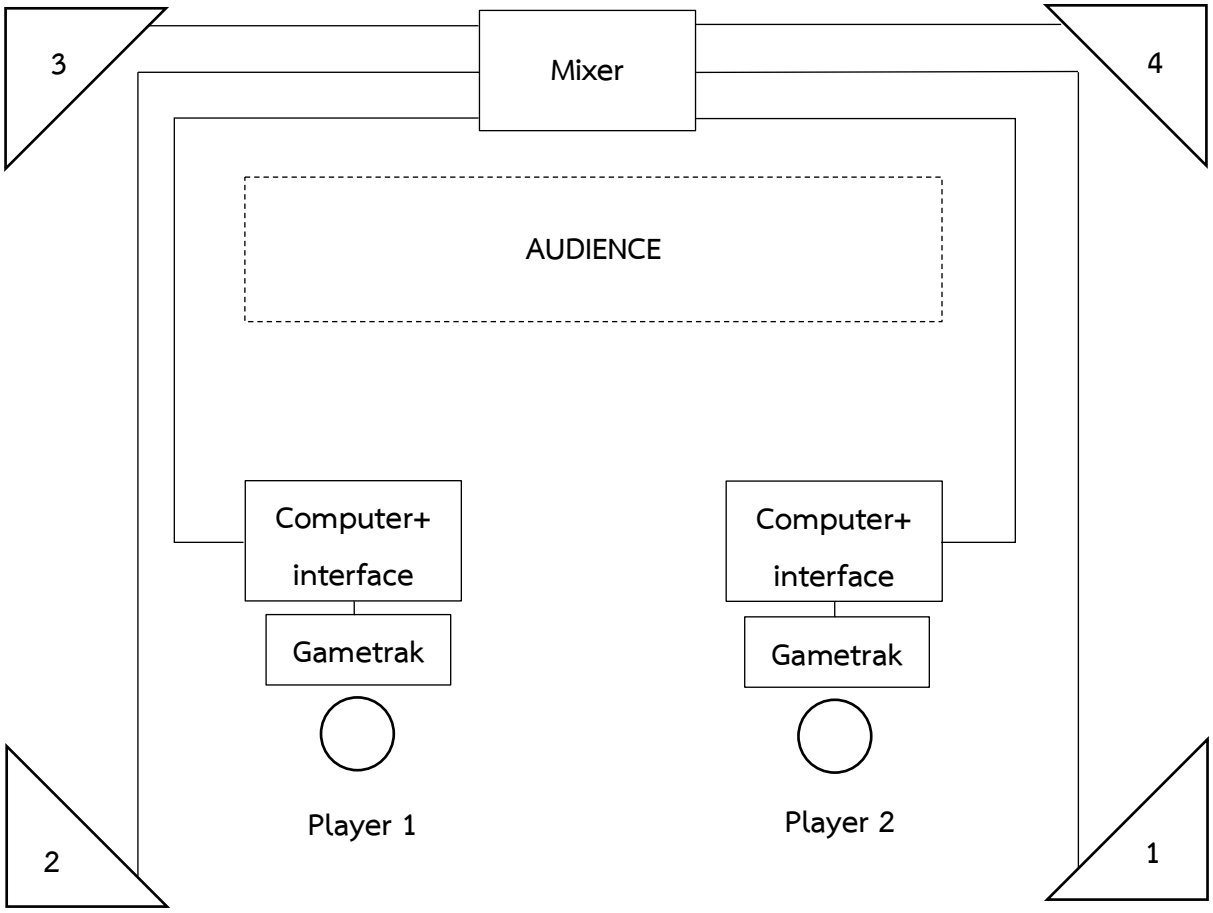
i

‘**Stretches**’ is specially composed in collaboration with *Swansea Laptop Orchestra* (Jenn Kirby and Simon Kilshaw) in *Ty Cerdd*’s CoDI ELECTRONIC as part of Bangor Music Festival 2019. The composition aims to explore a delicate soundworld of white noise with multiple band-pass filters controlled by Gametrak controllers and Max/MSP. Two performers gradually layer individual filtered noise on top of each other to form sounds with various spectral spaces which later evolve into more distinct timbres. Sound masses later travel all over the performance space and fully embrace the audience with rich electroacoustic sonorities that eventually fade into a single sustained band of white noise.

The premiere was performed by Jenn Kirby and Simon Kilshaw (*Swansea Laptop Orchestra*) at Pontio Arts and Innovation Centre, Bangor University in Bangor, Wales on 8 February 2019 in Bangor Music Festival 2019.

Duration: circa 8 minutes

Setup



Setup description

- Speakers should be placed according to the plan (in case there is not enough space, speakers 1 and 2 can be positioned in front of the players closer to the audience)
- Each computer sends audio out in 4 channels the mixer
- The same channel from both computers (for example, channel 1 from both players) can be combined into one output on the mixer and send to the specified speaker

Equipment

2 Gametrak controllers

2 computers with Max/MSP (the patches were designed on Max 7)

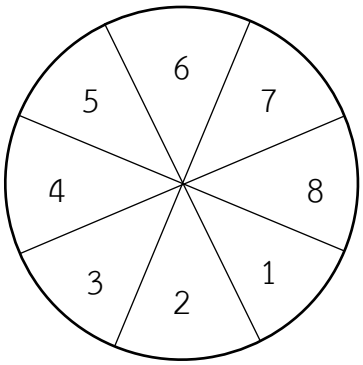
2 4-channel audio interfaces

1 audio mixer

4 speakers

Overview of a Gametrak controller and MAX patches

- Players 1 and 2 will have different patches (designed on MAX 7)
- On each player's screen, there will be a timer, 3 lights (on when receiving data from a Gametrak), cue number, and a reminding message box
- Tap the footswitch pedal (when indicated *-tap-*) to change the cue upward from 0-7 (except between 2-3 that will automatically change in 1 minute after starting CUE 2)
- Changing the cue from 0 to 1 will turn all audio on and start the timer
- To reset, keep tapping the footswitch until it reaches 0
- Make sure a Gametrak is connected to the computer before opening the patch
- Gametrak's tethers (for left and right hands) send data from their movement and position in 3 axes which from this point will be referred to as follows: **X** (left-right or the player), **Y** (front-back or toward the audience-toward the player), and **Z** (the length of a tether)
- The tethers operate differently in different sections of the piece; refer to the performance notes given below when needed
- **Segment(s)**, mentioned below in the performance notes of cues 5-7, refer(s) to the area of a circle in which the edge of a tether is



Performance notes

General performing concepts

- The score only provides rough instruction of how to perform; players are mainly required to improvise from the given instructions
- While performing, try to focus on the other player's sounds and interact with them
- Players are allowed to take time between sounds they create (or before responding to the others' sounds); feel free to hold or wait if needed
- When generating sounds, try to explore the concept of gradual and sudden changes in every aspect of the piece such as spectral space, dynamic, density of texture, spatialisation, timing, etc.

Generating individual sound (cues 1 and 2)

- Left and right tethers operate independently
- To generate a sound, move a tether toward yourself along the Y axis (to activate a trigger) and push the tether until it reaches the centre point right above the Gametrak (to trigger a sound)
- Every sound created during cues 1 and 2 will automatically decay to silence
- It is necessary to pull the tether back to reactivate the trigger before generating a new sound
- The speed of the triggering gesture affects the dynamic of a sound
- Triggering at a different position along the X axis will generate a different sound (low sounds on the left and high on the right)
- The Z axis of a tether determines the decay time of a sound
- At CUE 2, the patches will slowly pan the sounds to opposite directions (sounds from player 1 will come out more from speakers 2 and 3; player 2, 1 and 4)

Creating a group of sounds (cues 3 and 4)

- At CUE 3, all sounds from player 1 will only come out from speakers 2 and 3; player 2, 1 and 4
- Generating individual sounds will no longer be available from this point; similar triggering gesture (with all of the data from X, Y, and Z axes) will create a group of sounds instead

- To create a group of sounds, performing a triggering gesture with both hands; the patch will randomly generate sounds within the range of both hands (players can create groups of different sizes)
- It is still necessary to pull the tethers back to reactivate the triggers before generating a new group
- All groups that are created will be stored and used again later in the piece
- At CUE 3, all sounds will decay
- At CUE 4, sounds from player 1 will sustain while sounds from player 2 will decay

Replaying a previously created group of sounds (CUE 5, for player 1 only)

- To replay the stored sounds, move both hands to the same segment; the sound will also come out from the direction to which the player is pointing (for example, player 1's left hand is in segment 5, pointing at speaker 3, when the player moves their right hand to segment 5 the patch will replay a stored sound from speaker 3)
- Player 1 is encouraged to experiment with different gestures, for instance, moving hands above your shoulders, moving at shoulder level, etc.
- All sounds will automatically decay (Z value still controls the decay time)
- It is safer to move both hands in different directions after replaying a sound to avoid double-triggering

Spinning a previously created group of sounds (CUE 6)

- To generate a spinning sound, perform a spinning gesture by moving one of the tethers from segment 2 to 6; right-hand tether will generate an anti-clockwise spin, left-hand clockwise
- The speed of the spinning gesture (in either direction) will determine the speed of the spin
- All sounds will sustain; Z values from both tethers will control the volume and can decrease to silence
- Player 2 has the freedom to decide when (and how) to generate new sounds; when a new sound is played the previous one will automatically decay to silence

Performing CUE 7

- While walking toward the Gametrak (to tap the footswitch), players can drop the tether that is not needed (player 1 only needs the left, player 2 the right)
- Z value from the tether controls volume; when a player moves closer to the device, the volume will decrease to zero
- When the Z value becomes zero, the patch will generate a new sound
- The segments, in which players are, controls the panning of speakers as well
- After triggering a sound, players are required to move in different directions (except the last time); the order of directions can be agreed prior to the performance or realised in a performance (this also applies to the number of repetitions)

Stretches

In collaboration with Swansea Laptop Orchestra

Poumpak Charuprakorn (2019)

PLAYER 1

CUE 0

-tap-

CUE 1 (individual L/R)

Generate individual sounds.
Slowly layer individual sounds on top of each other.
React to the sounds generated by the other player.
Generate more sounds as the section progresses to create a thicker texture.

(at around 1 minute 30 seconds)

-tap-

CUE 2 (individual L/R)

Create even thicker texture with more attacks than the previous section.
Still react to the other player.
Keep an eye on the countdown on the screen.

(the patch will change to CUE 3 automatically after 1 minute)

PLAYER 2

CUE 0

-tap-

CUE 1 (individual L/R)

Generate individual sounds.
Slowly layer individual sounds on top of each other.
React to the sounds generated by the other player.
Generate more sounds as the section progresses to create a thicker texture.

(at around 1 minute 30 seconds)

-tap-

CUE 2 (individual L/R)

Create even thicker texture with more attacks than the previous section.
Still react to the other player.
Keep an eye on the countdown on the screen.

(the patch will change to CUE 3 automatically after 1 minute)

CUE 3 (groups with both hands)

Create groups of sounds with different sizes at different places within the full range.
React to the other player's groups as well.
Create sounds much more frequently later in the section.

(at around 3 minutes 30 seconds)

-tap-

CUE 4 (groups with both hands, sustained)

Create one big group of sounds at the same time with PLAYER 2.

(wait until PLAYER 2 starts playing their CUE 6 at around 4 minutes, both hands have to be down in different segments)

-tap-

CUE 5 (replay, both hands)

Replay previously created groups by pointing both hands in the same direction (same segment).
Generate sounds in various directions and aim to interact with the spinning sound created by PLAYER 2.

(at around 5 minutes 30 seconds, wait until your last sound decays)

-tap-

CUE 3 (groups with both hands)

Create groups of sounds with different sizes at different places within the full range.
React to the other player's groups as well.
Create sounds much more frequently later in the section.

(at around 3 minutes 30 seconds)

-tap-

CUE 4 (groups with both hands)

Create one big group of sounds at the same time with PLAYER 1.

(wait until your sound decays to silence)
(at around 4 minutes)

-double tap-

(skip CUE 5)

CUE 6 (spin, both hands)

Replay previously created groups and create spinning sounds by throwing with right or left hands (anti-clockwise, clockwise).

Keep repeating this step with various speeds and directions.

CUE 6 (spin, both hands)

Replay previously created groups and create spinning sounds by throwing with right or left hands (anti-clockwise, clockwise) in the opposite direction of the currently spinning sound. Perform this step only once.

(let both sounds spin for about 15 seconds, walk slowly towards the footswitch)
(at around 6 minutes)

-tap-

CUE 7 (left hand only)

Suddenly after tapping the footswitch, move away from the Gametrak in the opposite direction of PLAYER 2.
At the same time with PLAYER 2, walk toward the device, when the sound becomes silence, move in a different direction away from the device, again, in the opposite direction of PLAYER 2.
After repeating this step for 10-20 times, both players end at the direction facing the audience (segment 2), then slowly walk clockwise toward the other side of the device (segment 6).
After reaching segment 6, walk slowly toward the device, let go of the tether, and end the performance.

(wait for PLAYER 1 to perform a spin)

(let both sounds spin for about 15 seconds, walk slowly towards the footswitch)
(at around 6 minutes)

-tap-

CUE 7 (right hand only)

Suddenly after tapping the footswitch, move away from the Gametrak in the opposite direction of PLAYER 1.
At the same time with PLAYER 1, walk toward the device, when the sound becomes silence, move in a different direction away from the device, again, in the opposite direction of PLAYER 1.
After repeating this step for 10-20 times, both players end at the direction facing the audience (segment 2), then slowly walk anti-clockwise toward the other side of the device (segment 6).
After reaching segment 6, walk slowly toward the device, let go of the tether, and end the performance.

Stretches II

for Gametrak controller with MAX/MSP

Poumpak Charuprakorn (2019)

Full Score

i

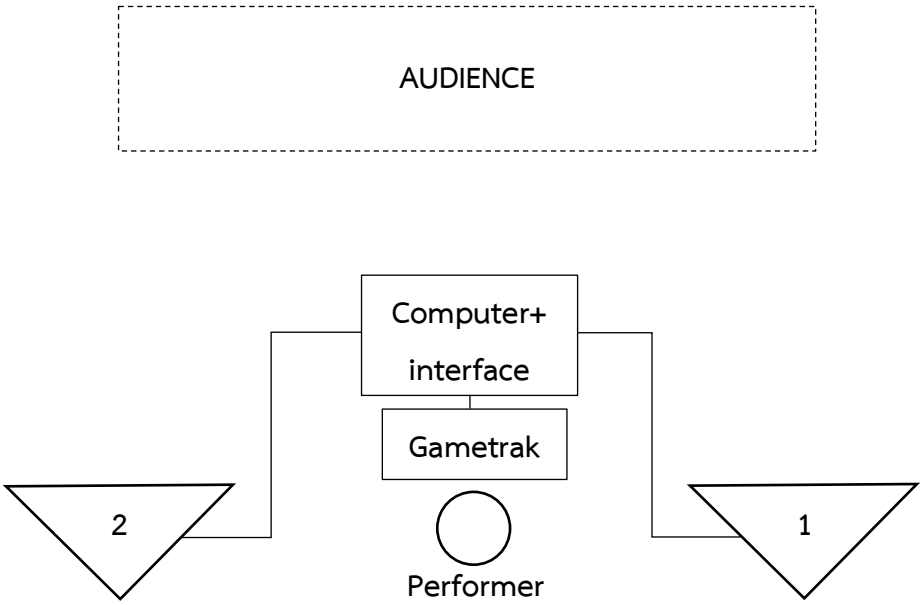
Stretches II is the second piece from a series of compositions for Gametrak controller and Max/MSP. The series was first developed in collaboration with *Swansea Laptop Orchestra* in *Ty Cerdd*'s CoDI ELECTRONIC project. The composition explores a delicate sound world of white noise with multiple band-pass filters and technological translation of physical movements into sounds. With the gestural device, individual filtered noise is gradually layered on top of one another to form sounds with more distinct timbres. Sound masses are sent to different speakers and present the audience with rich electroacoustic sonorities that eventually fade into a single sustained band of white noise.

The first performance took place at Sull Space in Cardiff, Wales on 2 March 2019 in Cardiff Science Festival 2019. It was performed by Poumpak Charuprakorn.

The second performance was also by Poumpak Charuprakorn at Cardiff University on 9 April 2019 in Cardiff University Composition Showcase 2019.

Duration: circa 8 minutes

Setup



Setup description

- Speakers should be placed according to the plan (in case there is not enough space, speakers can be positioned in front of the player closer to the audience)

Equipment

1 Gametrak controller

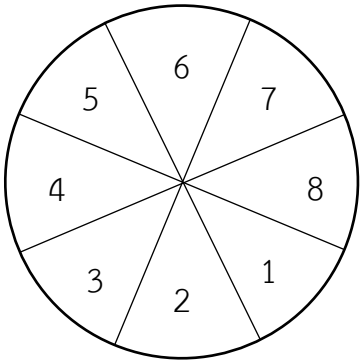
1 computer with Max/MSP (the patch was designed on Max 7)

1 audio interface

2 speakers

Overview of a Gametrak controller and MAX patches

- The patch for Gametrak controller was designed on Max 7
- It is better to open the patch in presentation mode (200%)
- On the screen, there will be a timer, 3 lights (will be on when receiving any data from a Gametrak), cue number, and a reminding message box
- Tap the footswitch pedal (when indicated *-tap-*) to change the cue upward from 0-7 (except between 2-3 that will automatically change in 1 minute after starting CUE 2)
- Changing the cue from 0 to 1 will turn all audio on and start the timer
- To reset, keep tapping the footswitch until it reaches 0
- Make sure a Gametrak is connected to the computer before opening the patch
- Gametrak's tethers (for left and right hands) send data from their movements and positions in 3 axes to which from this point will be referred as follows: **X** (left-right or the player), **Y** (front-back or toward the audience-toward the player), and **Z** (the length of a tether)
- The tethers operate differently in different sections of the piece; refer to the performance notes given below when needed
- **Segment(s)**, mentioned below in the performance notes of cues 5-7, refer(s) to the area of a circle in which the edge of a tether is



Performance notes

General performing concepts

- The score only provides rough instruction of how to perform; the player is mainly required to improvise from the given instructions
- The player is allowed to take time between sounds they create; feel free to hold or wait if needed
- When generating sounds, try to explore the concept of gradual and sudden changes in every aspect of the piece such as spectral space, dynamic, density of texture, spatialisation, timing, etc.

Generating individual sound (cues 1 and 2)

- Left and right tethers operate independently
- To generate a sound, move a tether toward yourself along the Y axis (to activate a trigger) and push the tether until it reaches the centre point right above the Gametrak (to trigger a sound)
- Every sound created during cues 1 and 2 will automatically decay to silence
- It is necessary to pull the tether back to reactivate the trigger before generating a new sound
- The speed of the triggering gesture affects the dynamic of a sound
- Triggering at different positions along the X axis will generate sounds of different ranges (low sounds on the left and high on the right)
- The Z axis of a tether determines the decay time of a sound
- At CUE 2, the patches will slowly pan the sounds to opposite directions (sounds from left tether will come out from speaker 2; right speaker 1)

Creating a group of sounds (cues 3 and 4)

- At CUE 3, speakers 1 and 2 will only send out high and low frequencies respectively
- Generating individual sounds will no longer be available from this point; similar triggering gesture (with all of the data from X, Y, and Z axes) will create a group of sounds instead

- To create a group of sounds, performing a triggering gesture with both hands; the patch will randomly generate sounds within the range of both hands (player can create groups of different sizes)
- It is still necessary to pull the tethers back to reactivate the triggers before generating a new group
- All groups that are created will be stored and used again later in the piece
- At CUE 3, all sounds will decay
- At CUE 4, sounds from speaker 1 will sustain while sounds from speaker 2 will decay

Spinning a previously created group of sounds (CUE 5 and 6)

- At CUE 5, the left tether can only perform 'spinning gesture' while the right tether's function is similar to CUE 1 and 2
- At CUE 6, both tethers can perform the spinning gesture
- To generate a clockwise spinning sound, perform a spinning gesture by moving one of the tethers clockwise from segment 7 to 4; anti-clockwise spinning, anti-clockwise from segment 5 to 8
- The speed of the spinning gesture (in either direction) will determine the speed of the spin
- All sounds will sustain; Z values from both tethers will control the volume and can decrease to silence

Performing CUE 7

- While walking toward the Gametrak (to tap the footswitch), the player can drop the left tether
- Z value from the right tether controls volume; when the player moves closer to the device, the volume will decrease to zero
- When the Z value becomes zero, the patch will generate a new sound
- The segments, in which player is, controls the panning of speakers as well (segments 4, 3, 2, 1, 8)

Stretches II

Poumpak Charuprakorn (2019)

CUE 0

-tap-

CUE 1 (individual L/R)

Generate individual sounds.

Slowly layer individual sounds on top of each other.

Generate more sounds as the section progresses to create a thicker texture.

(at around 1 minute 30 seconds)

-tap-

CUE 2 (individual L/R + panning)

Create even thicker texture with more attacks than the previous section.

Keep an eye on the countdown on the screen.

(the patch will change to CUE 3 automatically after 1 minute)

CUE 3 (groups with both hands)

Create groups of sounds with different sizes at different places within the full range.

Create sounds much more frequently later in the section.

(at around 3 minutes 30 seconds)

-tap-

CUE 4 (groups with both hands, L: decays; R: sustains)

Create one big group of sounds

(wait until the sounds from speaker 2 decay to silence, at around 4 minutes)

-tap-

CUE 5 (L: spin, R: individual)

Replay previously created groups and create spinning sounds by performing a spinning gesture with the left hand clockwise or anti-clockwise

Keep repeating this step with various speeds and directions

Generate individual sounds with the right hand

(at around 5 minutes 30 seconds, wait until the last sound from right tether becomes silence)

-tap-

CUE 6 (spin, both hands)

Replay previously created groups and create spinning sounds by performing a spinning gesture with right hand clockwise or anti-clockwise

Perform this step only once.

(let both sounds spin for about 15 seconds, walk slowly towards the footswitch)

(at around 6 minutes)

-tap-

CUE 7 (right hand only)

Suddenly after tapping the footswitch, move away from the Gametrak

Stand still facing the device for a few seconds, walk toward the device. When the sound becomes silence, move in a different direction away from the device

Or

Stand still facing the device for a few seconds, walk slowly around the device (within segments 4, 3, 2, 1, and 8 to control the panning) then walk toward the device. When the sound becomes silence, move in a different direction away from the device

After repeating one of these steps for 10-20 times, walk slowly toward the device, let go of the tether, and end the performance.