Portfolio of Works: Composing Perceptions of Time in Music

by

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

Master of Music

in

Composition

Department of Music

University of Alberta

Abstract

This portfolio contains three compositions whose primary aims are to manipulate perceptions of time through sonic contrast and similitude. The works also explore composing performer interactions, integrating electronics into an acoustic environment, and using varying levels of indeterminacy to increase performance possibilities. All three pieces were written between 2021 and 2022 in partial fulfilment of a Master's thesis at the University of Alberta.

The first of these works, *w.RivEr.ST & nimbi*, for saxophone quartet, uses interlacing multiphonics to create a static bed of sound with constantly varying inner motion. The second section, *nimbi*, is a single page, indeterminate score that encourages sonic exploration and improvisatory techniques. Both sections of the piece are written with proportional notation and require performer interaction and communication to maintain alignment of musical events, consistent pacing, and musical cohesion.

The second work, *Below, the Boarhound and the Boar*, for trumpet, violoncello, percussion, and electronics, deviates from the previous work in that it uses conventional, measured notation to control pitch, dynamics, timbre, and tempo. This piece marks my first significant endeavour into the use of electroacoustic techniques, such as additive synthesis, granular synthesis, and analysis/resynthesis, as compositional tools. Its primary goal is to manipulate temporal perceptions through abrupt contrasts in register, dynamics, and timbre.

The final work, *Grey on Indigo, Faded*, for flute, clarinet, violin, violoncello, and piano, builds on *w.RivEr.ST & nimbi* by expanding on ideas of silence, space, and static flow. This work, however, adds a four-channel field recording, played back at nearly imperceptible levels, in order and further draw attention to the silence and space between sounds.

Acknowledgements

I want to thank first and foremost my composition instructor and supervisor, Mark Hannesson, for showing me how fascinating and meaningful a single note can be, when given enough love and attention.

I would also like to thank my other instructors, Scott Smallwood, Maryam Moshaver, Andriy Talpash, and Mark Segger, for the support they gave me and the energy they put toward my growth as a student and artist. Their breadth of knowledge, compassion, and humanity are the reasons why I leave this university a better person than I was upon entering.

Thank you to my partner, Katie, my parents Arden and Arlana, and my sister Alicia, for your continual support and willingness to listen to my impassioned speeches about the most specific and unimportant topics, the likes of which you've never before heard.

I would like to thank all of my peers, without whom, I would have found myself lost many times in this school and city. I look forward to continuing to grow with you and wish you the best of luck and fortune in your artistic and professional developments to come.

Finally, a special thank you to my dear friend Jason for his lifelong friendship, love, and understanding. Our regular conversations are what keep me grounded and passionate about life and learning.

Table of Contents

Introduction

I did not enter my composition program with any overarching plan to ensure cohesion between the results of my upcoming musical exploration. However, two clear preoccupations emerged over the course of my studies that thematically connect the three works I wrote: (1) the listener's perception of time, as affected by sound, and (2) using compositions to create meaningful ensemble interactions. Furthermore, the creation of these works has elucidated a central purpose that drives my compositional practice: to create experiences in which people can practice deep listening, feel a sense of heightened self-awareness, and form extra-personal connections with their surroundings.

Each of the three works, found below, attempts to induce different temporal effects on the listener, such as stasis (*w.RivEr.ST & nimbi* (2021)), expansion (*Below, the Boarhound and the Boar* (2022)), and timelessness (*Grey on Indigo, Faded* (2022)). The first and last of these pieces also make use of proportional notation, graphic notation, or a combination of both, in order to control how performers interact and listen to one another, in realizing the piece. My interest in this performative element of music creation is a result of my experiences in experimental and improvisation-based music where the level of listening and investment of the musicians directly correlates to the quality of the music created.

w.RivEr.ST & nimbi is a work for saxophone quartet that heavily utilizes multiphonics and indeterminacy to emulate the cyclical and dynamic nature of rivers and clouds. *Below, the Boarhound and the Boar*, for trumpet, cello, percussion, and electronics, is inspired by cycles and expectation; the sonic material for this work is derived from the four Thai gongs that the percussionist plays during the piece. Lastly, *Grey on Indigo, Faded*, for flute, clarinet, violin, violoncello, and piano, explores the ability to compose silences to highlight space between sound.

Chapter One

w.RivEr.ST & nimbi

for saxophone quartet

Overview of Method

In *w.RivEr.ST & nimbi*, my aim was to explore a single idea, extended without development, to try and expand the listener's perception of the passing rate of time. In addition to this, I wanted to compose the performative aspect of this work by forcing ensemble interaction, awareness, and active listening through a combination of graphic and proportional notation. The relatively simple, slow-changing material combined with its presentation encourages the performers to spend most of their time looking at each other to coordinate the beginnings and endings of musical events and maintain pacing without a synchronizing pulse.

The work, inspired by the great rivers that flow from the Rocky Mountains and the cloud formations over the Canadian Prairies, aims to sonically recreate the slow, ever-shifting states of these two natural phenomena. The material chosen in the first section – *w.RivEr.ST* – primarily consists of overlapping multiphonics, which after a period of time, begin to elicit a feeling of temporal stasis despite the regular changes in pitch and the intrinsic instability of the technique.

The second section – *nimbi* – incorporates indeterminacy in a single page score that allows for variation with every performance in order to mimic the changing and irreplicable nature of clouds. The instructions to the performers for this section indicate a general increase in sound density followed by an equally long decrease (creating a mirrored binary form) while not specifying exact pitch lengths, dynamics, or performance techniques. Though specific pitches are notated for performers, they are free to choose which ones they would like to play from their assigned sets, and with what technique. Together, these elements culminate in an unpredictability that mirrors the variability of density in cloud groups, while still providing an overarching, consistent form from performance to performance.

Program Notes

From a distance, rivers and clouds appear as static, unchanging masses, complete and unified. Up close however, they are revealed to be perpetually shifting and in a constant state of becoming. The saxophones' multiphonics in *w.RivEr.ST & nimbi* are a reflection of these dual-states: at times they feel unstable, shifting their internal structures while at others, they combine into unified, static entities, inside which time slows.

w.RivEr.ST & nimbi

for saxophone quartet

Thomas Powell

w.RivEr.ST & nimbi

for saxophone quartet

Thomas Powell

Instrumentation

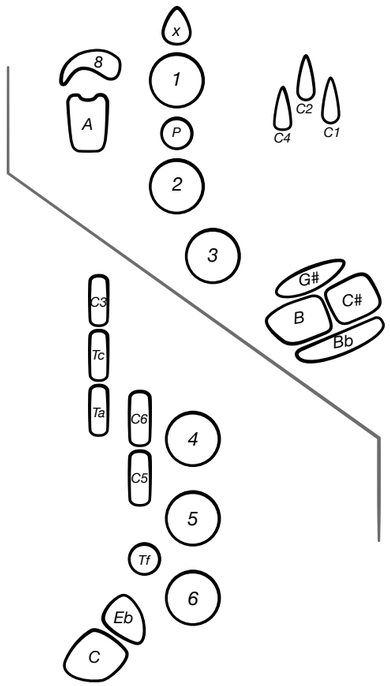
Bb Soprano Saxophone

Eb Alto Saxophone

Bb Tenor Saxophone

Eb Baritone Saxophone (+ Eb Alto)

Fingering Diagram



1. w.RivEr.ST

= pitched note*

= Multi-phonic*

= Air

= Air + flutter tongue

= duration markers

= sound event relations

= fingering reduction

= repeat previous sound

= sounding pitch(es)*

Duration: ~ 9:30

2. nimbi

Play any one pitch from the measure.*

On repeat, play any two pitches.

Next repeat, play three pitches, and so on.

After the sixth repeat (and you have played six pitches from the measure), play one less pitch on each repeat.

The piece is finished when everyone reaches zero pitches.

Pitches must be read left to right.

Accidentals only affect adjacent pitch.

= 1/4 and 3/4 tone flat or sharp

= 1/8 thtone flat or sharp

Pitches may be produced using any technique and articulation within dynamics. Note length is variable.

Dynamics are *pp* to *mp.*

Generally drifting.

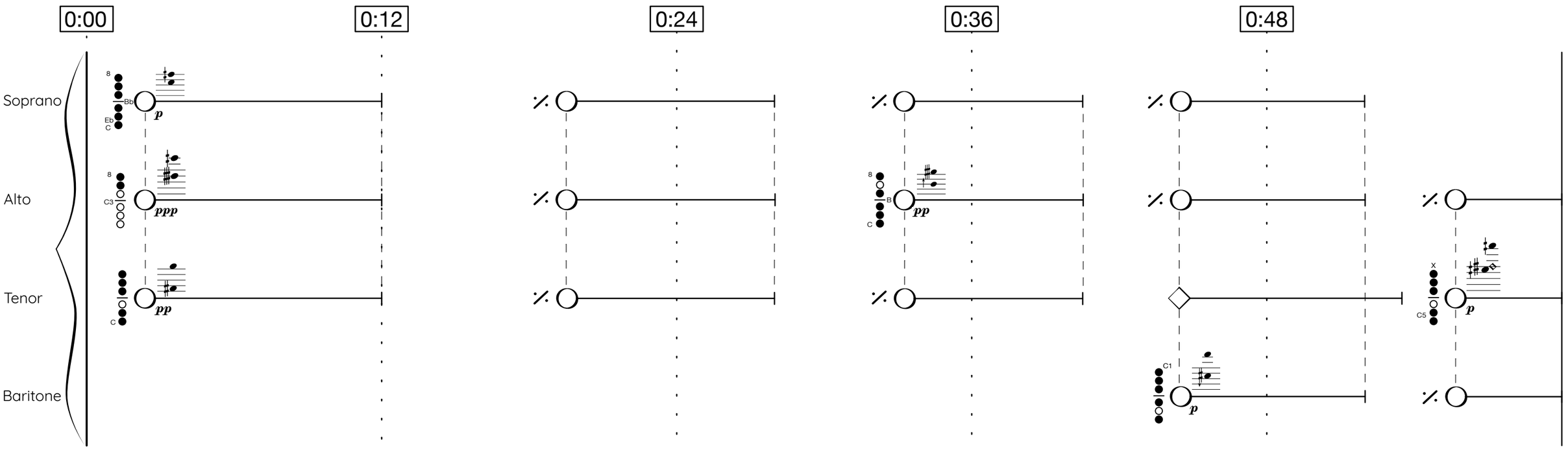
Duration: 2-3 minutes.

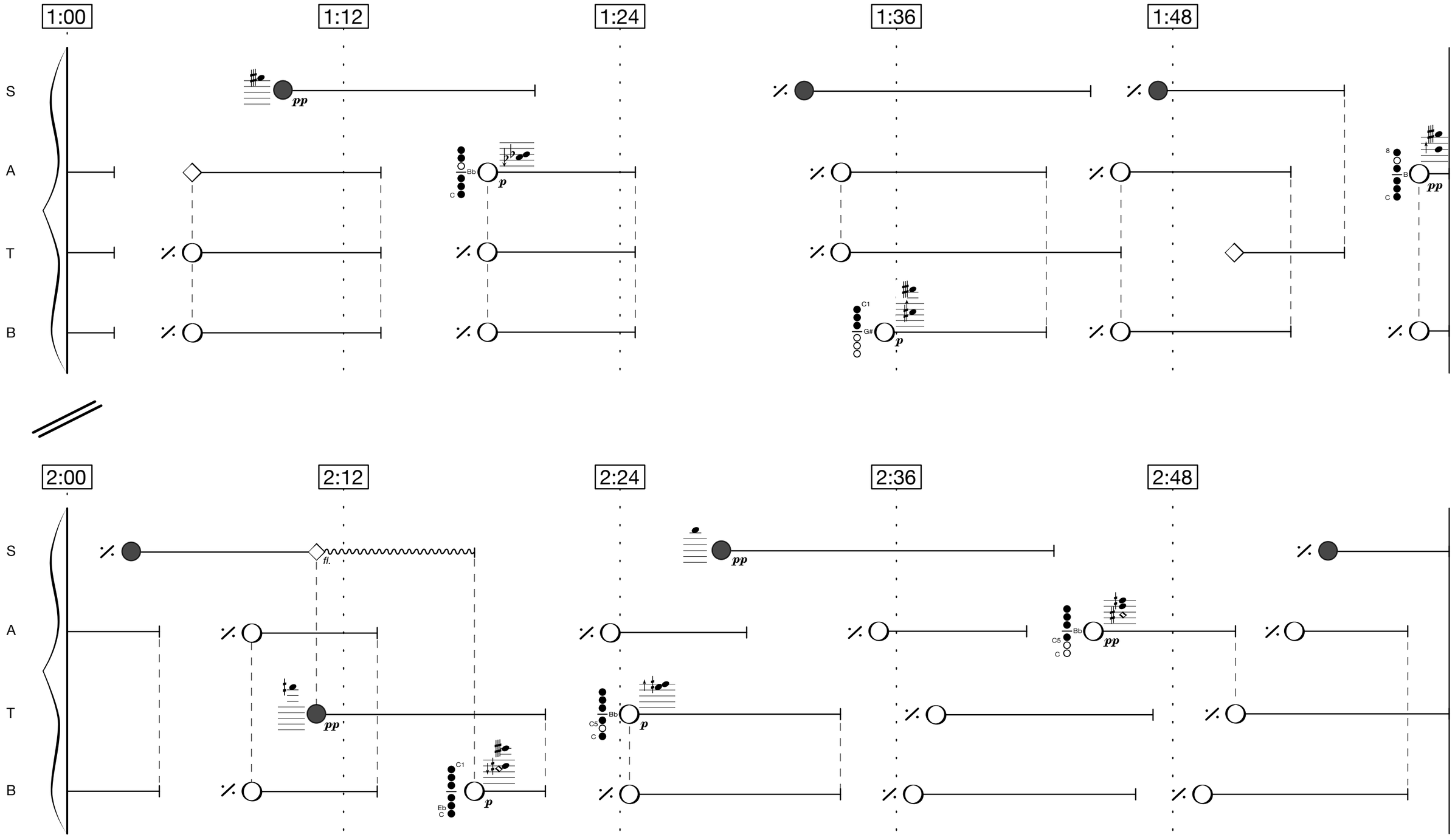
**All pitches are transposed.*

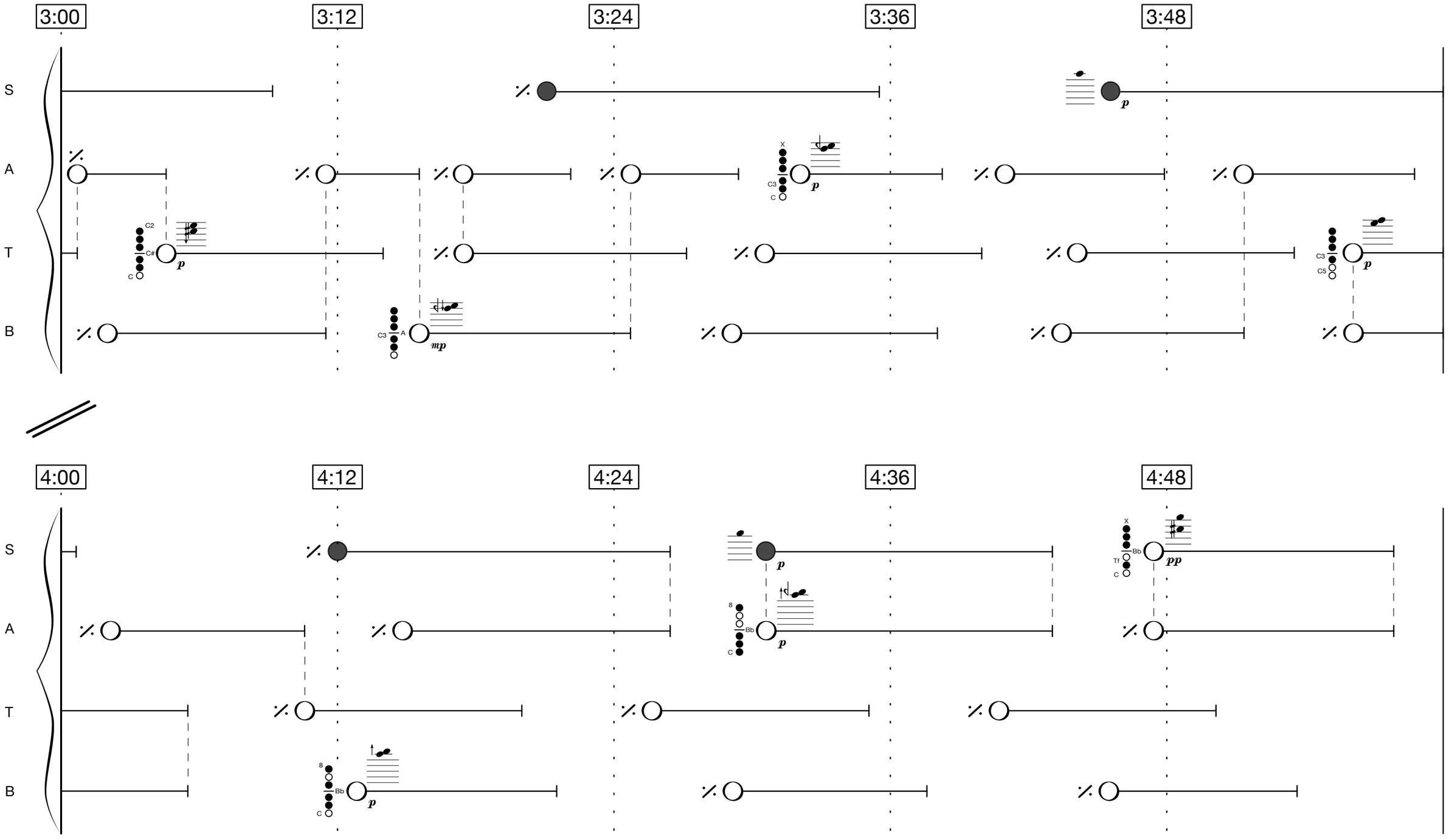
w.RivEr.ST

for saxophone quartet

Composed by Thomas Powell




1:00
1:12
1:24
1:36
1:48
S
A
T
B
pp
Bb
C
p
C1
G#
8
B
2:00
2:12
2:24
2:36
2:48
fl.
Eb
C5


3:00
3:12
3:24
3:36
3:48
S
A
T
B
C2
C#
C
p
C3
A
mp
X
C3
C
p
p
C3
C5
p
4:00
4:12
4:24
4:36
4:48
S
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8
Bb
C
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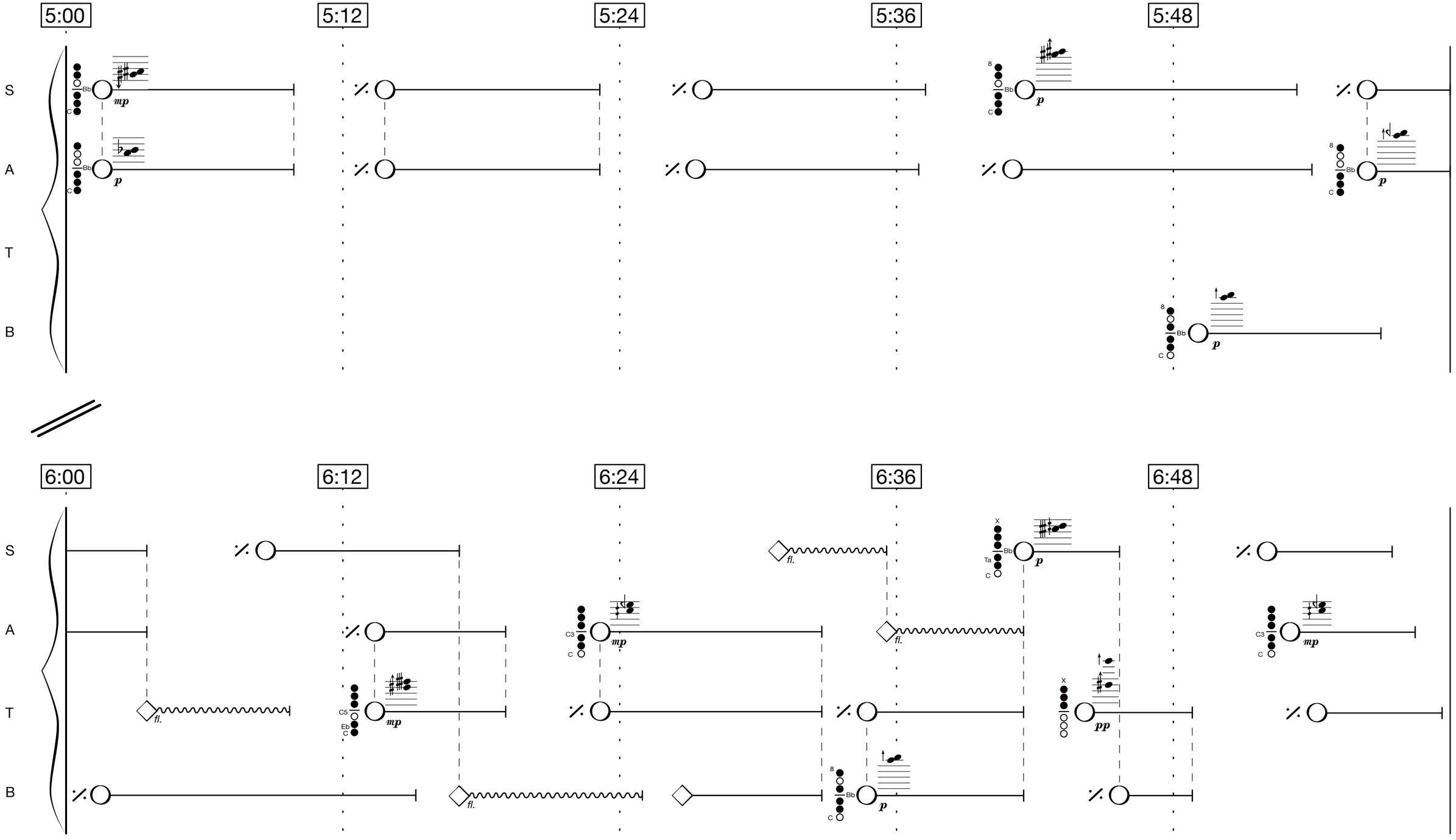
8
Bb
C
p
X
Tr
Bb
C
pp


5:00
5:12
5:24
5:36
5:48
S
A
T
B
Bb
C
mp
p
8
6:00
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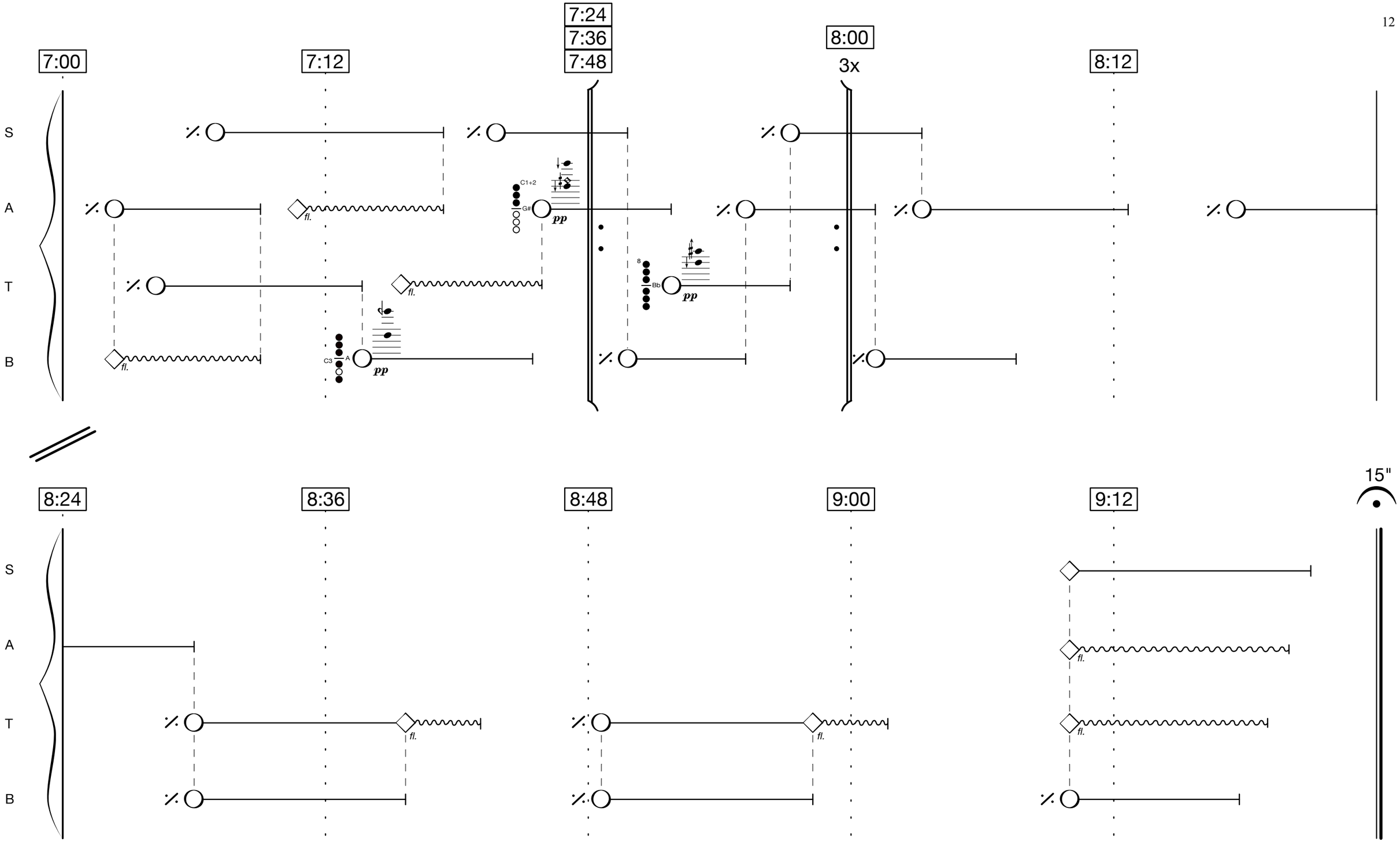
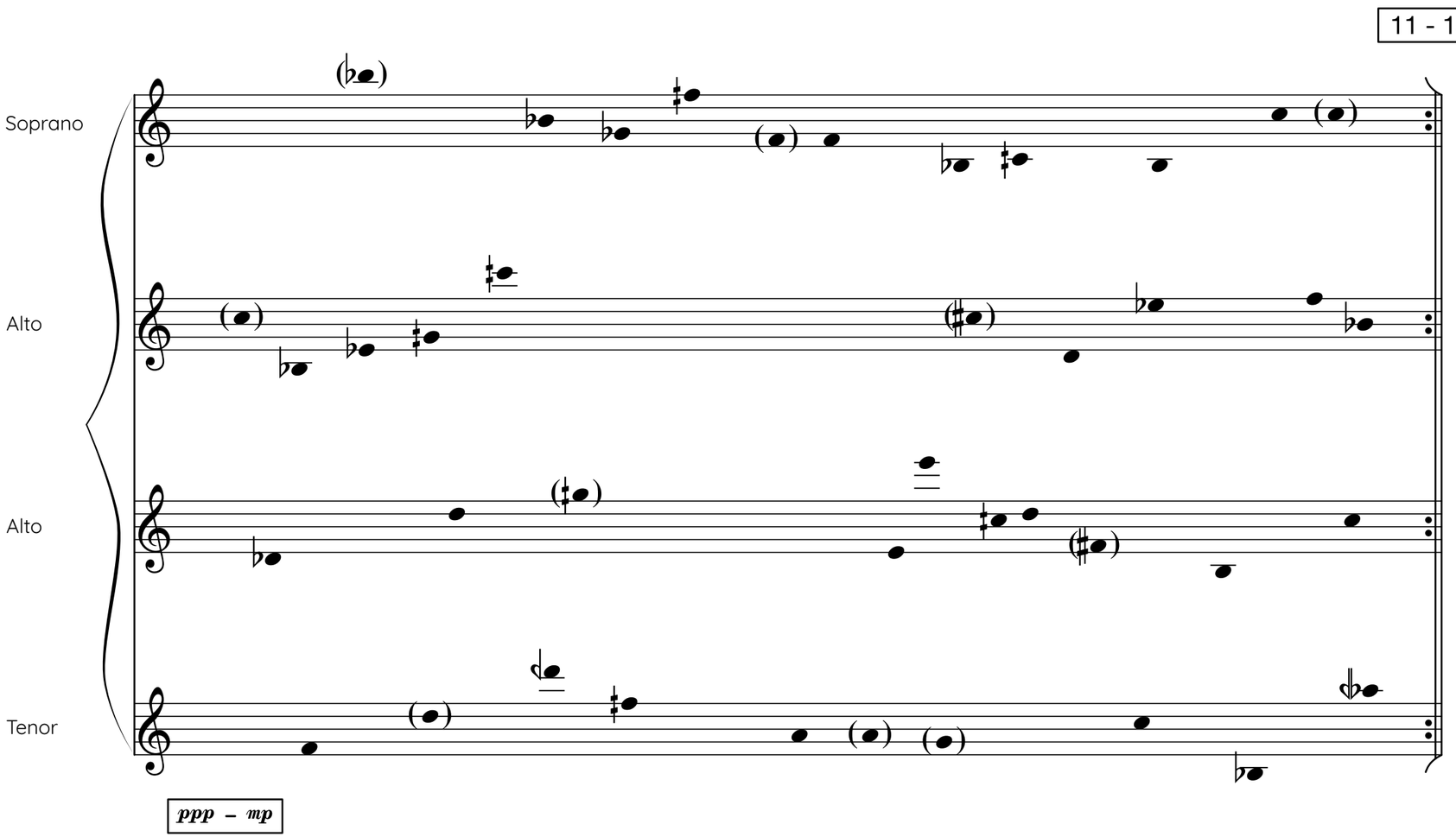
6:36
6:48
fl.
C5
Eb
C3
Ta
X
pp


7:00
7:12
7:24
7:36
7:48
8:00
3x
8:12
S
A
T
B
fl.
C1+2
G#
pp
C3
A
8
Bb
8:24
8:36
8:48
9:00
9:12
15"

Composed by Thomas Powell

nimbi

for saxophone quartet



Chapter Two

Below, the Boarhound and the Boar

for chamber ensemble and electronics

Overview of Method

Below, the Boarhound and the Boar, for trumpet, cello, percussion, and electronics, is an exploration of contrasts, specifically in pacing, materials, and dynamics, and their effects on the listener's perception of time.[1] In this way, it opposes the homogeneity of my previous work, *w.RivEr.ST & nimbi*, but continues my exploration of time as a primary concern for composition.

The percussion is central both to the composition and performance of this work, often taking a soloistic role and being the originating point of activity and density. Compositionally, much of the pitch material and timbral considerations are derived from the four Thai gongs used as part of the percussionist's gamut. Furthermore, the electronic samples are either made from recordings of the gongs, or synthesised based on analysis of their frequency content.

The role of the cello shifts between adding complementary percussive elements (*col legno battuto* at mm. 30, 32, 34, etc.), noise elements in conjunction with the trumpet (such as bowing on the bridge or tailpiece at mm. 23, 27-9, 56-7 etc.), and providing clear pitch material on its own or with the trumpet (mm. 71-90). The trumpet occupies a similarly fluid space using percussive and phonetic breath techniques to create noise and pseudo-electronic effects (mm. 4-16), metallic objects such as the Harmon mute or a metal sheet to connect to the metallic timbres of the gongs (mm. 19-22, 31-49), and extended techniques such as singing while playing or pressurized multiphonic squeals to distort and expand the timbral potential of the instrument.

The form of the piece is in three main sections: A (mm. 1-115), B (116-117), and C (mm. 118-181). The A section lasts approximately seven-minutes and creates tension through the rise and fall of sonic activity and the use of extended techniques that destabilize the traditional positions

[1] The title for this work, along with the epigraph found in the score, are lines from T.S. Eliot's poem, "Burnt Norton" (1935), the first poem in his collection *Four Quartets*. They are the legal property of Faber and Faber Ltd. and are used with permission.

of the trumpet and cello. The B section, lasting 2’10”, is the focal point of the piece and contains only a low frequency drone in the electronics. During this section, the instrumentalists do not play, with the exception of the percussionist who has a one-minute-long drum roll that crescendos into the final section. The goal of this section is to provide a sudden contrast to the motion of the A section through the use of an extended period of stasis. Finally, in the C section, the cello and trumpet take up traditional melodic roles with the sound of the gongs resonating behind them – heard clearly in this way for first time in the piece. This adds further relief to the tension created in the A section and unwinds the feeling of stasis to a quiet end.

Program Notes

Sometimes there is a single moment, however brief, that can bring quiet to the constant cycling of our days. It brings us out of ourselves to notice what we are doing, where we are, and with whom we are. Look for these moments and the stillness they offer, then, continue your pattern, as before, below, like the boarhound and the boar.[2]

[2] This line is a reference to T.S. Eliot's poem, "Burnt Norton," (1935) from his *Four Quartets*, and is used with permission by Faber and Faber Ltd. in the context of this Thesis. Do not reproduce without permission.

Below, the Boarhound and the Boar

for trio and electronics

by Thomas Powell (2022)

Below, the Boarhound and the Boar

for Bb Trumpet, Violoncello,
Percussion, and Electronics

(2022)

by Thomas Powell

We move above the moving tree

In light upon the figured leaf

And hear upon the sodden floor

Below, the boarhound and the boar

Pursue their pattern as before...

- T.S. Eliot, "Burnt Norton"

Performance Notes

Trumpet

Items needed:

Harmon Mute (stem removed).

Thin gauge metal sheet large enough to cover and extend past the bell. The metal should be thick enough to be stable while upright, but thin enough to buzz when covering the bell of a sounding trumpet.

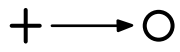

Breath only sound. Mouth shape/phonetic sound indicated above note head. All sounds are exhaled unless otherwise indicated.

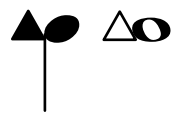

Inhale breath sound (indicated above breath note head).

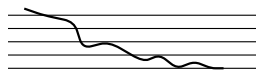

Pressurized multi-phonic/squeal. Produced with extreme air pressure barely allowed through the mouthpiece.


Place hand over bell or mute opening.


Open bell or mute opening.


Smoothly transition the hand over the bell from closed to open (can be vice versa).

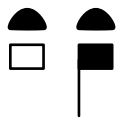

Vocalize with trumpet pitch, either in unison or at the octave, depending on vocal range. Try to stay near, but not exactly, in unison in order to create beats between the note and the voice.

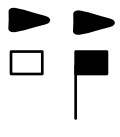

Rapid run with no definite pitch. Range should follow general contour of line.

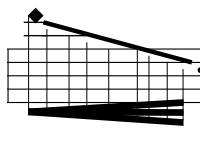
Violoncello

Con sordino: leather is preferred.

Unless otherwise notated, notes are to be played *non-vibrato.*


Unpitched sound, played by bowing the wood of the bridge (no string sound).


Unpitched sound, played by bowing the tailpiece.


Col legno battuto bounce. Bounce the wood of the bow on the string, letting it accelerate until rest. Left hand should lightly press string (harmonic pressure) and gliss. in the direction of the line. Note head indicates approximate LH position.


Bow pressure indication. Thicker areas of the shape equate to more pressure.

Electronics

Items needed:

A laptop with MAX/MSP installed (at least version 8).

A midi mixing board with 8 sliders.

A 2-channel speaker system and audio interface through which to connect the laptop.

6 Boxed text indicates keyboard key to trigger.

3 Circled text indicates fader to manipulate.

Audio files and Max patch for performance can be obtained by emailing tpowell2@ualberta.ca

Performance Notes

Percussion

Percussion setup

Snare Drum (tuned to A). Snare should remain off unless otherwise indicated.

Tom Drum (tuned to D). Drum should not be too resonant. Use gel square or other tool if necessary.

Bass Drum.

4 Thai Gongs:

18" (D below middle C).

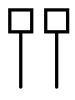
16" (F below middle C).

14" (G♯ below middle C).

12" (A♮ below middle C).

Gongs are to be placed face up, laying on a table, to begin the piece. It is recommended a towel or blanket be in between them and the table. A rig to hang all 4 gongs should be nearby and easily accessible. Drums should be located near the table to allow simultaneous playing of the gongs and drums.

Implements needed:



Rollers (Vic Firth T2 Cartwheel timpani mallets, or similar).

Bass Drum (Anything large and soft).

Firm Yarn (Musser M-222, or similar).

Metal Triangle Beaters (2x).

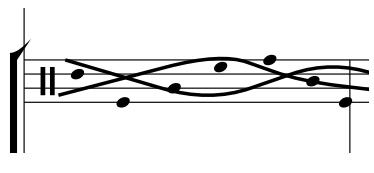
Bow (cello or bass).

(Optional) Sandpaper or sandpaper block (see fingernail symbol below).

Symbols:

Use finger nails to strike or scrape drum head. If player does not keep long enough fingernails for effect, a sandpaper block or piece of sandpaper can be used.

Trace around drum head in a circular motion to create a white noise effect. Can be done with the wood ends of mallets or with the fingernails.



Drag indicated implement over faces of gongs or drums to create a texture of light, randomized attacks. Vary speed, pressure, and areas of contact as necessary to maintain sense of motion within the texture.

Dampen drum head to stop sound.

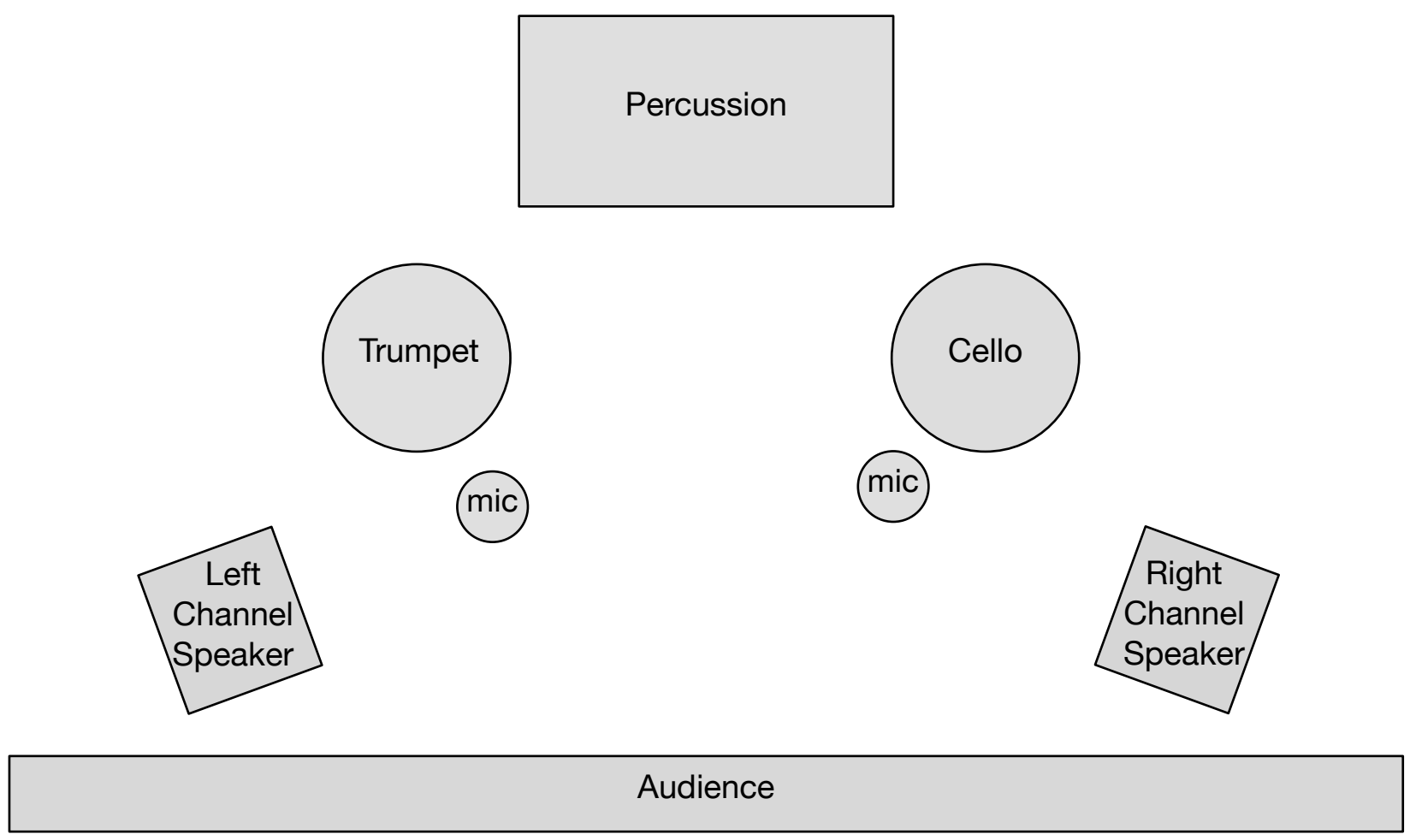
Strike mid-area of gong (i.e. not raised centre point). Regular note heads indicate to hit the centre point.

Strike rim of drum.

Bowed note on gong.

Layout & Amplification

Suggested Layout:



Amplification:

Instrument amplification will be required in both small venues, such as a gallery, studio space, or club, and large performance spaces, such as a concert or recital hall. The trumpet and violoncello will require standing mic's for amplification. They should both have a cardioid polar pattern to minimize on-stage bleed. Clip-on-mic's will be not be appropriate due to the extended techniques employed on the trumpet's bell and cello's bridge. The cello microphone should be placed very close to the bridge to pick up some of their quieter gestures.

Overhead mic's may also be required for the percussion to ensure overall timbral homogeneity. Be sure to balance amplified levels with electronics. Overall volume of the ensemble should not be much louder than if they were unamplified, but the overall resulting texture should be more cohesive.

Duration *c. 12'30"*

Score is Transposed.

Below, the Boarhound and the Boar

Thomas Powell

♩ = 65

Trumpet (in Bb)
Violoncello
Gongs
Percussion
Snare Tom Bass Dr.
Electronics

tch sss k
fp mp
sul pont.
pp mp
secco
ppp p pp
1 2

7
Trpt. (Bb)
Vlc.
Gongs
Percussion
Sn. Tom Bs.Dr.
Electronics

ff t tch ff aah t k f
p mp p
sul tasto sul pont.
pp mp pp
ppp

13
Trpt. (Bb)
Vlc.
Gongs
Percussion
Sn. Tom Bs.Dr.
Electronics

ti k ss t k ta f sh
mp mf
3
Harmon in (no stem)
sul tasto ord.
mp pp mf pp
mp pp p
3 1
begin fade-in

19

Trpt. (Bb)

Harmon out

too

mf p mf p

Vlc.

mp p mf

Gongs

Percussion

Sn. Tom Bs.Dr.

secco

p mp

6

f

Electronics

cut to barely audible

continue fade in

25

k tch koo

Prepare sheet of metal

Trpt. (Bb)

mf

col legno battuto
L.H. harm. gliss

Vlc.

mf

Gongs

Percussion

snare on with tap

snare off, to rollers

Sn. Tom Bs.Dr.

mp p mf p mf mp

Electronics

4

31

With metal sheet (Plate Buzz)

circular breathe if/when possible

Trpt. (Bb)

mp

arco cl b. arco cl b. arco Molto pont.

Vlc.

mf mp mf mp mf p

Gongs

Percussion

wood end wood end

Sn. Tom Bs.Dr.

mp

Electronics

37

Trpt. (Bb)

Vlc.

Gongs

Percussion

Sn.
Tom
Bs.Dr.

Electronics

mp

poco a poco cresc.

cl b.

arco

mf

mp

mf

p

mf

mp

cl b.

p

mp

mp

6

6

6

43

Trpt. (Bb)

mf

Vlc.

arco

cl b.

arco

f

mp

cresc.

Gongs

Percussion

Sn.
Tom
Bs.Dr.

mp

mf

p

Electronics

49

Trpt. (Bb)

remove
metal

t

t

ff

f

p

p

Vlc.

sul pont.

ff

mf

p

Gongs

Percussion

Sn.
Tom
Bs.Dr.

secco

to rollers

f

p

Electronics

Fader 1 off

55

Trpt. (Bb): ee t hh too → oh see oo t k pff huu k ff; *mf*; *poco cresc.*

Vlc.: *mf*; sul tasto → sul pont. → molto pont.; *poco cresc.*

Gongs

Percussion: Wood end of mallet

Sn. Tom Bs.Dr.: *ppp* — *mp*

Electronics: 5 2 3; Begin fade-in

62

Trpt. (Bb): tah; pressurized multiphonic; explore different partials, trying to match and then depart from the pitch of the electronics/cello; *f*

Vlc.: press finger into string next to bow; Sul A; explore different partials, trying to match and then depart from the pitch of the electronics/trumpet; *f*

Gongs: loosely holding beaters, drag erratically across gongs; *f*

Percussion

Sn. Tom Bs.Dr.: to metal beaters

Electronics

68

Trpt. (Bb): Prepare Harmon; t k ss k p; Harmon in; 3

Vlc.: *f*

Gongs

Percussion

Sn. Tom Bs.Dr.

Electronics

74

Trpt. (Bb)

s f t krr t

k t k t k t k

5

Vlc.

3

sfz

Gongs

Percussion

Sn.
Tom
Bs.Dr.

Electronics

80

Vocalize in near-unison (or 8ve),
explore creating beats between notes

Trpt. (Bb)

ti

ti

Vlc.

sul pont.

ord.

Gongs

Percussion

Begin switching to rollers as smoothly as possible.
Use backs of sticks to continue sound.

Sn.
Tom
Bs.Dr.

Electronics

86

Trpt. (Bb)

1/2

p t

s t ff k

Vlc.

5

7th partial
sul D

cl b.

Gongs

Percussion

(rims)

(ord.)

secco

Wood ends

Sn.
Tom
Bs.Dr.

Electronics

92

Trpt. (Bb)

Vlc.

cl b.

Gongs

Percussion

Sn.
Tom
Bs.Dr.

wood ends

secco

Electronics

add in fader 4

98

remove Harmon

press near bow
Sul C

pick up 12"
gong after hit

6

104

mp – f

Harm. Trill (Partial 3)

(Partial 5)

(Partial 7)

mf – f

holding in air, manipulate pitch with movements of the gong

110

Trpt. (Bb)

(Partial 9)

(Partial 11+)

Vlc.

Gongs

Percussion

Sn.
Tom
Bs.Dr.

ALL OFF
Trigger 7

Electronics

♩= 65

116

c. 2'10"

Harmon In

mf

c. 2'10"

Mute in

con sord., arco

f

c. 2'10"

Bow and strike gongs freely. Let Ring.
Notation is merely a sample depiction.

f

Silently hang gongs

c. 1'15"

c. 55"

(tom)

pppp

ff

8

5

fade-in

122

pizz.

128

Trpt. (Bb)

Vlc.

arco

pizz.

arco

Gongs

Percussion

Sn.
Tom
Bs.Dr.

Electronics

134

Trpt. (Bb)

Vlc.

3

Gongs

Percussion

Sn.
Tom
Bs.Dr.

Electronics

140

Trpt. (Bb)

Vlc.

3

pizz.

arco

pizz.

Gongs

Percussion

Sn.
Tom
Bs.Dr.

Electronics

146

Trpt. (Bb)

Vlc. arco pizz. arco pizz.

Gongs

Percussion

Sn.
Tom
Bs.Dr.

Electronics

152

Trpt. (Bb)

Vlc. arco sul pont.

Gongs

Percussion

Sn.
Tom
Bs.Dr.

Electronics

158

Trpt. (Bb)

Vlc.

Gongs

Percussion

Sn.
Tom
Bs.Dr.

begin very gradual fade out

Electronics

164

Trpt. (Bb)

pp mp pp mp pp

Vlc.

p

Only strike lowest gong, continue bowing rest

Gongs

Percussion

Sn.
Tom
Bs.Dr.

Electronics

170

Trpt. (Bb)

mp pp p sim.

Vlc.

pp p sim.

As written

Gongs

Percussion

mp

Sn.
Tom
Bs.Dr.

Fader 5

OFF

Electronics

176

Trpt. (Bb)

Fade with Gong

Vlc.

Fade with Gong

Let ring

Gongs

Percussion

Sn.
Tom
Bs.Dr.

Fade with Gong

Electronics

Chapter Three

Grey on Indigo, Faded

for Pierrot ensemble and field recording

Overview of Method

Grey on Indigo, Faded is a piece composed for meditation and stillness. It is written for flute, clarinet, violin, violoncello, and piano with accompanying field recording. Both its form and materials are influenced by the breath cycle and more generally, the interdependence of something (presence) and nothing (absence).

Due to the wide variability of performance spaces (room size, shape, material, humidity, noise floor, etc.) and this work's reliance on long silences between notes, I chose to compose these *spaces-between* to ensure a certain consistency between performances. My solution was to create and play back a field recording of a quiet landscape (in four-channels) around the audience and musicians at a low volume, just above the noise floor of the venue. This recording was made in Elk Island National Park, near Edmonton, Alberta, in October of 2022.

The form of the piece is divided into two main sections (herein known as A and B), separated by a minute-and-a-half instrumental break. The A section, lasting approximately eleven minutes, represents the inhale, gradually filling the space with instrumental sounds that increasingly overlap as time progresses. Following the section break, the B section, representing the exhale, slowly unravels and expands on earlier materials until the field recording, once again, becomes the dominant feature. The B section also features, for the first time in the piece, harmonic passages on the piano. These chords present the listener with all of the melodic content of the piece and represent the saturation of the lungs with air at the peak of the breath.

Nearly all melodic and harmonic material is extracted from Forte set class 5-Z18 (01457), in its original form and inversion.[3] The material develops minimally in order to avoid creating a predictable trajectory and to keep focus on momentary instances of sound. This is also achieved

[3] Forte, Allen. 1973. *The Structure of Atonal Music*. Yale University Press.

through irregular pacing and minimal repetition of materials. When something is repeated, it is to amplify the effect of the sound's absence in the moments that follow.

Like *w.RivEr.ST & nimbi*, this piece uses proportional notation in order to encourage performer communication and to allow flexibility in pacing. The primary differences are that there are no time markers beyond the second page of the score and a stopwatch is not to be used. This is to remove a musician's need to focus and strictly adhere to any exact timing cues and instead, allowing them to move at a pace that feels appropriate to them at the time of performance.

Program Notes

Space and stillness are present in everything, corollary to the constant of activity and motion. Between sounds, and even within them, there is anticipation and the potential for more to come into being, to continue being, or to not. This relationship between potential and realization is central to *Grey on Indigo, Faded,* where stillness is on equal footing to motion; silences emerge from sound just as much as sounds emerge from silence.

Grey on Indigo, Faded

for quintet and fixed media

by Thomas Powell

Grey on Indigo, Faded

for Flute, Clarinet in Bb, Violin, Violoncello,
Piano, and Field Recording

Full Transposed Score (2022)

by Thomas Powell

Performance Notes

Time

One system is approximately 30 seconds.

Time is to be felt; do not use a stopwatch.

Phrase entrances are to be treated with care, begun patiently, and only when they makes musical sense.

Go slower than you think you should.

Dynamics

All notes are quiet, separate from the electronics, yet seamlessly connected.

Note attacks are very soft or from *niente*.

Note releases are smooth with a small decrescendo.

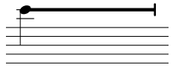
Always maintain note integrity and clarity, above all else.

Silence

Maintain tension and intention when not playing.

Silences frame playing as much as playing frames silence.

Score

 = Sustain pitch until end of line.

Absence of staff indicates silence.

Accidentals only apply to adjacent pitch.

All notes are *non-vib*.

Piano sustain pedal is held down throughout, even when staff is absent.

Score is Transposed

Duration: c. 20' to 24'

Electronics

Requirements

A laptop with Cycling '74's MaxMSP (8.0 or later).

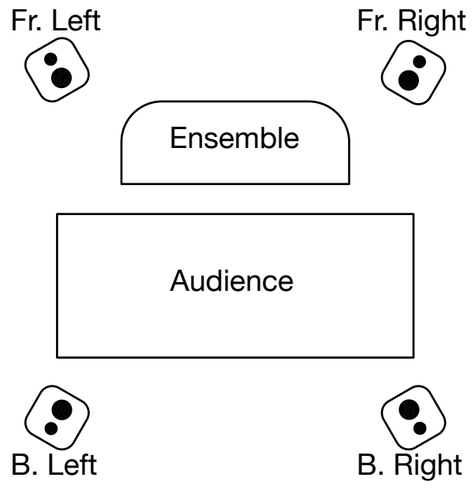
A sound card that has 4 balanced outputs and can connect to the laptop.

4 speakers with appropriate cables to connect to sound card and to a power source.

Setup

Speakers are to be placed surrounding the audience and ensemble as a front stereo pair and a back stereo pair (see below).

The laptop can be set up wherever is convenient for connections.



Performance

Volume levels should be set beforehand to a low level where the fine details of the field recording are just audible in the space. The acoustic instruments, when played softly, should be clearly audible yet balanced with the recording.

At the beginning of the piece, the audio should be triggered simultaneously with the first piano note.

At the end of the piece, the recording should be faded out 15 seconds following the end of the final note.

Max Patch

Ensure the audio output of Max is set to your sound card.

Set your output paths (speaker numbers) in the [mc.dac~] object. This can be done by manually changing the numbers in the object, or by sending the numbers as a message to the [mc.dac~].

Start audio processing in Max with the "startwindow" message.

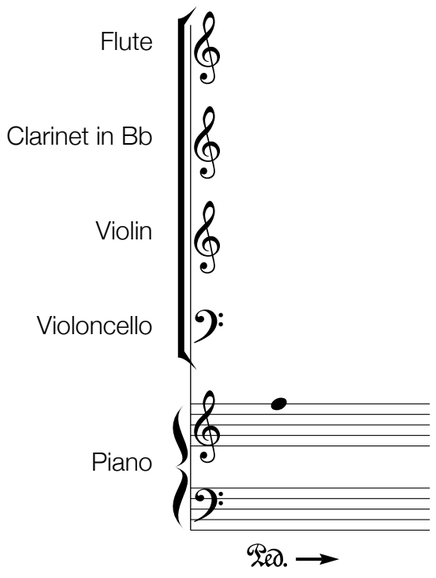
Ensure your audio levels are set with the gain fader.

Hit the space bar to start audio. The toggle will light up to show it is running. A secondary press will stop and reset audio.

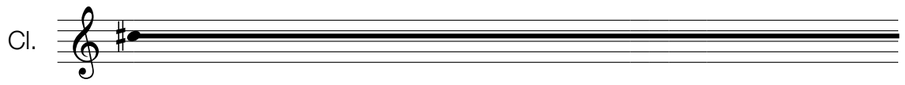
Hit "f" to begin fade out of the audio. When the fade out is completed, audio will automatically stop and reset.

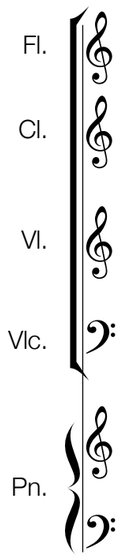
Email thomas.powell13@gmail.com for .maxpat and audio files.

c. 30"


Flute
Clarinet in Bb
Violin
Violoncello
Piano
Ped.

c. 1'


Cl.


Fl.
Cl.
Vl.
Vlc.
Pn.

c. 1'30"

Fl.

Cl.

Vl.

Vlc.

Pn.

Cl.

Pn.

sim.

Fl.

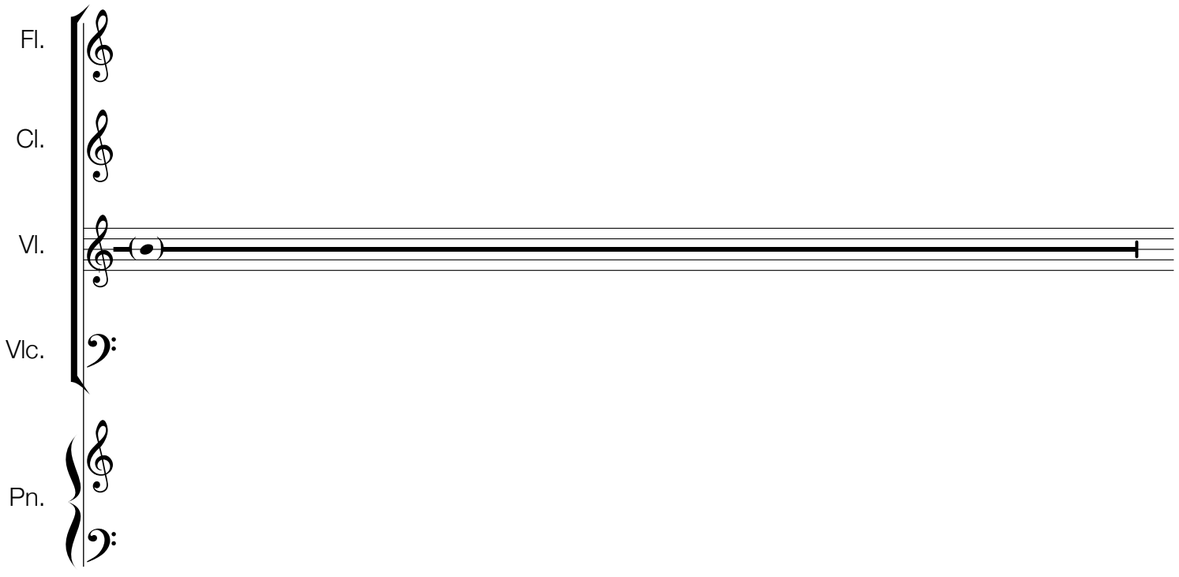
Cl.

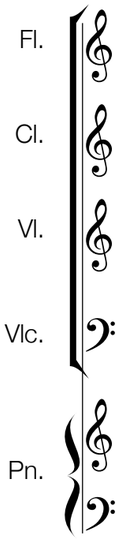
Vl.

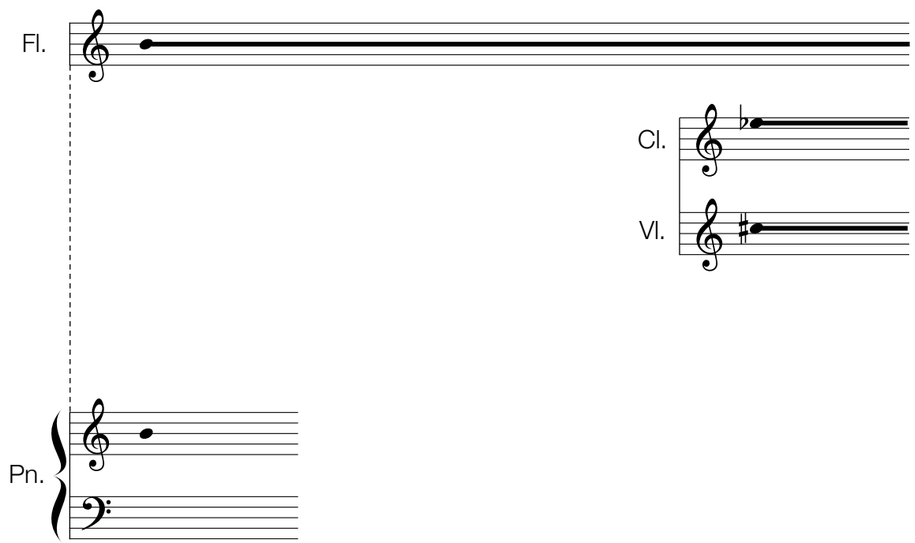
Vlc.

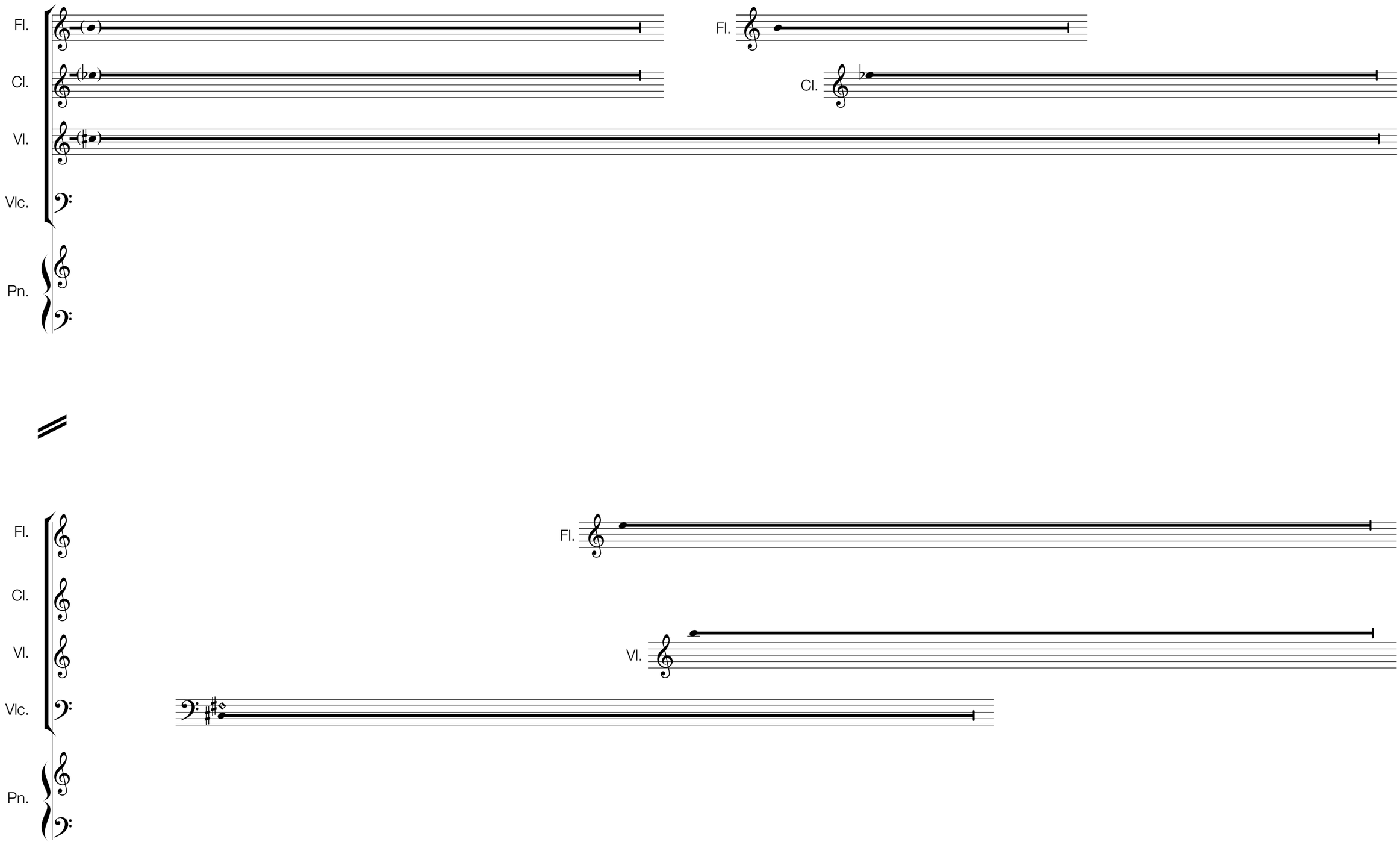
Pn.

Vl.

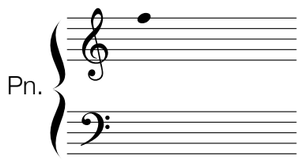

Fl.
Cl.
Vl.
Vlc.
Pn.


Fl.
Cl.
Vl.
Vlc.
Pn.


Fl.
Cl.
Vl.
Pn.

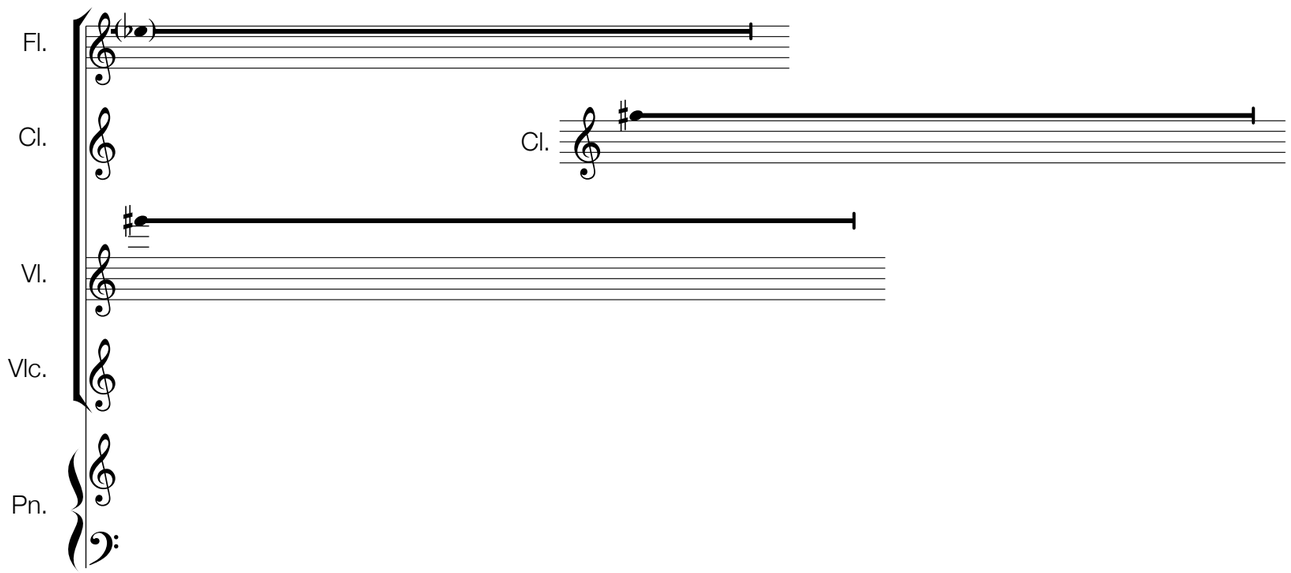

Fl.
Cl.
Vl.
Vlc.
Pn.
Fl.
Cl.
Fl.
Vl.
Vlc.
Pn.

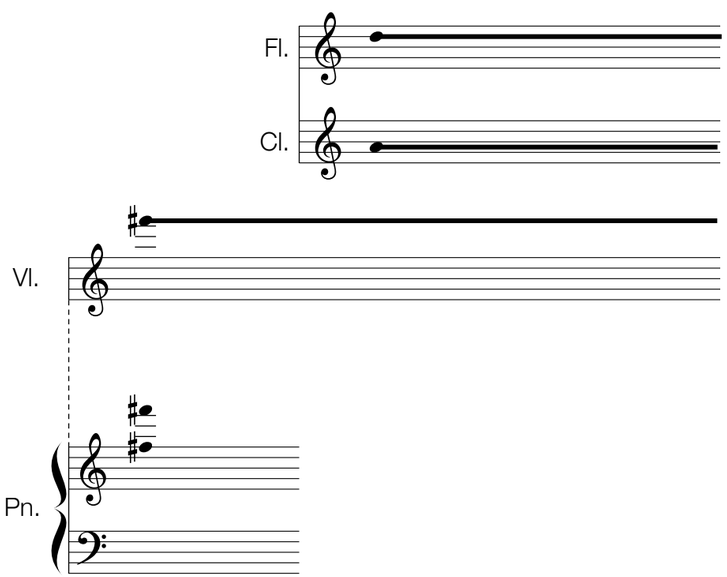

Fl.
Cl.
Vl.
Vlc.
Pn.


Pn.


Fl.

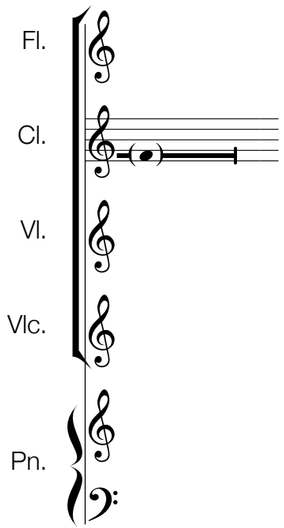

Vlc.
Pn.


Fl.
Cl.
Cl.
Vl.
Vlc.
Pn.


Fl.
Cl.
Vl.
Pn.


Fl.
Cl.
Vl.
Vlc.
Pn.


Cl.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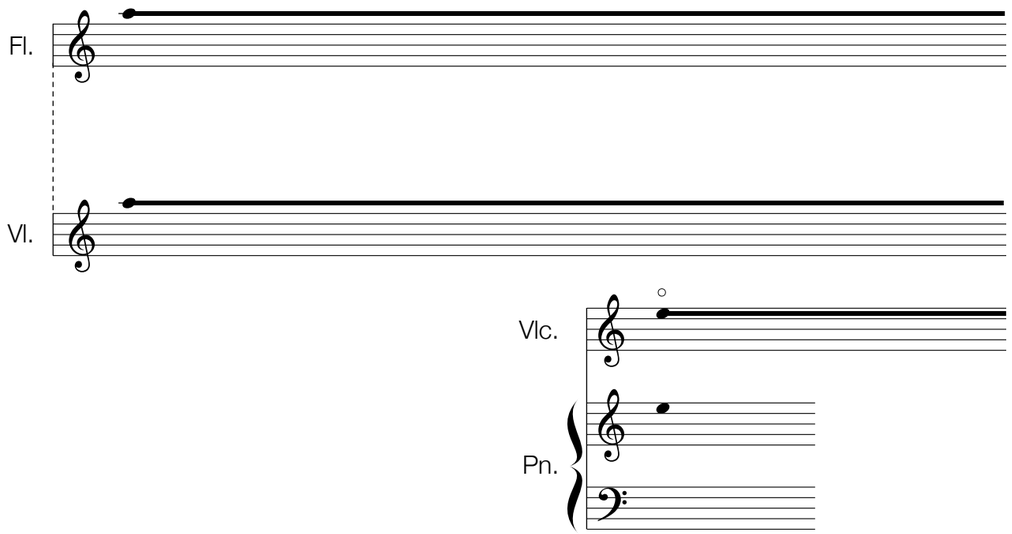
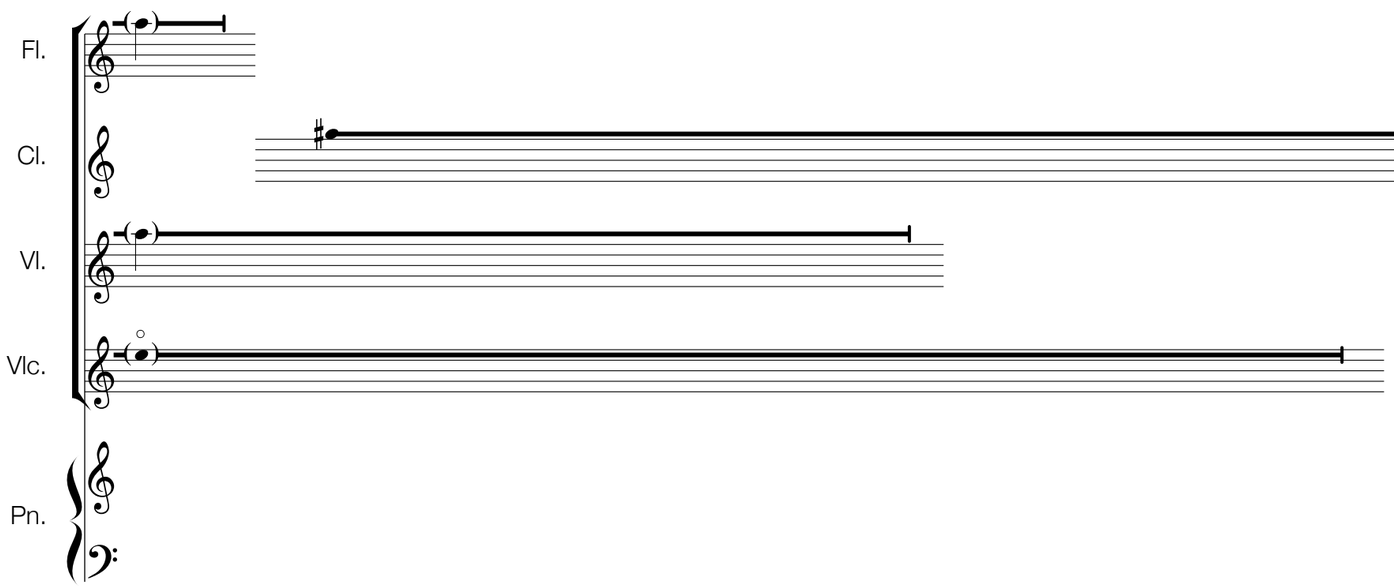
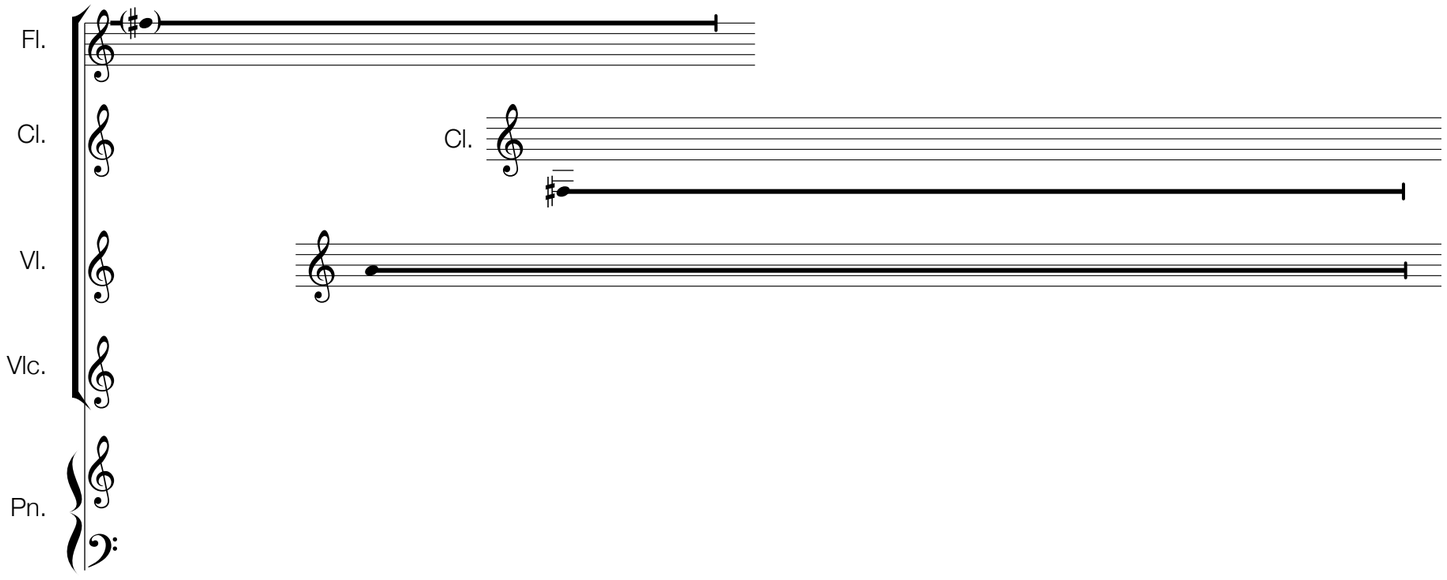
Vl.
Vlc.
Pn.


Fl.
Vl.
Vlc.
Pn.


Fl.
Cl.
Vl.
Vlc.
Pn.


Fl.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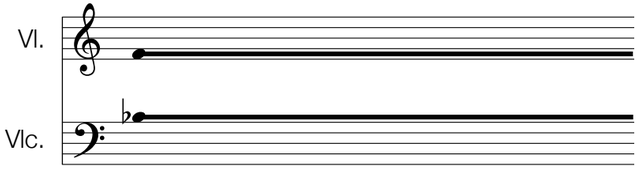
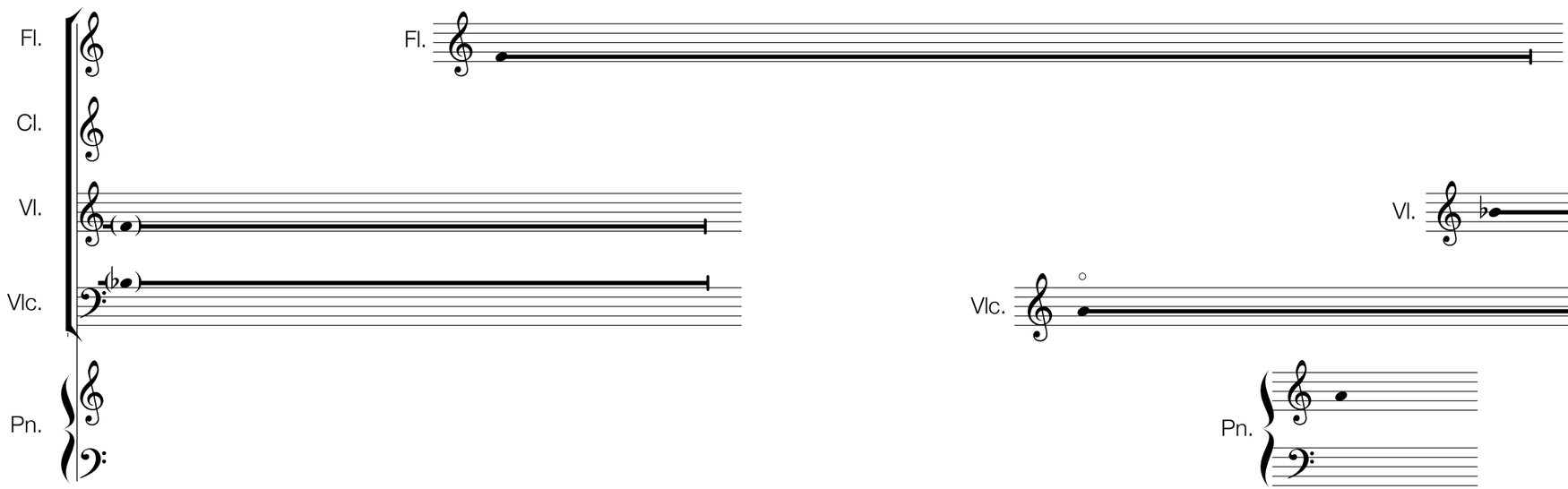
Cl.


Vl.
Vlc.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Pn.
Fl.


Vl.
Vlc.
Pn.

Fl.

Cl.

Vl.

Vlc.

Pn.

Vl.

Cl.

Vlc.

Fl.

Cl.

Vl.

Vlc.

Pn.

Pn.

Cl.

Fl.
Cl.
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Pn.

Fl.

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Vlc.

Pn.

Cl.

Pn.

Fl.

Cl.

Vl.

Vlc.

Pn.


Fl.
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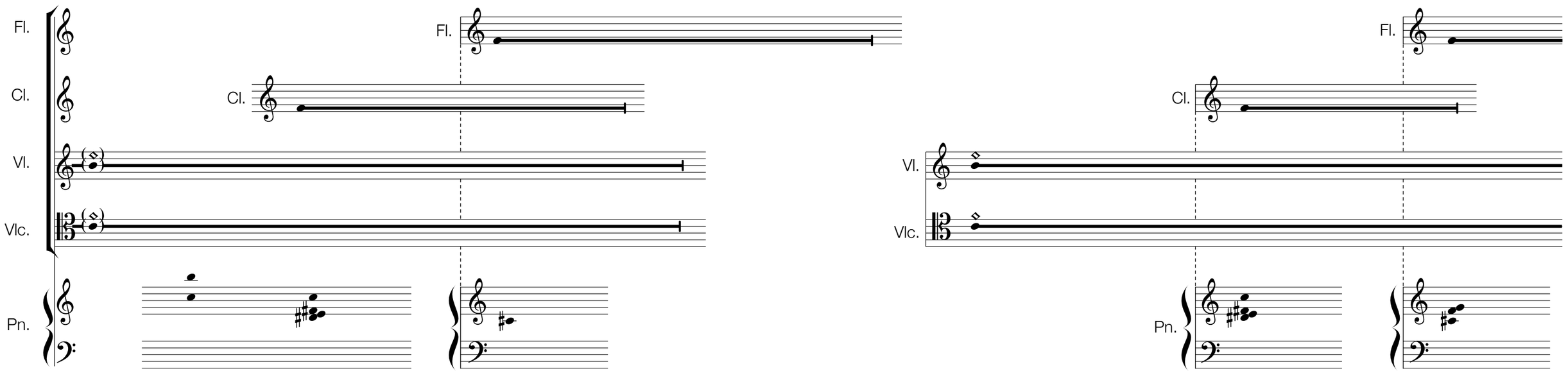
Vl.

Vlc.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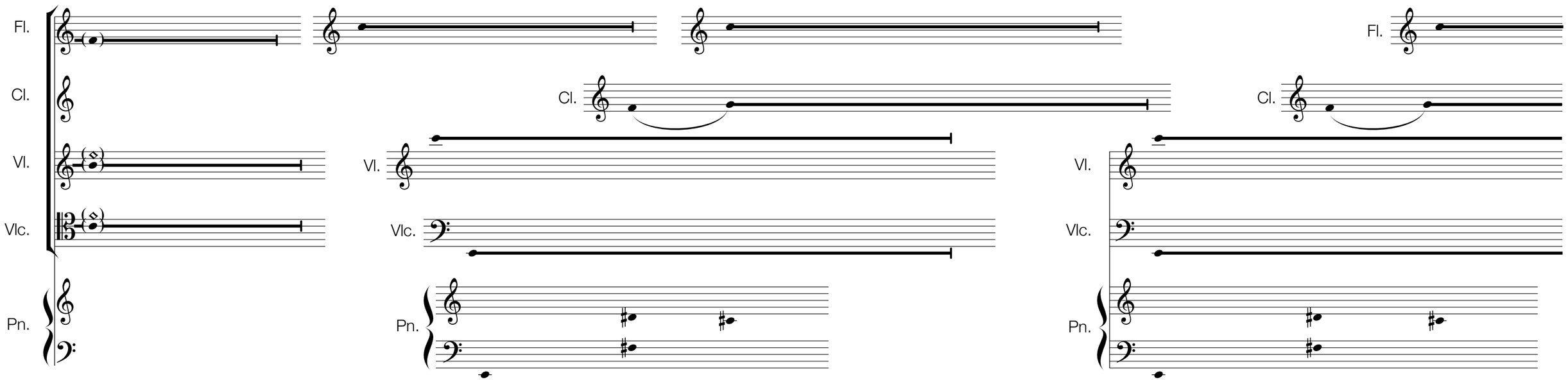
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Vlc.
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Fl.
Cl.
Vl.
Vlc.
Pn.
Vl.
Pn.
Fl.
Vl.
8va
8vb

Fl.

Cl.

Vl.

Vlc.

Pn.

8va

Pn.

Fl.

Cl.

Vl.

Vlc.

Pn.

8vb

Fl.
Cl.
Vl.
Vlc.
Pn.

8va

Fl.
Cl.
Vl.
Vlc.
Pn.

Vlc.

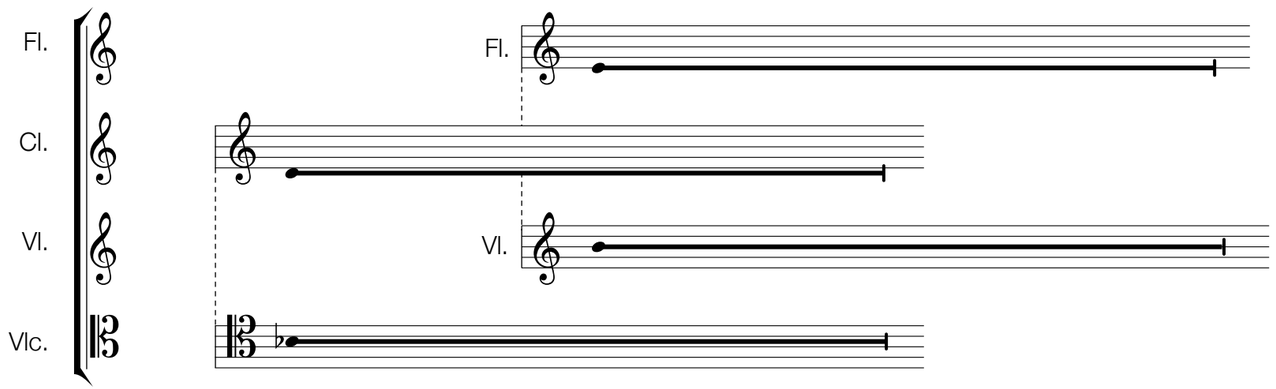
Pn.

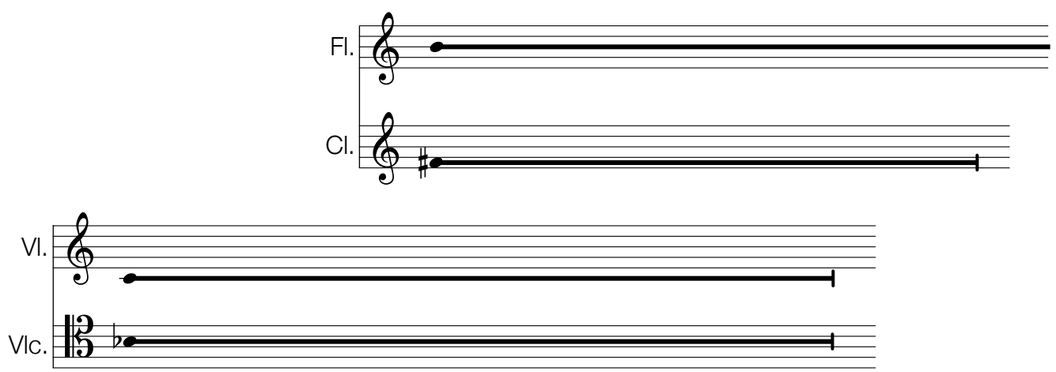
Pn.

Fl.
Cl.
Vl.
Vlc.
Pn.

Vl.
Vlc.
Pn.

Fl.
Cl.
Vl.
Vlc.
Pn.
8vb


Fl.
Cl.
Vl.
Vlc.
Fl.
Vl.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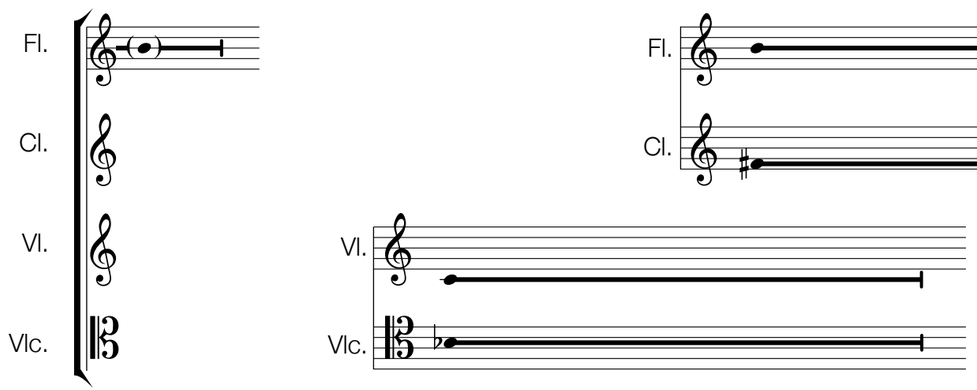
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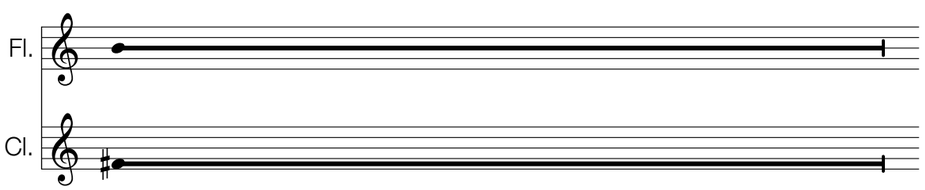
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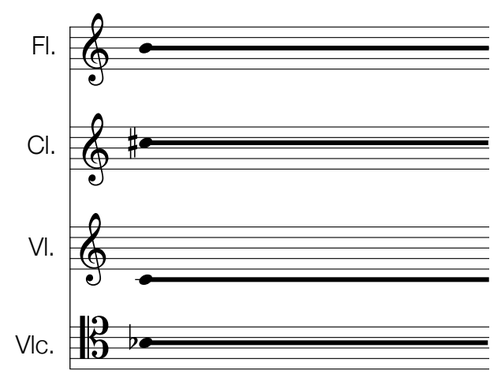
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Vl.
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Fl.
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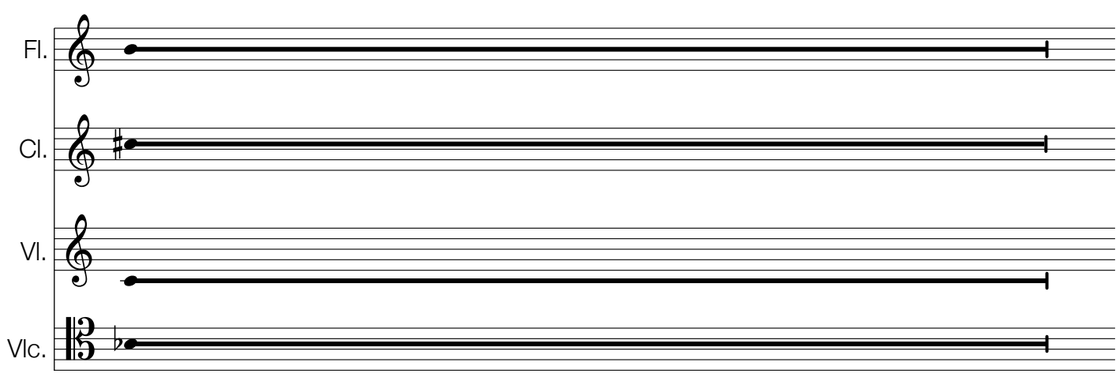
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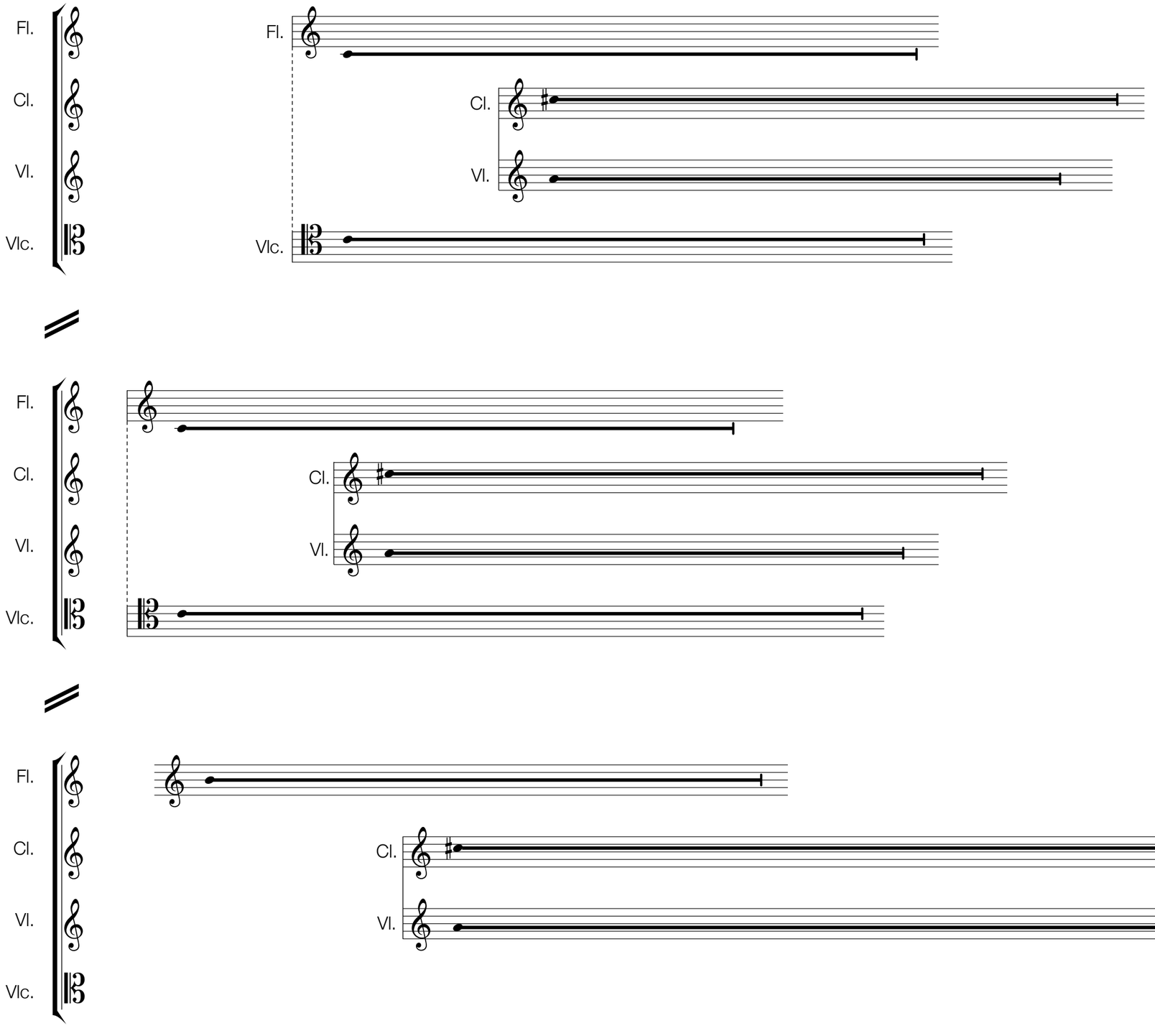
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Vlc.
Cl.
Vl.
Fl.
Cl.
Vl.
Vlc.

Appendix A: Supplementary Files

Recordings of Compositions (Folder)

Below, the Boarhound and the Boar – Thomas Powell (2022).wav

Grey on Indigo, Faded – Thomas Powell (2022).wav

w.RivEr.ST & nimbi – Thomas Powell (2021).wav

Max Patches and Performance Audio Files (Folder)

Below, the Boarhound and the Boar – Performance Patch.maxpat

Boar_Fader_1.wav

Boar_Fader_2.wav

Boar_Fader_3.wav

Boar_Fader_4.wav

Boar_Trigger_1.wav

Boar_Trigger_2.wav

Boar_Trigger_4.wav

Boar_Trigger_6.wav

Boar_Trigger_7.wav

Boar_Trigger_8.wav

Grey on Indigo, Faded - Performance Patch.maxpat

back_left.wav

back_right.wav

front_left.wav

front_right.wav

Appendix B: Performance Information

w.RivEr.ST & nimbi

Performed on December 14th, 2021 at Convocation Hall, Old Arts Building, University of Alberta. Performed by Alison Balcetis on soprano saxophone; Kendra Heslip on alto saxophone; Charles Stolte on tenor saxophone; Ben Whittier on baritone saxophone.

Below, the Boarhound and the Boar

Performed on April 14th, 2022 at Convocation Hall, Old Arts Building, University of Alberta. Performed by Russell Whitehead on trumpet; Conrad Sobieraj on violoncello; Mark Segger on percussion; Thomas Powell on electronics. Conducted by Andriy Talpash.

Grey on Indigo, Faded

Performed on December 14th, 2022 at Convocation Hall, Old Arts Building, University of Alberta. Performed by Shelley Younge on flute; Don Ross on clarinet; James Cockell on violin; Conrad Sobieraj on violoncello; Maria Protodyakonova on piano; Thomas Powell on electronics. Conducted by Andriy Talpash.

All concerts recorded and mixed by Russell Baker and Patrick Strain.