THE COMPOSITION OF TIMBRE:

A MULTIDIMENSIONAL APPROACH

APPENDIX: PORTFOLIO OF COMPOSITIONS

IVONNE MICHELE ABONDANO FLÓREZ

SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF LEEDS

FACULTY OF ARTS, HUMANITIES AND CULTURES

SCHOOL OF MUSIC

AUGUST 2021

THE COMPOSITION OF TIMBRE: A COMPOSITIONAL APPROACH

APPENDIX: PORTFOLIO OF COMPOSITIONS

CONTENT i

and it comes like a piece of light through the dust (2018–20), for bass clarinet. 1

The Shimmer Beneath: A Scattering Attempt (2019), for cello duo 10

Distorted Pieces of Something. Study on Light (when it rains) (2019), for soprano saxophone and viola 22

A Weightlessness Process (… or how to become ethereal) (2019–20), for cello 40

Just An Attempt To Dissipate (2019), for soprano voice, alto flute, bass clarinet, and guitar 52

We no longer sleep in the wind (2020), for Paetzold double bass recorder 87

suelo seco (2020–21), for amplified cello and piano 97

The Loneliness of the Rusted Things (2020), for flute, oboe, clarinet, violin, viola, and cello 113

and it comes like a piece of light through the dust

solo bass clarinet

MICHELE ABONDANO

2018–20

and it comes like a piece of light through the dust

solo bass clarinet

Duration: 10 minutes

All alterations of pitch affect only the note they precede.

SYMBOLS

Positions of the mouth in regard to the clarinet neck without mouthpiece (w/o mouthpiece):

○ The mouth should be in front of the hole of the barrel, close to it but without contact to make part of the sound spread outside the instrument.

◐ The hole of the barrel should be partially cover by the mouth. There should be still certain space open to make part of the sound spread outside the instrument.

● The hole of the barrel should be covered by the mouth. All the sound should be produced inside the instrument.

The three positions should be prepared by the performer according to her/his needs to make the whistle or singing possible. However, there should be a clear intention to make a difference between them in order to create a subtle process of transformation of timbre as written on the score.

→ Gradual transition from a position/sound to another one.

Noteheads:

◇ Whistling (voice technique)

⊗ Singing

Always articulate the vowel [ɑ], according to IPA: open, low back, unrounded vowel. Example in British English: arm [ɑːm].

Note: In order to recognise the pitch to whistle or sing, it is recommended to use a tuner whenever needed during the performance.

ϕ Vocal Fry (voice technique)

Turbulence technique that occurs at the vocal folds. When frying, the vocal folds come together slowly enough to create a pulse tone that has a less-prominent or even absent harmonic series –VoiceScienceWorks Website. *Note: It is recommended to use the low register of the voice with low air pressure.*

Important: The ‘vocal fry’ sound produces undetermined pitch; therefore, the notated pitch for the voice works only as a guide to ease the reading, while the low pitch corresponds to the fingering that should be used, although it works only as a natural amplification and filter for the vocal sound.

□ Air Tones

Blow to produce air sound, pitch is undetermined. However, the fingering for the written pitch should be held to ease the timbral transition.

◇ + V Hollow Tones

Strong inhalation of air from the articulation of the syllable ‘Hoo’ [hu:]. Although the pitch is undetermined, the fingering for the written pitch should be held to ease the timbral transition. The same instruction apply in both cases, with or without mouthpiece; however, there can be an evident difference in the resulting sound which is expected. This is a variation of a technique used by Ann Cleare in her piece ‘eyam I’.

Techniques

Double Trill — Combine a fundamental fingering with the rapid alteration of two different keys with different hands (fingering diagrams on score). Allow dyad multiphonics to speak whenever possible to create a blurred timbre of constant movement. Performer is going to be able to hear specific pitches, but not all of them all of the time, there’s always just the suggestion of the dyad (the top notes are almost identical with these, so you’ll mostly hear that popping out) –Heather Roche. [Fingerings diagrams by Heather Roche using Bret Pimintel’s website]

flz. — Flutter-tongue/frullato

ord. — Ordinary. Mostly used to clarify that a previous instruction should be stopped.

M — Spectral Multiphonics (also, overblown multiphonics)

The technique consists of producing simultaneous upper harmonic from a given fundamental (the partial that should be emphasised is determined on score for each case, although there can be an inflection of pitch (upper or downer) depending on the clarinettist’s technique and the instrument used. “It is recommended to find the right amount of space in the cavity of the mouth and throat. The performer could experiment with lowering the jaw and changing the direction of the flow of air. These multiphonics use the core fundamental fingerings for each pitch.” –Heather Roche.

Underblown Multiphonics

To produce these multiphonics it is necessary to use altissimo fingerings, allowing the lower undertones to sneak back in. –Heather Roche. The corresponding fingering is written above each multiphonic.
[Fingerings diagrams by Heather Roche using Bret Pimintel's website]

Multiphonics microtonal notation:

𝅘𝅥	¼ tone lower
♯	¼ tone higher
𝄭	Light inflection of tone down
𝄮	Light inflection of tone up

PREPARATION

Cardboard mute

Use a hard cardboard tube like those that come inside the cling film rolls. The size should be: Length: 300 mm, diameter: 25 mm, and thickness: 4 mm. *Note: It is important to keep these measures, especially in terms of thickness, in order to successfully achieve the timbral transformation pursued with the use of the cardboard mute.*

Cover the hole of one end of the roll with a piece of bubble wrap, press enough to make it work as a barrier for air to pass through. Then, fix it with tape. Let the other end open.

Insert the mute by the open side into the bell. The top side should be that one covered by the bubble wrap.

The cardboard mute works as a 'distortion' effect rather than a mute. It only affects the pitches produced from the low C fingering, it doesn't have any effect on the other techniques or pitches. Therefore, it should be placed inside the bell from the beginning of the piece and not be removed until the end.

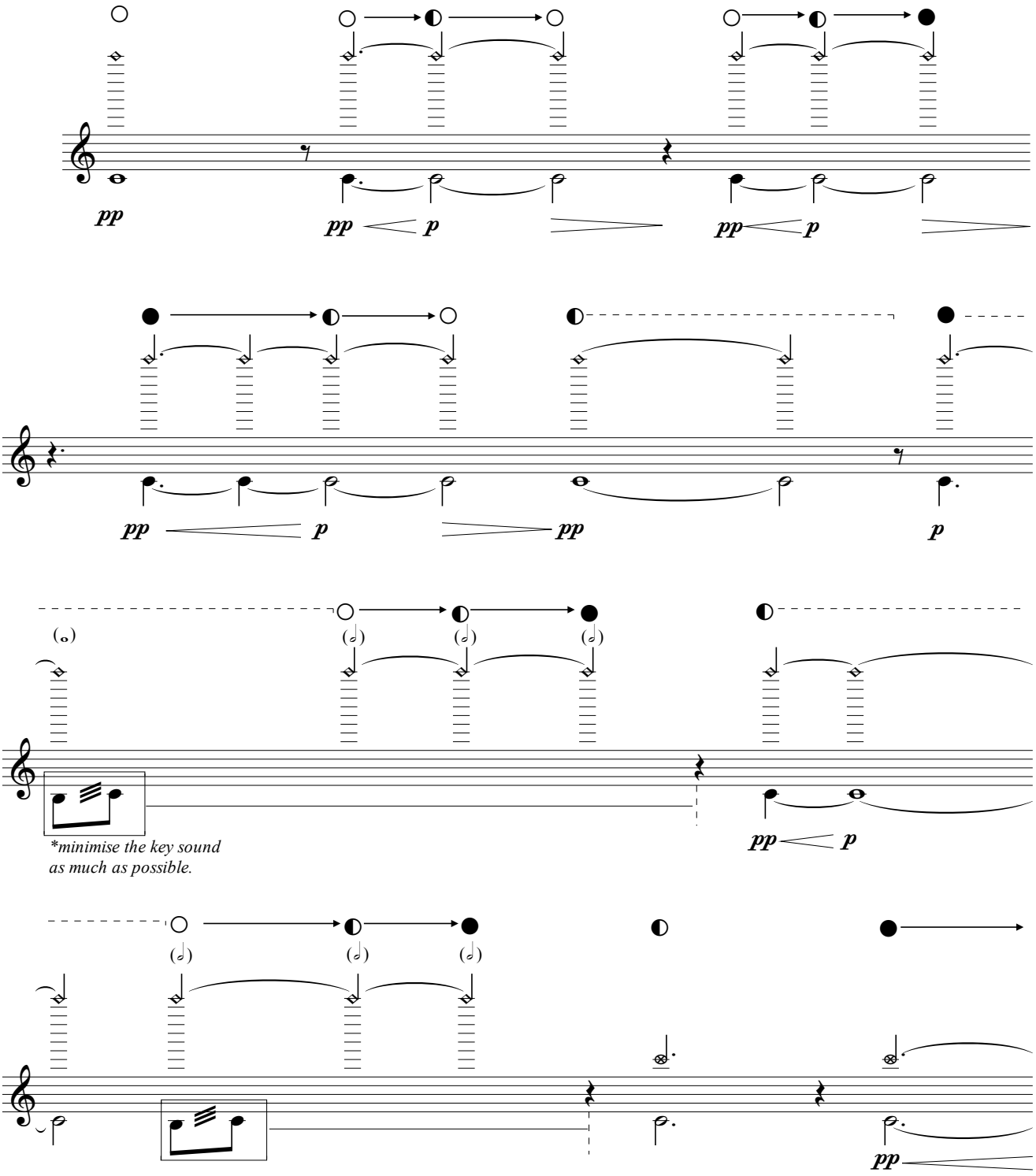
and it comes like a piece of light through the dust

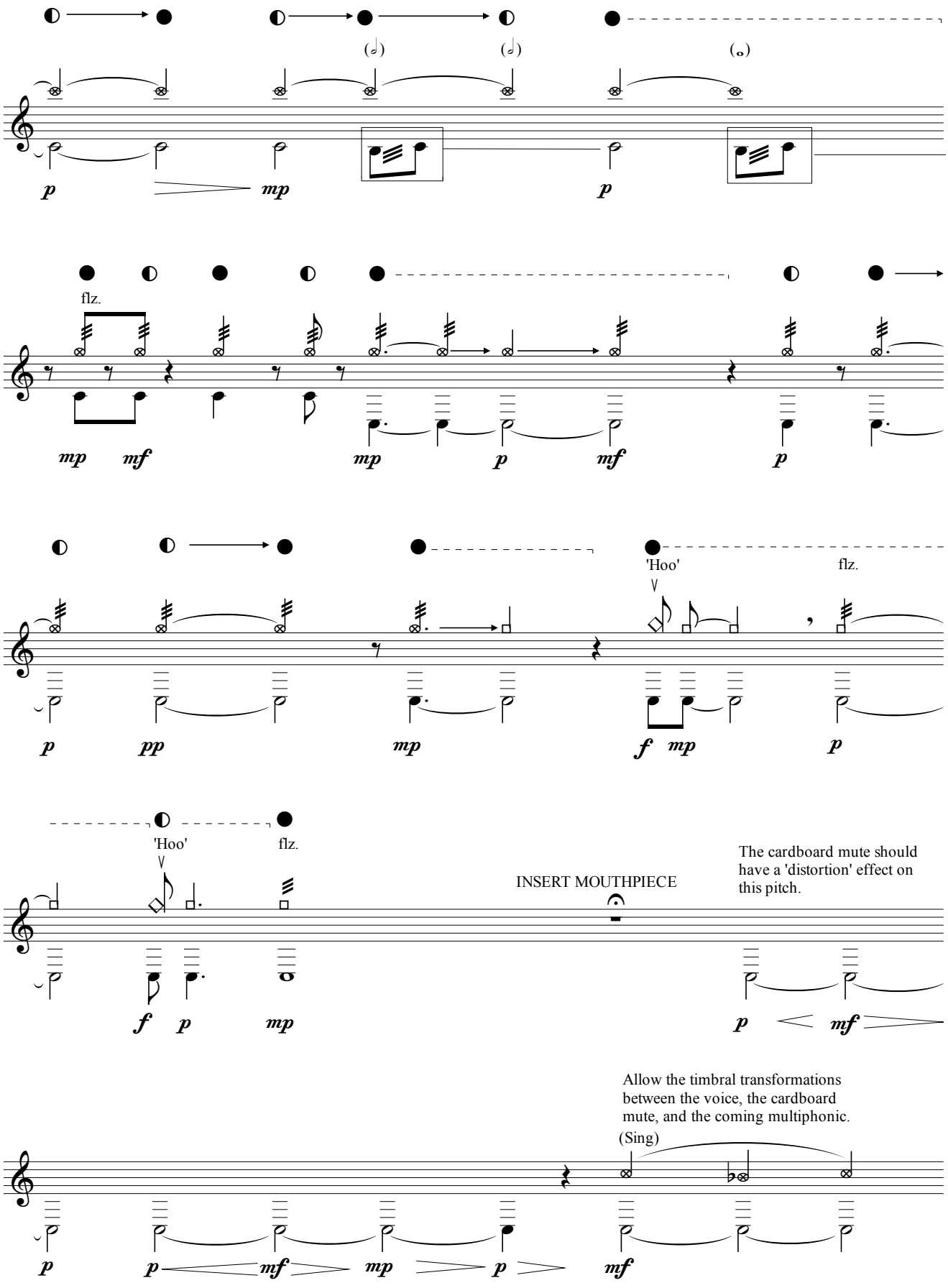
solo bass clarinet

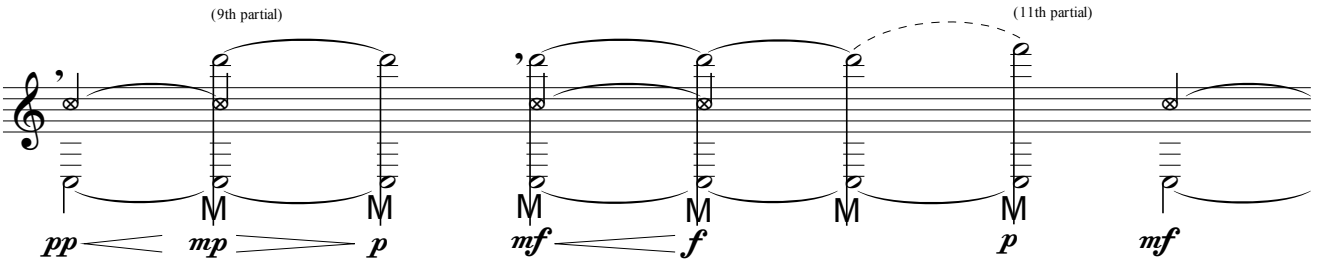
MICHELE ABONDANO
2018–20

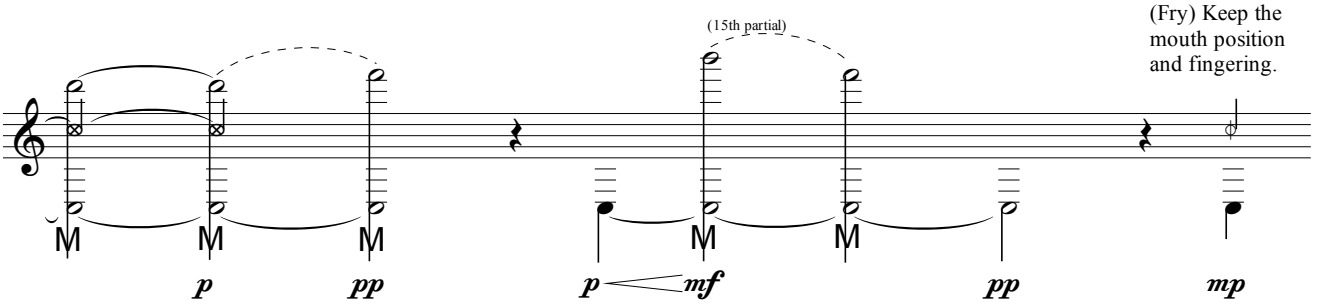
Voice is also transposed
**Male voices may be transposed an additional octave lower when singing.*

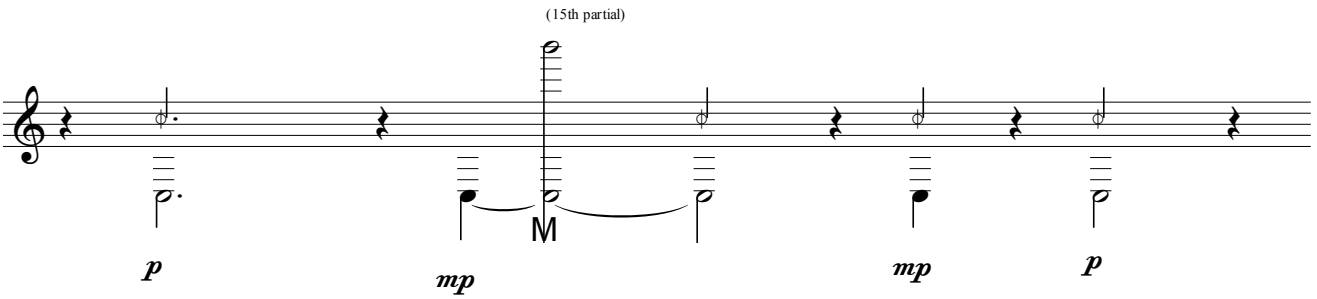
♪ = ca. 60
CARDBOARD MUTE
W/O MOUTHPIECE
(Whistle)

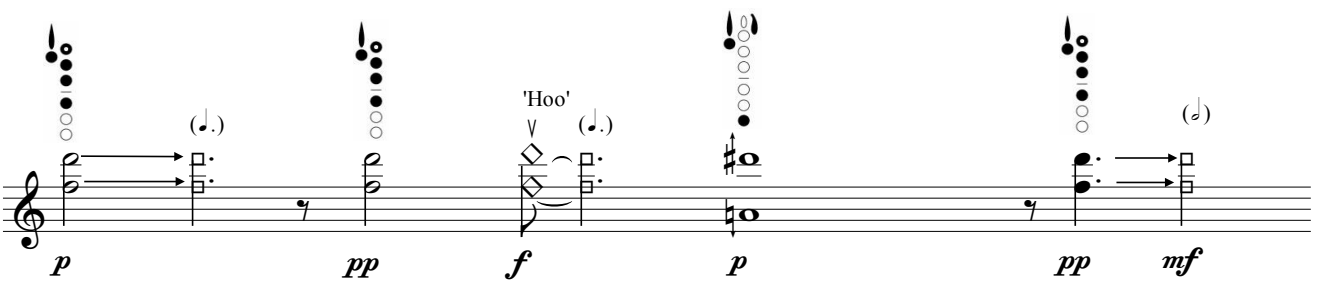


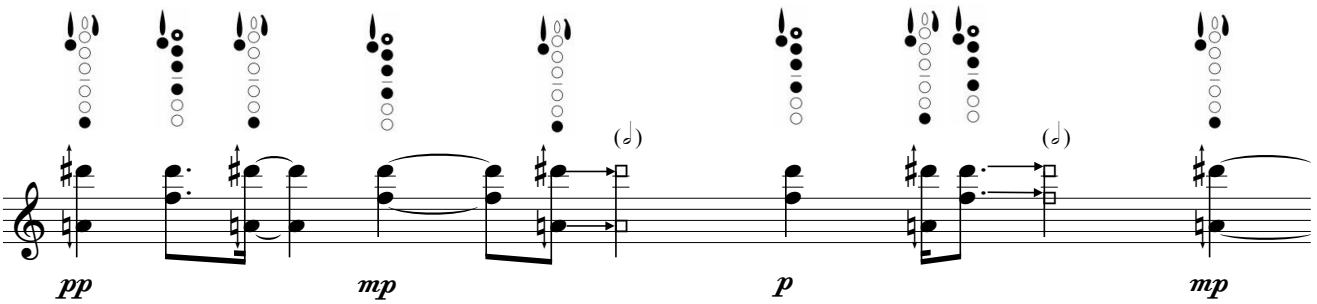

flz.
'Hoo'
flz.
'Hoo'
flz.
INSERT MOUTHPIECE
The cardboard mute should have a 'distortion' effect on this pitch.
Allow the timbral transformations between the voice, the cardboard mute, and the coming multiphonic.
(Sing)

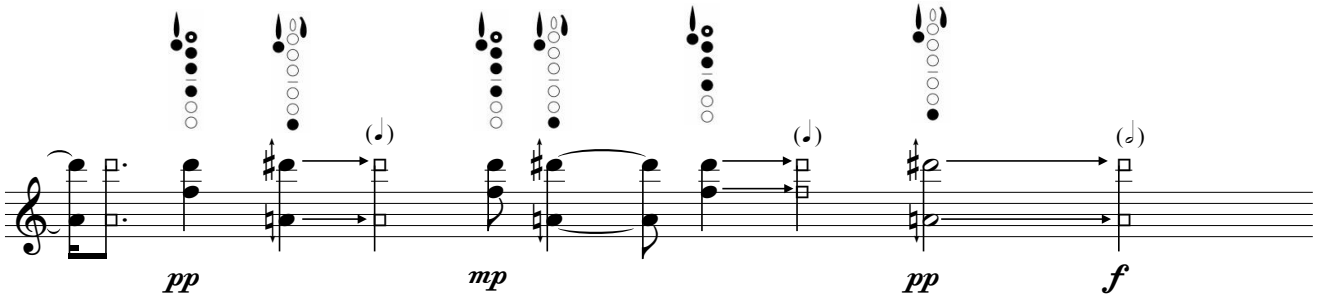

(9th partial)
(11th partial)
pp
mp
p
mf
f
p
mf

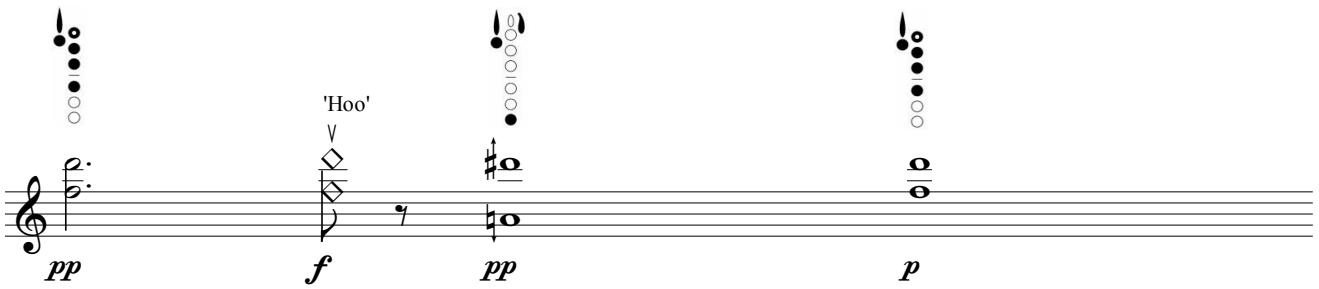

(15th partial)
(Fry) Keep the mouth position and fingering.
p
pp
p
mf
pp
mp

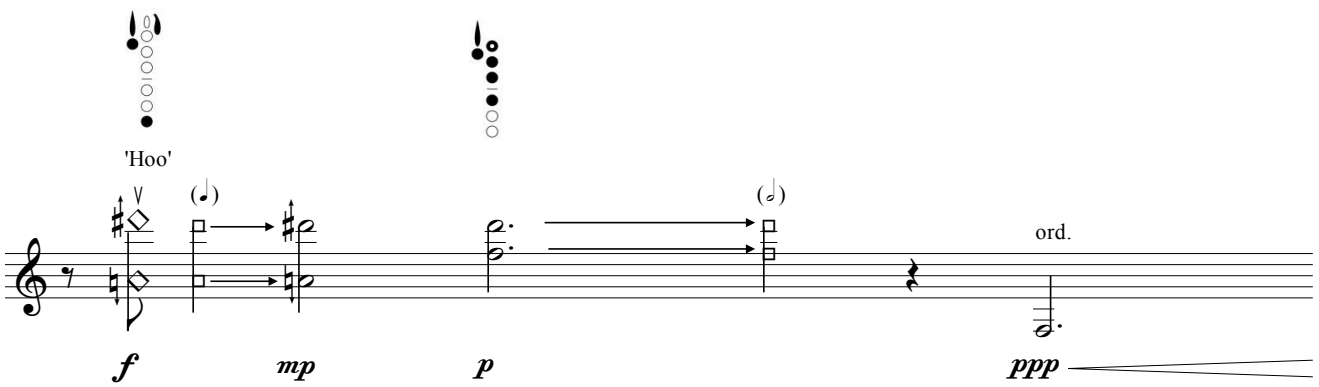

(15th partial)
p
mp
mp
p


'Hoo'
p
pp
f
p
pp
mf

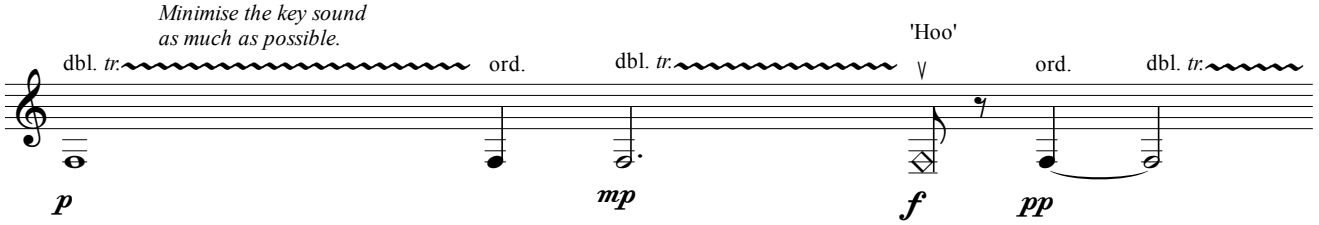

pp
mp
p
mp

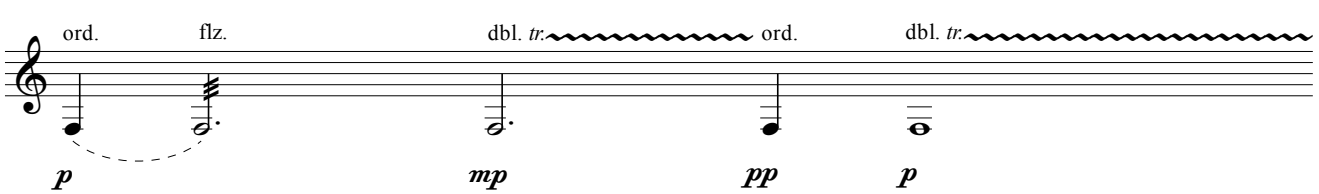


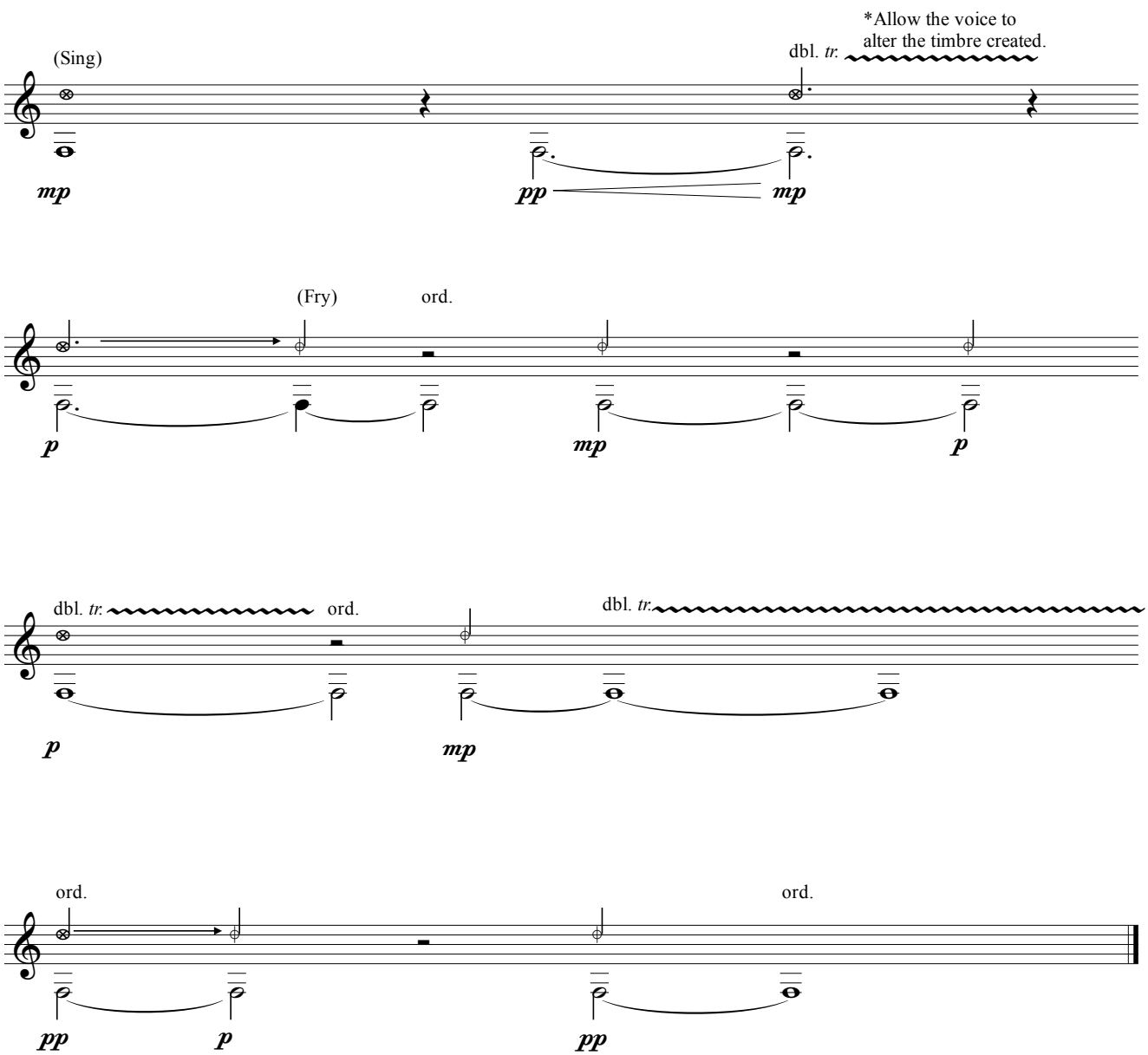




*Allow dyad multiphonics
to speak whenever possible.
Create a blurred timbre.
Minimise the key sound
as much as possible.






(Sing)
dbl. tr.
*Allow the voice to alter the timbre created.
mp
pp
mp
(Fry)
ord.
p
mp
p
dbl. tr.
ord.
dbl. tr.
p
mp
ord.
ord.
pp
p
pp

The Shimmer Beneath:

A Scattering Attempt

Cello Duo

MICHELE ABONDANO

2019

The Shimmer Beneath: A Scattering Attempt

Cello Duo

PERFORMANCE NOTES

All glissandi should start immediately at the beginning of the note value.
Always without vibrato unless it is indicated.
Apply the technique as written, the unstable or shifting behaviour of timbre is expected and desired.

Duration: 7 minutes

SYMBOLS

𝅘𝅥𝅯	Quarter of tone down
♯	Quarter of tone up
▲△▼▽	Triangular-shaped notehead: Highest/lowest pitch possible.
◇	Diamond-shaped notehead: Harmonic Fingering.
□	Square shaped notehead: Airy Sound [A. S.] Use very light finger pressure (less than harmonic pressure) to produce an air noise with undetermined pitch.
P. S.	Pinched String Pinch the string with index and thumb fingers, right at the end of the fingerboard. The pitch is undetermined with high inharmonicity since the string is prevented to vibrate normally, increasing the sound of the bowing.
Ord. F.	Ordinary Fingering. Back to normal stopped note pressure.
M	Multiphonics: String is specified in each case. The expected partials are written in numbers and sounding pitch (latter only the first time it appears in score). Place the bow wherever it needs to be and use whatever pressure is necessary to make the multiphonic happen.

BOWING PLACES

M.S.P.	molto sul ponticello
M. S. T.	molto sul tasto
B. B.	behind the bridge
S. P.	sul ponticello
S. T.	sul tasto
ORD.	ordinary (normal place)

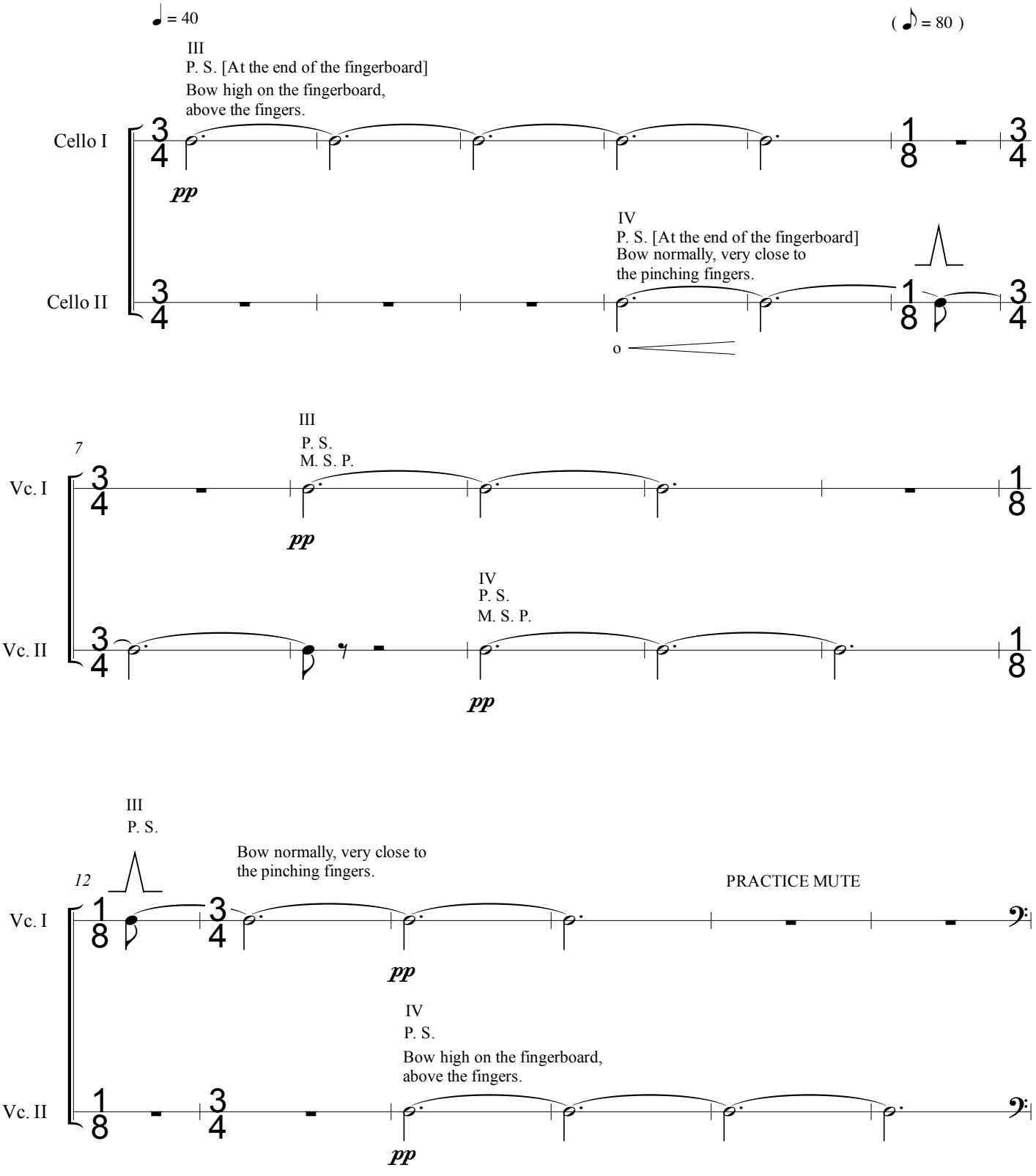
BOW TECHNIQUES

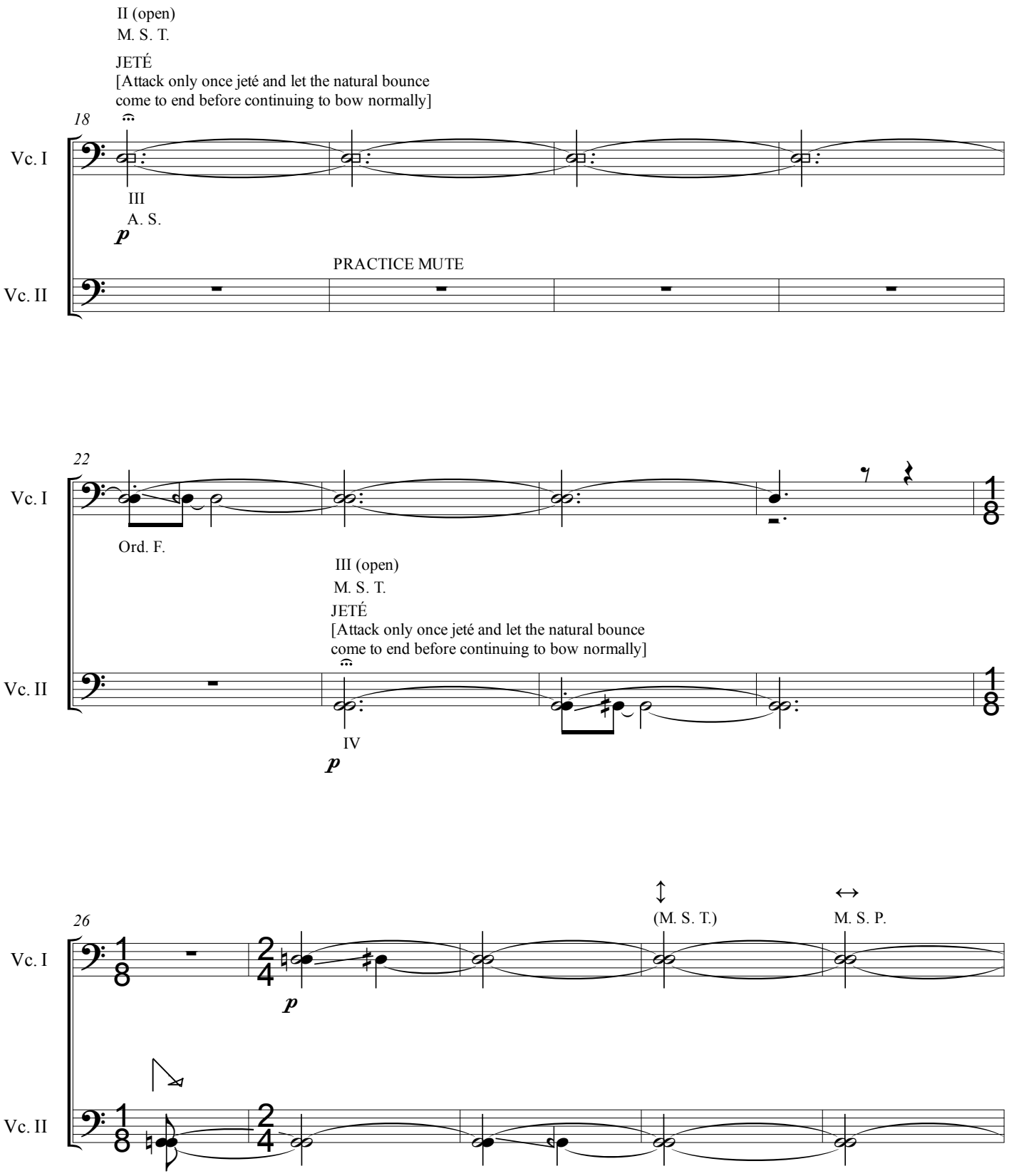
C. L.	Col Legno
M. L.	Mezzo Legno
	The bow is thrown and allowed to bounce at a naturally decaying frequency.
½ C. L. Split Bridge:	Place the wood of the bow behind the bridge and the hair of the bow in front of the bridge. This should create a very light whisper of the notated pitch surrounded by a white noise hiss.
↔	Horizontal Movement of Bow (Normal Bowing)
↕	Vertical Movement of Bow: Move the bow along the string(s) producing a soft scratch.
	Bow Flick: Rapidly slide the bow vertically from current place to M. S. P. and back to create a light, white noise break in the sound.
	Bow Accent: Rapidly slide the bow behind the bridge and back to create a slight, distorted accent.
	Bow Vibrato: Vary the pressure of the bow with the right hand without moving the left hand. The movement is suggested by the type of graphic, so the variations can be small and regular or gradually increased.

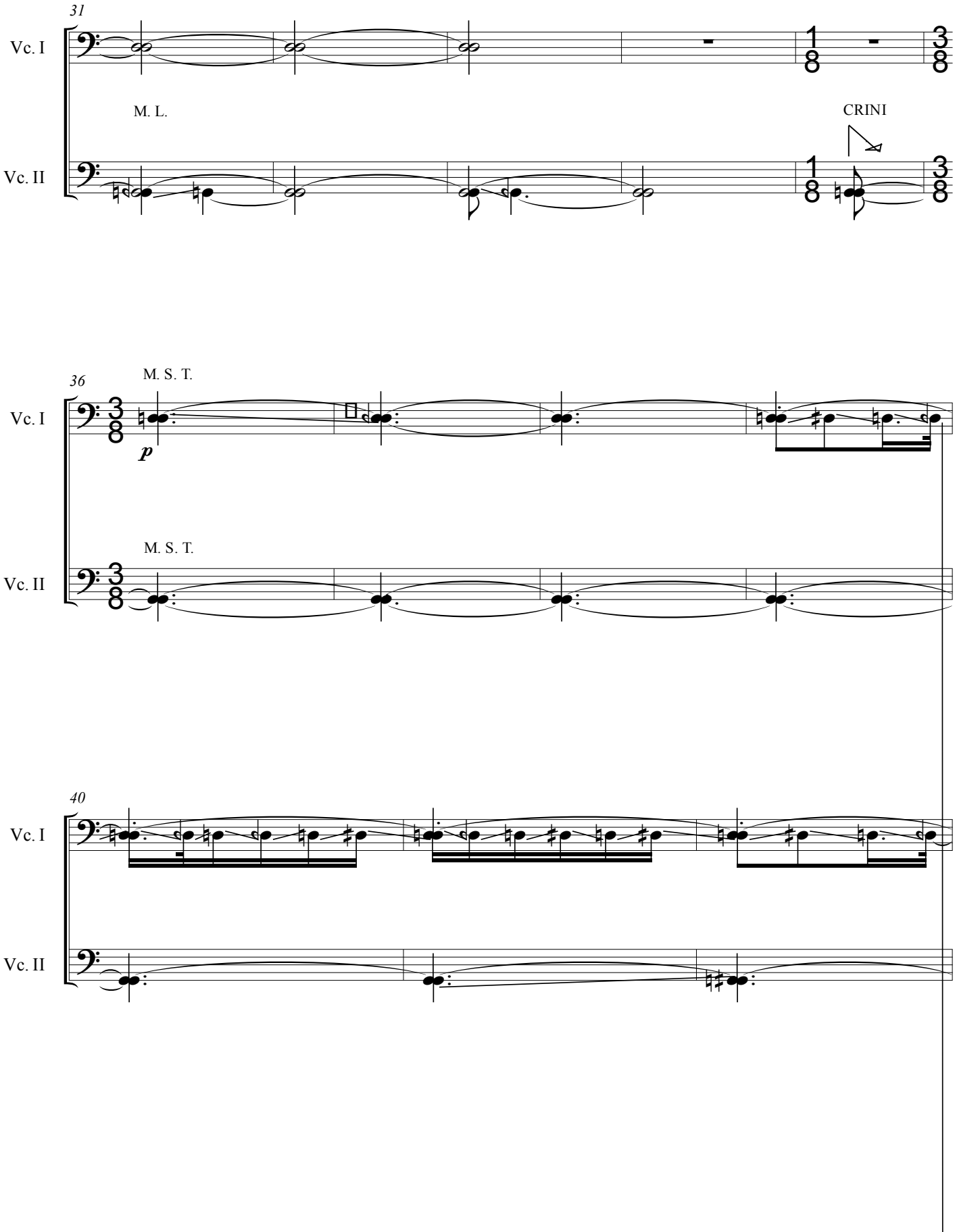
The Shimmer Beneath: A Scattering Attempt

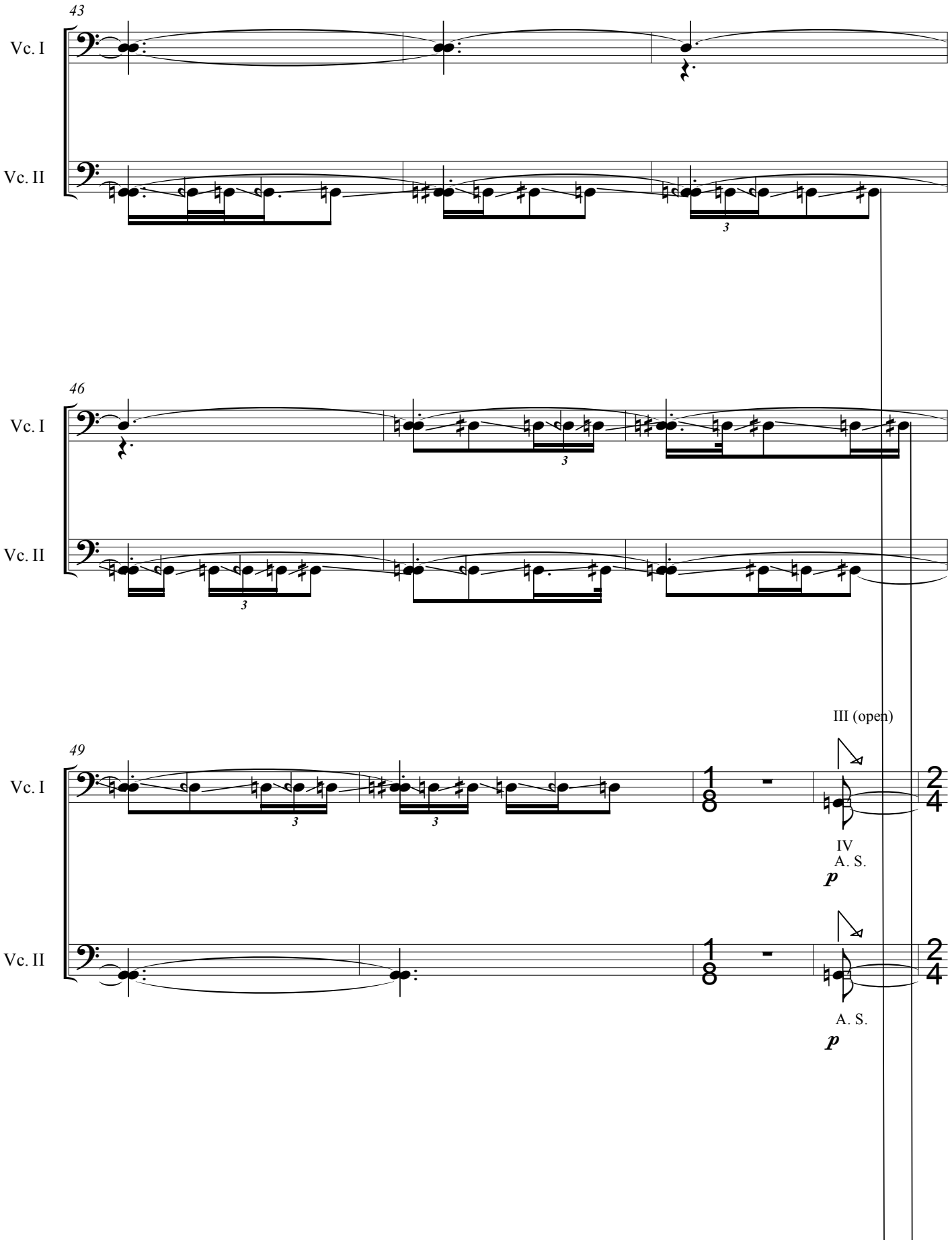
For Cello Duo

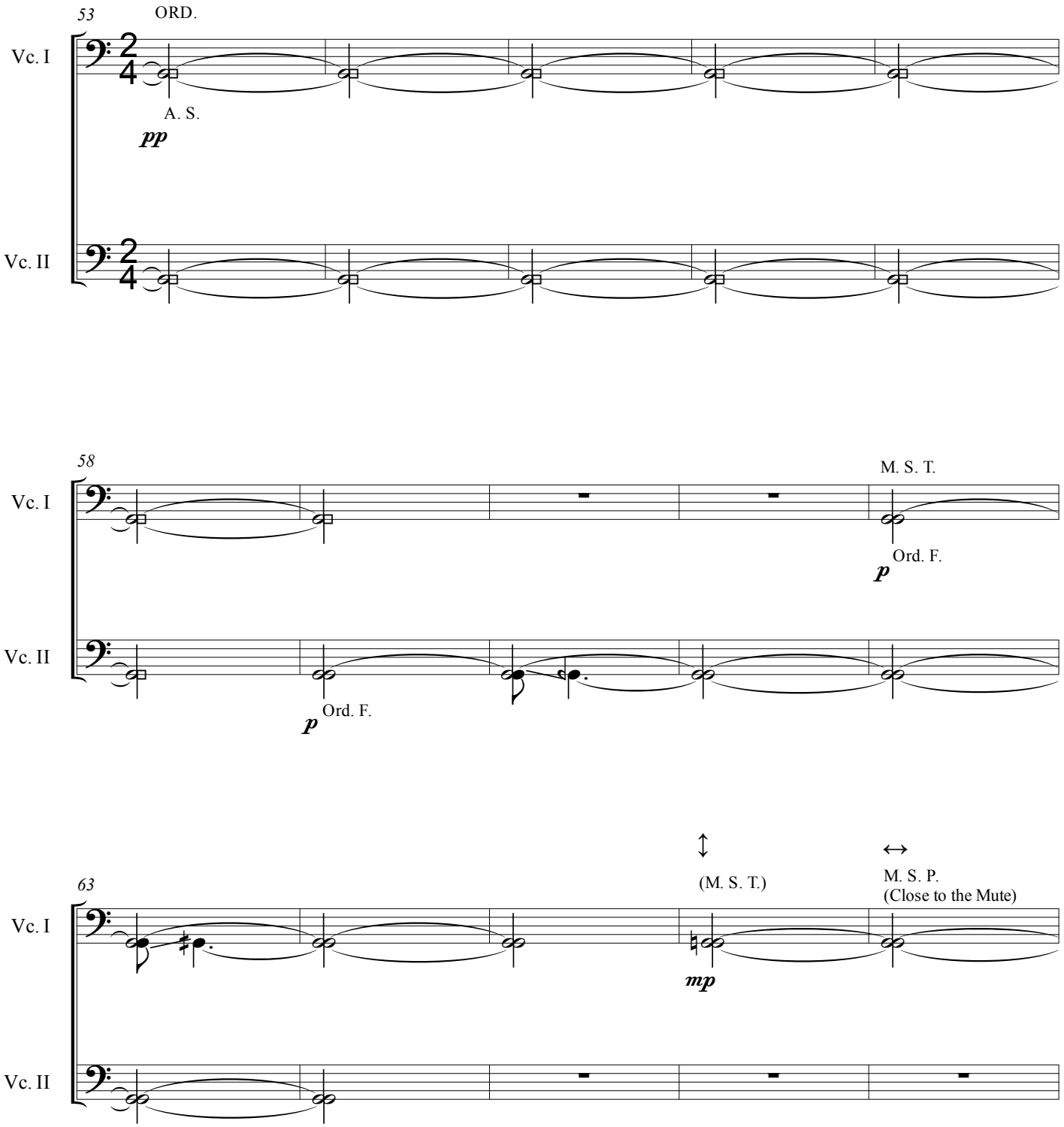
MICHELE ABONDANO
2019

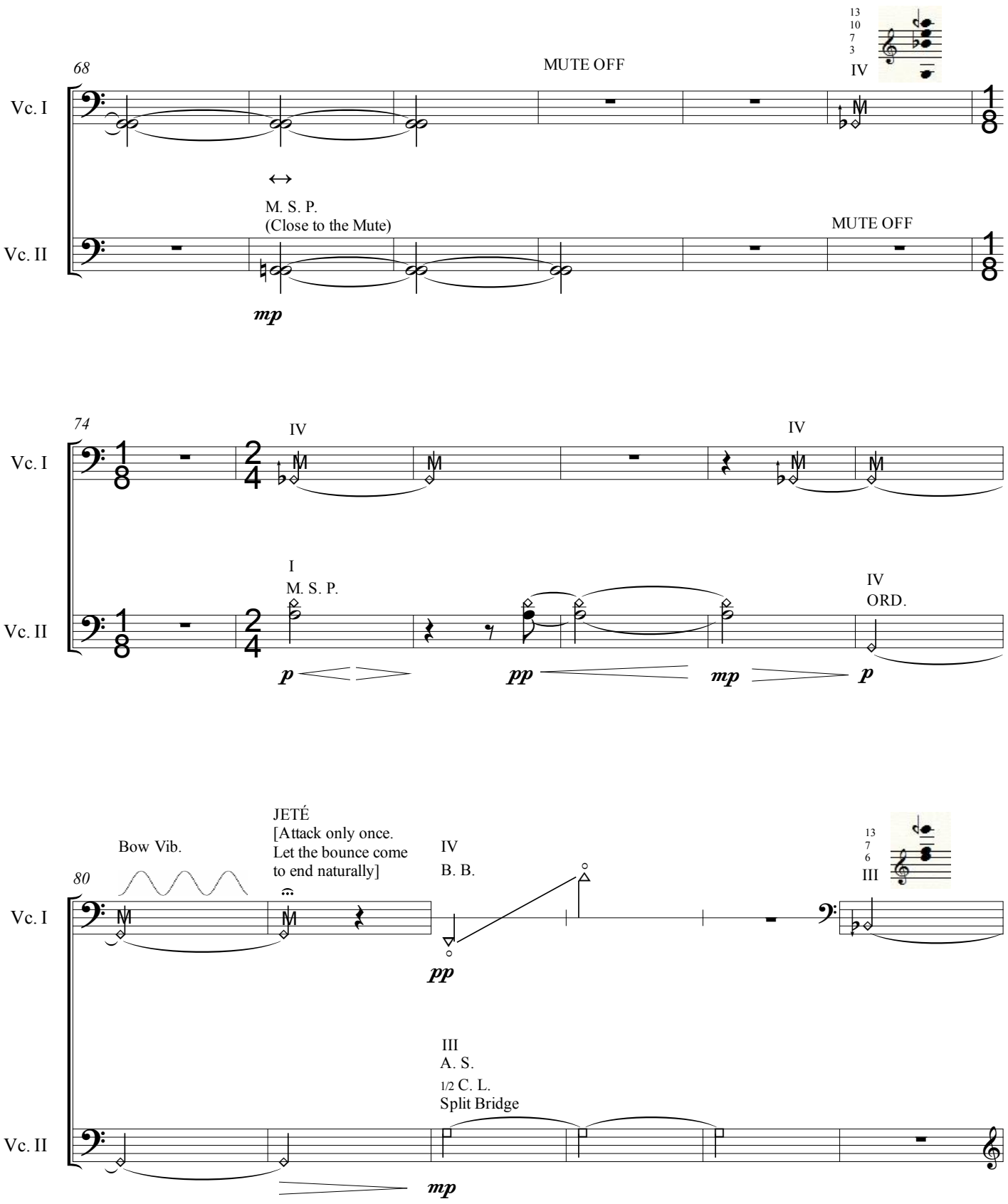


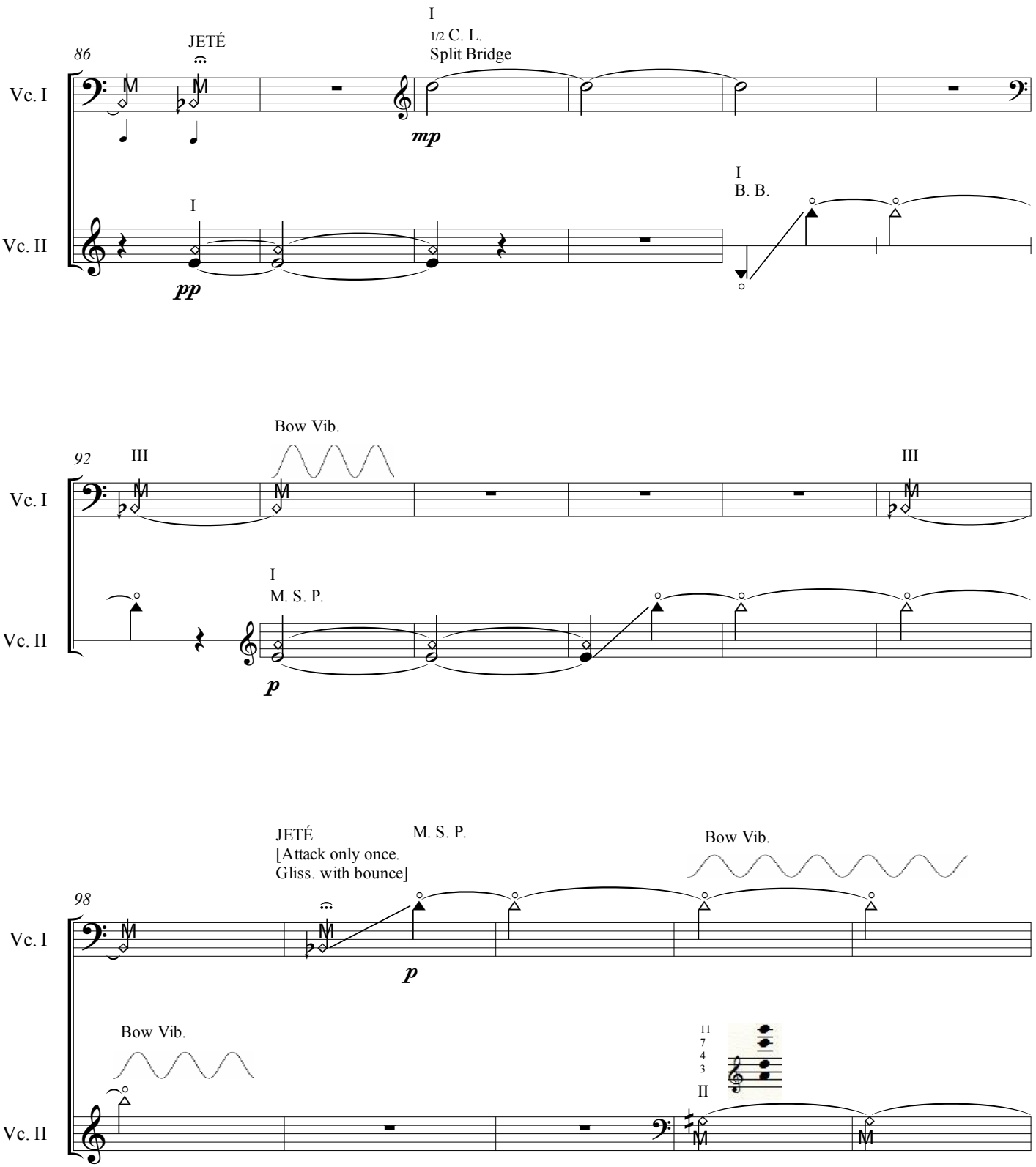

II (open)
M. S. T.
JETÉ
[Attack only once jeté and let the natural bounce
come to end before continuing to bow normally]
18
Vc. I
III
A. S.
p
PRACTICE MUTE
Vc. II
22
Vc. I
Ord. F.
III (open)
M. S. T.
JETÉ
[Attack only once jeté and let the natural bounce
come to end before continuing to bow normally]
Vc. II
IV
p
26
(M. S. T.)
M. S. P.
Vc. I
p
Vc. II

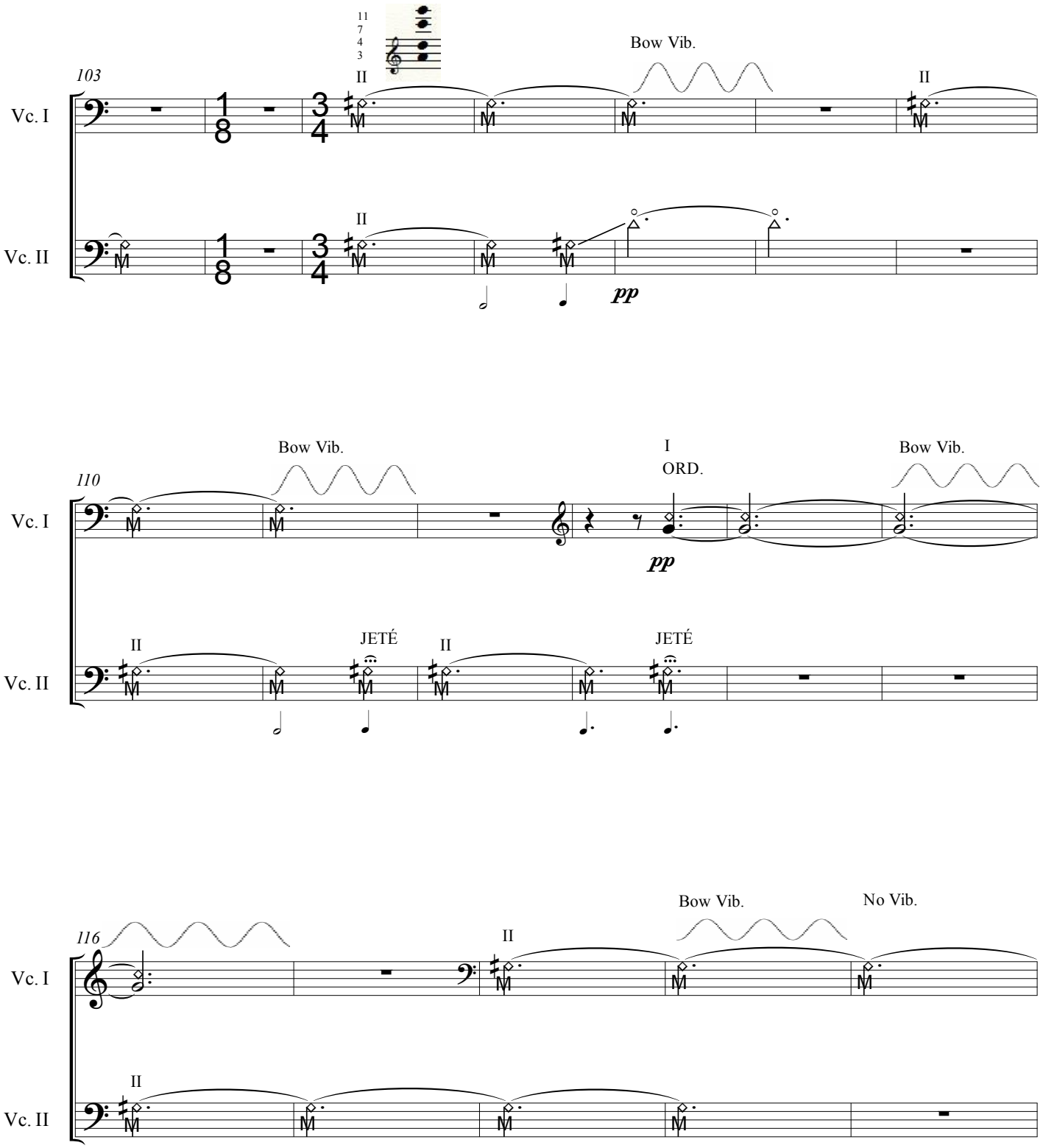

31
Vc. I
Vc. II
M. L.
CRINI
36
M. S. T.
p
M. S. T.
40

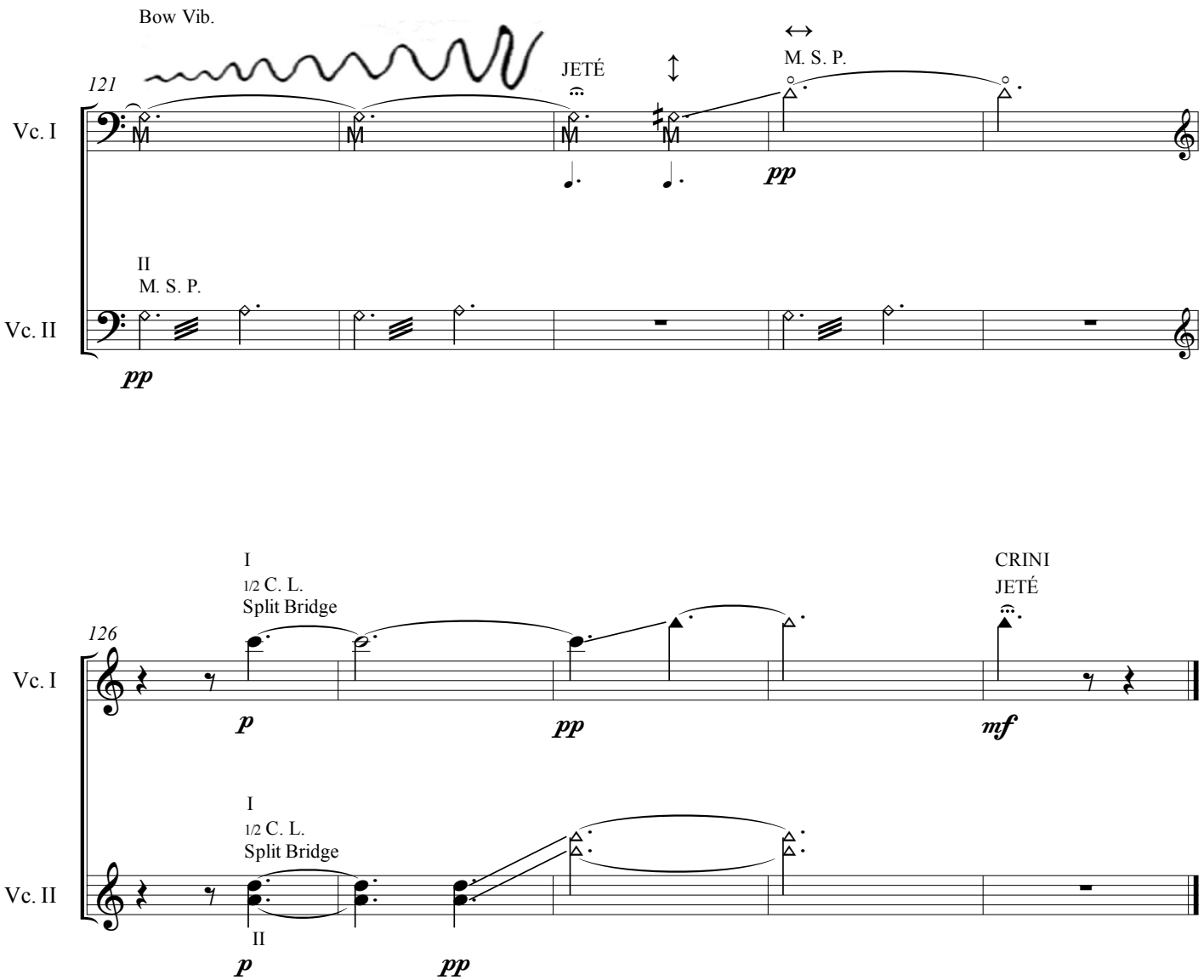

43
Vc. I
Vc. II
3
46
Vc. I
Vc. II
3
III (open)
49
Vc. I
3
3
1
8
2
4
IV
A. S.
p
Vc. II
1
8
2
4
A. S.
p


53
ORD.
Vc. I
A. S.
pp
Vc. II
58
M. S. T.
Vc. I
Ord. F.
p
Vc. II
p
Ord. F.
63
(M. S. T.)
M. S. P.
(Close to the Mute)
Vc. I
mp
Vc. II


68
MUTE OFF
13
10
7
3
IV
Vc. I
M. S. P.
(Close to the Mute)
MUTE OFF
Vc. II
mp
74
IV
IV
Vc. I
I
M. S. P.
IV
ORD.
Vc. II
p
pp
mp
p
80
Bow Vib.
JETÉ
[Attack only once.
Let the bounce come
to end naturally]
IV
B. B.
13
7
6
III
Vc. I
pp
III
A. S.
1/2 C. L.
Split Bridge
Vc. II
mp


86
JETÉ
I
1/2 C. L.
Split Bridge
Vc. I
mp
I
B. B.
I
Vc. II
pp
92
Bow Vib.
III
III
Vc. I
I
M. S. P.
Vc. II
p
JETÉ
[Attack only once.
Gliss. with bounce]
M. S. P.
Bow Vib.
98
Vc. I
p
Bow Vib.
11
7
4
3
II
Vc. II


103
Vc. I
Vc. II
11
7
4
3
II
Bow Vib.
II
II
pp
110
Bow Vib.
I
ORD.
Bow Vib.
pp
II
JETÉ
II
JETÉ
116
Bow Vib.
No Vib.
II
II


Bow Vib.
121
JETÉ
M. S. P.
Vc. I
pp
II
M. S. P.
Vc. II
pp
I
1/2 C. L.
Split Bridge
126
CRINI
JETÉ
Vc. I
p
pp
mf
I
1/2 C. L.
Split Bridge
Vc. II
II
p
pp

Distorted Pieces of Something

Study on Light (when it rains)

Soprano Saxophone and Viola

MICHELE ABONDANO

2019

Distorted Pieces of Something

Study on Light (when it rains)

PERFORMANCE NOTES

Transposed Score (Soprano Saxophone in B♭)

All glissandi should start immediately at the beginning of the note value and take the full duration notated at an even pace.
Always without vibrato unless it is indicated.
Apply the technique as written, the unstable or shifting behaviour of timbre is expected and desired.

Duration: 7 minutes

GENERAL SYMBOLS

Quarter of tone down

Quarter of tone up

Triangular-shaped notehead: Highest pitch possible.

Gradual transition from a position/sound to another one.

SOPRANO SAXOPHONE

Noteheads

Square-shape notehead: Air Sound.

Blow to produce air sound, pitch is undetermined. However, the fingering for the written pitch should be hold to ease the timbral transition.

Diamond-shaped notehead: Aeolian Sound.

A mix of air sound with determined pitch.

 x-shape notehead: Snap tongue.

Percussive sound produced by a very slight and fast slap tongue. The mouth should be open and close rapidly as well as the size of the mouth opening should change constantly to generate different timbral qualities.

This technique doesn't involve fingering nor blowing into the instrument. However, when an 'x' is added to the steam, it indicates that aleatory key click sounds should be produced as well.

Symbols

 Flutter Tongue [Flz.]

ALSO FOR:

Growling (voice technique)

Turbulence technique also known as the 'Arytenoid Rattle'. Basically, performer adjusts the larynx such that the arytenoid cartilages come close enough together to bump into one another and rattle. –VoiceScienceWorks Website. 'Growling' commonly refers to a vibration that is taking place in the throat. *Note: If this technique results difficult to achieve, it could be replaced by singing while trilling the tongue (flutter-tongue technique).*

 Slap Tongue

Percussive sound with determinate pitch. Build up a strong pressure with the tongue on the reed and then pull it back from the embouchure and release the tongue.

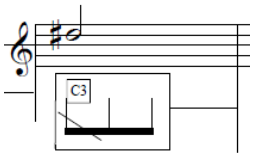
 Intensity vibrato. Starting right at the dynamic level marked in each case, increase and decrease the intensity irregularly.

Techniques

Bisbigliando — Alternate different fingering for the same pitch. The speed of the change is determine by the figures written. The fingerings are written on score for each pitch. The graphics were taken from the book 'Hello! Mr. Sax' by Jean-Marie Londeix.

Multiphonics — Produce the pitches written from a particular fingering. This technique could also require a modification of the embouchure. The fingerings are written on score for each multiphonic. The graphics were taken from the book 'Hello! Mr. Sax' by Jean-Marie Londeix.

Key Clicks



The superior pitch indicates the fingering. In the bottom, the key to stroke in a kind of trill (as fast as possible) but emphasising the key click sound.

VIOLA

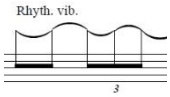
Noteheads

◇ — Diamond-shaped notehead: Harmonic Fingering.

□ — Square shaped notehead: Airy Sound [A. S.]

Use very light finger pressure (less than harmonic pressure) to produce an air noise with undetermined pitch.

Without notehead: Silent Fingering [S. F.]
Use strong finger pressure across the string (similar to left hand tapping in guitar) to produce a kind of percussive sound. Use all fingers to increase the speed and the variety of pitches.



Rhythmic Vibrato: Finger vibrato with determinate speed according to the figures written.

Bowing Position

B. B.: Behind the bridge.
M. S. P.: Molto sul ponticello. Very close to the bridge.
M. S. T.: Molto sul tasto. High on the fingerboard.
O. B.: On the bridge.
ORD.: Ordinario (normal place)

Bowing Techniques

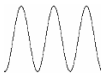
Press the bow on the string while constantly turning it from ordinary position to col legno. The bow should be stuck on the string (no horizontal bowing).

Heavy pressure of bow on the string.

Normal pressure of bow on the string.

Bow shake: Scratch between two strings using the low part of the bow. The bow should be stuck on the string (no horizontal bowing).

Bow Accent: Rapidly slide the bow behind the bridge and back to create a slight, distorted accent.



Bow Vibrato: Vary the pressure of the bow with the right hand without moving the left hand. The movement is suggested by the type of graphic, so the variations can be small and regular or gradually increased.

The bow is thrown and allowed to bounce at a naturally decaying frequency.

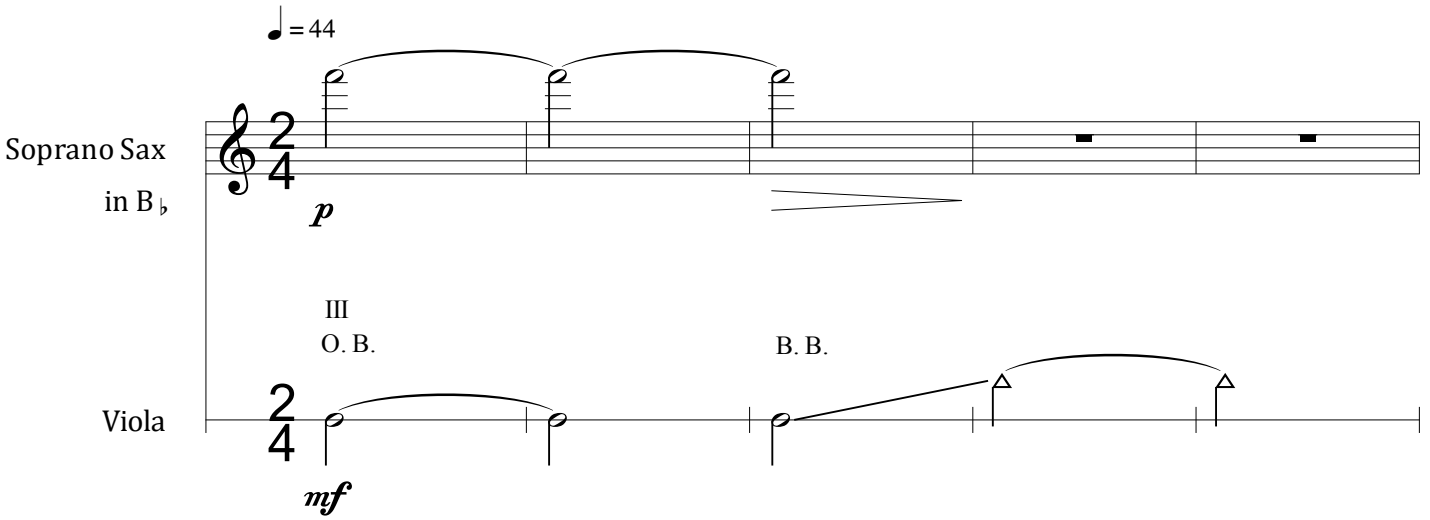
C. L.	Col legno
C. L. B.	Col legno batutto
½ C. L.	Mezzo legno. Bow's wood and hair simultaneously.
½ C. L. Split Bridge	Place the wood of the bow behind the bridge and the hair of the bow in front of the bridge. This should create a very light whisper of the notated pitch surrounded by a white noise hiss.
M	Multiphonic. The harmonic fingering should produce several partials simultaneously. Since the pitches could vary according to each instrument, they are not notated. Bow pressure, position, and speed should be adapted to whatever will allow the multiphonic to speak best.

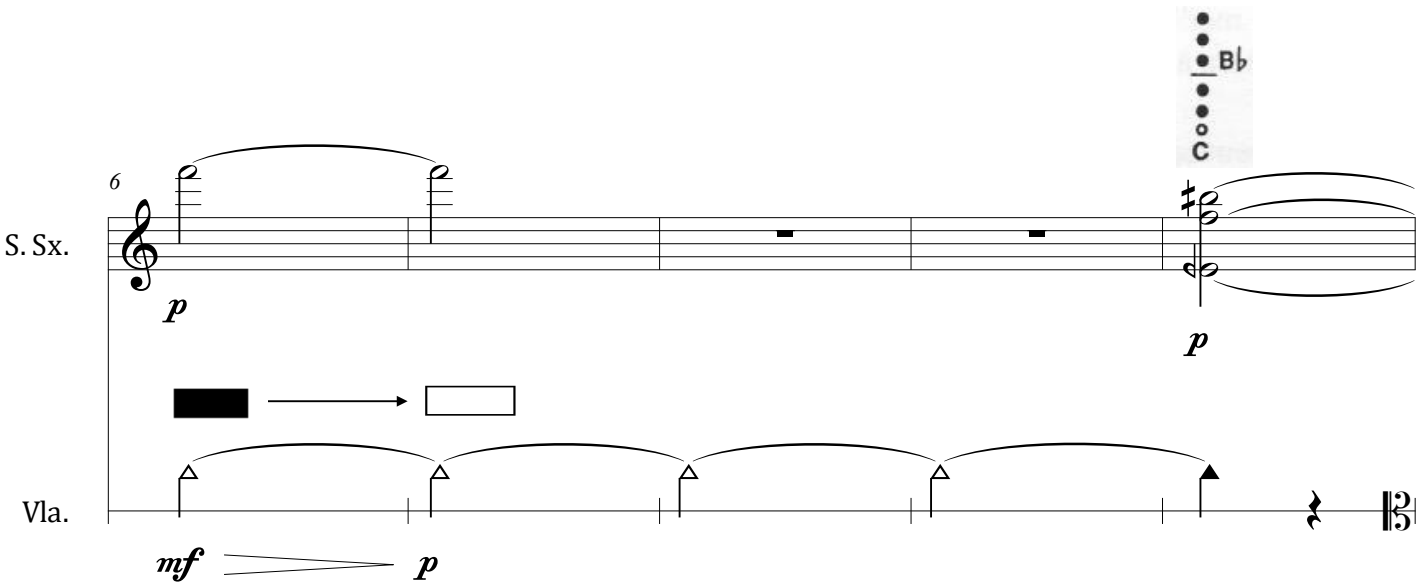
Distorted Pieces of Something

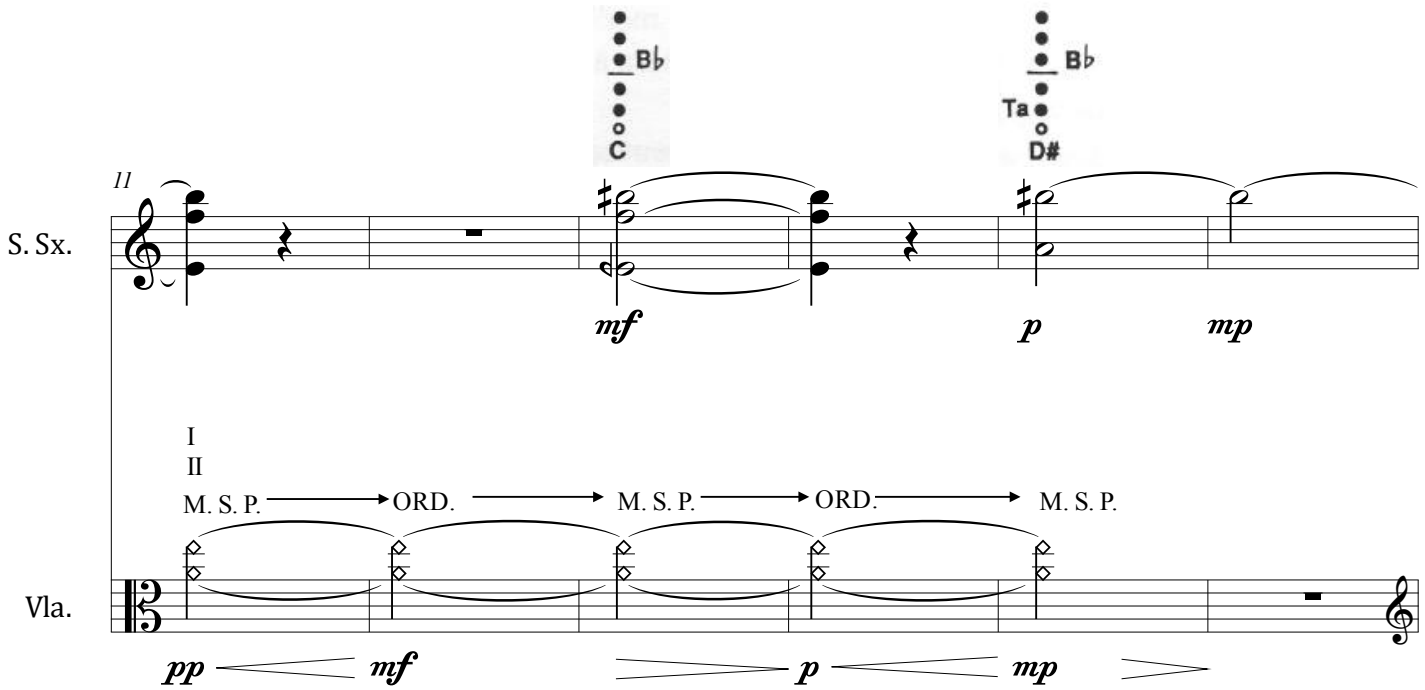
Study on Light (when it rains)

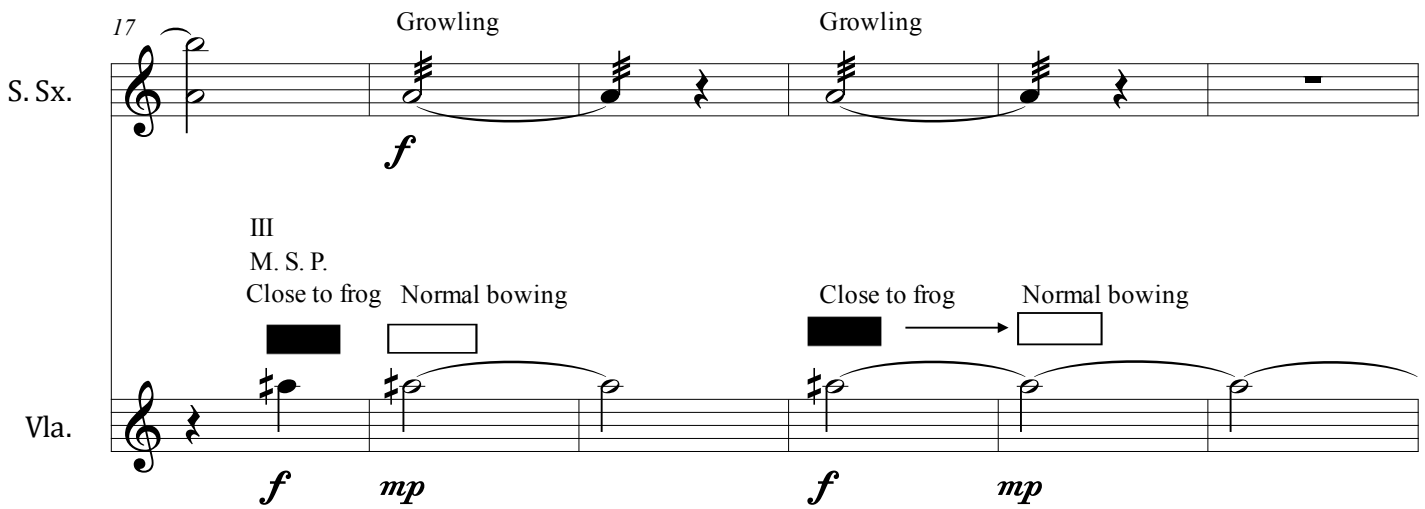
MICHELE ABONDANO
2019

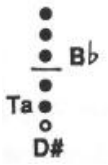
Transposed Score






11
S. Sx.
B♭
C
B♭
Ta
D#
mf
p
mp
I
II
M. S. P.
ORD.
M. S. P.
ORD.
M. S. P.
Vla.
pp
mf
p
mp


17
S. Sx.
Growling
Growling
f
III
M. S. P.
Close to frog
Normal bowing
Close to frog
Normal bowing
Vla.
f
mp
f
mp



*Play the A from the mult. fingering

Growling

Ord.

23

S. Sx.

f

Close to frog

Normal bowing

Vla.

mf

p

28

S. Sx.

pp

Rhyth. vib. (1/4 t.)

Vla.

mf

pp

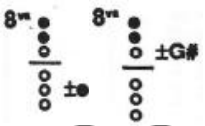
3

3

3

Bisb.

*Alternate both fingerings adding the +/- finger of each one.



32

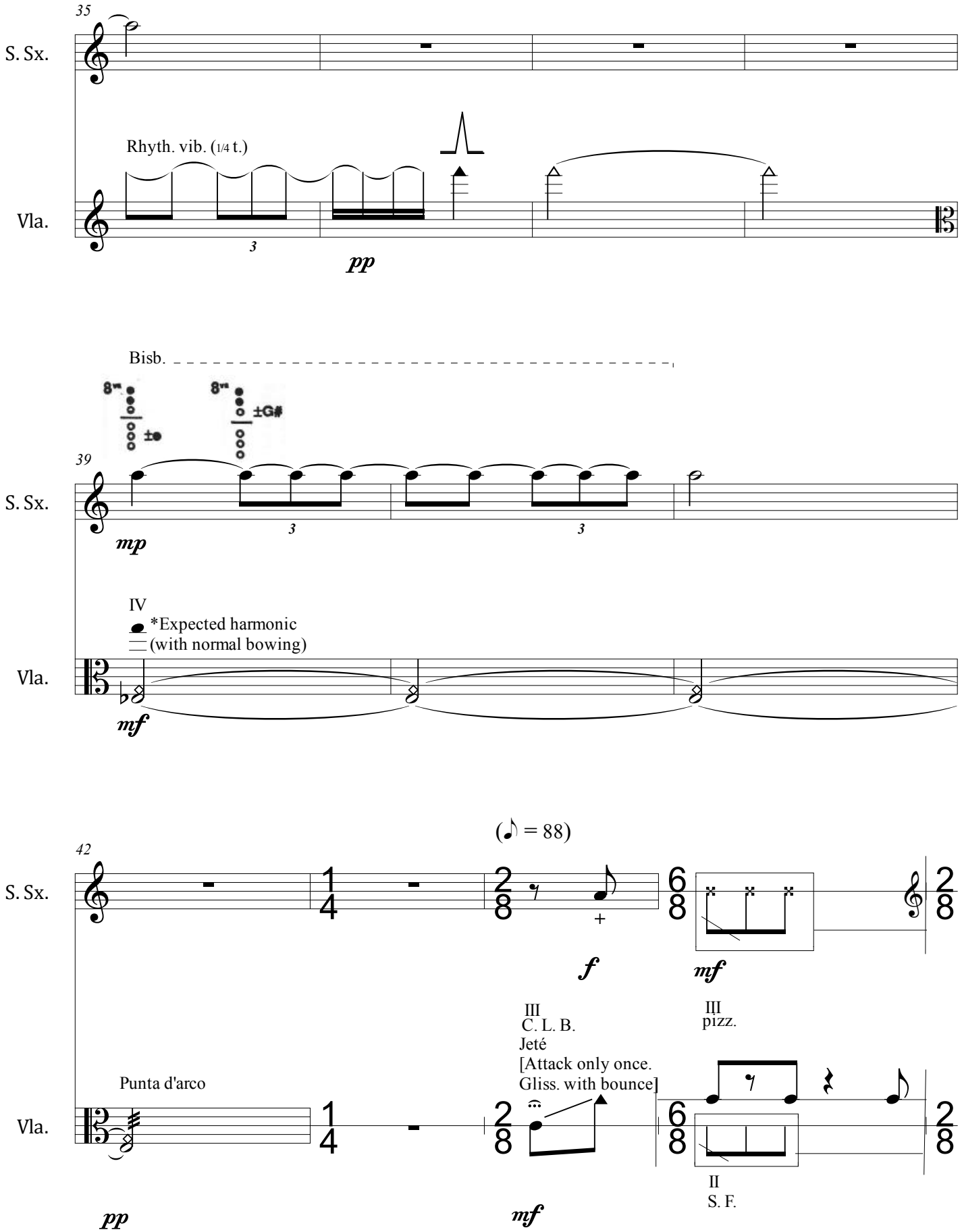
S. Sx.

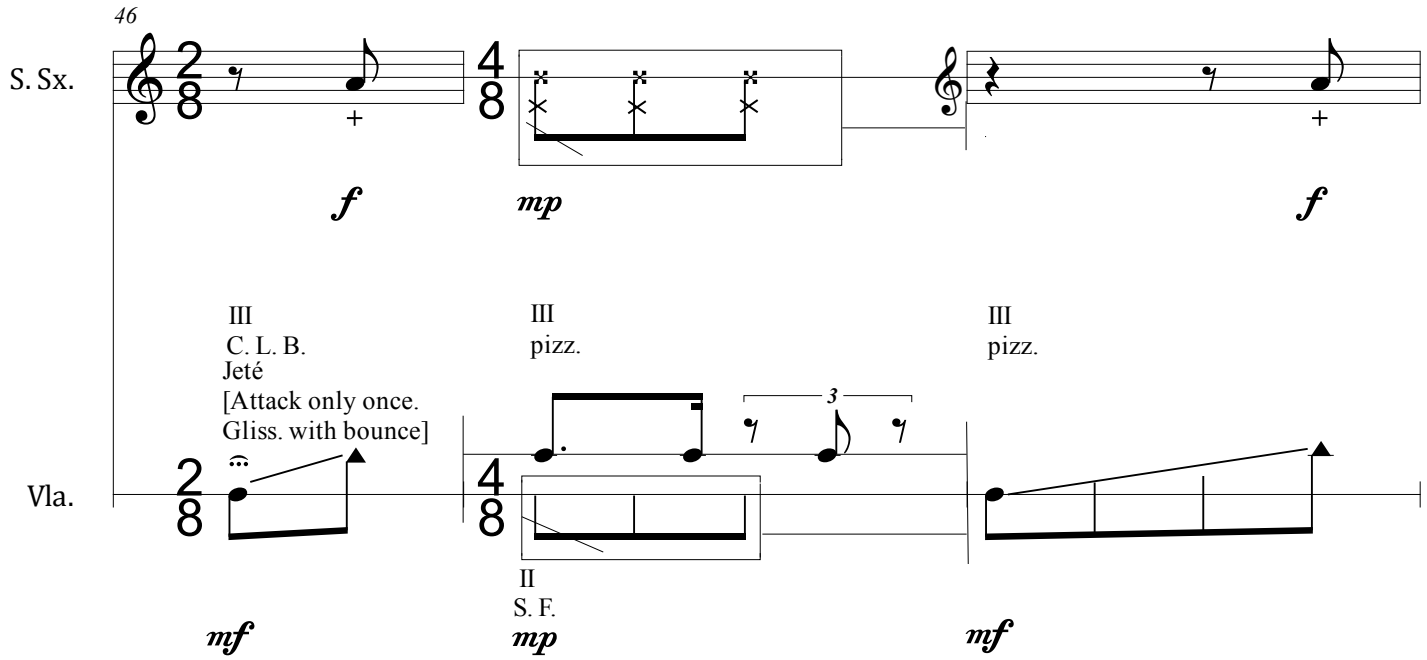
p

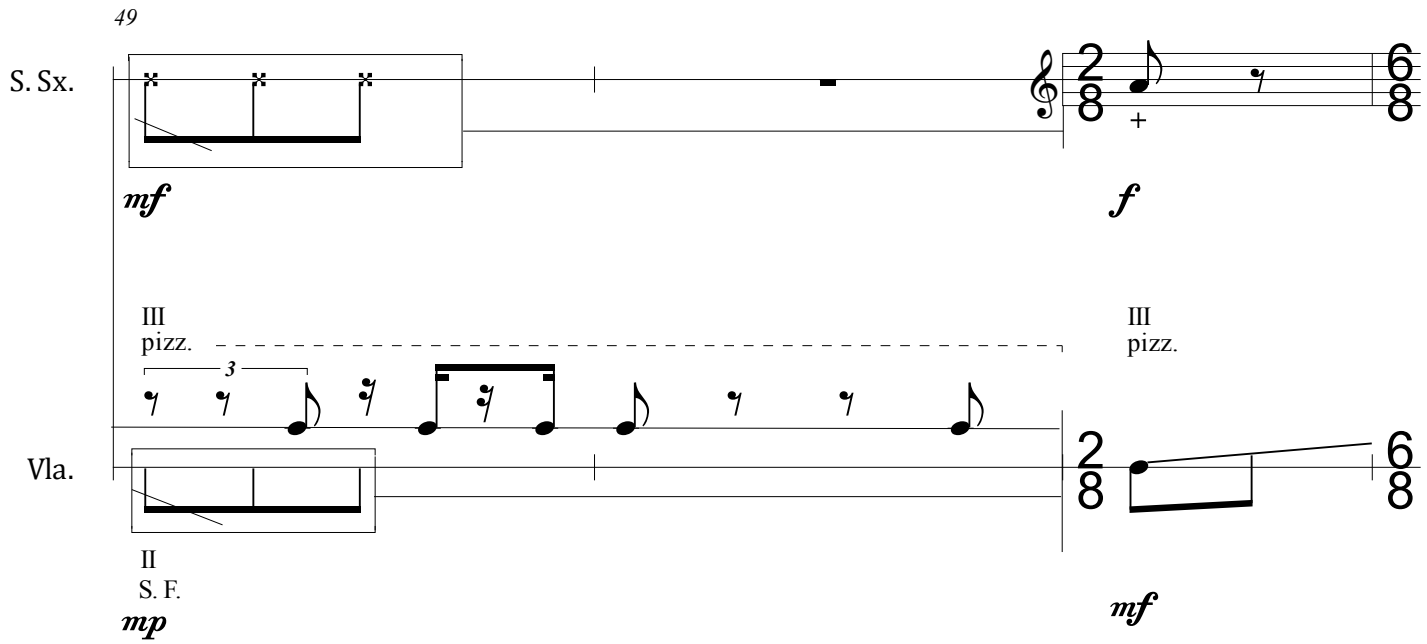
3

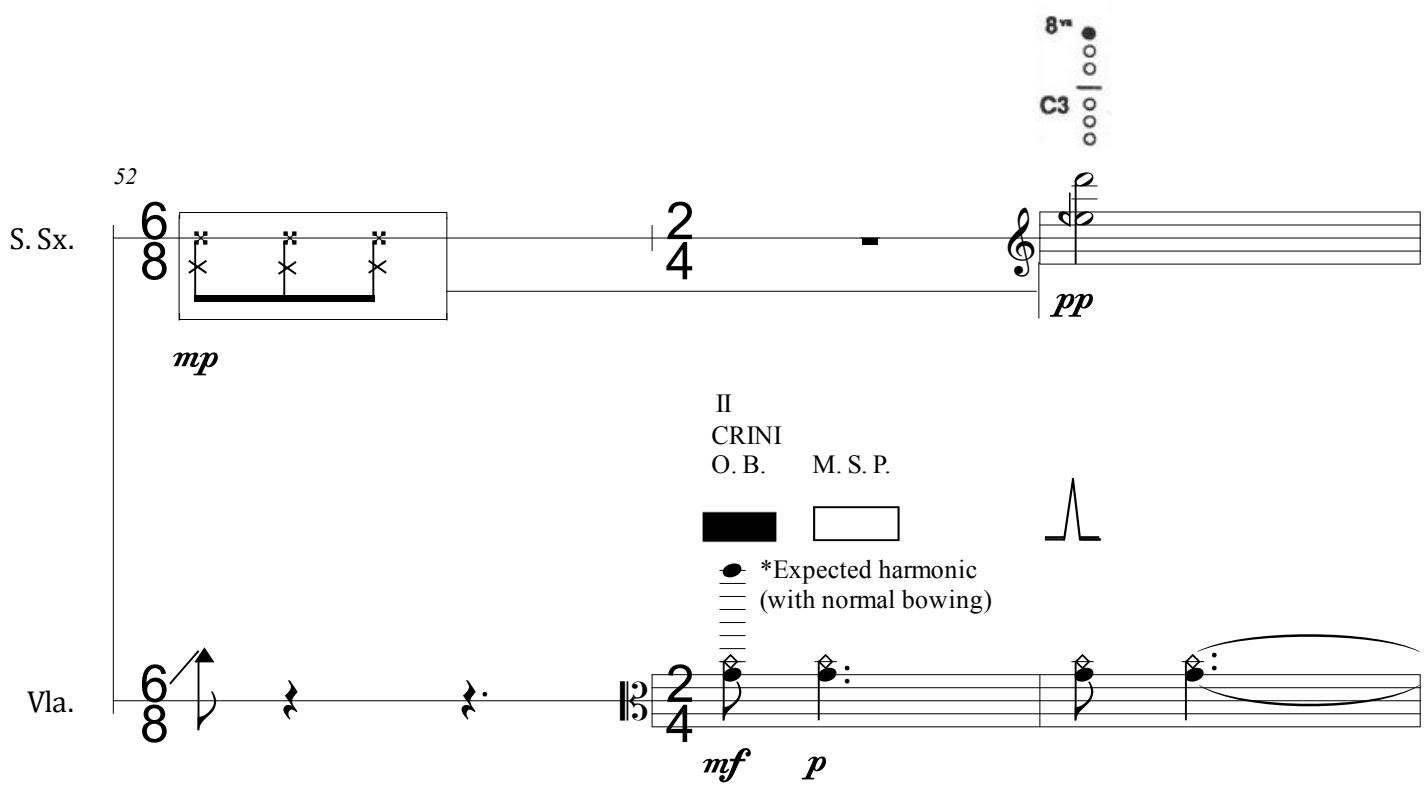
3

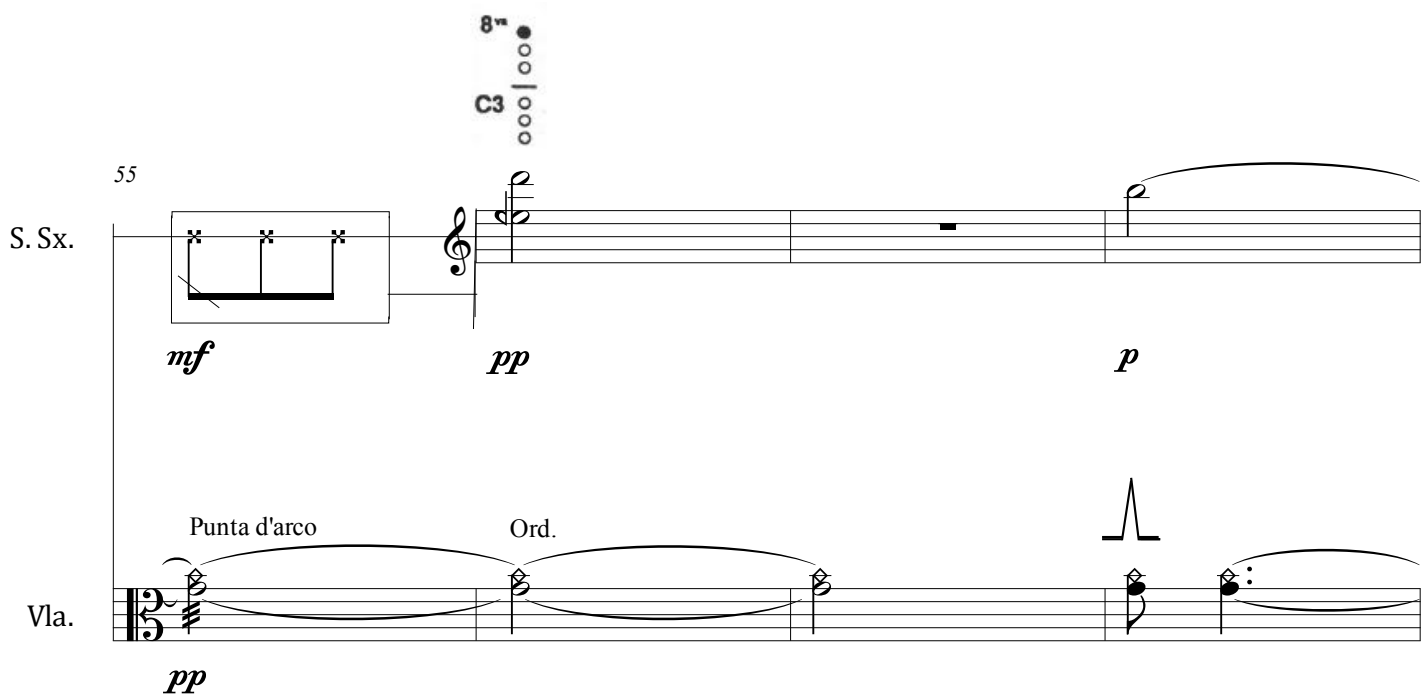
Vla.


35
S. Sx.
Rhyth. vib. (1/4 t.)
Vla.
3
pp
Bisb.
8va
±e
8va
±G#
39
S. Sx.
3
3
mp
IV
*Expected harmonic
(with normal bowing)
Vla.
mf
(♪ = 88)
42
S. Sx.
f
mf
III
C. L. B.
Jeté
[Attack only once.
Gliss. with bounce]
III
pizz.
Punta d'arco
Vla.
pp
mf
II
S. F.

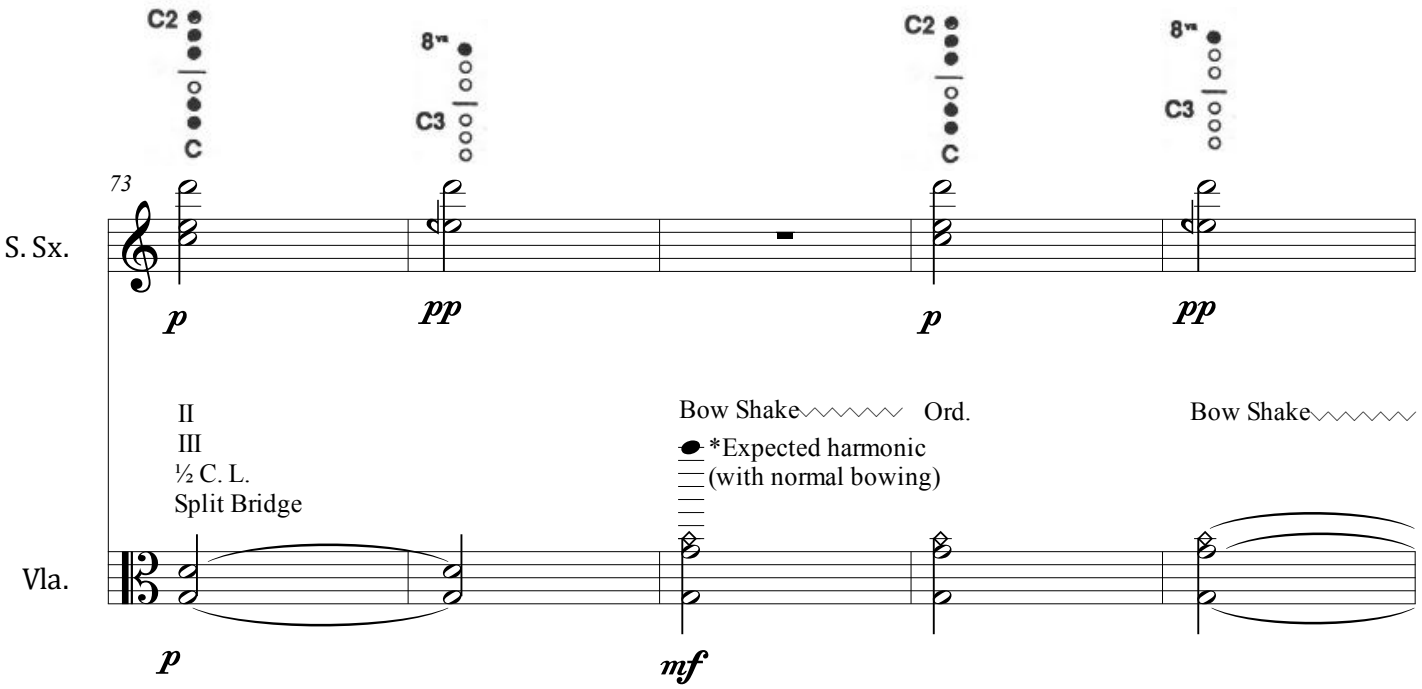

46
S. Sx.
f
mp
f
III
C. L. B.
Jeté
[Attack only once.
Gliss. with bounce]
III
pizz.
III
pizz.
3
Vla.
II
S. F.
mf
mp
mf

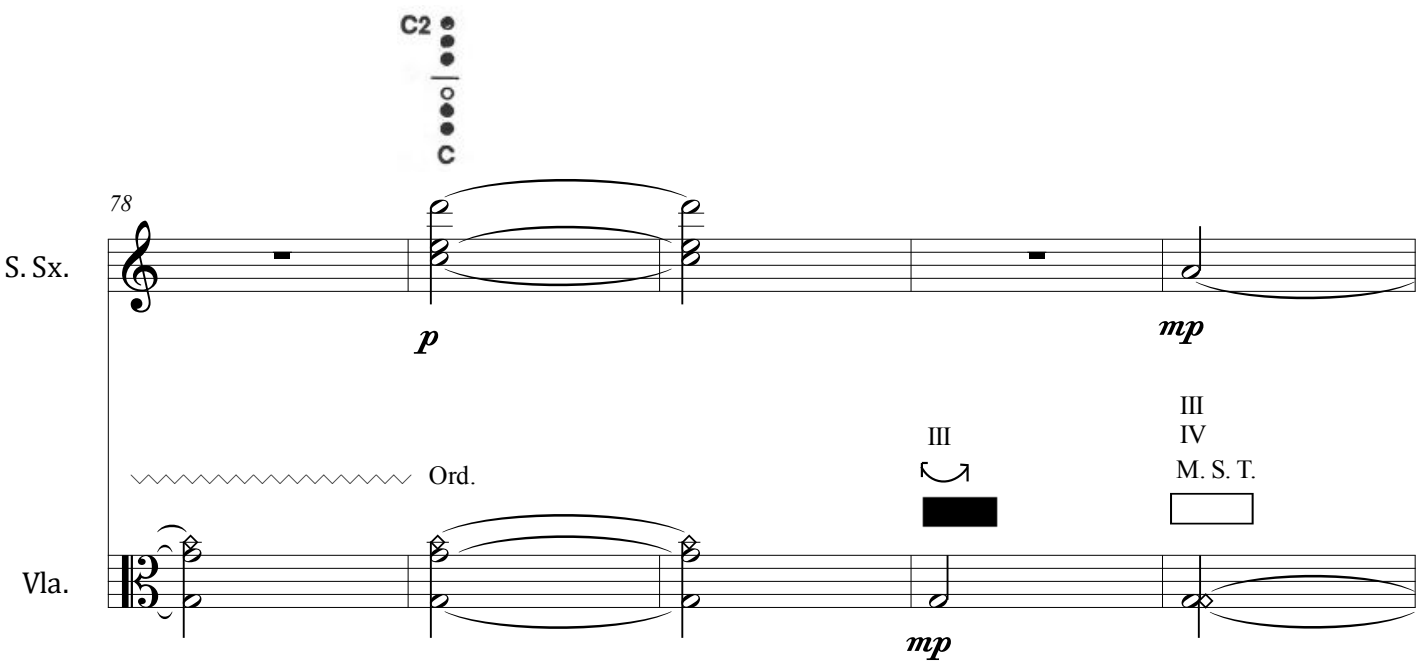

49
S. Sx.
mf
f
III
pizz.
III
pizz.
3
Vla.
II
S. F.
mp
mf

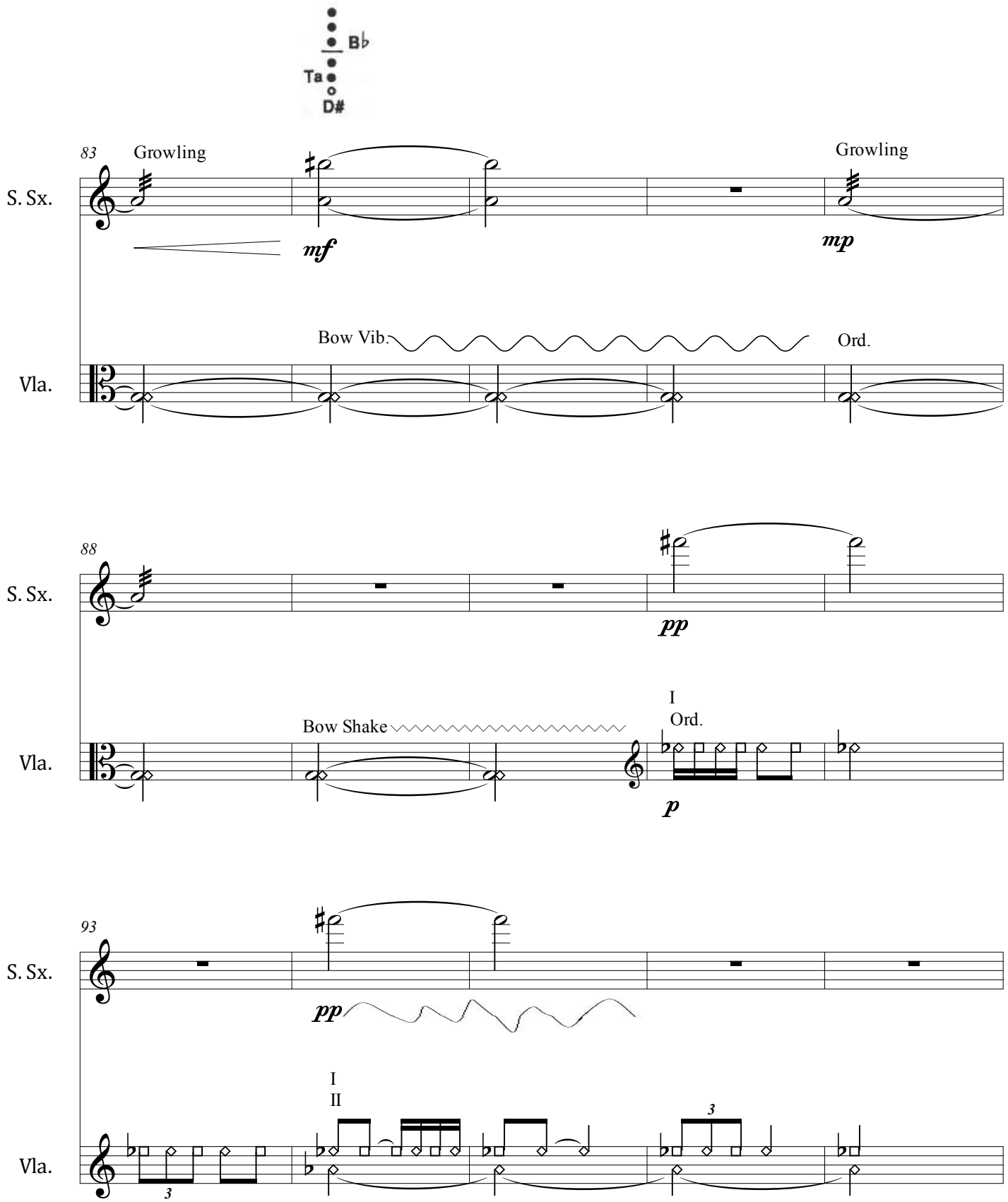

8va
C3
52
S. Sx.
mp
pp
II
CRINI
O. B.
M. S. P.
*Expected harmonic
(with normal bowing)
Vla.
mf
p

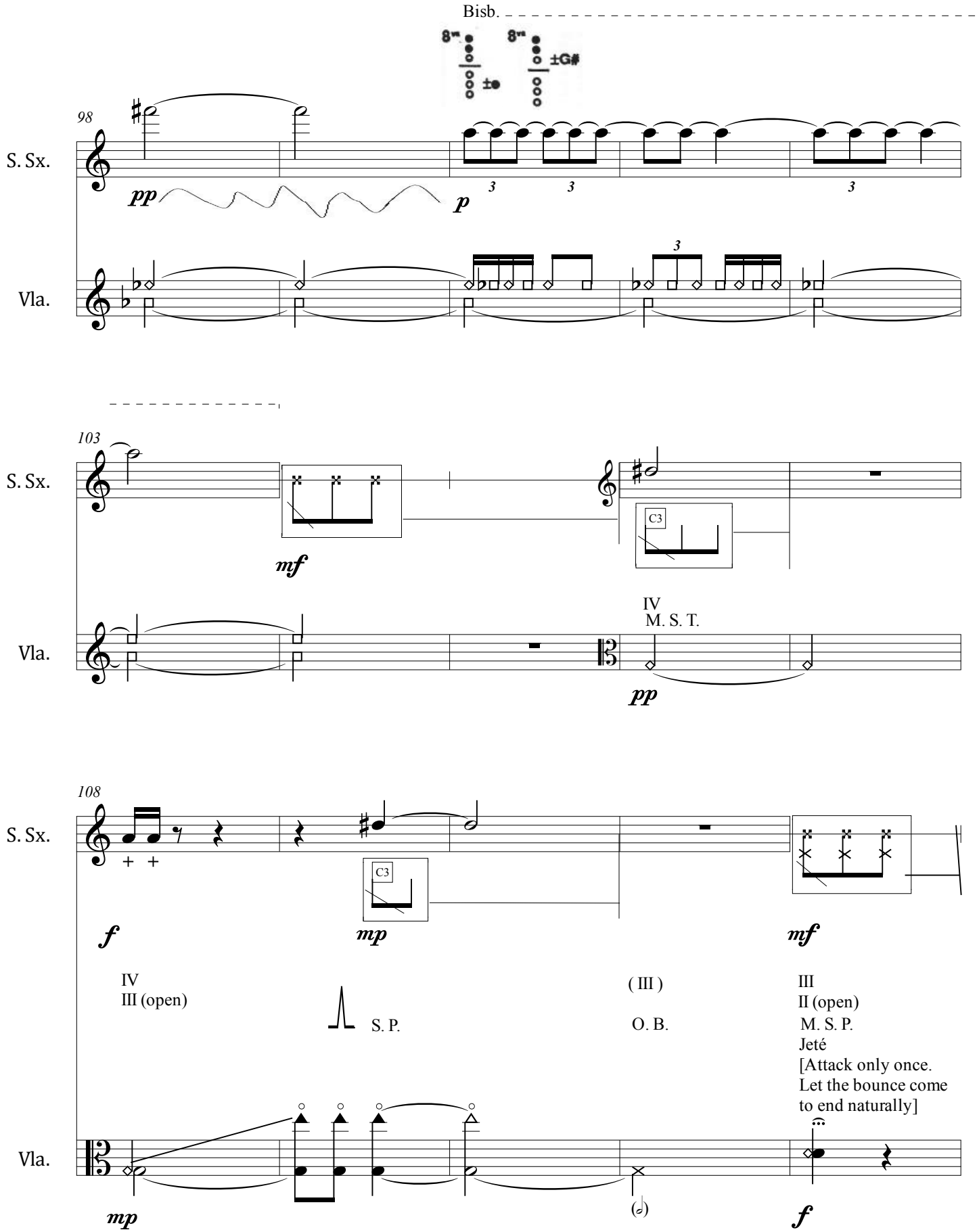

8va
C3
55
S. Sx.
mf
pp
p
Punta d'arco
Ord.
Vla.
pp

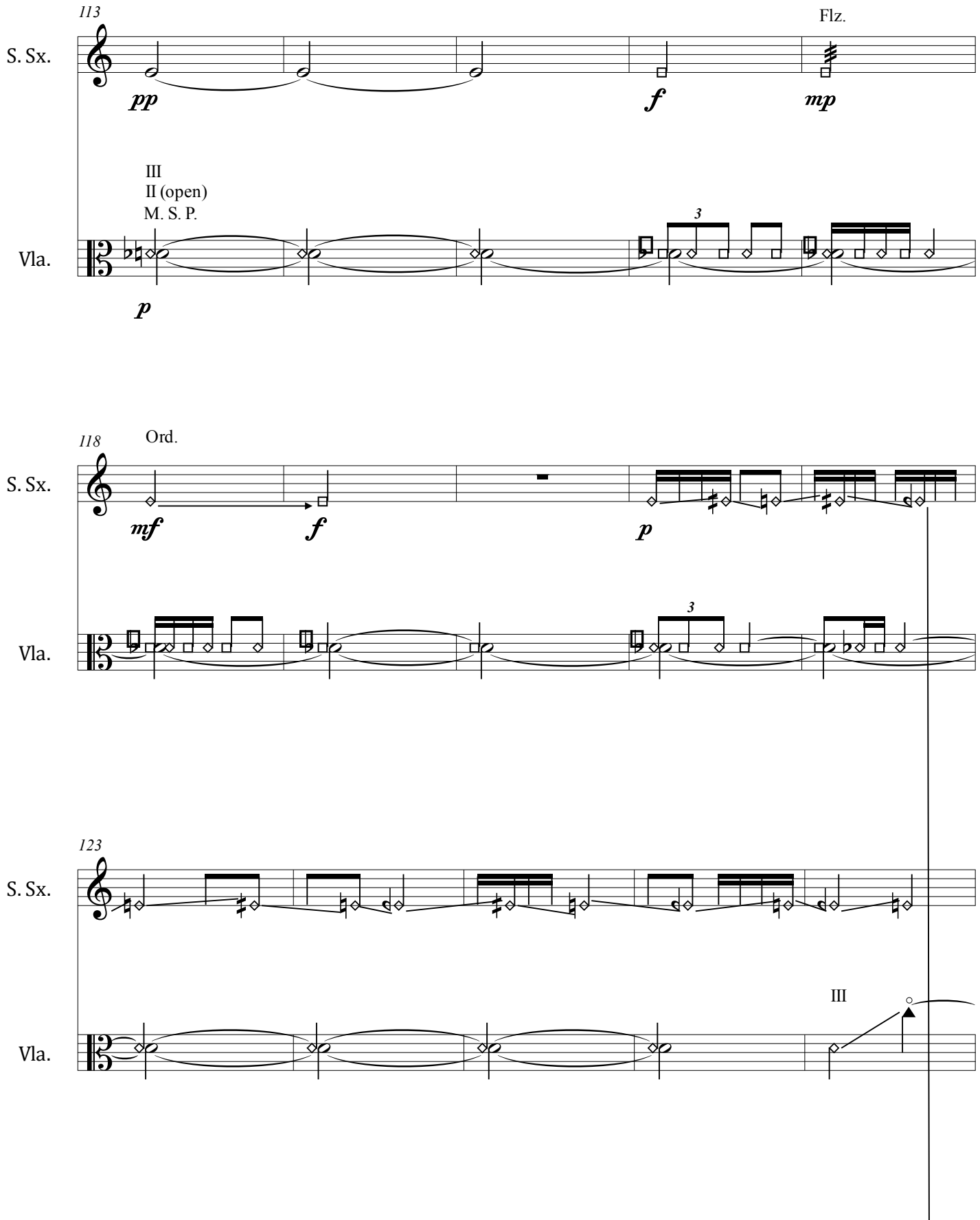

59
S. Sx.
Jeté
[Attack only once.
Gliss. with bounce]
Ord.
Vla.
mf
f
64
S. Sx.
f
mf
mp
II
III
Vla.
mp
69
Growling
S. Sx.
mf
III
M. S. P.
½ C. L.
Split Bridge
II
III
III
M. S. P.
Vla.
mf
pp
mp
mf

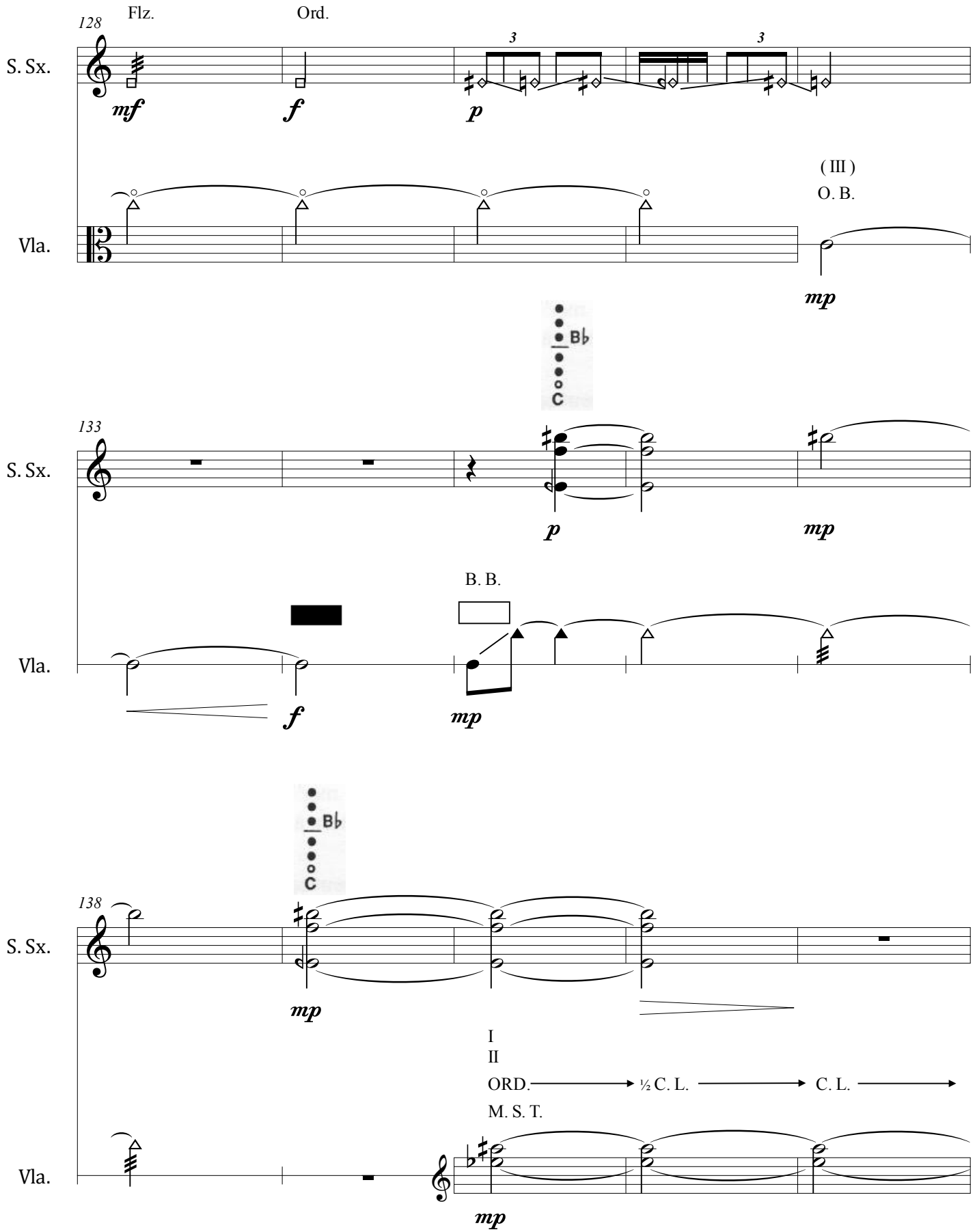

C2
C
8va
C3
73
S. Sx.
p
pp
p
pp
II
III
½ C. L.
Split Bridge
Bow Shake
Ord.
*Expected harmonic
(with normal bowing)
Bow Shake
Vla.
p
mf

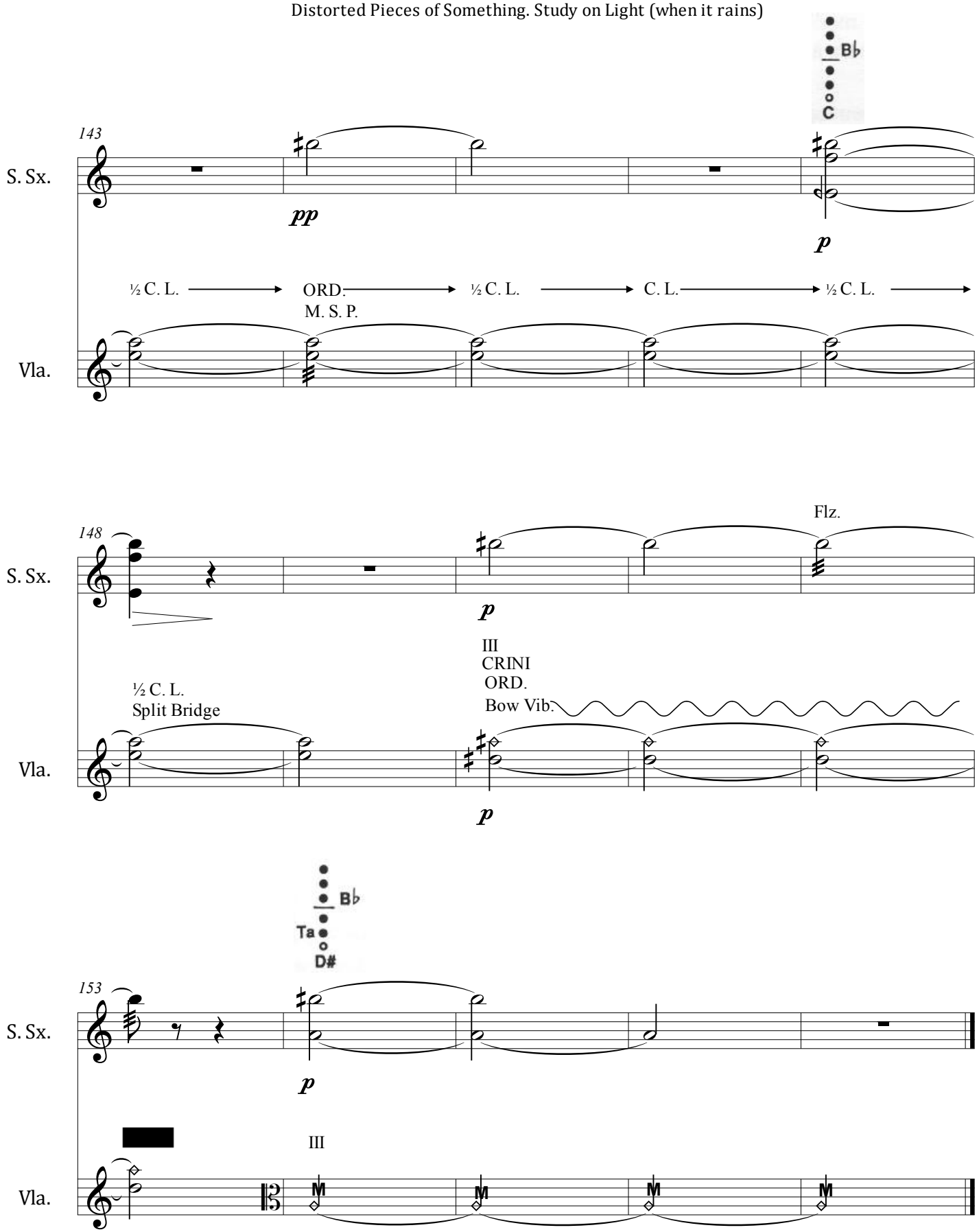

C2
C
78
S. Sx.
p
mp
III
IV
M. S. T.
Ord.
III
Vla.
mp


Bb
Ta
D#
83
Growling
Growling
S. Sx.
mf
mp
Bow Vib.
Ord.
Vla.
88
S. Sx.
pp
I
Ord.
Bow Shake
Vla.
p
93
S. Sx.
pp
I
II
3
3
Vla.


Bisb.
8va
±G#
98
S. Sx.
pp
p
3
3
3
Vla.
3
103
S. Sx.
mf
C3
IV
M. S. T.
Vla.
pp
108
S. Sx.
+ +
C3
f
mp
mf
IV
III (open)
S. P.
(III)
O. B.
III
II (open)
M. S. P.
Jeté
[Attack only once.
Let the bounce come
to end naturally]
Vla.
mp
f


113
S. Sx.
pp
f
Flz.
mp
III
II (open)
M. S. P.
Vla.
3
p
118
Ord.
S. Sx.
mf
f
p
3
Vla.
123
S. Sx.
III
Vla.


128
Flz.
Ord.
S. Sx.
mf
f
3
p
3
(III)
O. B.
Vla.
mp
B♭
C
133
S. Sx.
p
mp
B. B.
Vla.
f
mp
B♭
C
138
S. Sx.
mp
I
II
ORD.
½ C. L.
C. L.
M. S. T.
Vla.
mp


143
S. Sx.
Bb
C
pp
p
½ C. L.
ORD.
M. S. P.
½ C. L.
C. L.
½ C. L.
Vla.
148
S. Sx.
Flz.
p
III
CRINI
ORD.
½ C. L.
Split Bridge
Bow Vib.
Vla.
p
Bb
Ta
D#
153
S. Sx.
p
III
Vla.
M
M
M
M

A Weightlessness Process

(… or how to become ethereal)

Solo Cello

MICHELE ABONDANO

2019–20

A Weightlessness Process

(… or how to become ethereal)

Solo Cello

PERFORMANCE NOTES

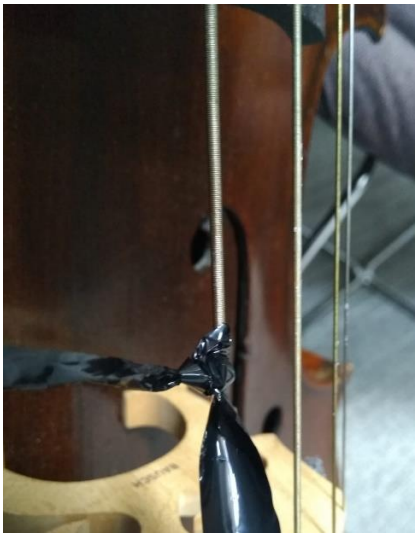
All glissandi should start immediately at the beginning of the note value.
Always without vibrato unless indicated.
The techniques, when played literally as written, will result in unstable, shifting timbral behaviours: this is expected and desired.
The dynamics written work as references; however, the performer should use whatever pressure/intensity should be necessary to make the technique work and produce the timbre described (when specified). It implies that the dynamics could be unstable/shifting.

Duration: 12 minutes.

PREPARATION

MAGNETIC TAPE (VIDEO CASSETTE)

1. Cut 70 cm of magnetic tape.
2. Tie one end to string IV, using a double knot (passing the tape twice around the string) to prevent the tape to break during the performance.
3. Ensure that a playable length of ca. 65 cm is available, once the tape has been tied to the string.
4. Repeat steps 1-3 for string III.



POLYSTERYNE FOAM

1. Cut a square of 9 cm^2 of ca. 1 cm-thick polystyrene foam.
2. Place it behind the bridge across strings II and III, using strings I and IV to hold the left and right sides in place.
3. Leave enough free space between the polystyrene foam and the bridge for performing the technique '½ C.L. Split Bridge'.

SYMBOLS

𝄳	Quarter-tone flat
𝄲	Quarter-tone sharp
𝄰	Slightly upper than sharp
𝄱	Gentle downward inflection
△	Triangular-shaped notehead: Highest pitch possible.

M Multiphonics: String is specified in each case. The expected partials are written in numbers and sounding pitch (latter only the first time it appears in score). Bow pressure, position, and speed should be adapted to whatever will allow the multiphonic to speak best. Look for instability and allow the unpredictable changes of behaviour to happen.

TAPE TECHNIQUE

Fingers Slide (rubbing the tape)

Place the knot at the end of the fingerboard and always try to keep it there.
Hold the tape between the thumb and the index finger, then slide the fingers with constant pressure. The hand is specified in each case (RH: Right Hand, LH: Left Hand). The sound should come from the friction and it is expected to be loud and unstable; therefore, it is important to use new pieces of tape for each performance in order to mantain a good grip.
The speed at which to slide the fingers is in part determined by the duration of a given figure. The movement should be always in one direction, from the knot to the extreme. Try to maintain an even motion.
Allow the body of the instrument to resonate as much as possible.

BOWING PLACES

M.S.P.	molto sul ponticello
S. P.	sul ponticello
S. T.	sul tasto
ORD.	ordinario (normal place)

POLYSTYRENE FOAM (Behind the bridge)

Far away from the bridge:	Bow the lowest part of the foam.
Close to the bridge:	Bow at the top of the foam. The pitch produced should be higher than that produced in the low part of the foam.

BOW TECHNIQUES

Press the bow on the string while constantly turning it from ordinary position to col legno (twisting the wrist). The bow should be stuck on the string (no horizontal/vertical displacement).

½ C. L.
Split Bridge: Place the wood of the bow behind the bridge and the hair of the bow in front of the bridge. This should create a very light whisper of the notated pitch surrounded by a white noise hiss.

Bow Vibrato Vary the pressure of the bow with the right hand without moving the left hand. The speed of movement is determined by the figure written and the amplitude is suggested by the graphic in each case.

A Weightlessness Process

(... or how to become etheral)

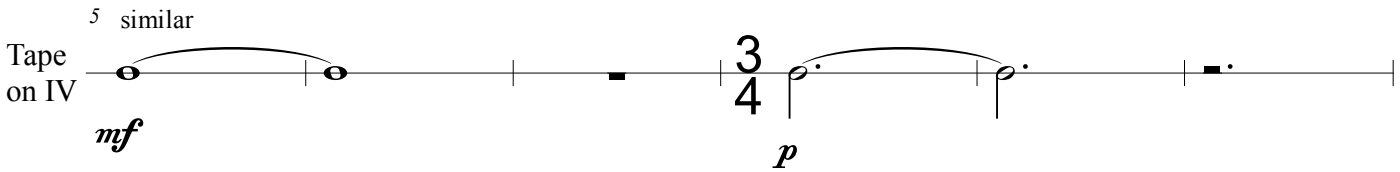
Solo Cello

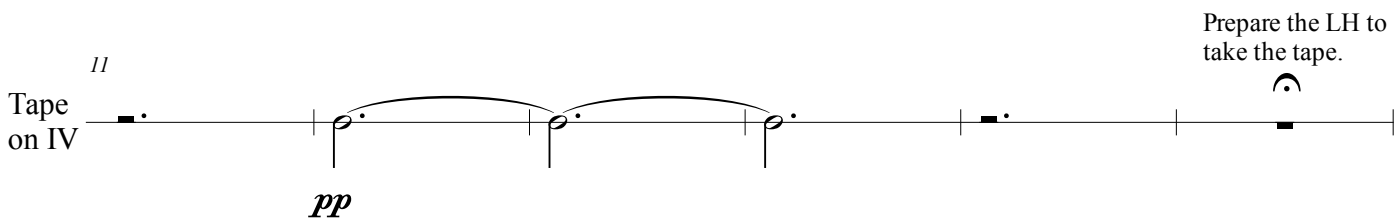
MICHELE ABONDANO
2019–20

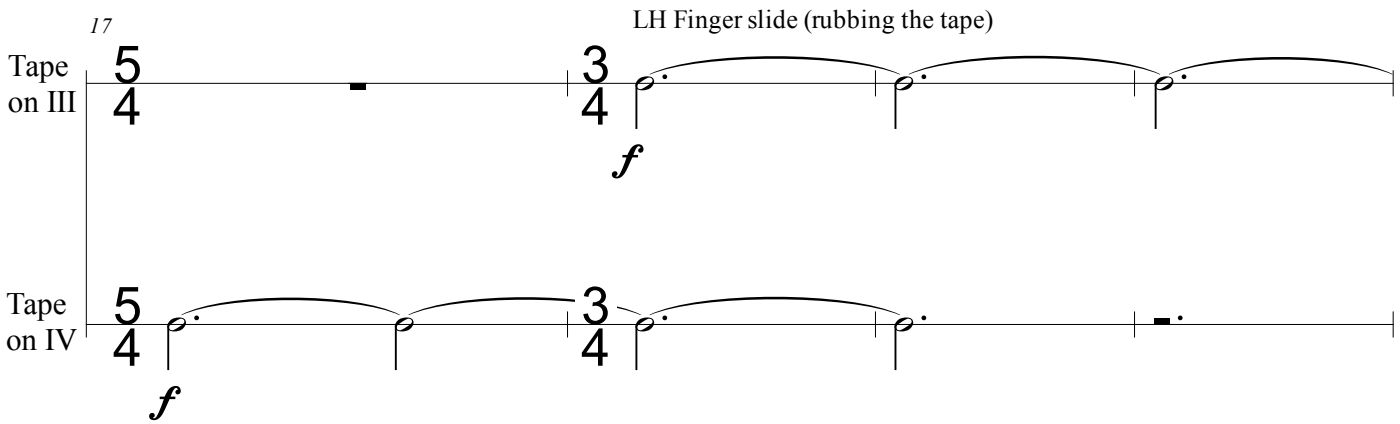
♩ = 55

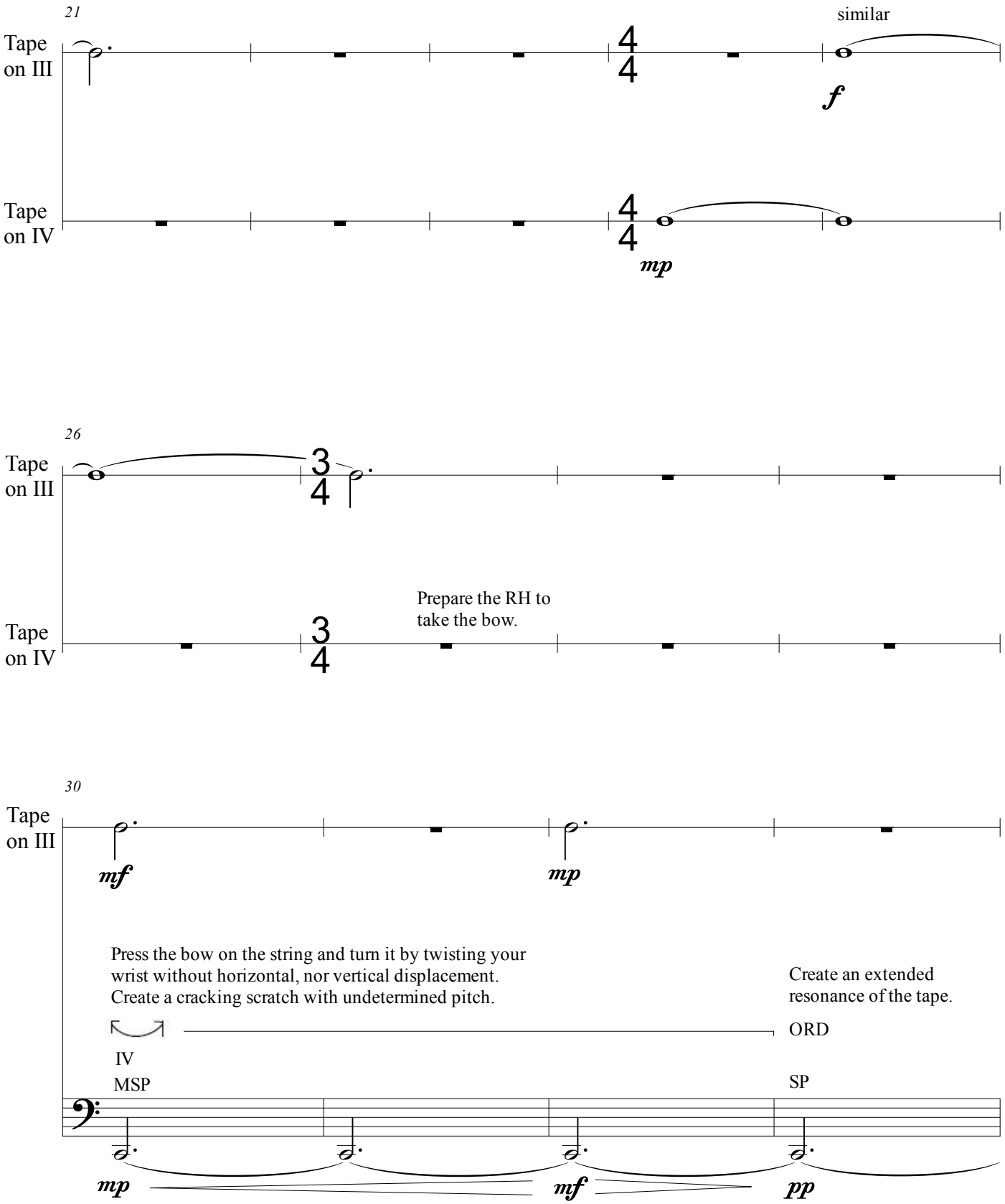
RH Finger slide (rubbing the tape).
Expect a timbre of unstable behaviour.

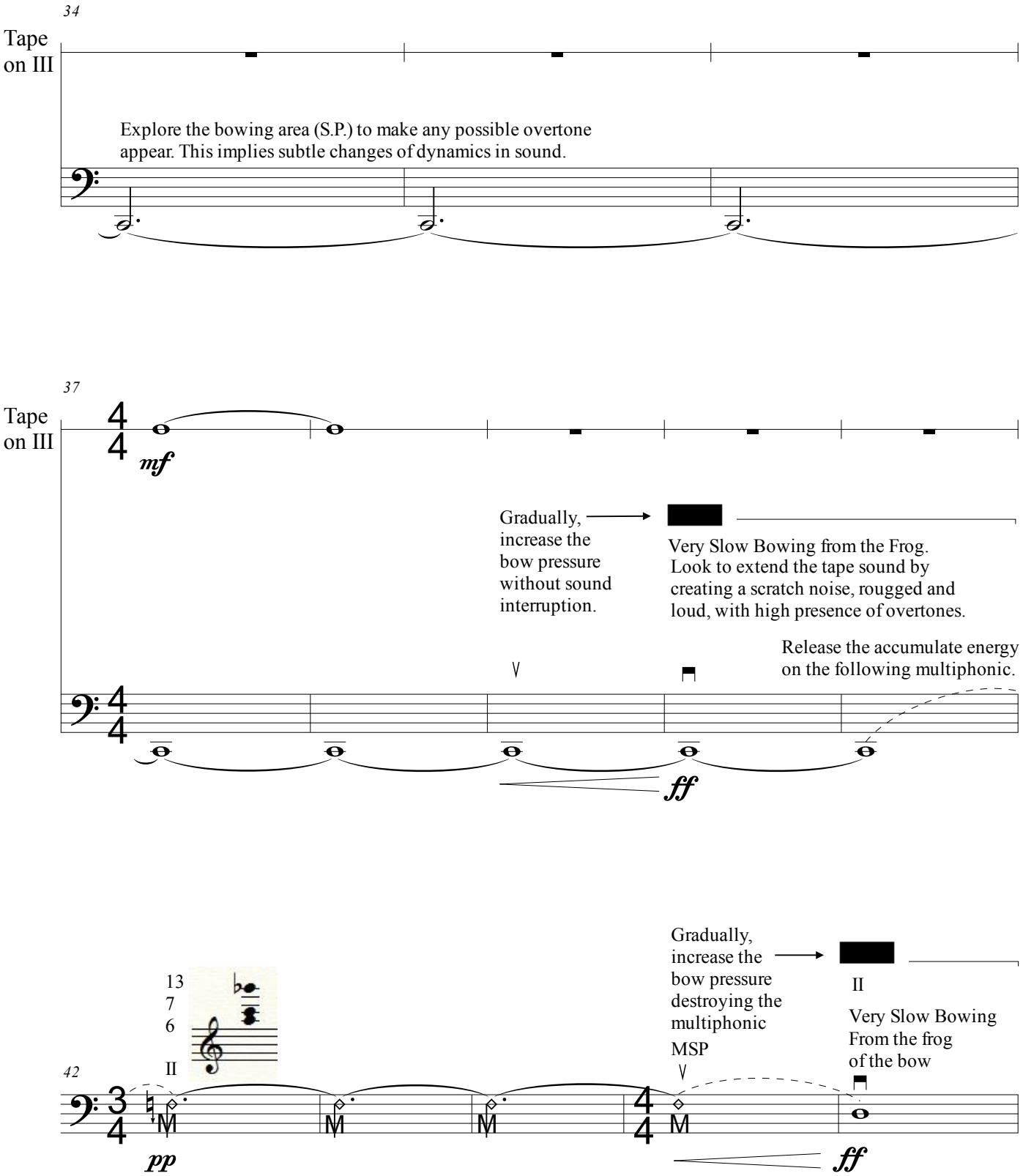
*Start always from the knot. Stop at the point of the tape in which the fingers are when the figure ends.

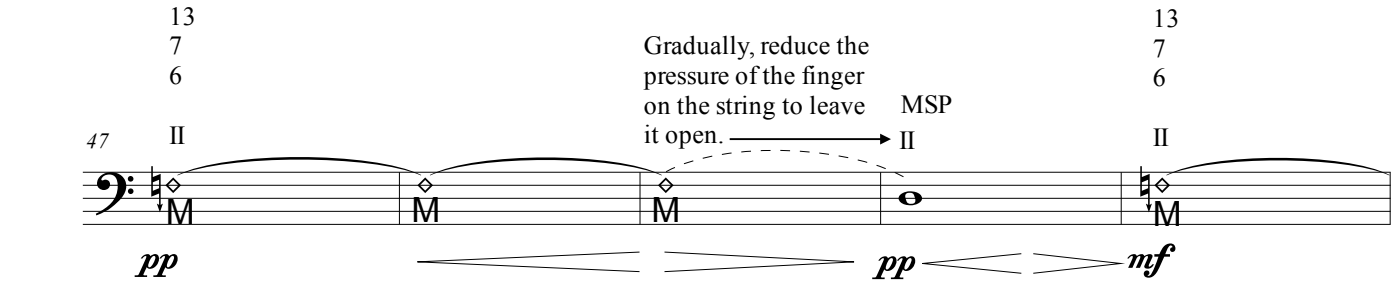


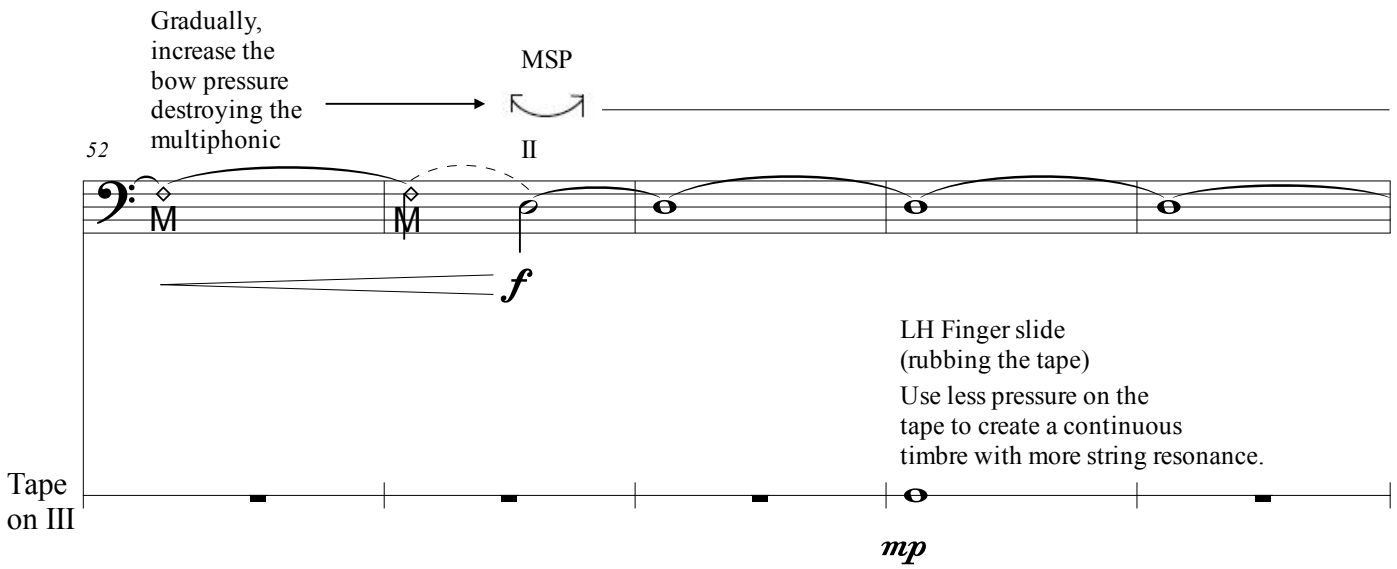


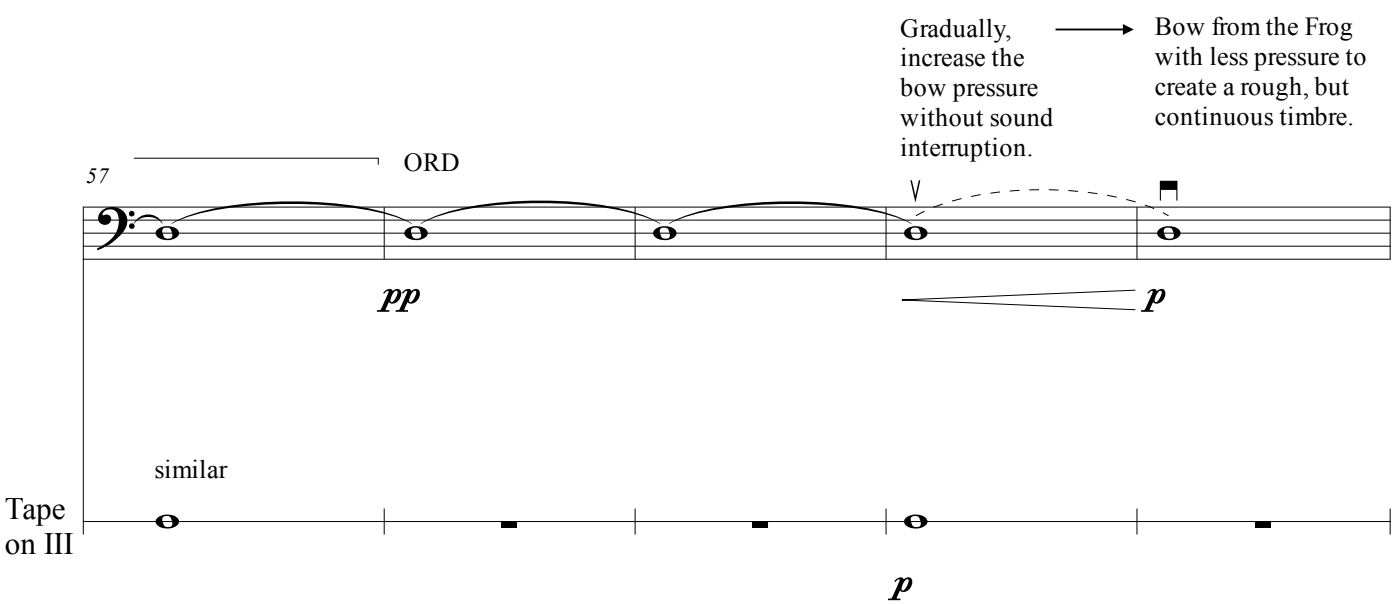


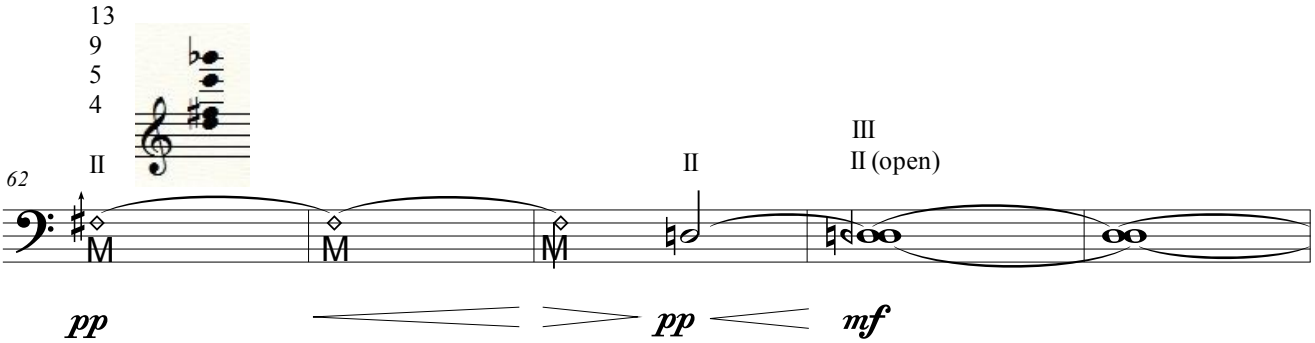

21
similar
Tape on III
Tape on IV
f
mp
26
Prepare the RH to take the bow.
30
mf
mp
Press the bow on the string and turn it by twisting your wrist without horizontal, nor vertical displacement.
Create a cracking scratch with undetermined pitch.
Create an extended resonance of the tape.
ORD
IV
MSP
SP
mp
mf
pp

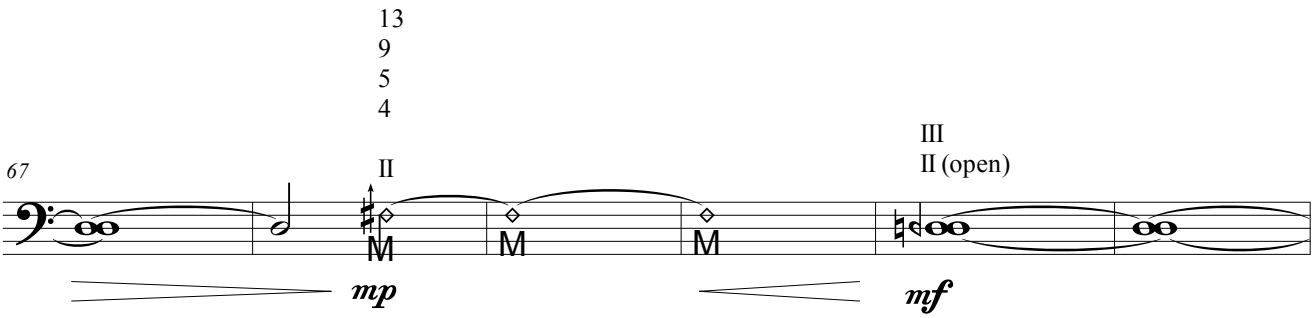

34
Tape
on III
Explore the bowing area (S.P.) to make any possible overtone
appear. This implies subtle changes of dynamics in sound.
37
Tape
on III
mf
Gradually,
increase the
bow pressure
without sound
interruption.
Very Slow Bowing from the Frog.
Look to extend the tape sound by
creating a scratch noise, rougged and
loud, with high presence of overtones.
Release the accumulate energy
on the following multiphonic.
ff
13
7
6
II
42
pp
Gradually,
increase the
bow pressure
destroying the
multiphonic
MSP
II
Very Slow Bowing
From the frog
of the bow
ff

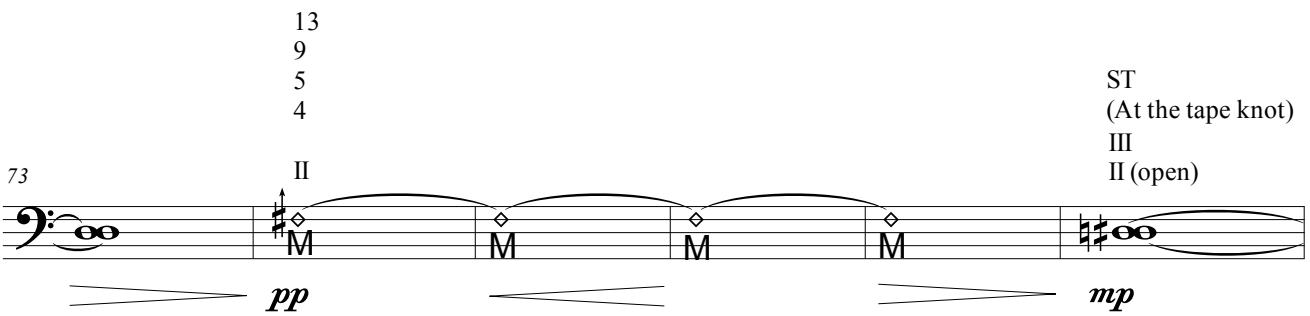

13
7
6
Gradually, reduce the pressure of the finger on the string to leave it open.
MSP
13
7
6
47
II
II
II
M
M
M
M
pp
pp
mf

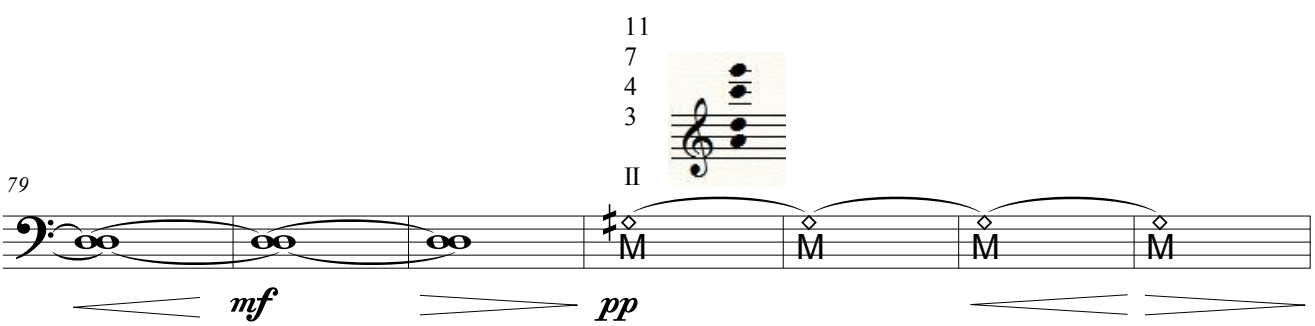

Gradually, increase the bow pressure destroying the multiphonic
MSP
52
II
M
M
f
LH Finger slide
(rubbing the tape)
Use less pressure on the tape to create a continuous timbre with more string resonance.
Tape on III
mp

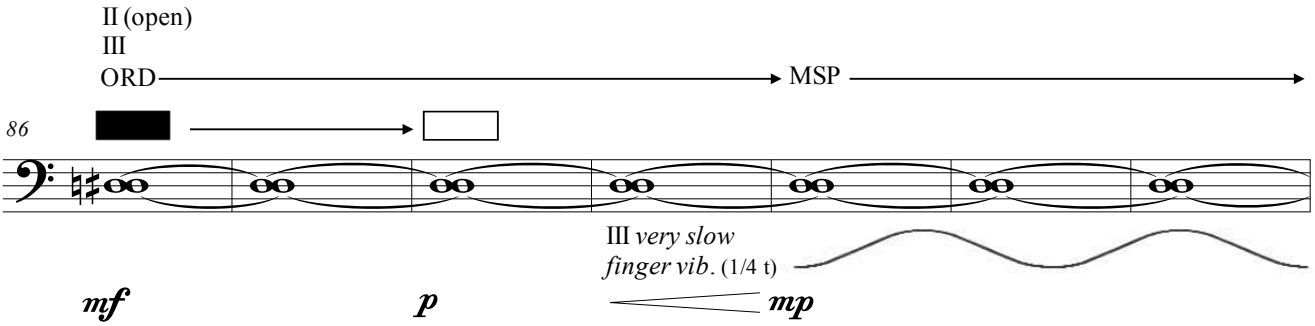

Gradually, increase the bow pressure without sound interruption.
Bow from the Frog with less pressure to create a rough, but continuous timbre.
ORD
57
pp
p
similar
Tape on III
p

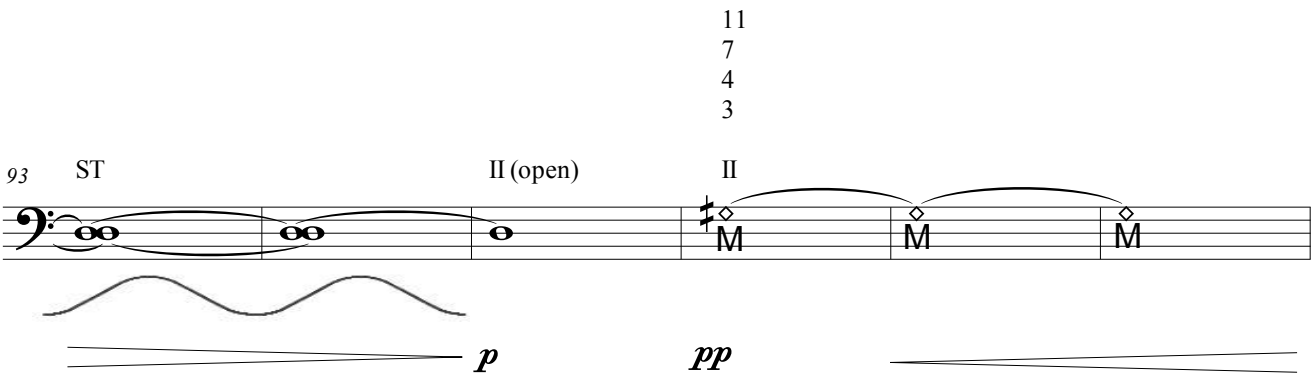

13
9
5
4
II
62
M
M
M
II
III
II (open)
pp
pp
mf

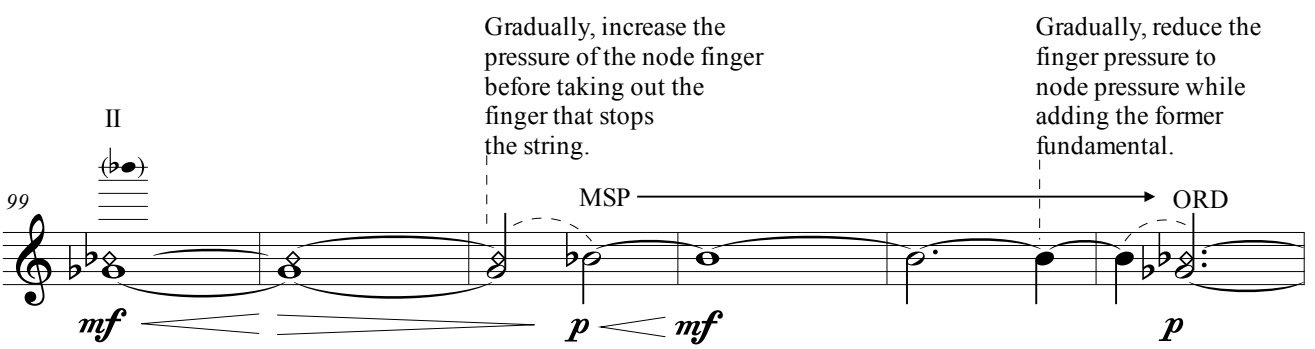

13
9
5
4
II
67
M
M
M
III
II (open)
mp
mf

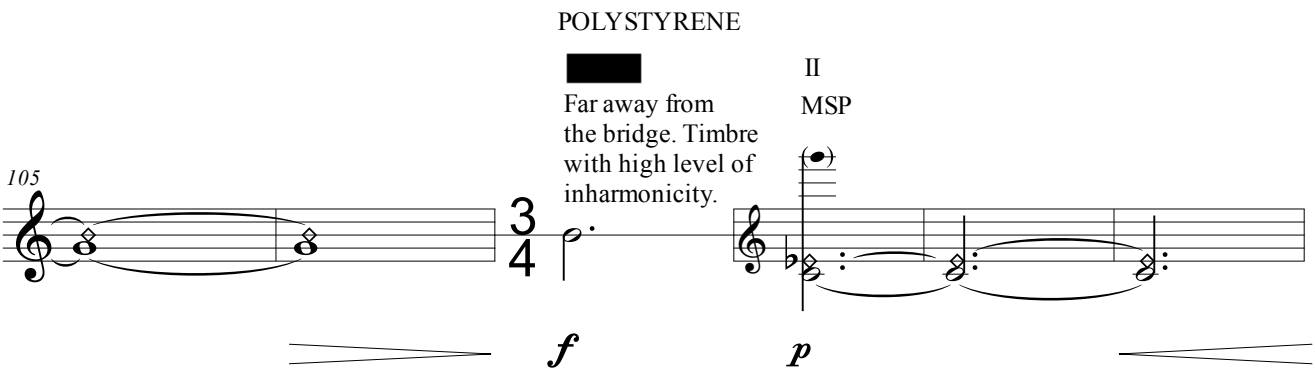

13
9
5
4
II
73
M
M
M
M
ST
(At the tape knot)
III
II (open)
pp
mp


11
7
4
3
II
79
M
M
M
M
mf
pp

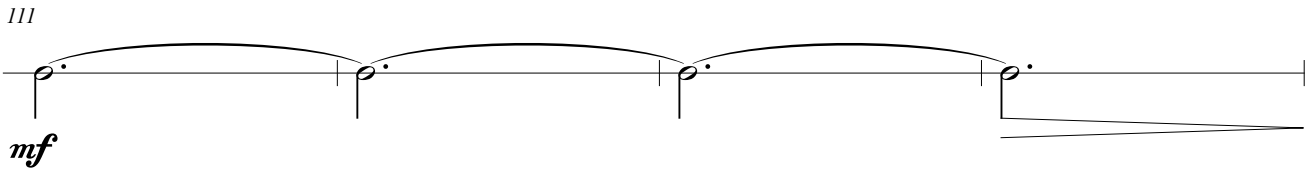

II (open)
III
ORD
MSP
86
III very slow
finger vib. (1/4 t)
mf
p
mp

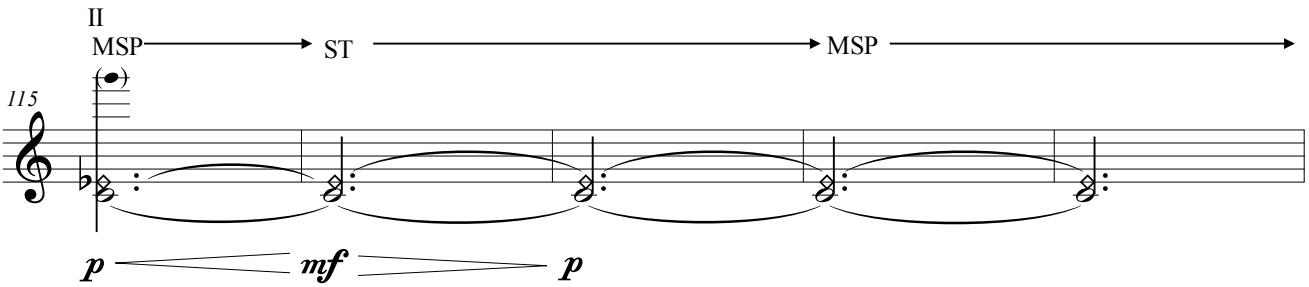

11
7
4
3
93
ST
II (open)
II
M
M
M
p
pp

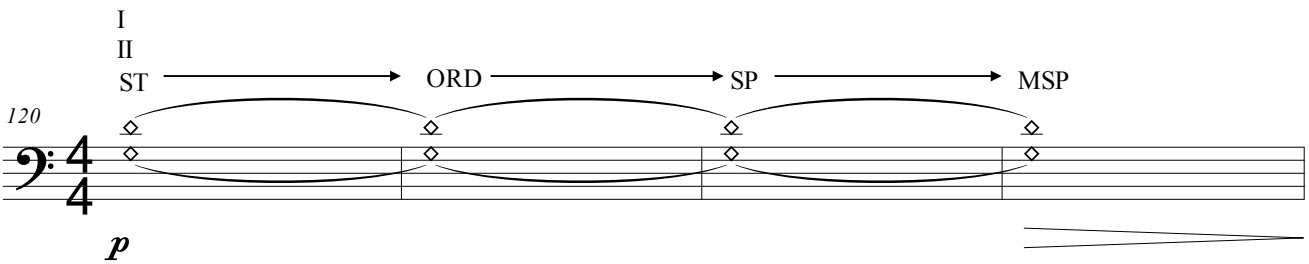

II
Gradually, increase the pressure of the node finger before taking out the finger that stops the string.
Gradually, reduce the finger pressure to node pressure while adding the former fundamental.
99
MSP
ORD
mf
p
mf
p


POLYSTYRENE
II
MSP
Far away from the bridge. Timbre with high level of inharmonicity.
105
3
4
f
p

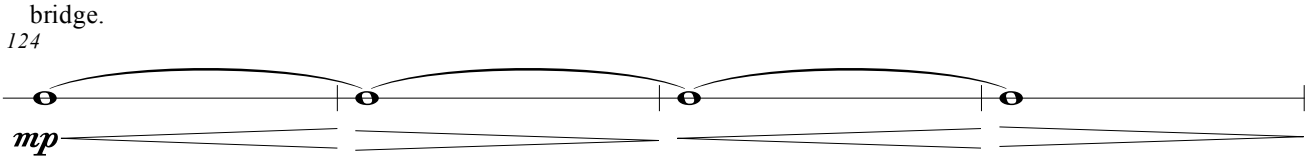
POLYSTYRENE
Far away from
the bridge

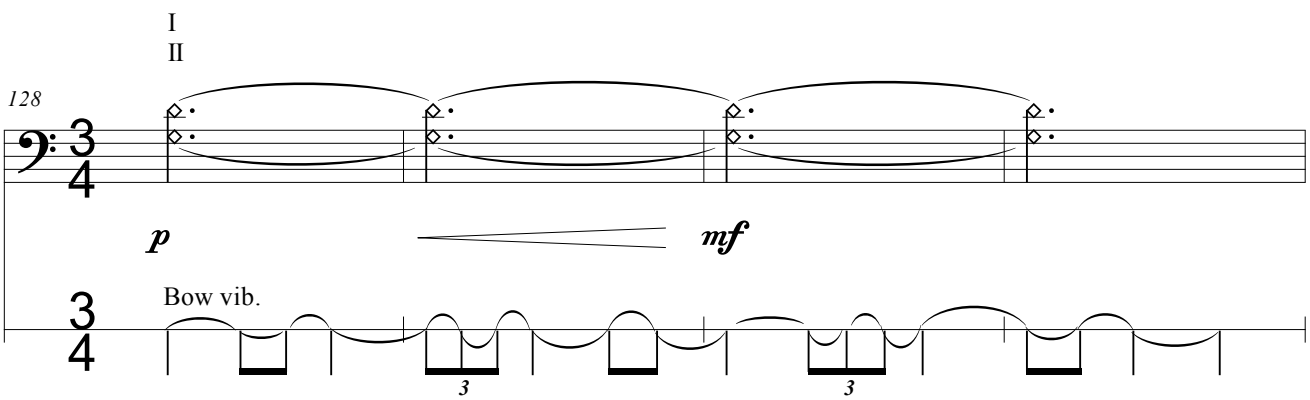






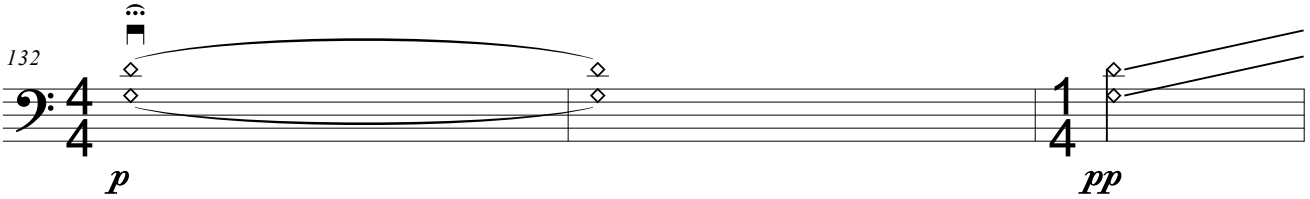
POLYSTYRENE
Close to the
bridge.

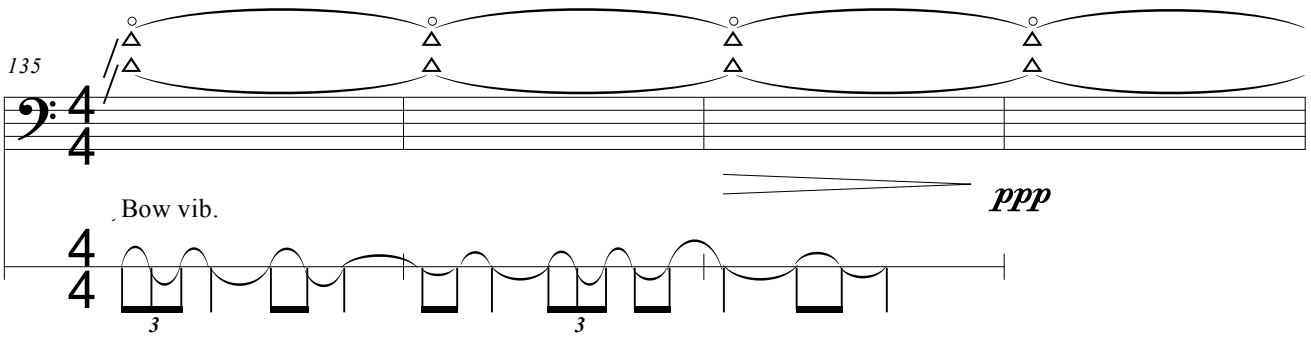




I
II
JETÉ
[Attack only once jeté and allow the natural bounce to come to an end before continuing to bow normally]

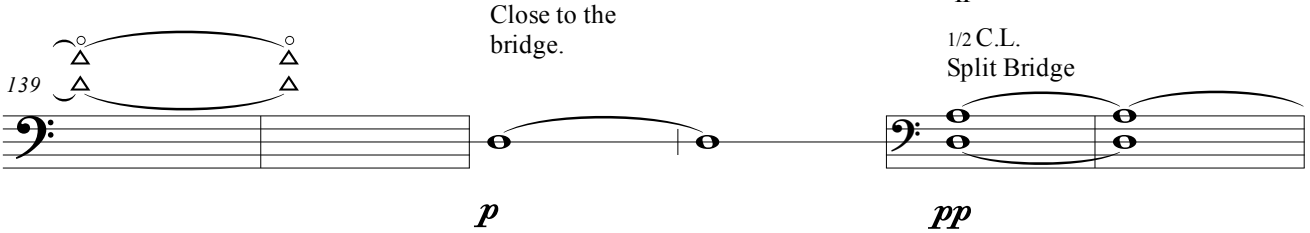
Interact with the tape. Unexpected overtones may appear.





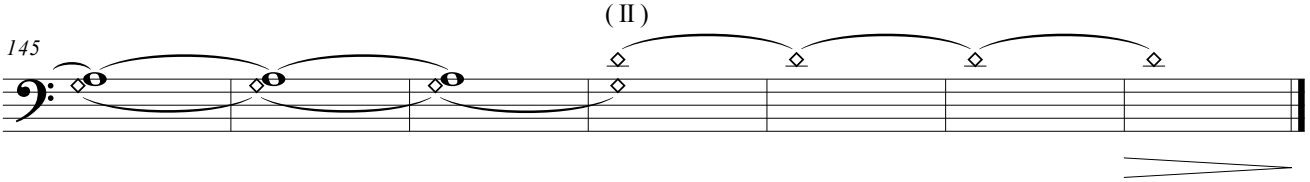
POLYSTYRENE
Very slow bowing
Close to the bridge.

I
II
1/2 C.L.
Split Bridge



I (open)
II

(I)
(II)



Just An Attempt To Dissipate

Soprano, Alto Flute, Bass Clarinet, and Acoustic Guitar

Commissioned by Collective Lovemusic

MICHELE ABONDANO

2019

Just An Attempt To Dissipate

The four instruments determine a space of interaction where the created timbre presents a continuous change of density. The piece is *just an attempt to dissipate*, not only the tension generated in that process, but the perception of mass in timbre itself, even though it could seem to be unbreakable and impossible to disperse.

PERFORMANCE NOTES

Transposed Score [Flute in G, Bass Clarinet in B♭].

The techniques, when played literally as written, could result in unstable, shifting timbral behaviours: this is expected and desired.
The dynamics are written as references; however, the performer should use whatever pressure/intensity is necessary to make the technique work.

Duration: 8:15 minutes

GENERAL SYMBOLS

Quarter of tone down

Quarter of tone up

Gentle upward inflection

Note: Microtonal alterations are used in multiphonics notation.

_____ Prolongation line. The sound should be held until the line finishes to give place to another sound or just to cease.

---------- Dotted prolongation line. It represents a kind of sound that is naturally interrupted, with unpredictable behaviour. However, it works exactly like the normal prolongation line. The sound should be produced until the line finishes to give place to another one or just to cease.

Gradual transition from a position/sound to another one.

Stop line. It indicates to cease the sound.

SOPRANO (Voice)

There is no text, not even words. The phonemes are written using the International Phonetics Alphabet [IPA] symbols.

⟨ɒ⟩ Open back rounded vowel. It is generally the sound for 'o' as initial vowel in English. Example: **o**live.

⟨ŋ⟩ Voiced velar nasal. It is the sound of 'ng' in English. Example: si**ng**.

⟨r⟩ Voiced dental alveolar trill. The reference should be the sound 'r' as initial consonant in Spanish. Example: **r**ío. The trill or 'rolling effect' is so much stronger and more articulated than the same phoneme in English (example: **r**iver).

Noteheads

△ Triangular-shaped notehead: Highest pitch possible.

Triangular-shaped notehead with harmonic circle: Highest pitch possible with air.

This technique implies no vibrations, only air. It is the result of mixing the *falsetto* with air while matching a pitch in the highest possible register of the voice.

⊗ 'x'circled-shaped notehead: Hummed voice.

Also called 'Bocca Chiusa' although, in this piece, sometimes it implies the open mouth to articulate the 'snap tongue' sounds at the same time.

 x-shaped notehead: Snap tongue.

Percussive sound produced by a very slight and fast slap tongue against the back part of the teeth and palate. The mouth should be open and closed rapidly as well as the size of the mouth opening should change constantly to generate different timbral qualities. The saliva increase the timbral diversity.

ϕ Divided circle-shaped notehead: Vocal Fry

Turbulence technique that occurs at the vocal folds. When frying, the vocal folds come together slowly enough to create a pulse tone that has a less-prominent or even absent harmonic series [VoiceScienceWorks Website]. *Note: The resulting sound has undetermined pitch; therefore, the notation used works as a guideline to produce a gentle cracking sound in the lowest register (beneath the chest voice) with low air pressure*.

Scotch Tape

Take a 2 cm-width roll of scotch tape. Mark the extreme with a piece of coloured paper to peel off easily.

↑ Peel off. The movement should be slow and constant during the entire figure or until the dotted prolongation line stops. The timbre created should be loud, rough, and granular.

↓ Stick it back. The movement should be fast to make the entire piece of tape stick again to the roll during the figure written. This movement is soundless.

ALTO FLUTE

Noteheads

◇ Diamond-shaped notehead: Aeolian Sound. A mix of air sound with determined pitch.

⊗ ‘x’circled-shaped notehead: Hummed voice.

Sing inside the instrument while producing the normal sound. The voice pitch is also transposed to ease the reading.

□ Square-shaped notehead: Air Sound.

Blow to produce air sound, pitch is undetermined. However, the fingering for the written pitch should be held to ease the timbral transition.

Techniques

Flutter Tongue [Flz.]

Tongue Pizzicato [T. Pizz.]

Percussive sound with pitch. Build up a strong pressure behind the tongue and, then, rapidly snap the tongue down/away from the teeth/lips to produce a ‘pop’ sound.

Quasi Tongue Pizzicato [Quasi T. Pizz.]

This technique is used when playing only the headjoint. Articulate the normal Tongue Pizzicato while adding a stream of air that can be heard.

Tongue Ram

Explosive percussive sound. Seal the embouchure hole completely with the lips and strongly propel the tongue into the embouchure hole. The sounding resonance produced is generally a major seventh below the fingered/written pitch.

Multiphonics

The corresponding fingering is written above each multiphonic. The diagrams were taken from the book ‘The techniques of Flute Playing II’ by Carin Levine and Christina Mitropoulos-Bott.

Headjoint technique

Wave Hand On/Off: Play only the headjoint of the flute. Place the palm of the right hand [R.H.] on the extreme hole. Move the hand to cover and uncover the hole according to the written rhythm.

BASS CLARINET

Noteheads

□ Square-shaped notehead: Air Sound.

Blow to produce air sound, pitch is undetermined. However, the fingering for the written pitch should be held to ease the timbral transition.

◇ Diamond-shaped notehead: Aeolian Sound. A mix of air sound with determined pitch.

⊗ 'x'circled-shaped notehead: Hummed voice.

Sing inside the instrument while producing the normal sound. The voice pitch is also transposed to ease the reading.

Techniques

Flutter Tongue [Flz.]

Also, Growling [Growl.] when a specific pitch for the voice is written.

Turbulence technique also known as the 'Arytenoid Rattle'. Basically, the performer adjusts the larynx such that the arytenoid cartilages come close enough together to bump into one another and rattle [VoiceScienceWorks Website]. 'Growling' commonly refers to a vibration that is taking place in the throat.

\+ Slap Tongue

Percussive sound with determinate pitch. Build up a strong pressure with the tongue on the reed and then pull it back from the embouchure and release the tongue.

M Spectral Multiphonics (also, overblown multiphonics)

The technique consists in producing simultaneous upper harmonic partials (the one to be emphasised is written on score) from a given fundamental. "It is recommended to find the right amount of space in the cavity of the mouth and throat. The performer could experiment with lowering the jaw and changing the direction of the flow of air. These multiphonics use the core fundamental fingerings for each pitch." –Heather Roche.

Underblown Multiphonics

To produce this multiphonics it is necessary to use altissimo fingerings, allowing the lower undertones to sneak back in. –Heather Roche. The corresponding fingering is written above each multiphonic. [Fingerings diagrams by Heather Roche using Bret Pimintel's website].

Preparation

Aluminium Foil

Use a piece of aluminium foil big enough to wrap completely the bell's opening.

The aluminium foil affects only the pitches (fundamental and harmonic partials), as well as multiphonics produced from the low C fingering.
The resulting timbre can be described as an 'electrical noise', a kind of distortion layer covering the sound.

ACOUSTIC GUITAR

Noteheads

◇ Diamond-shaped notehead (with harmonic circle): Harmonic Fingering (Left Hand).

× X-shaped notehead: Undetermined pitch. It is used to indicate a rythmic pattern on strings I and II; however, the resulting pitches are undetermined and shifting as a result of the Left Hand finger glissando. The correspondent fingers are marked above as **t** (thumb), **r** (ring), **m** (middle), **i** (index).

Techniques

Superball Mallet Tremolo. Rub the string with the Superball Mallet.

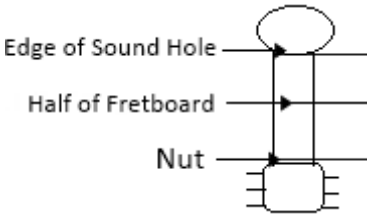
Bartók Pizzicato. Right Hand.

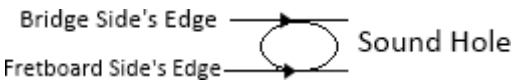
JETÉ The Cello Bow is thrown and allowed to bounce at a naturally decaying frequency. The bow movement should be from the frog to the point.

Finger Glissando

Slide the fingers along the strings controlling the movement by trying to reach the specified points and following the written rhythm. The graphic on score works only as a guideline for the finger displacement according to the three specific points on the guitar; however, the rhythm should be played always as written.

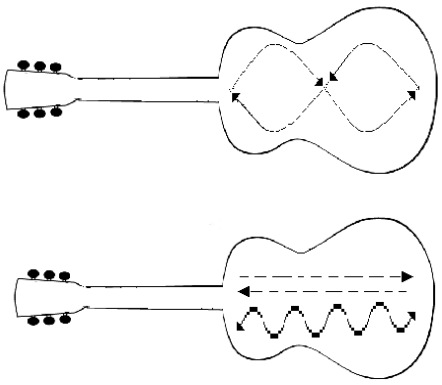
Left Hand [L.H.] Points of displacement





Superball Stick Movement

Rub the guitar back following the line movement and direction according to the following graphics:

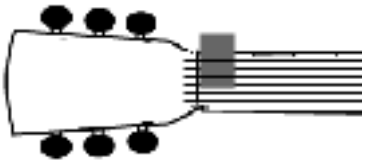


The speed is determined by the number of beats (duration) that are invested in each movement as it has been notated on score.

Preparation

Aluminium Foil

Use a piece of aluminium foil that matches the 1st Fret width, and long enough to cover from string I to IV. Place it close to the nut, using strings I and III to hold it (strings II and IV should be covered). Prevent it to reach string V. *Hold the preparation for the entire piece.*

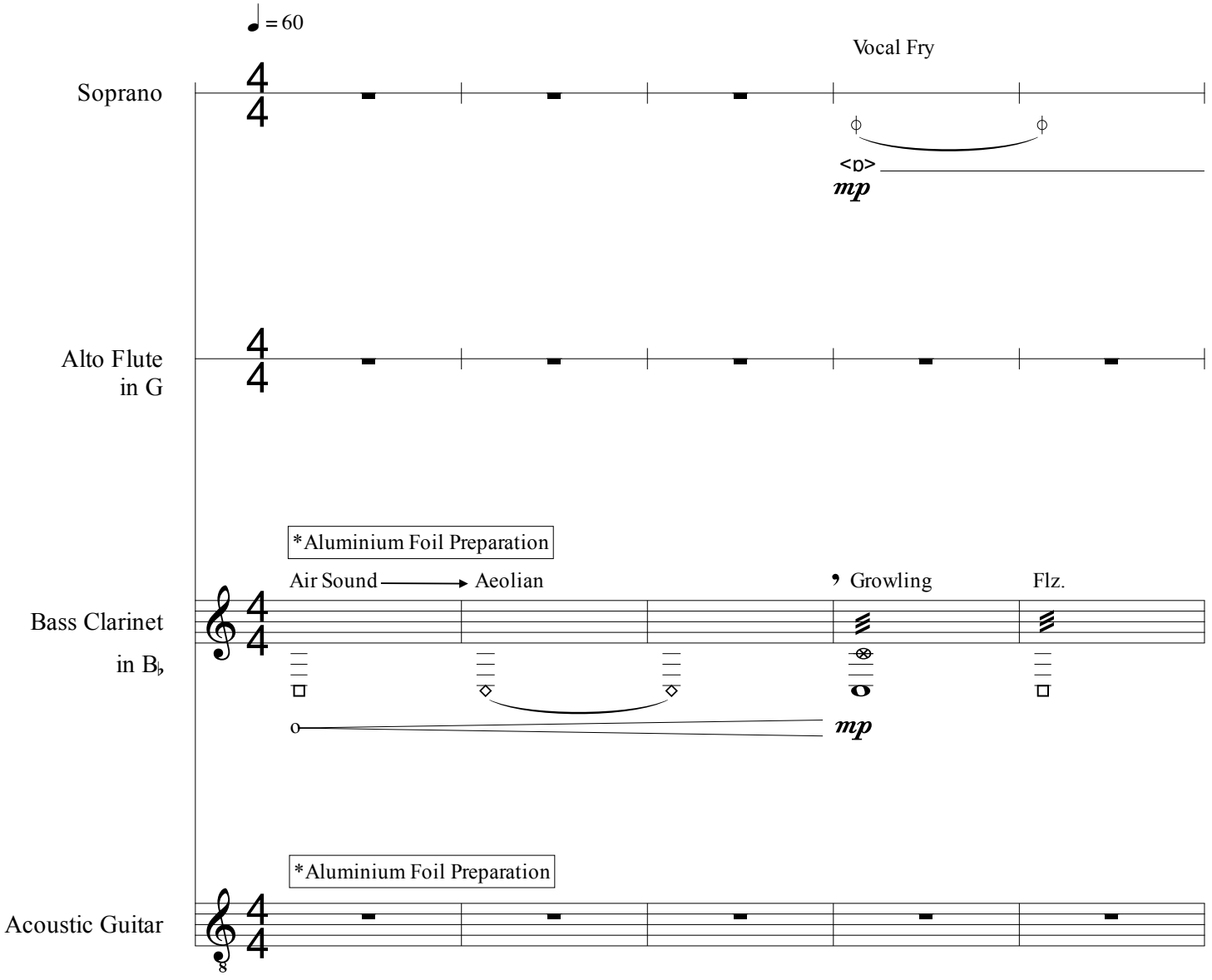


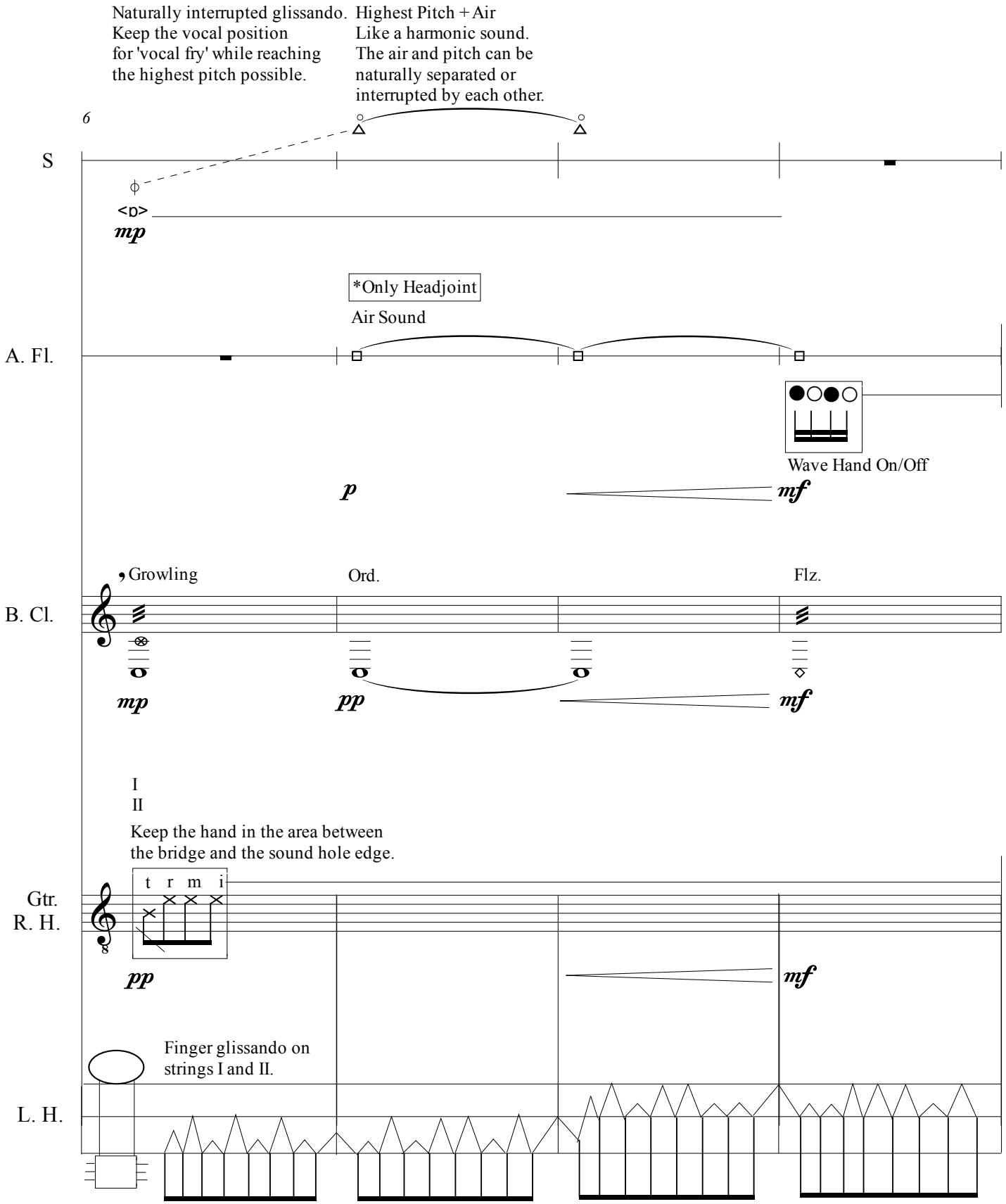
Just An Attempt To Dissipate

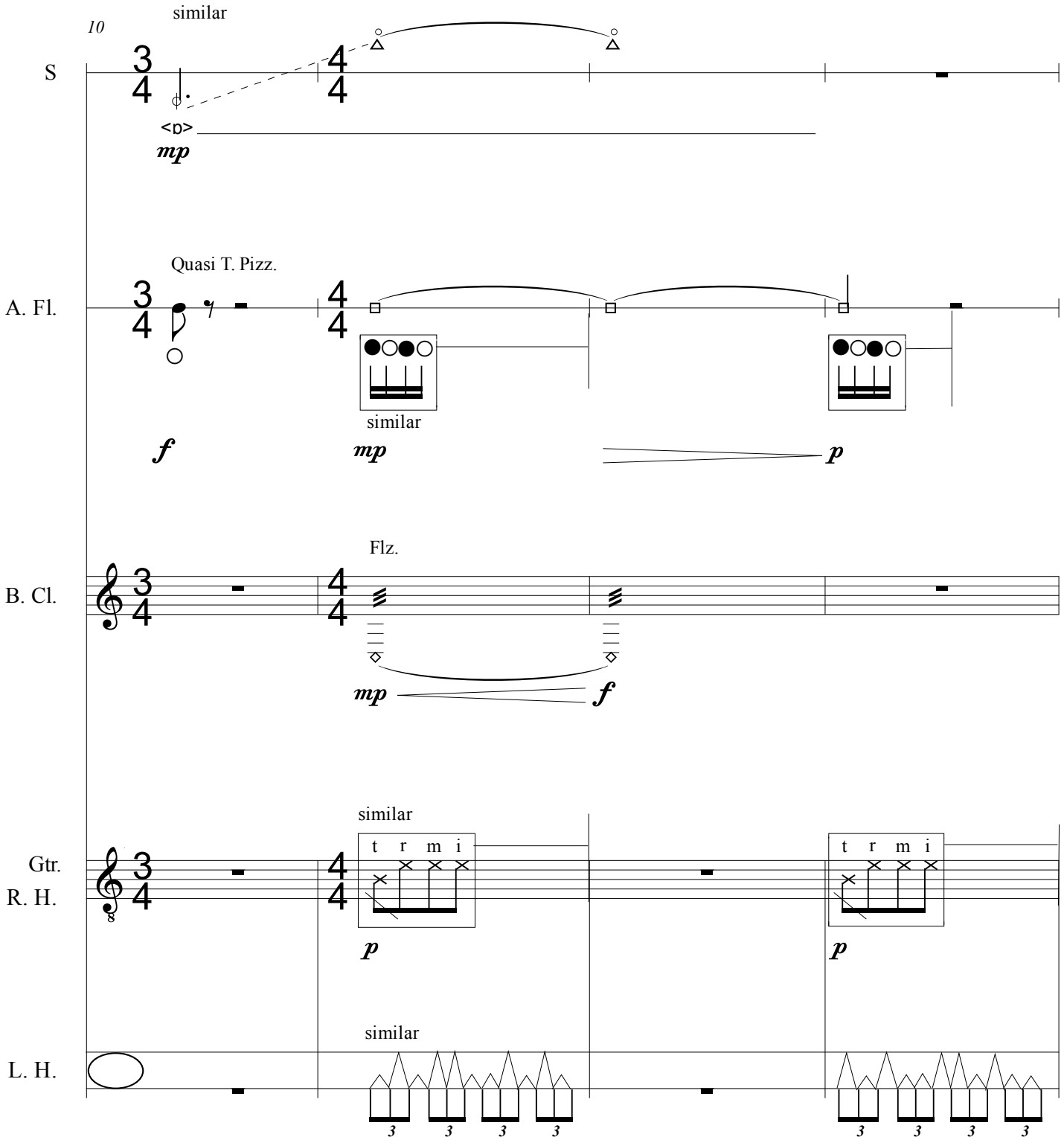
Commissioned by Collective Lovemusic

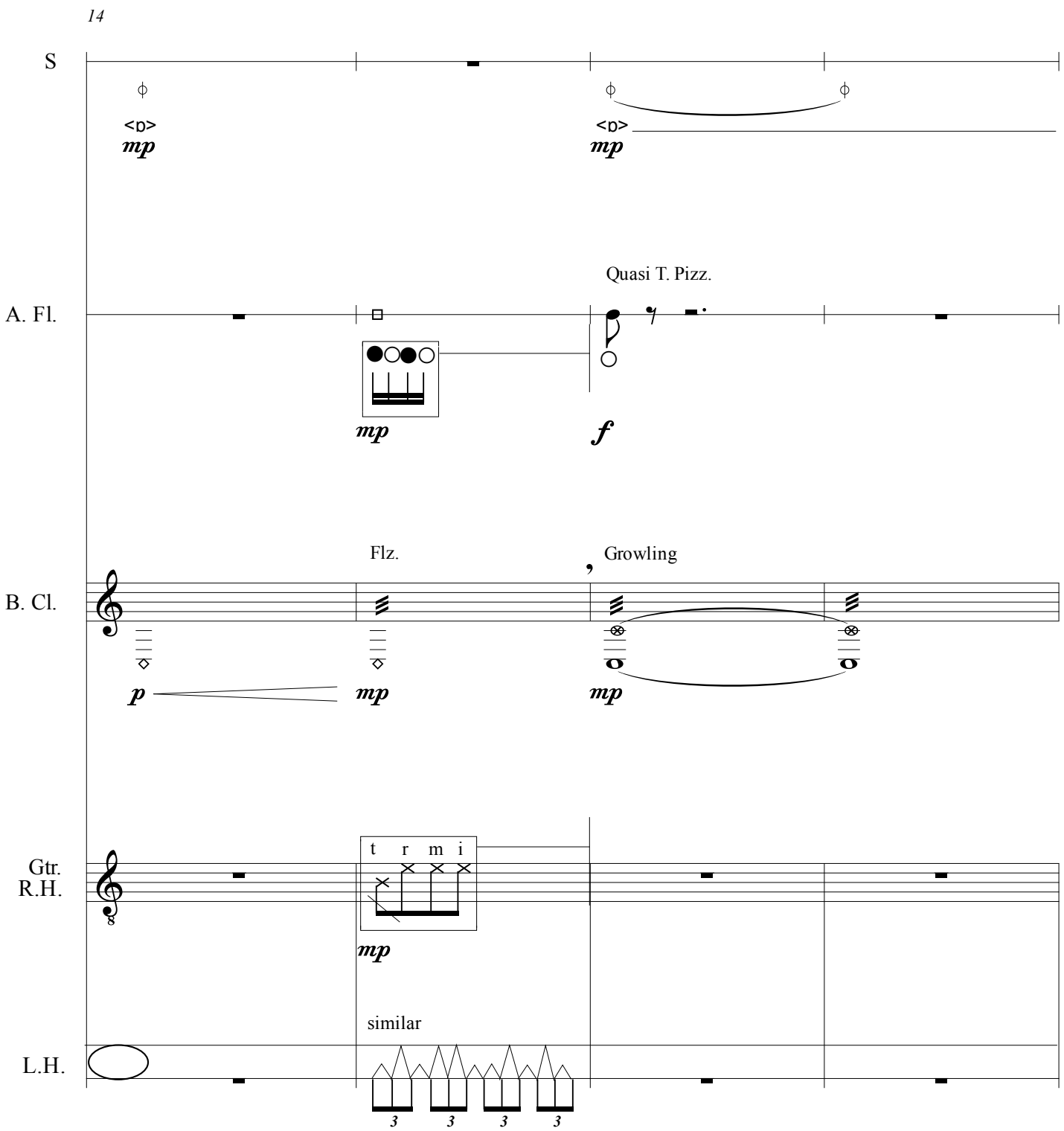
MICHELE ABONDANO
2019

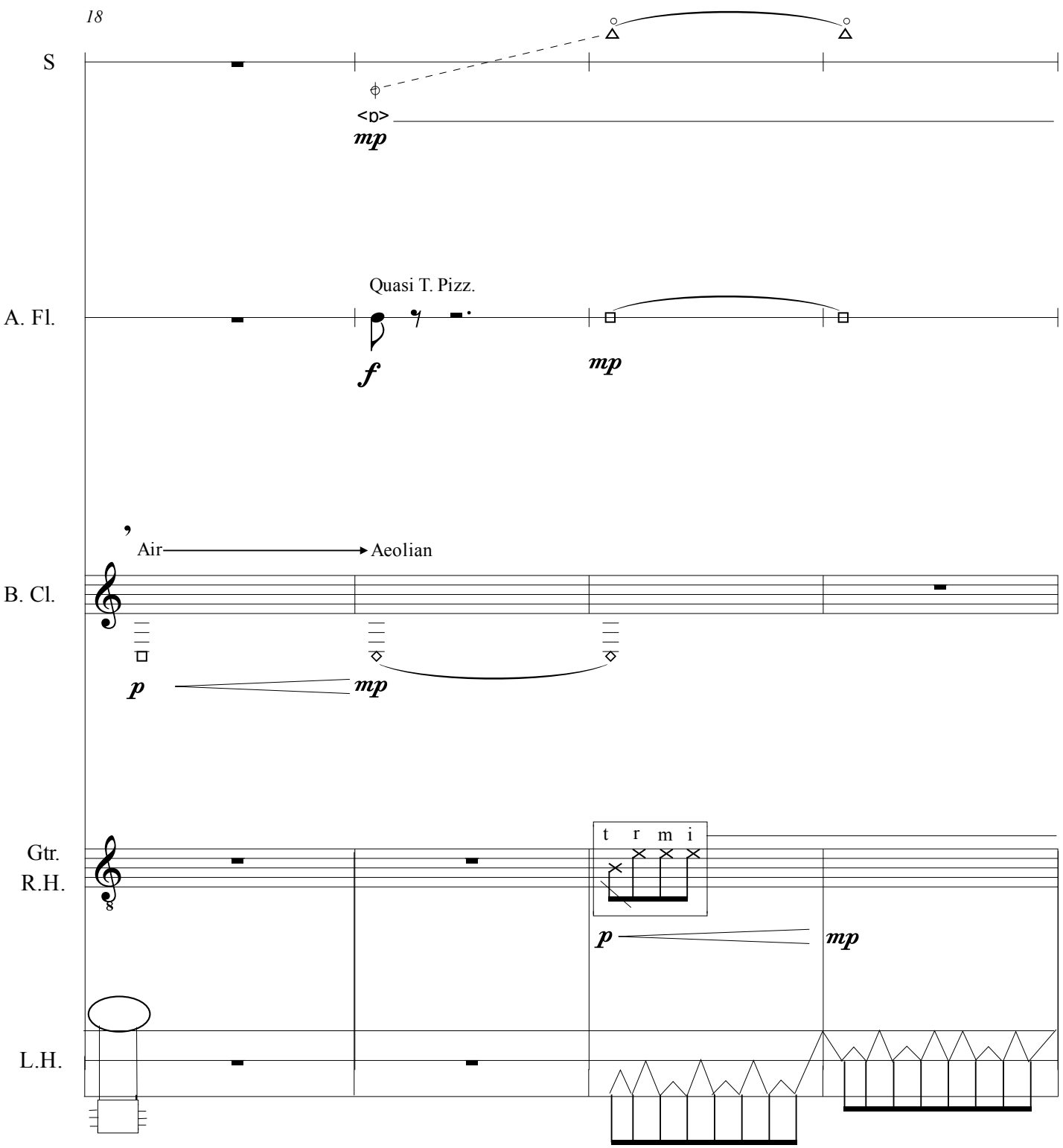
Transposed Score

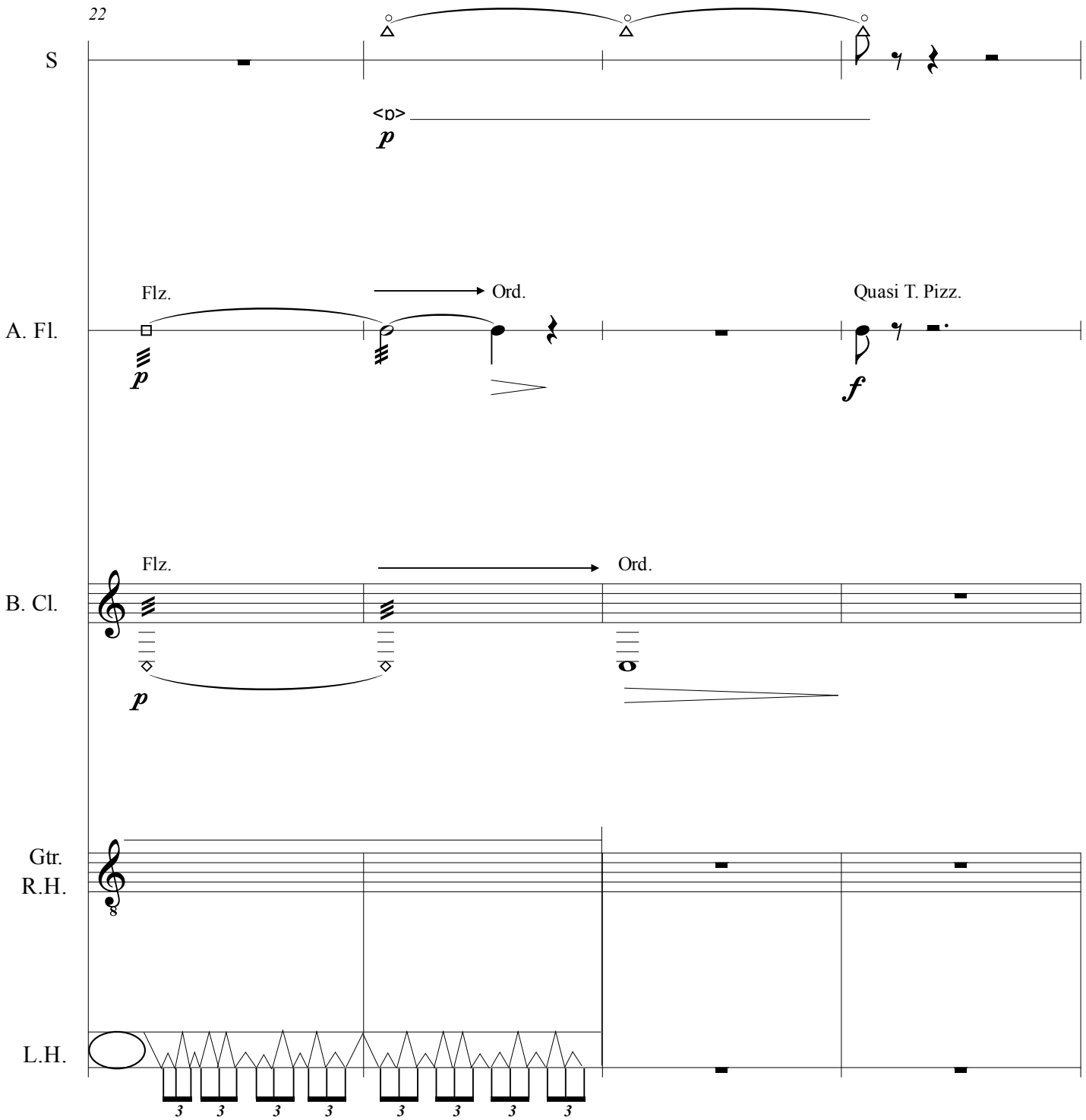


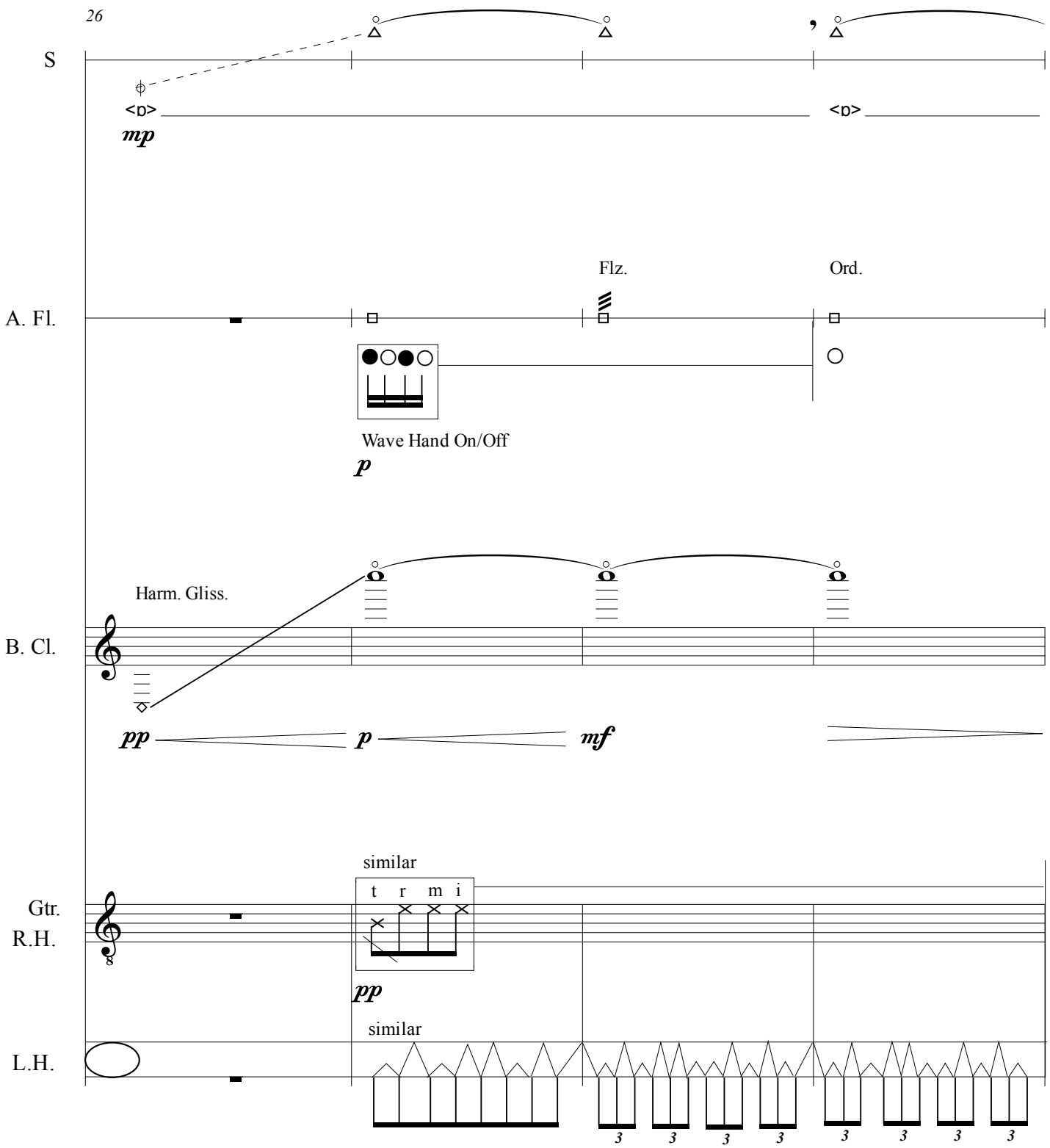

Naturally interrupted glissando.
Keep the vocal position
for 'vocal fry' while reaching
the highest pitch possible.
Highest Pitch + Air
Like a harmonic sound.
The air and pitch can be
naturally separated or
interrupted by each other.
6
S
<o>
mp
*Only Headjoint
Air Sound
A. Fl.
Wave Hand On/Off
p
mf
Growling
Ord.
Flz.
B. Cl.
mp
pp
mf
I
II
Keep the hand in the area between
the bridge and the sound hole edge.
t r m i
Gtr.
R. H.
8
pp
mf
Finger glissando on
strings I and II.
L. H.

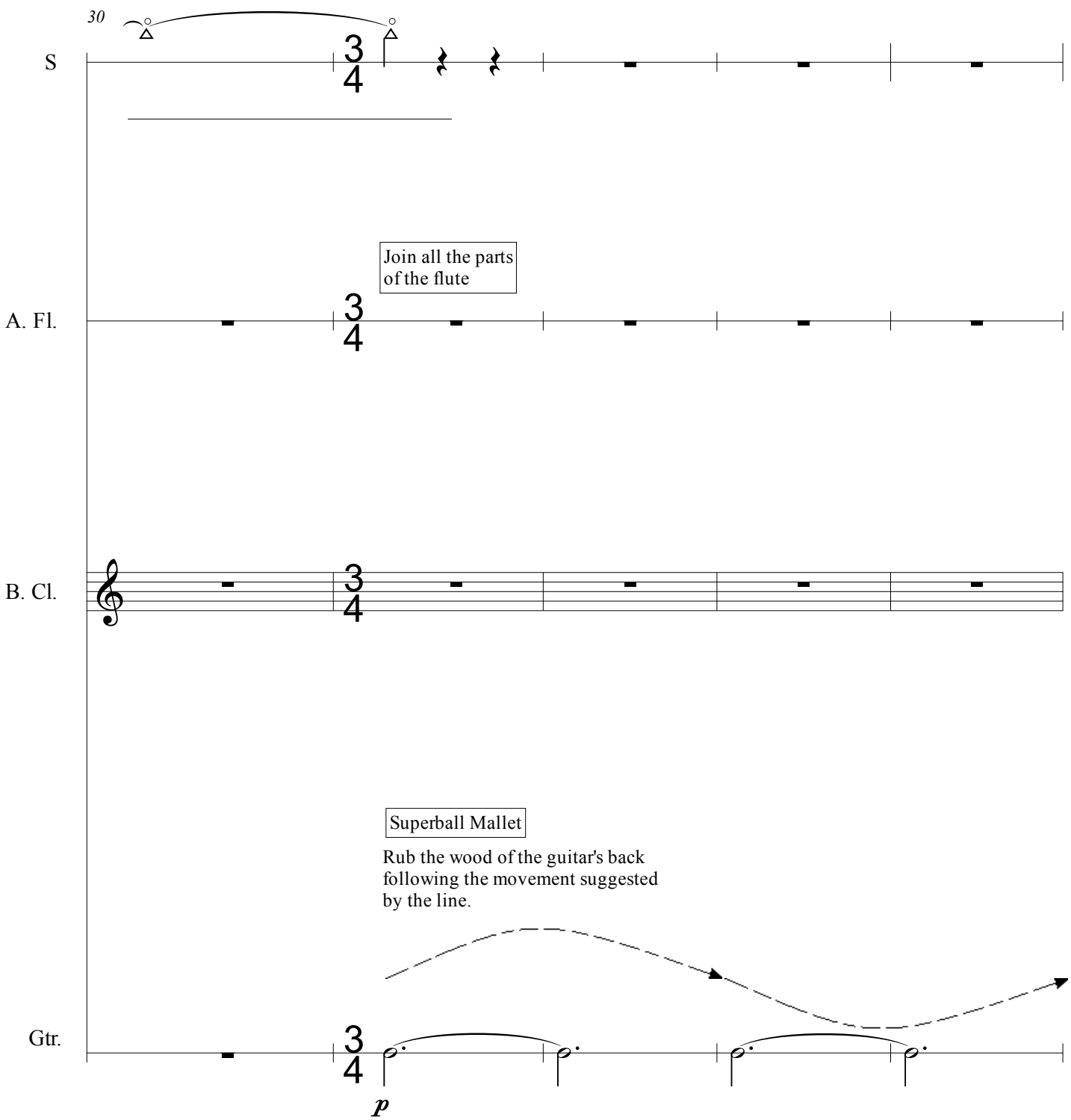

10
similar
S
<D>
mp
Quasi T. Pizz.
A. Fl.
similar
f
mp
p
Flz.
B. Cl.
mp
f
similar
t r m i
Gtr.
R. H.
p
t r m i
p
similar
L. H.
3
3
3
3
3
3
3
3

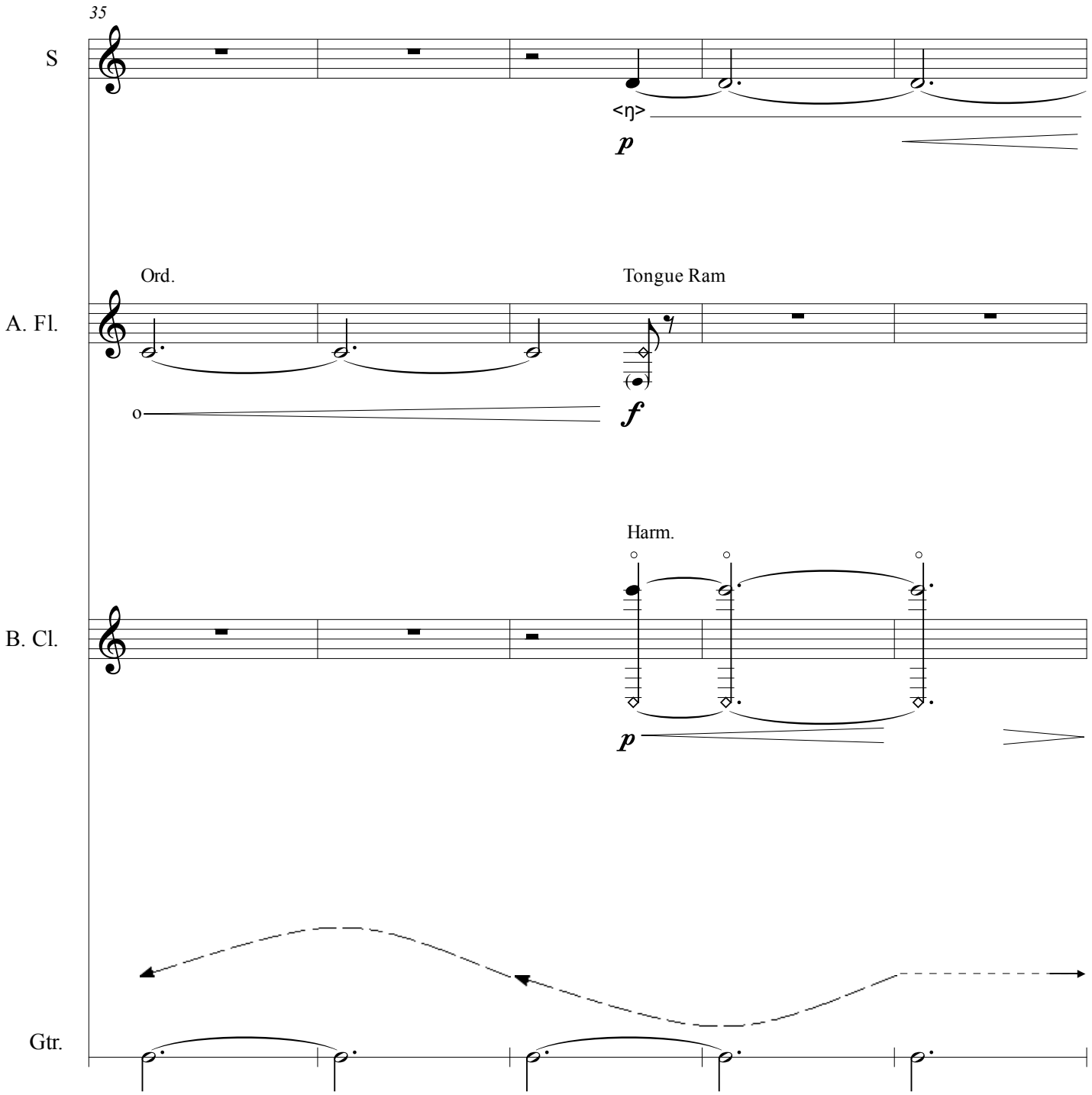

14
S
<p>
mp
<p>
mp
Quasi T. Pizz.
A. Fl.
mp
f
Flz.
Growling
B. Cl.
p
mp
mp
t r m i
Gtr.
R.H.
mp
similar
L.H.
3 3 3 3

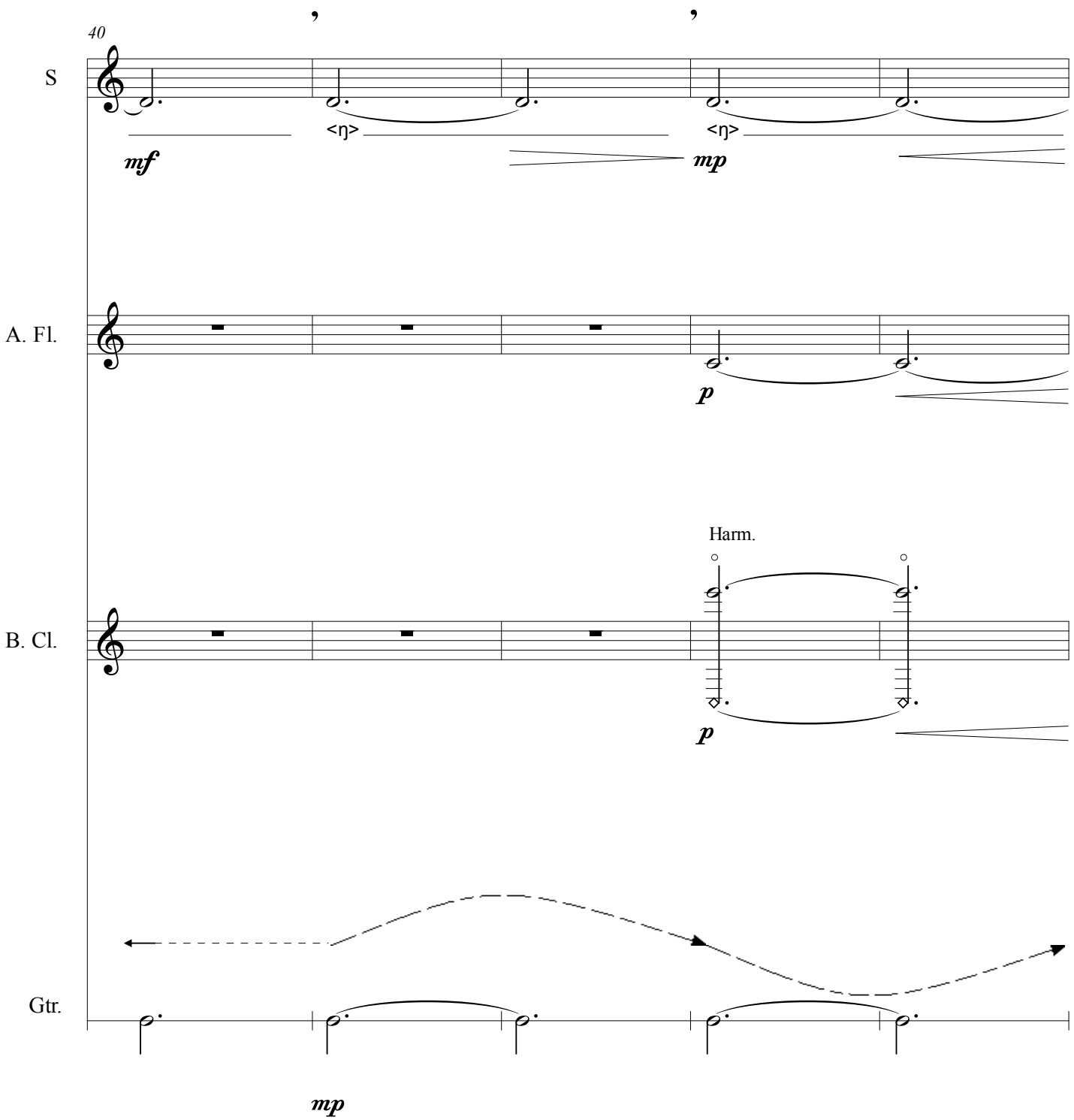

18
S
<D>
mp
A. Fl.
Quasi T. Pizz.
f
mp
Air
Aeolian
B. Cl.
p
mp
Gtr.
R.H.
t r m i
p
mp
L.H.

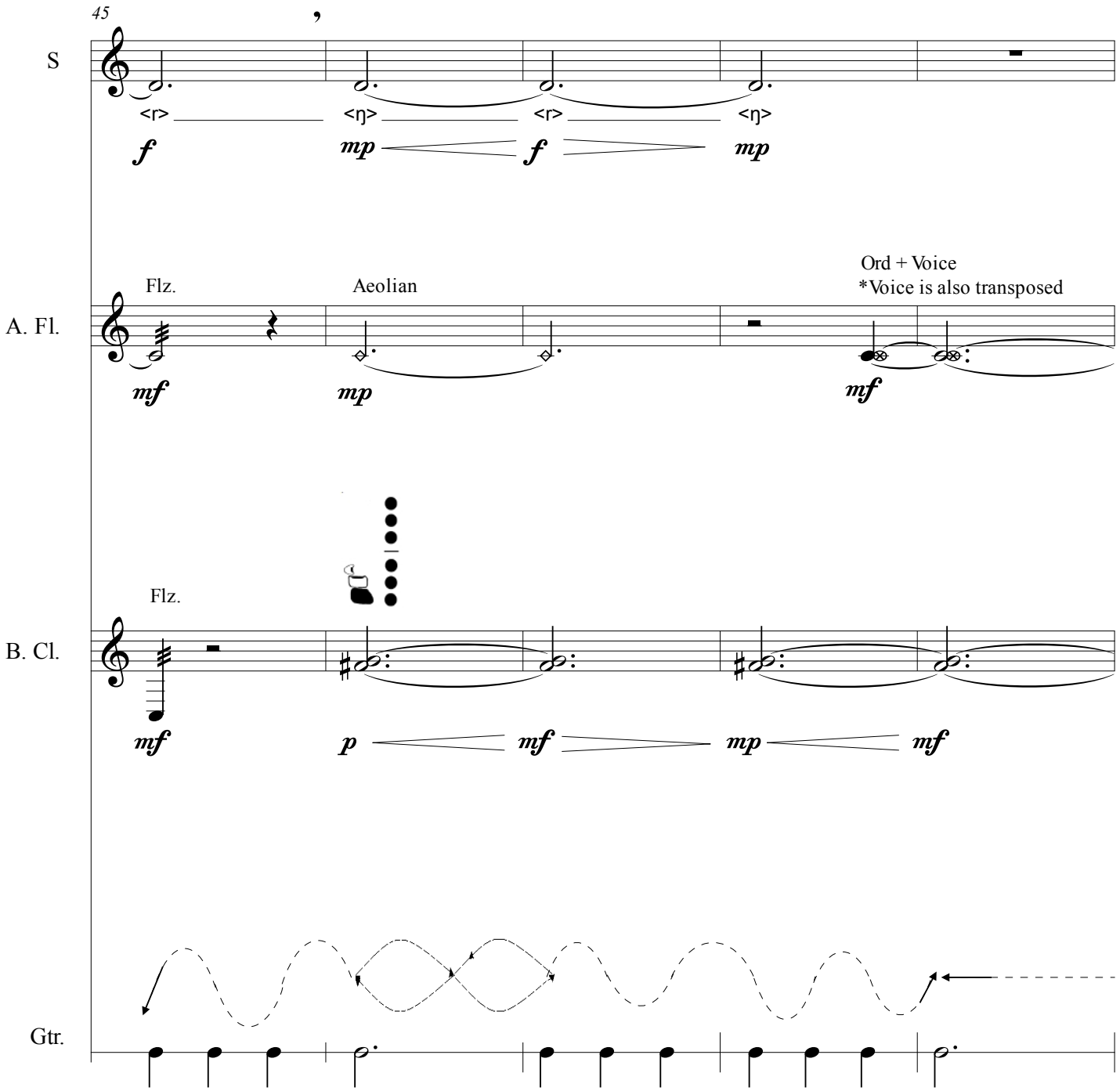

22
S
<p>
p
A. Fl.
Flz.
Ord.
Quasi T. Pizz.
p
f
B. Cl.
Flz.
Ord.
p
Gtr.
R.H.
8
L.H.
3 3 3 3 3 3 3 3

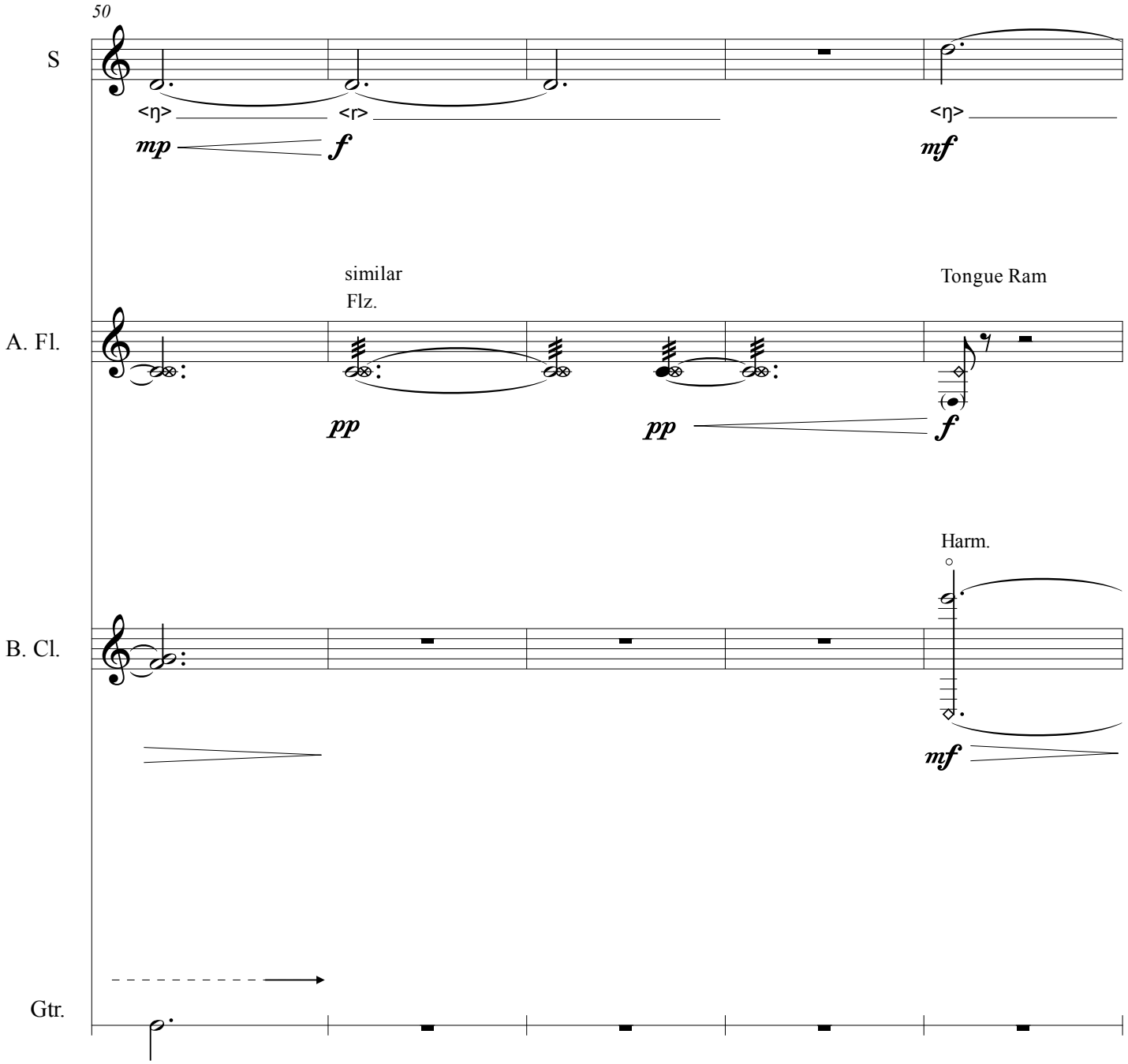

26
S
<o>
mp
<o>
Flz.
Ord.
A. Fl.
Wave Hand On/Off
p
Harm. Gliss.
B. Cl.
pp
p
mf
similar
t r m i
Gtr.
R.H.
pp
similar
L.H.
3 3 3 3 3 3 3 3

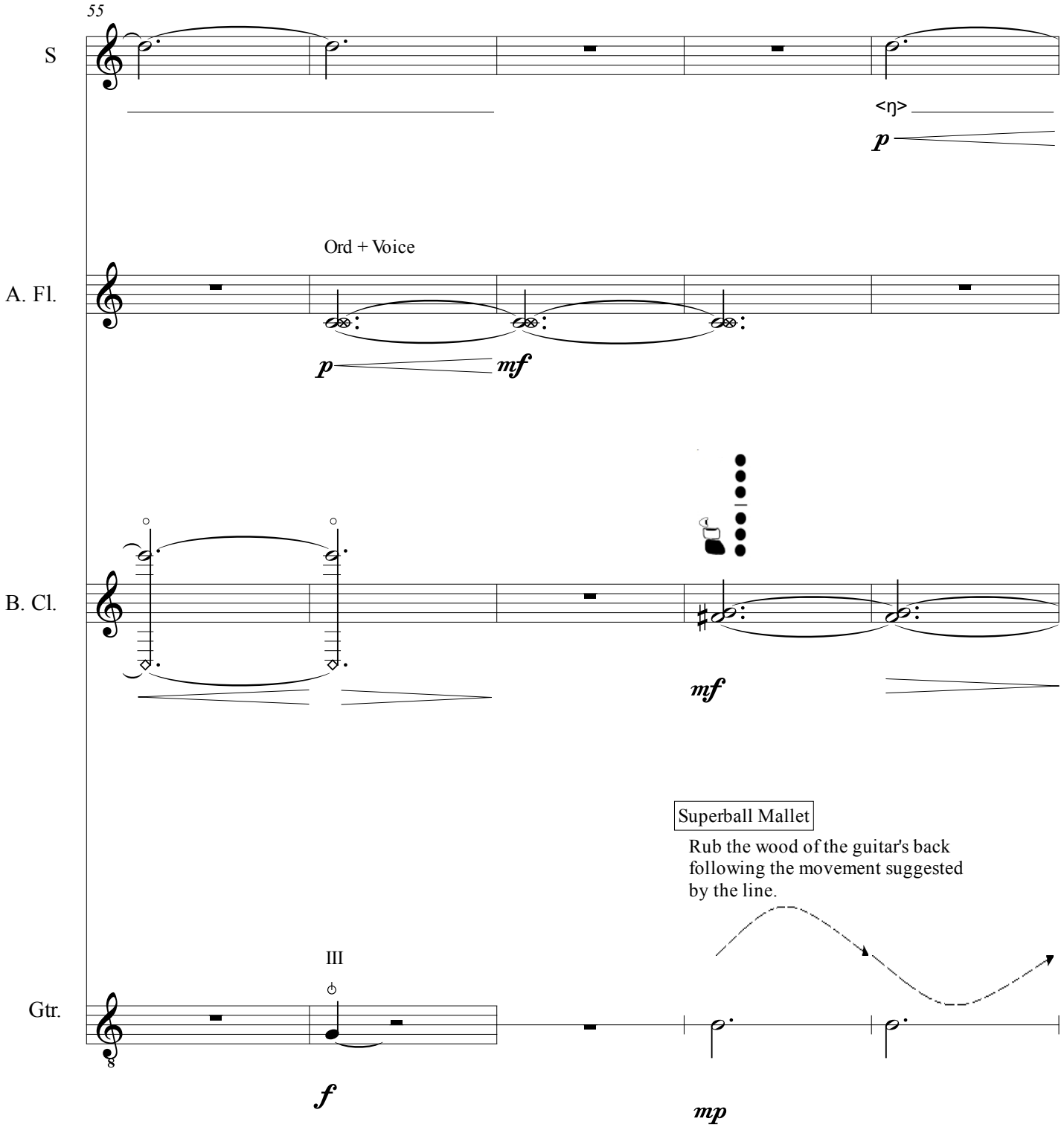

30
S
A. Fl.
Join all the parts
of the flute
B. Cl.
Superball Mallet
Rub the wood of the guitar's back
following the movement suggested
by the line.
Gtr.
p

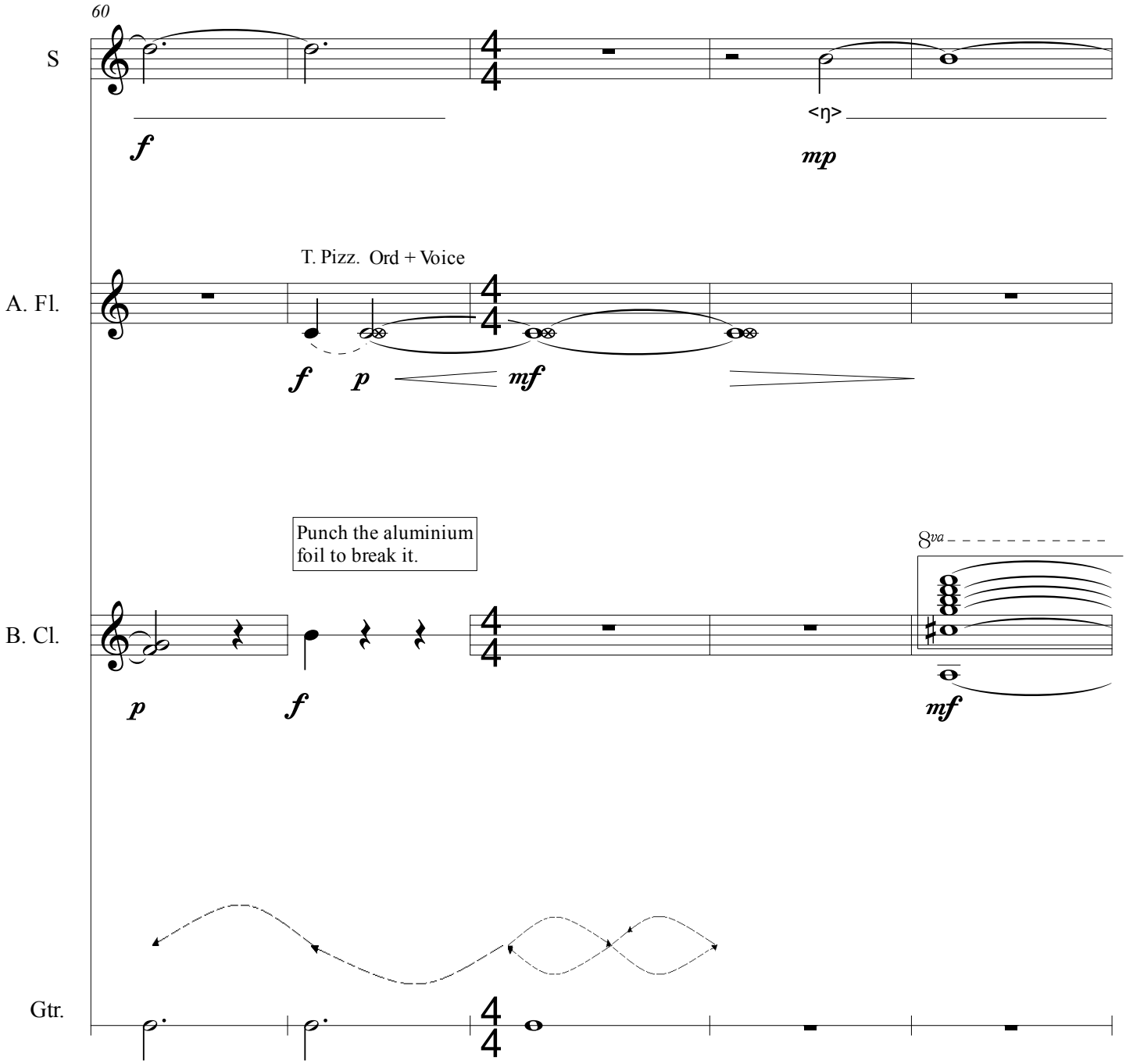

35
S
<η>
p
Ord.
Tongue Ram
A. Fl.
o
f
Harm.
B. Cl.
p
Gtr.

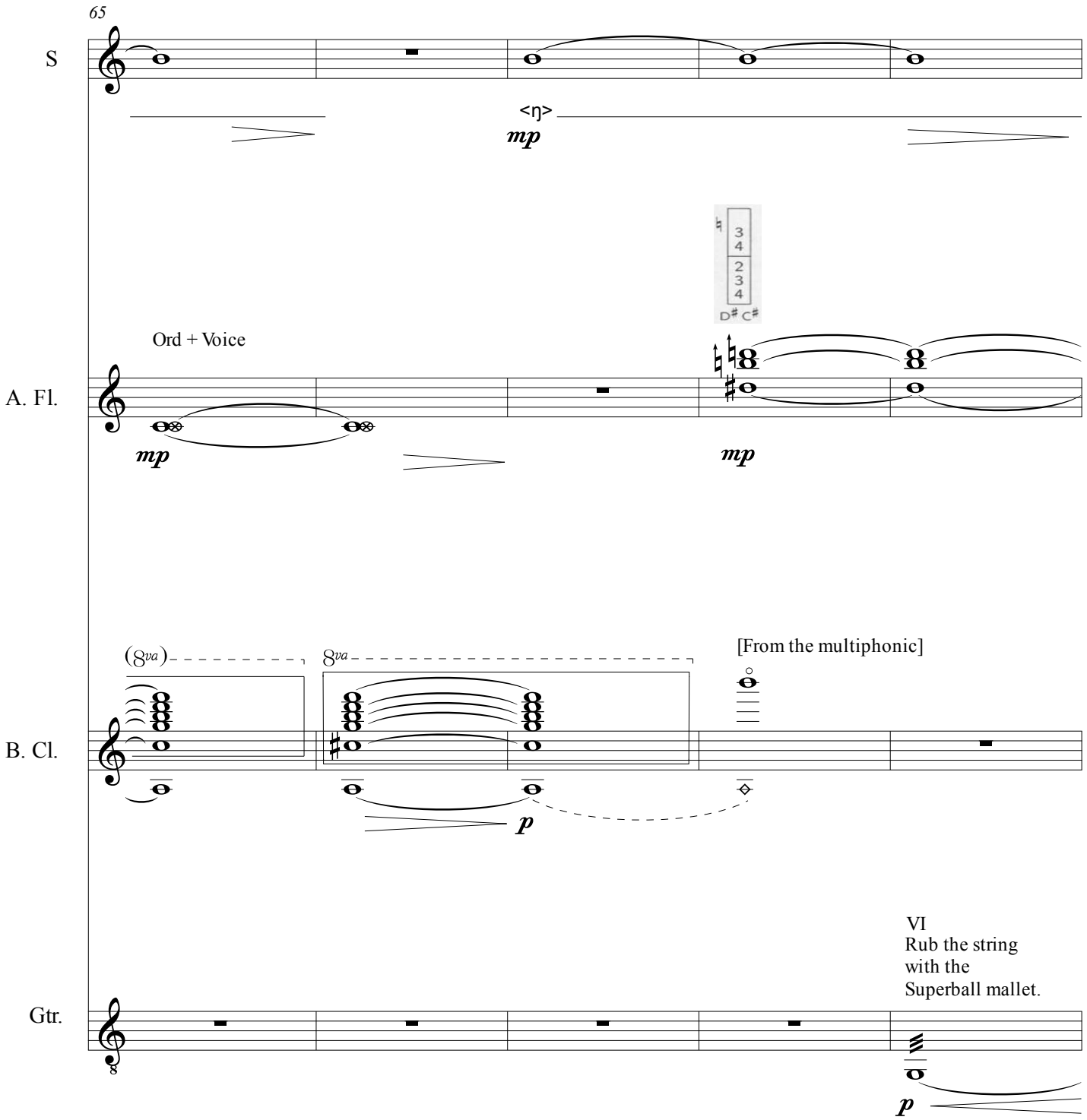

40
S
A. Fl.
B. Cl.
Gtr.
mf
mp
p
Harm.
mp

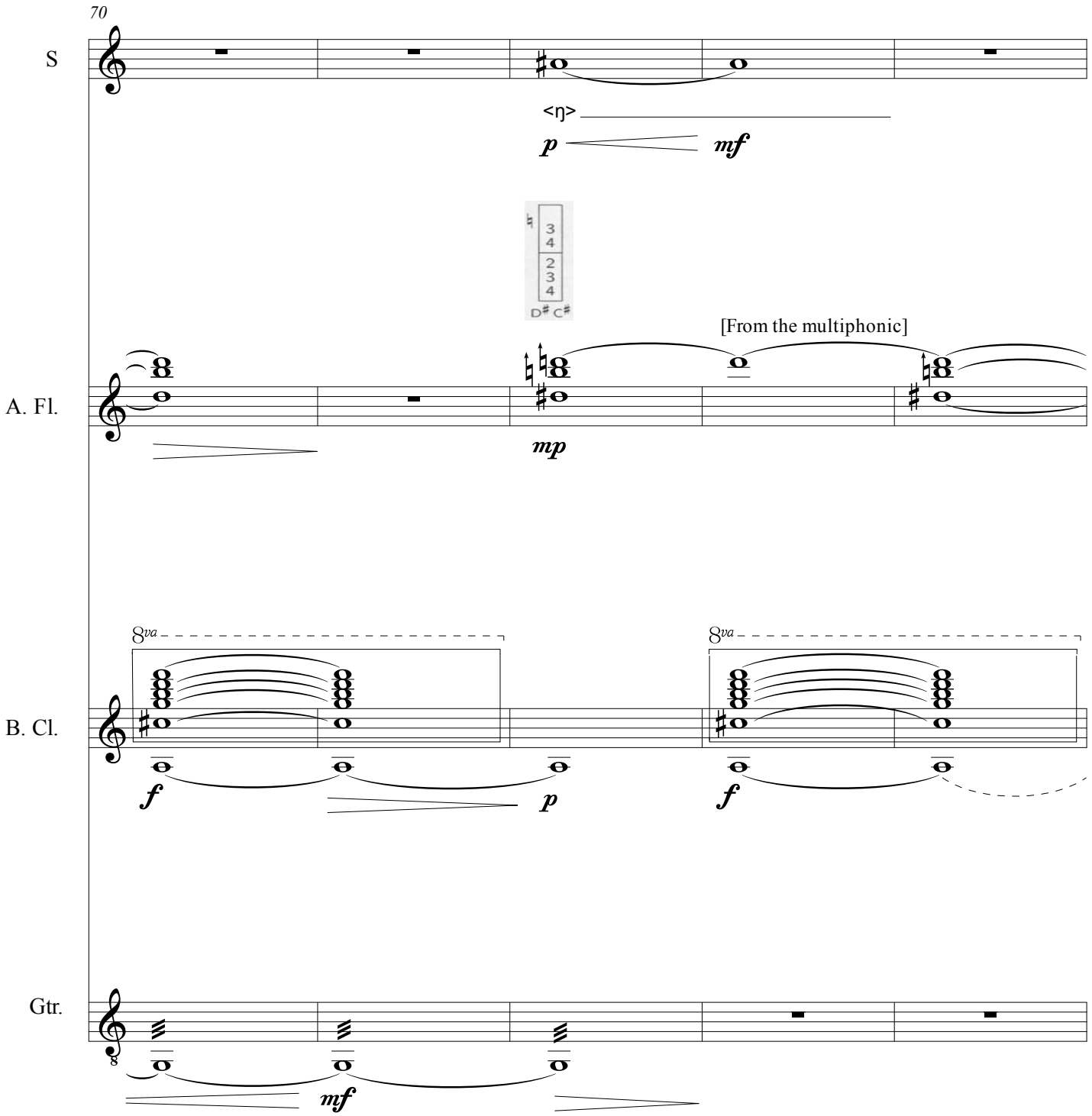

45
S
<r>
<ŋ>
<r>
<ŋ>
f
mp
f
mp
A. Fl.
Flz.
Aeolian
Ord + Voice
*Voice is also transposed
mf
mp
mf
B. Cl.
Flz.
mf
p
mf
mp
mf
Gtr.

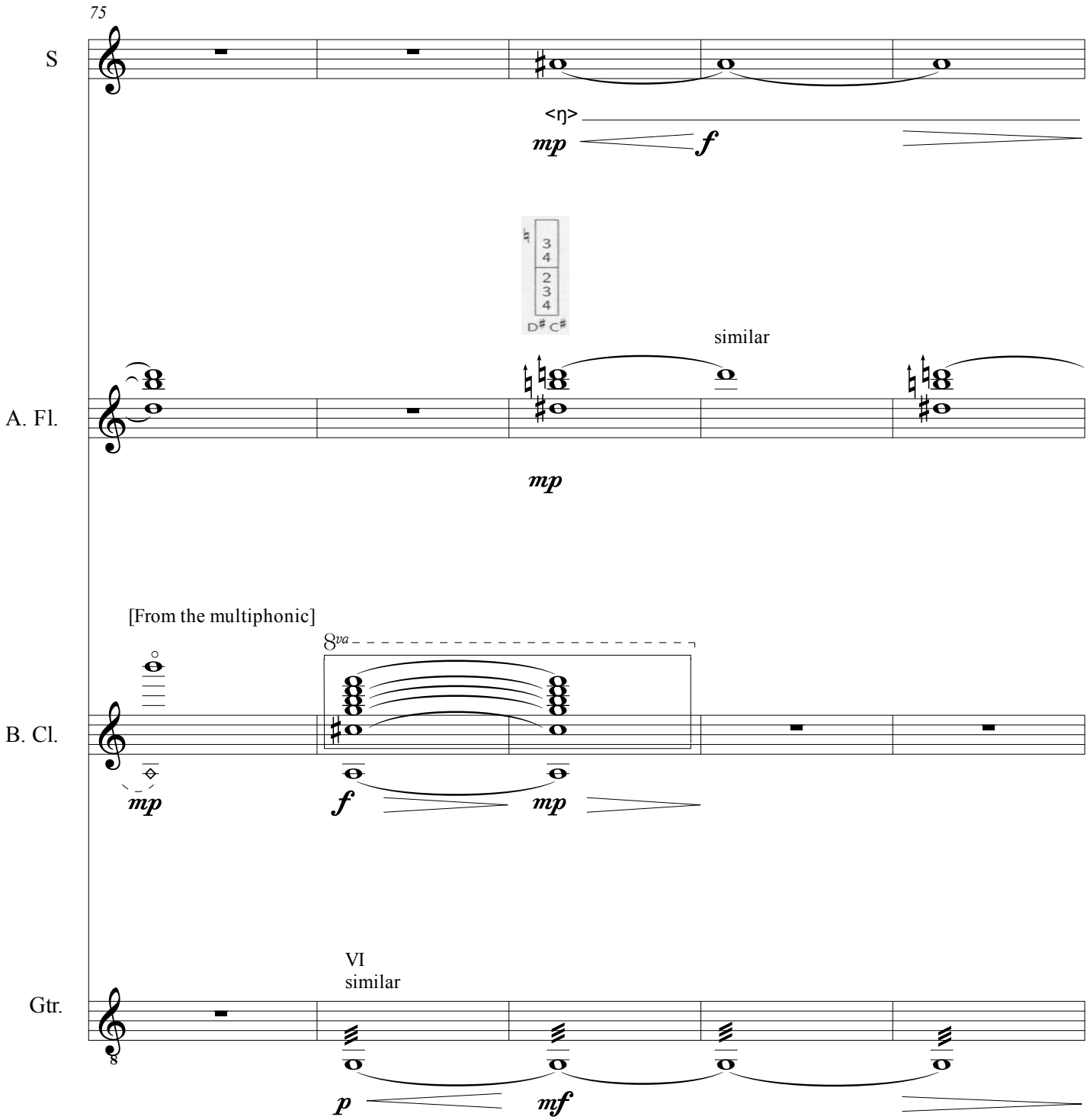

50
S
<ŋ>
<ɾ>
<ŋ>
mp
f
mf
similar
Flz.
Tongue Ram
A. Fl.
pp
pp
f
Harm.
B. Cl.
mf
Gtr.

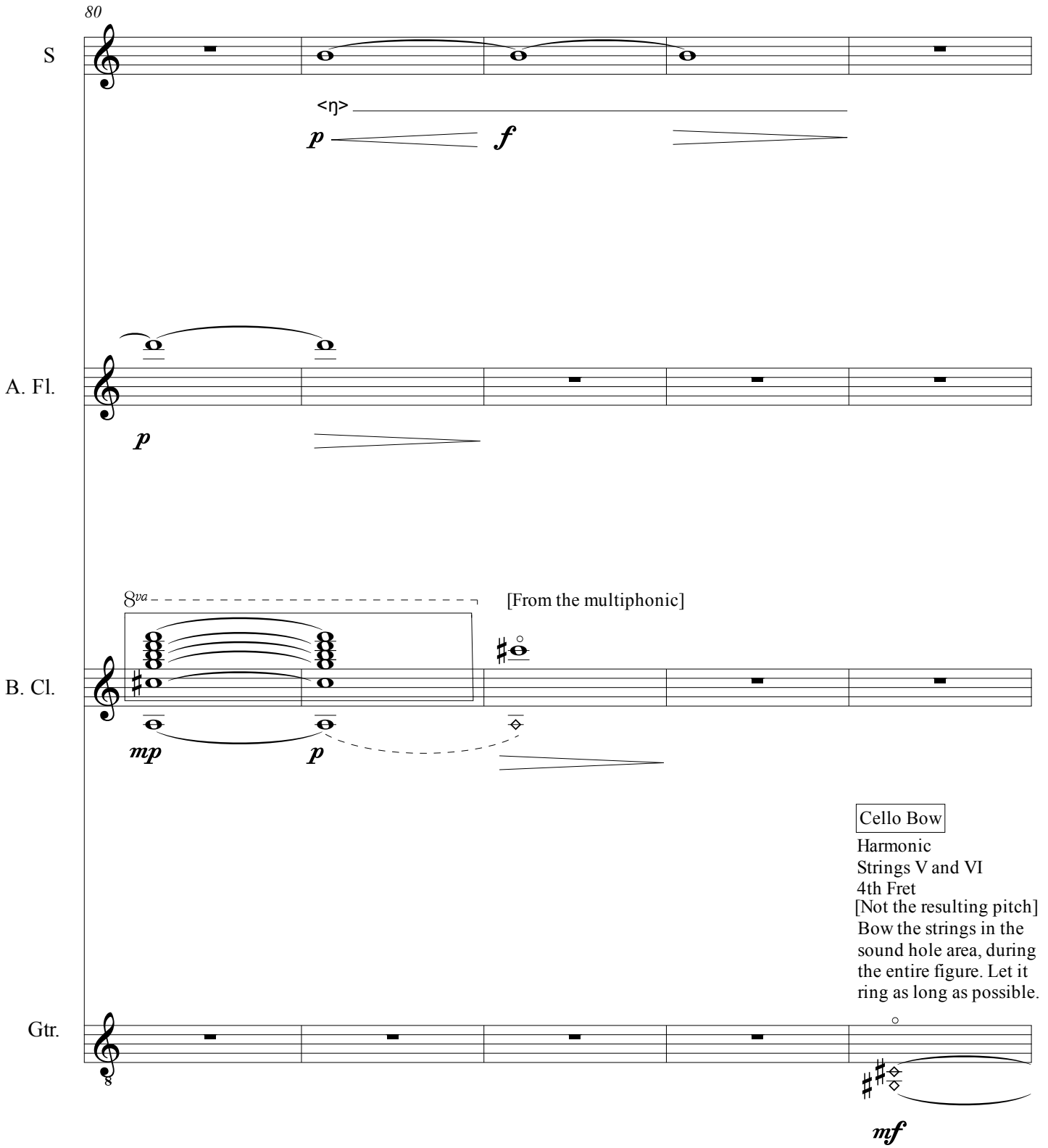

55
S
<ŋ>
p
Ord + Voice
A. Fl.
p
mf
B. Cl.
mf
Superball Mallet
Rub the wood of the guitar's back following the movement suggested by the line.
III
Gtr.
8
f
mp

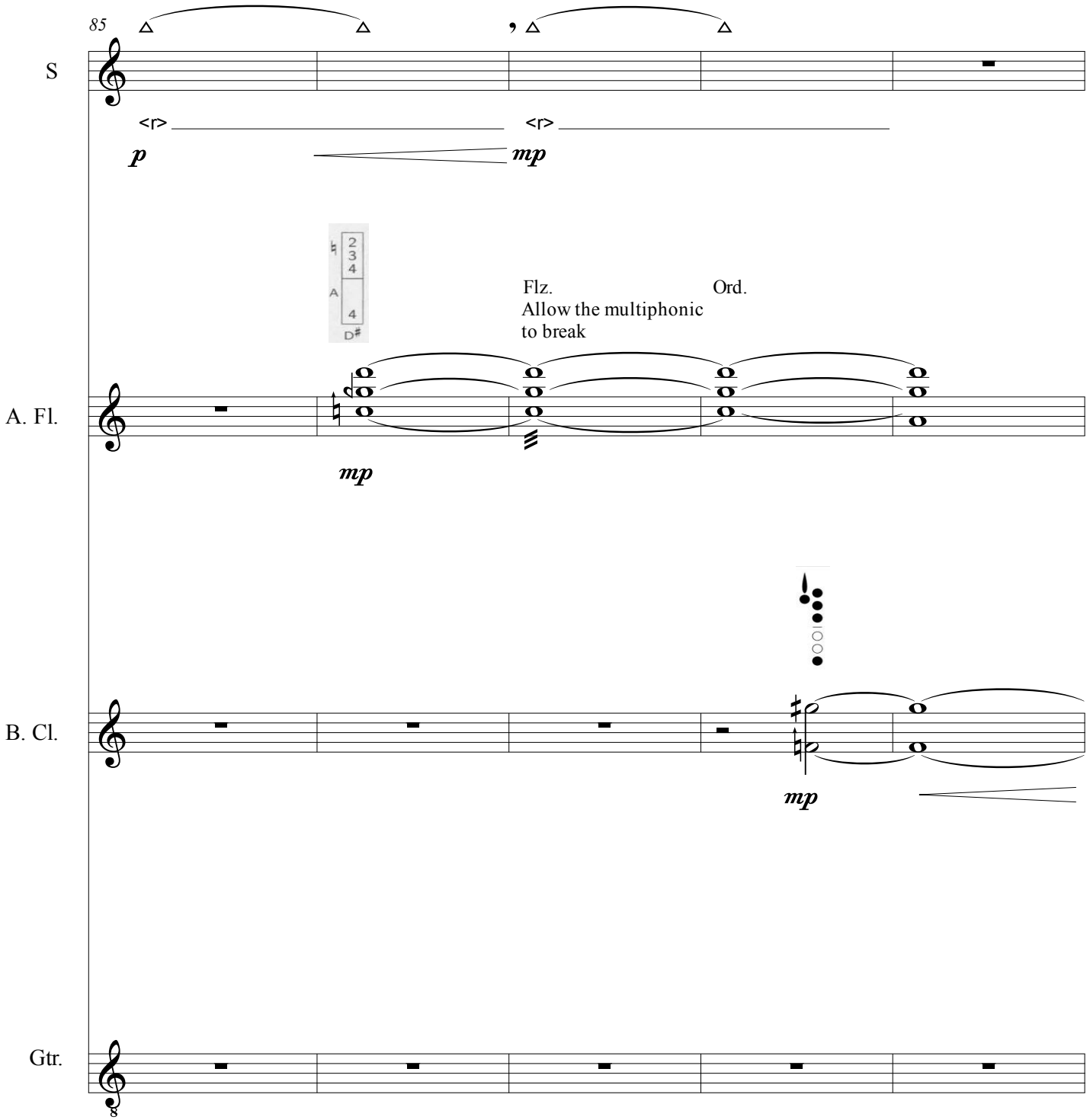

60
S
A. Fl.
B. Cl.
Gtr.
T. Pizz. Ord + Voice
Punch the aluminium foil to break it.
8va

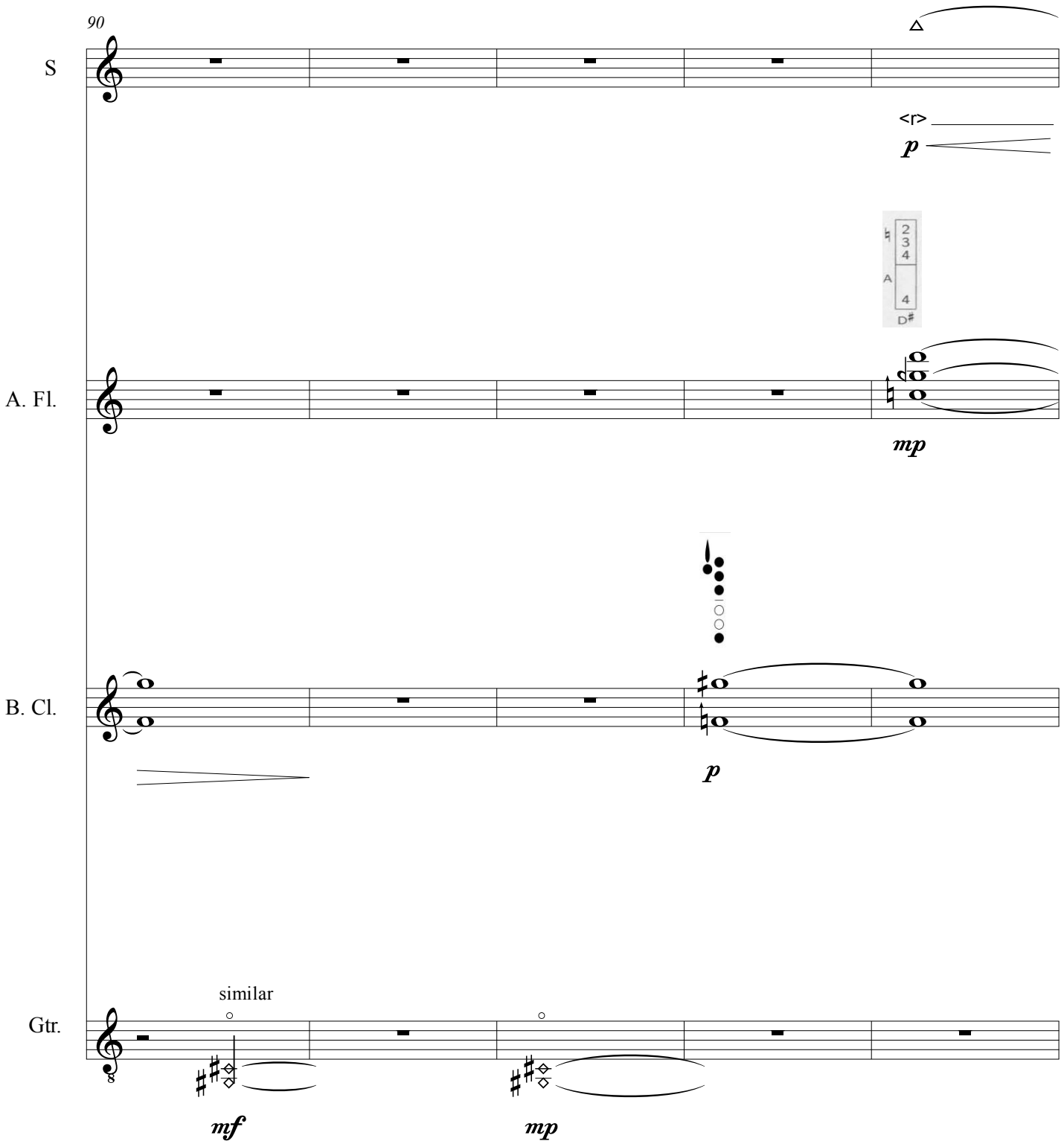

65
S
<η>
mp
Ord + Voice
A. Fl.
mp
mp
(8va)
8va
[From the multiphonic]
B. Cl.
p
VI
Rub the string
with the
Superball mallet.
Gtr.
p

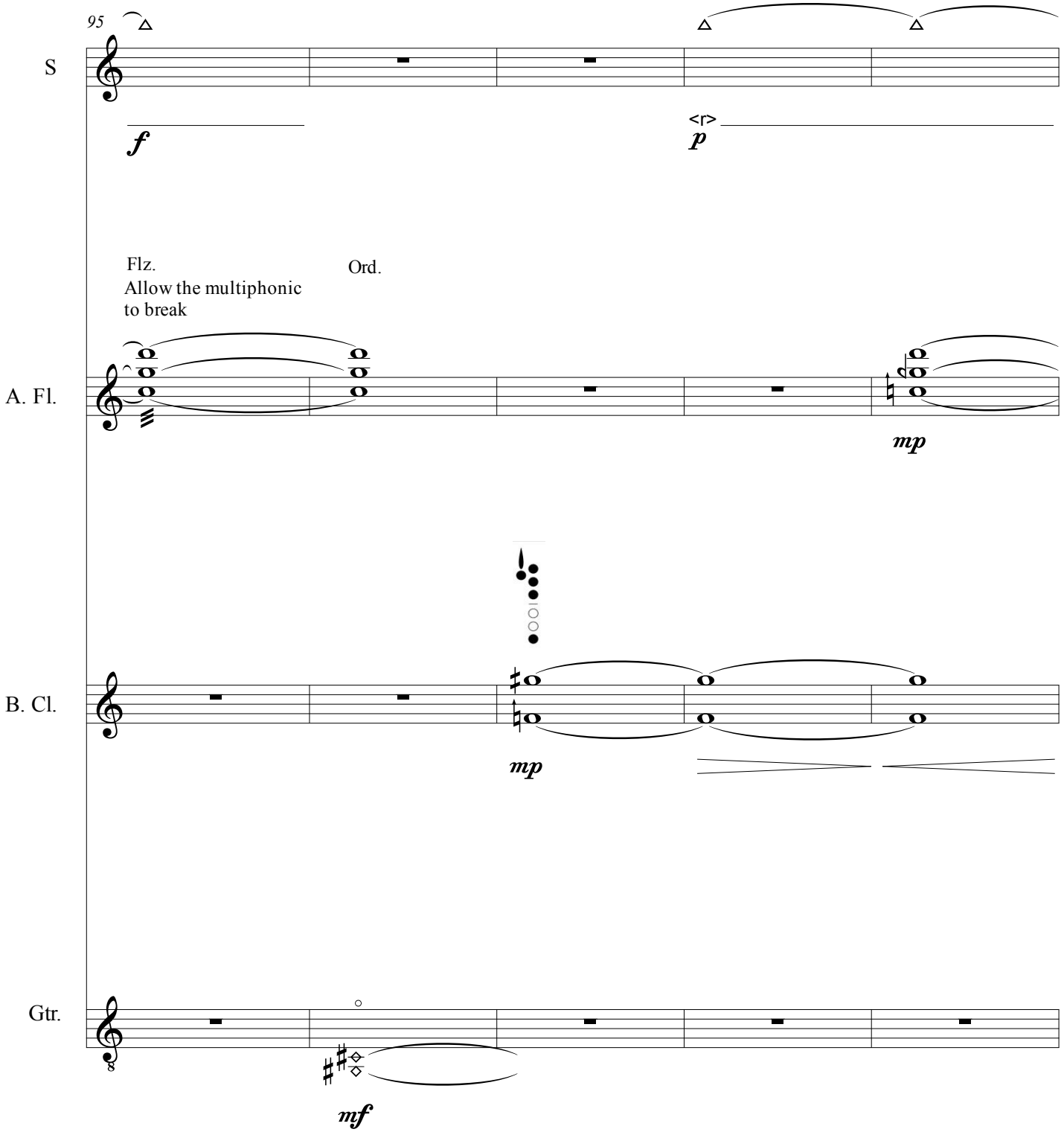

70
S
<η>
p
mf
3
4
2
3
4
D♯ C♯
[From the multiphonic]
A. Fl.
mp
8va
8va
B. Cl.
f
p
f
Gtr.
8
mf

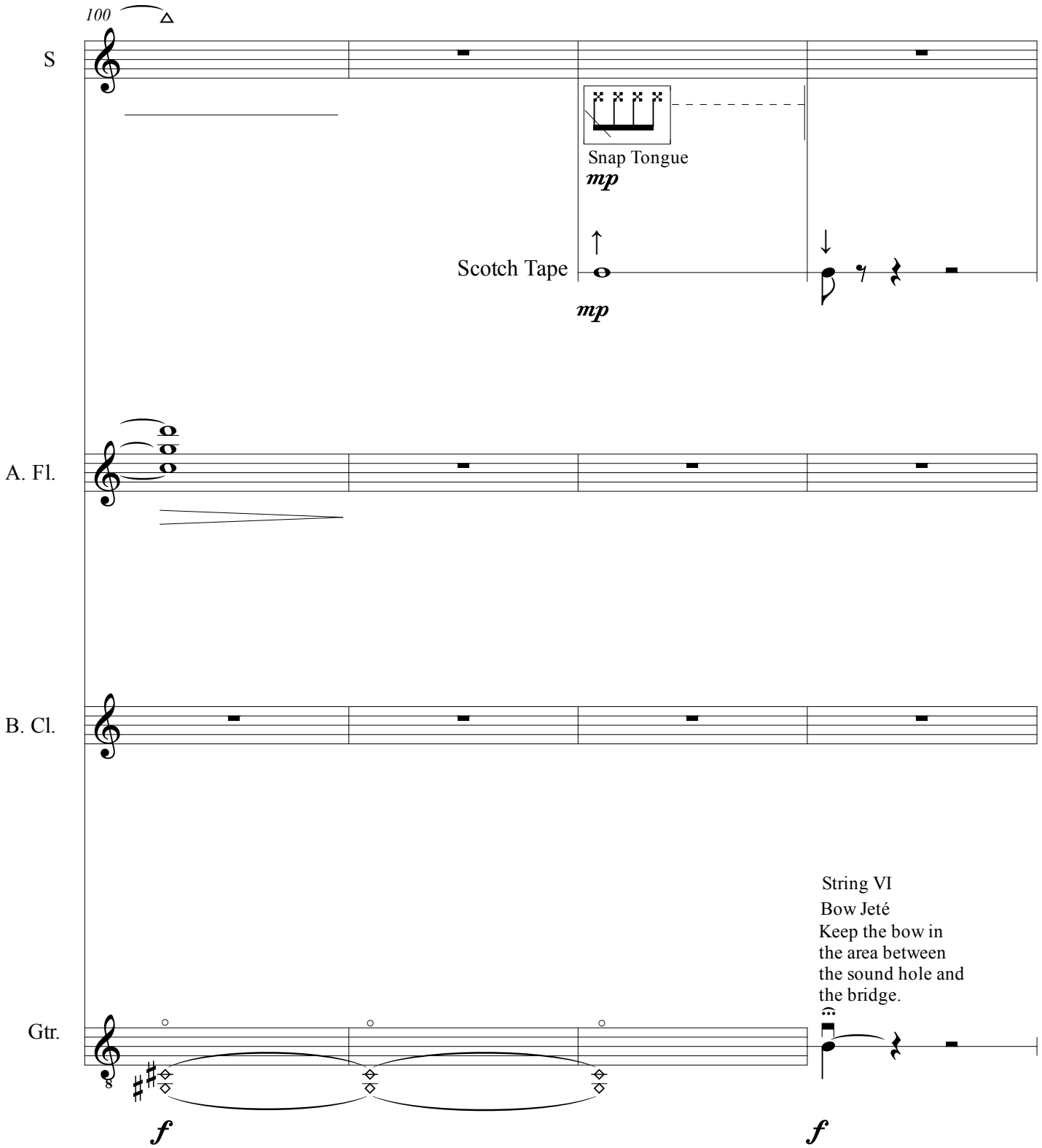

75
S
<ŋ>
mp
f
3
4
2
3
4
D♯ C♯
similar
A. Fl.
mp
[From the multiphonic]
8va
B. Cl.
mp
f
mp
VI
similar
Gtr.
8
p
mf

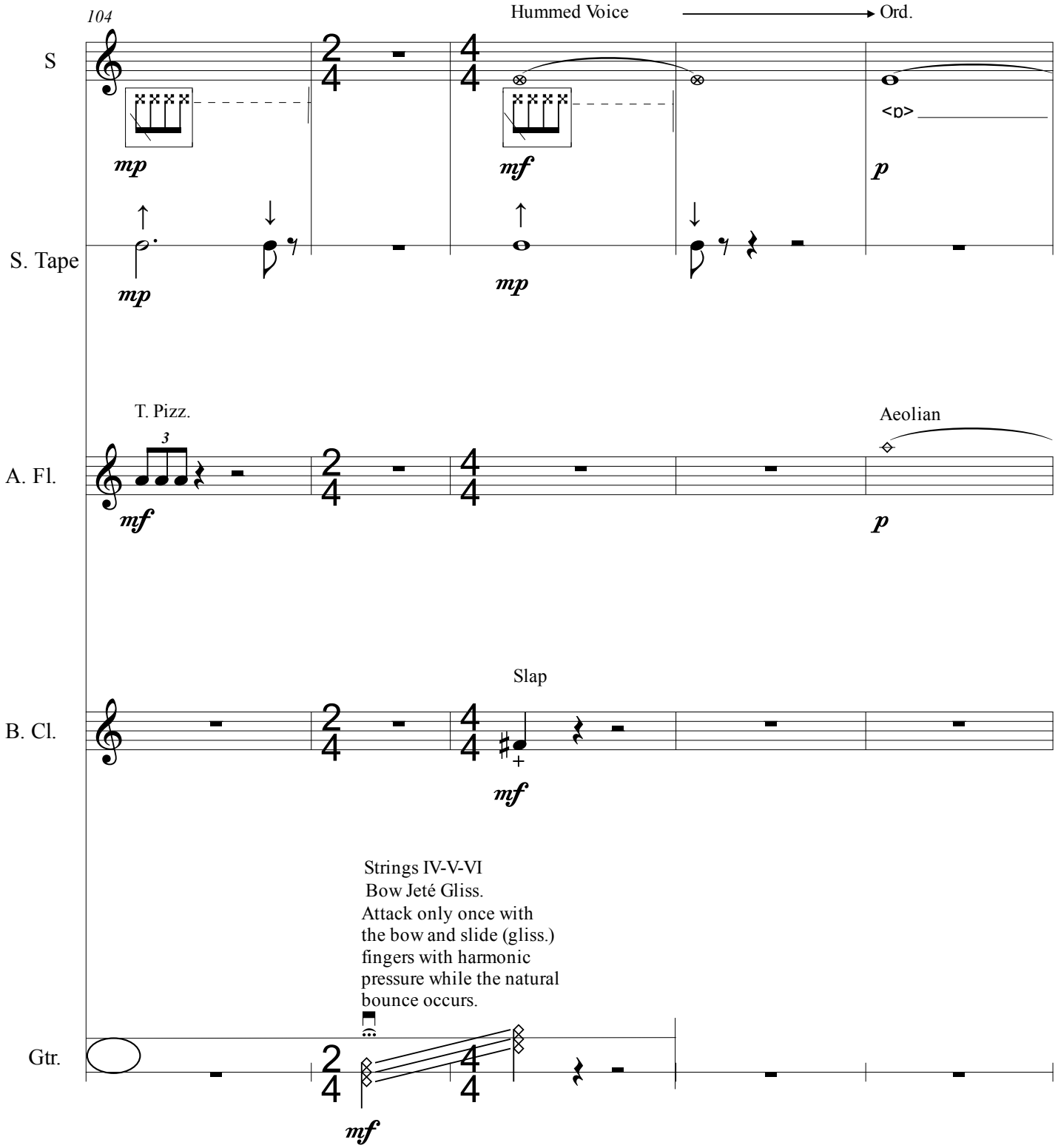

80
S
<η>
p
f
A. Fl.
p
8va
[From the multiphonic]
B. Cl.
mp
p
Cello Bow
Harmonic
Strings V and VI
4th Fret
[Not the resulting pitch]
Bow the strings in the sound hole area, during the entire figure. Let it ring as long as possible.
Gtr.
8
mf

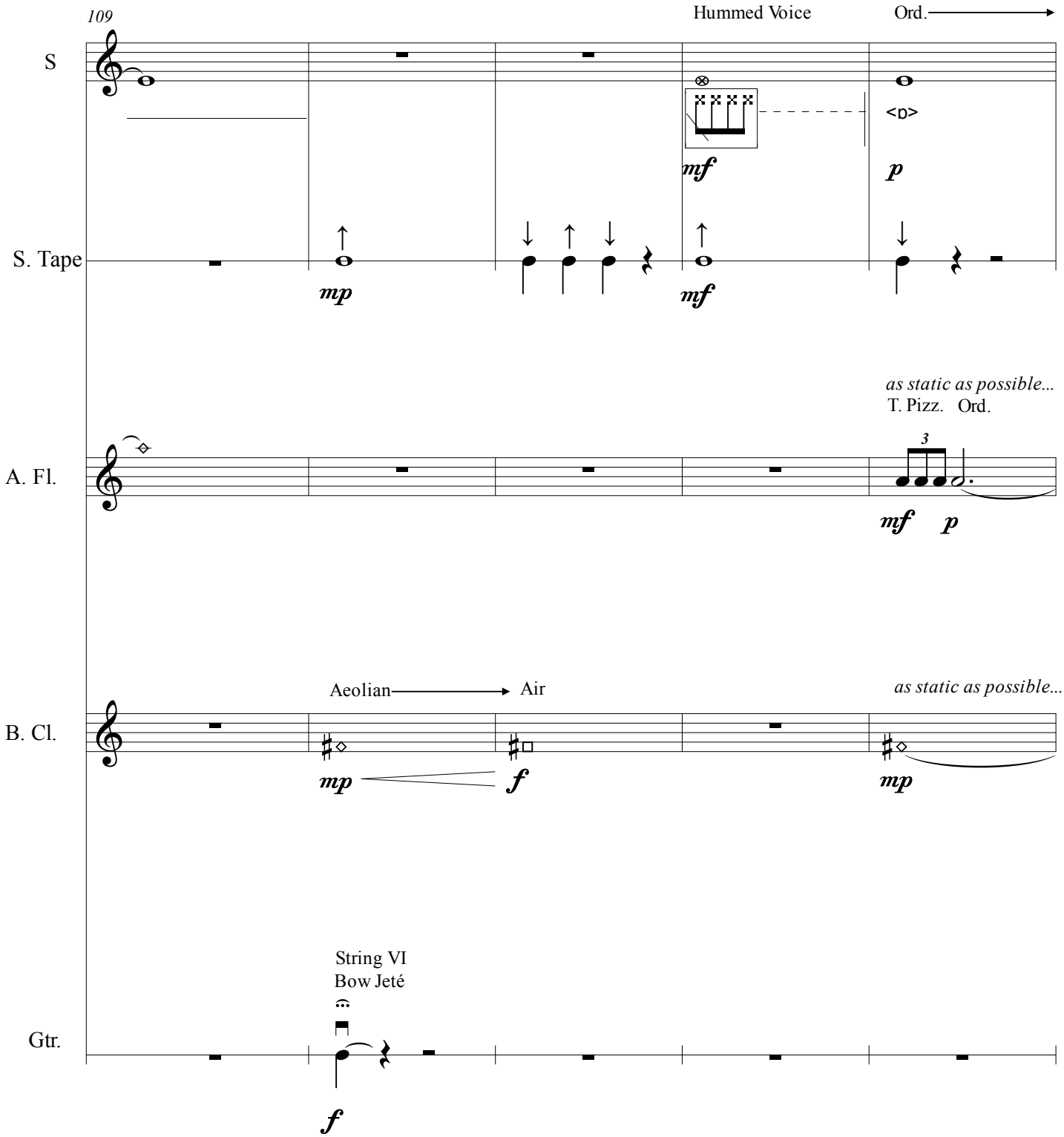

85
S
p
mp
A. Fl.
Flz.
Allow the multiphonic
to break
Ord.
mp
B. Cl.
mp
Gtr.

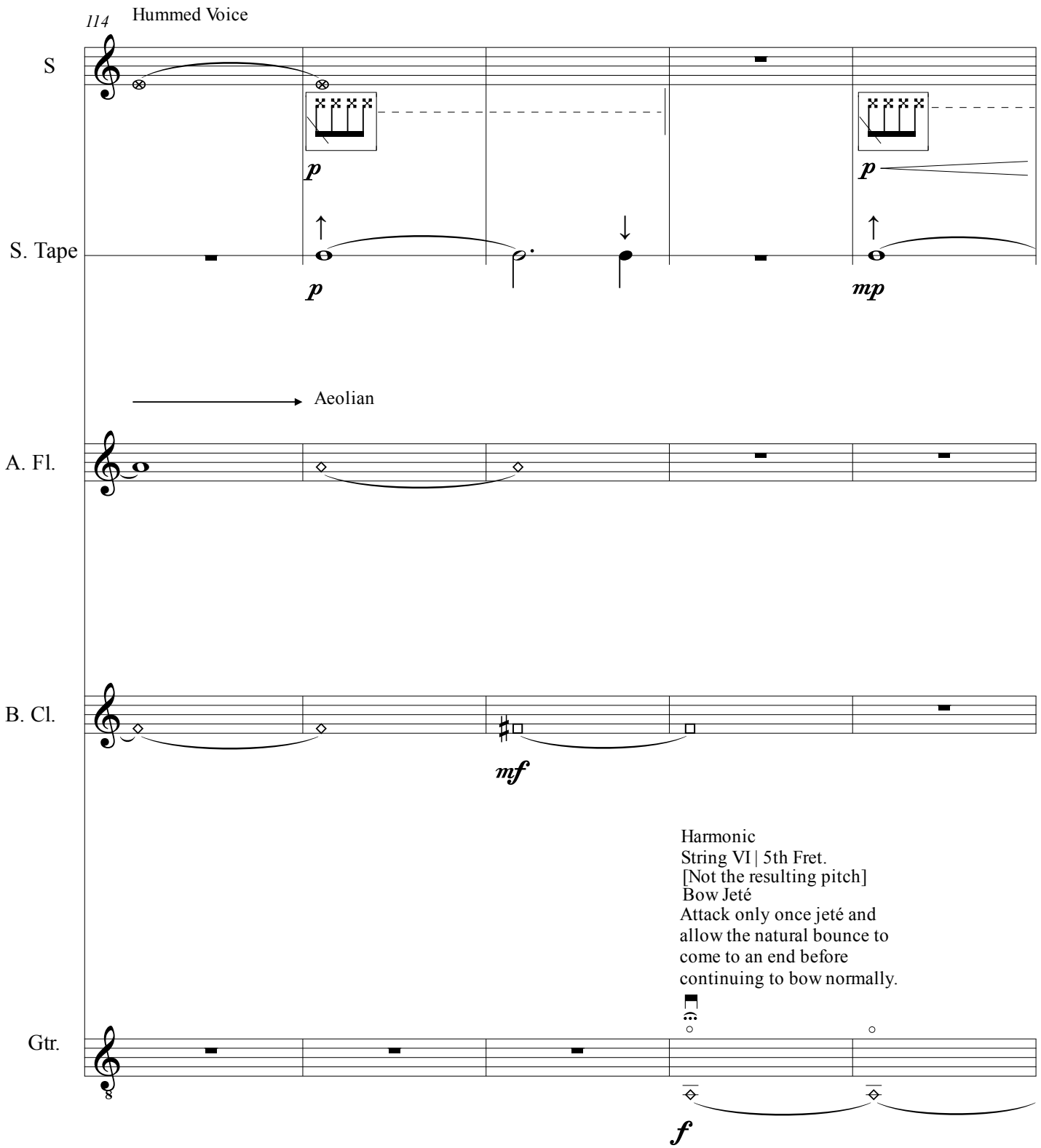

90
S
<r>
p
A. Fl.
mp
B. Cl.
p
similar
Gtr.
8
mf
mp

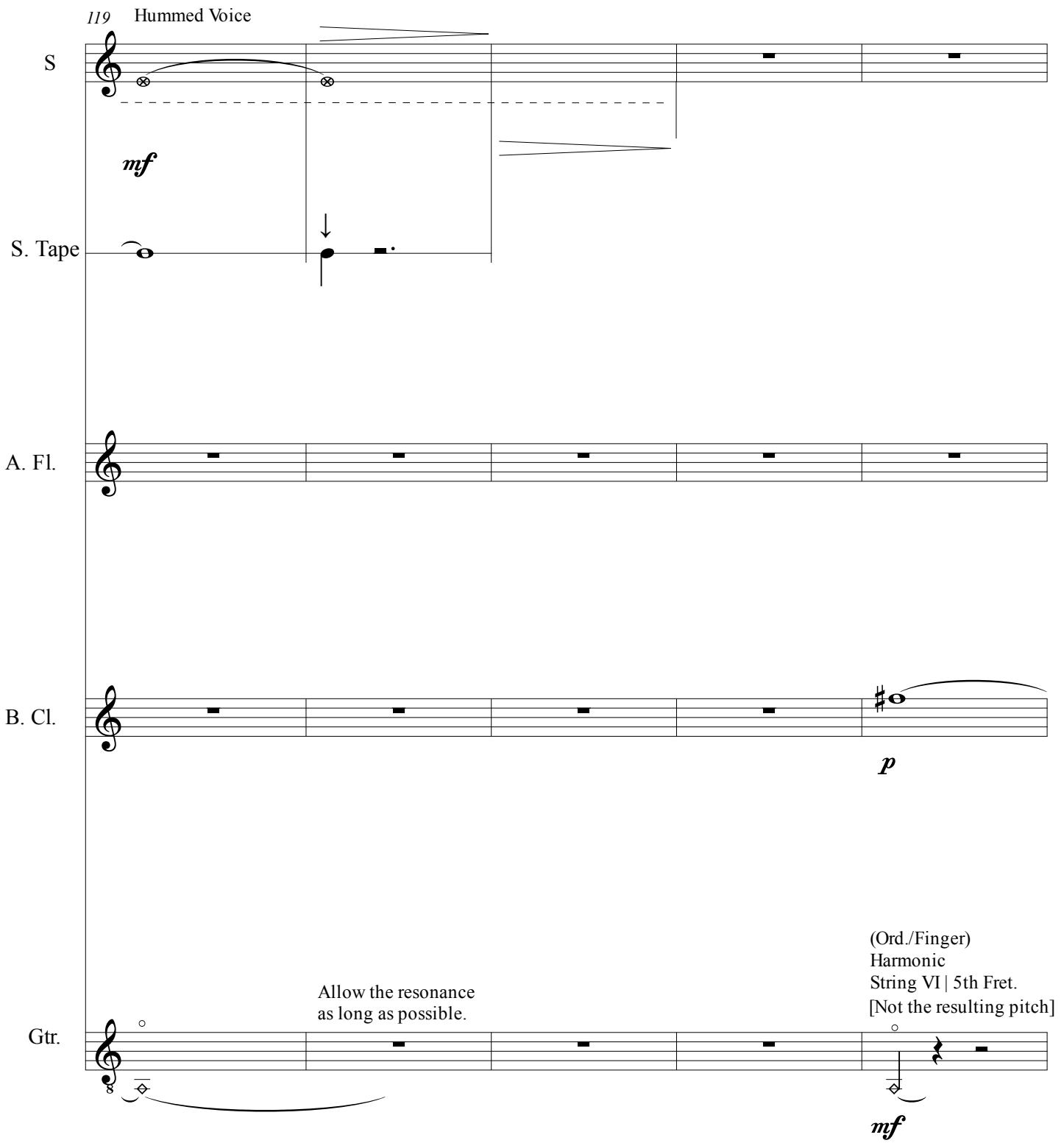

95
S
f
<r>
p
Flz.
Allow the multiphonic
to break
Ord.
A. Fl.
mp
B. Cl.
mp
Gtr.
8
mf

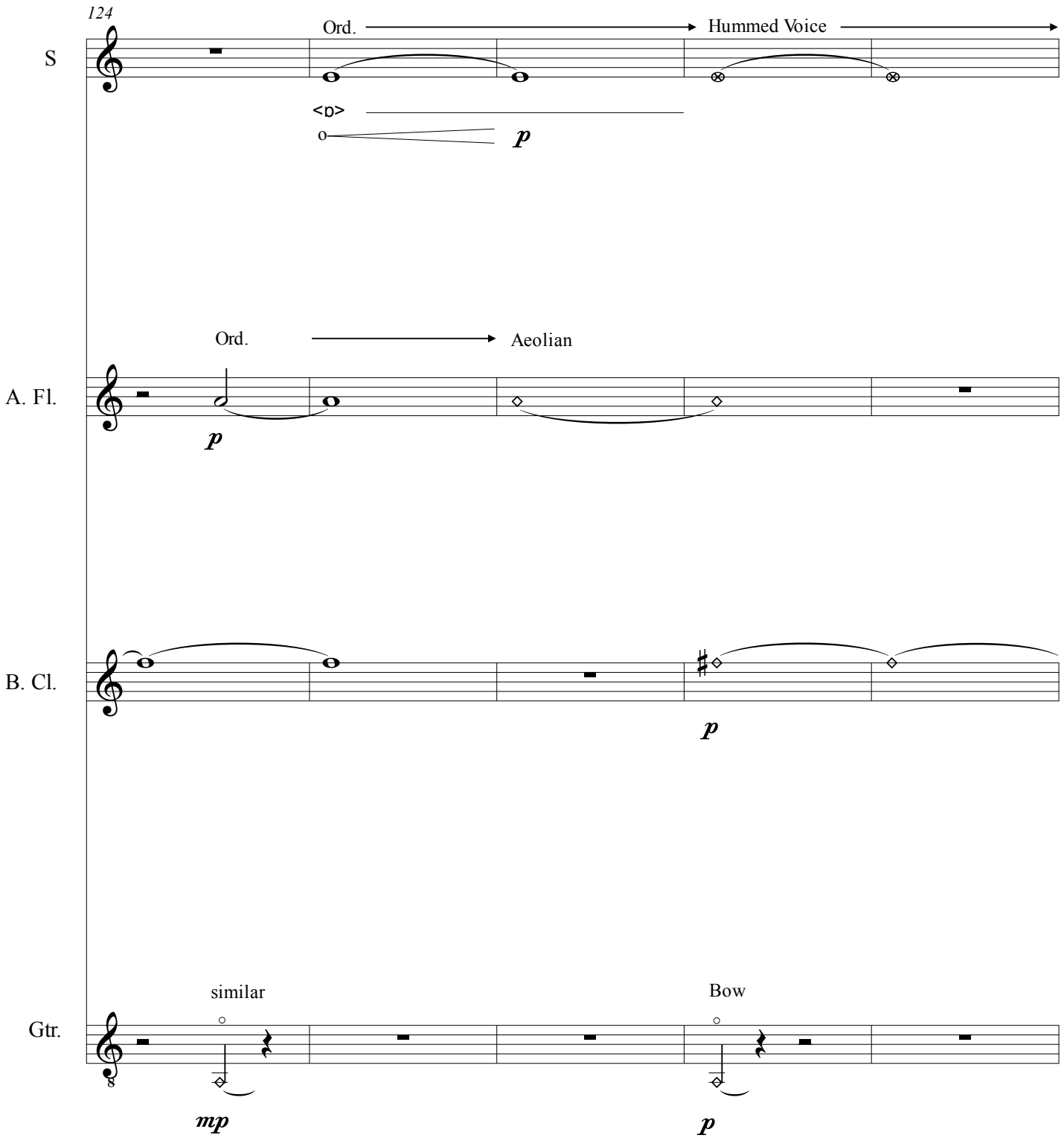

100
S
Snap Tongue
mp
Scotch Tape
mp
A. Fl.
B. Cl.
String VI
Bow Jeté
Keep the bow in
the area between
the sound hole and
the bridge.
Gtr.
8
f
f

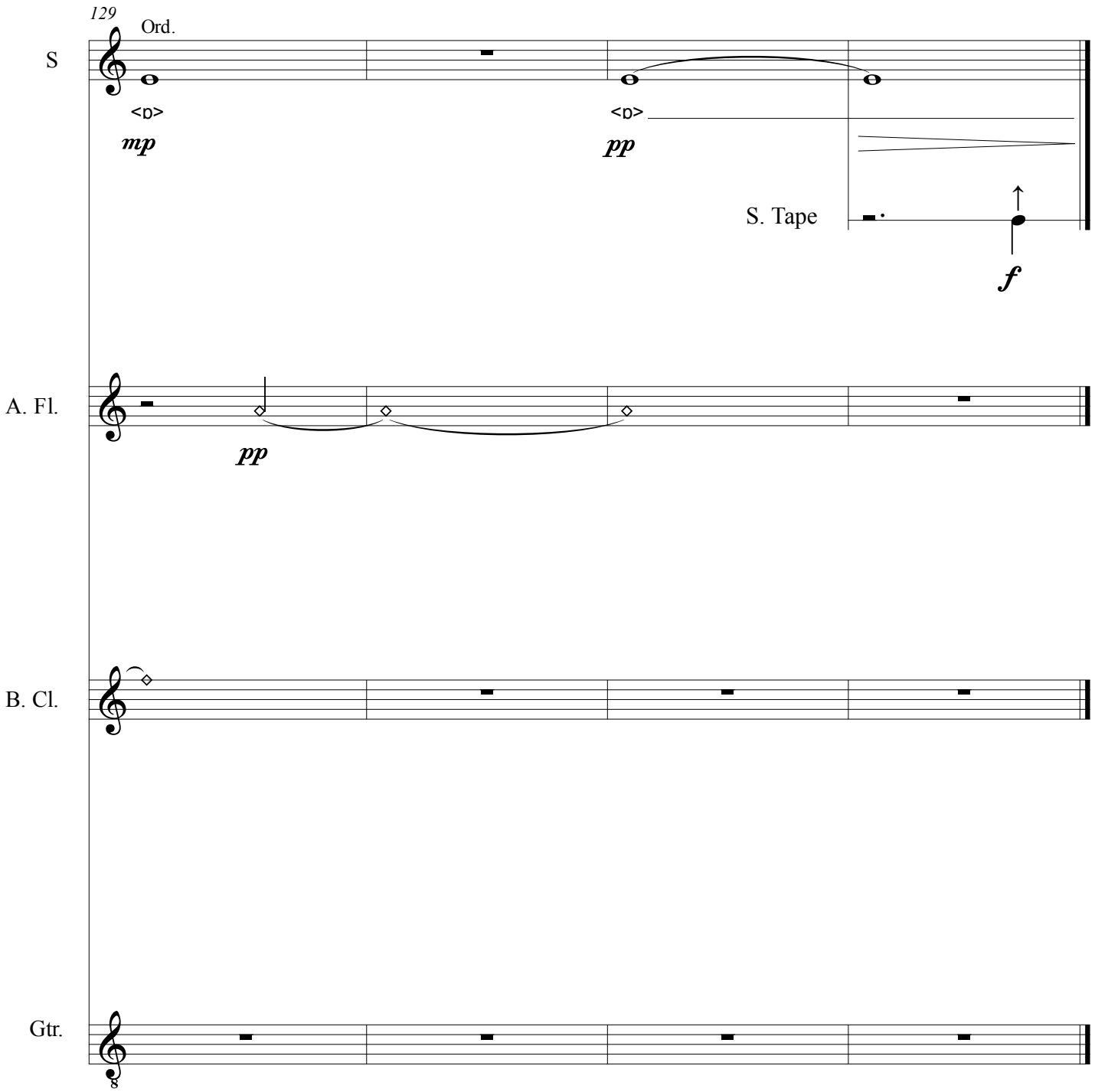

104
Hummed Voice
Ord.
S
mp
mf
p
<p>
S. Tape
mp
mp
T. Pizz.
Aeolian
A. Fl.
3
mf
p
Slap
B. Cl.
mf
Strings IV-V-VI
Bow Jeté Gliss.
Attack only once with
the bow and slide (gliss.)
fingers with harmonic
pressure while the natural
bounce occurs.
Gtr.
mf


109
Hummed Voice
Ord.
S
<p>
mf
p
S. Tape
mp
mf
as static as possible...
T. Pizz. Ord.
A. Fl.
3
mf
p
Aeolian
Air
as static as possible...
B. Cl.
mp
f
mp
String VI
Bow Jeté
Gtr.
f


114
Hummed Voice
S
p
p
S. Tape
p
mp
Aeolian
A. Fl.
B. Cl.
mf
Harmonic
String VI | 5th Fret.
[Not the resulting pitch]
Bow Jeté
Attack only once jeté and
allow the natural bounce to
come to an end before
continuing to bow normally.
Gtr.
8
f


119
Hummed Voice
S
mf
S. Tape
A. Fl.
B. Cl.
p
Gtr.
Allow the resonance
as long as possible.
(Ord./Finger)
Harmonic
String VI | 5th Fret.
[Not the resulting pitch]
8
mf


124
S
Ord.
Hummed Voice
<p>
p
A. Fl.
Ord.
Aeolian
p
B. Cl.
p
Gtr.
similar
Bow
mp
p


129
Ord.
S
<p>
mp
<p>
pp
S. Tape
f
A. Fl.
pp
B. Cl.
Gtr.
8

We no longer sleep in the wind

Solo Paetzold double bass recorder

For Sylvia Hinz

MICHELE ABONDANO

2020

We no longer sleep in the wind

Performance Notes

The score use chronometric notation. The exact time for each attack is notated in minutes:seconds format, inside a circle, starting the piece at 0:00. It is required to use a stopwatch for the performance.

The techniques, when played literally as written, could result in unstable, shifting timbral behaviours: this is expected and desired.

The dynamics are written as references; however, the performer should use whatever pressure/intensity is necessary to make the techniques work.

Duration: 14:45 minutes

Notation

_____ Prolongation line. The sound should be held until the line finishes to give place to another sound or just to cease.

Flutter Tongue [Flz.]

◐ Mixed sound: Air + Pure tone. Half covered labium.

● Pure Air: Completely covered labium.

○ Ordinary sound: Completely open labium.

Noteheads

△ Triangular-shaped notehead: Highest pitch possible.

⊗ 'x' circled-shaped notehead: Hummed voice.

Sing inside the instrument while producing the normal sound.

M + △ Underblown Multiphonics

From a fundamental given, play the highest pitch possible (notated with a tringle-shaped notehead), allowing the lower undertones to sneak back in. These multiphonics also use the core fundamental fingerings for each pitch, but it requires little air pressure in order to occur.

Note: multiphonics are dynamic entities; timbres in continuous transformation with shifting qualities and unpredictable behaviour.

Slow f. vib. Slow ¼ tone finger vibrato. The finger pressure is reduced in order to produce a slight alteration of pitch, which may be perceived also as a subtle glissando. It is important to try to produce a very slowly change. Fingering is included in each case to indicate the specific finger to do the vibrato.

Exaggerate / uneven vib. Vibrato with irregular change of pitch and speed.

Double trill Trill with one finger of each hand at the same time. The specific fingers are indicated in each case.

Preparation

Aluminium Foil

When indicated in the score, use a piece of aluminium foil to cover the labium. It is necessary to paste it with tape in order to have the hands available to continue playing. There is a pause of 10 s. to complete this action, therefore, it is recommended to prepare the aluminium with the tape in advance and keep it in a place easy to reach at the precise moment.
The resulting timbre can be described as an ‘electrical noise’, a kind of distortion layer covering the sound.

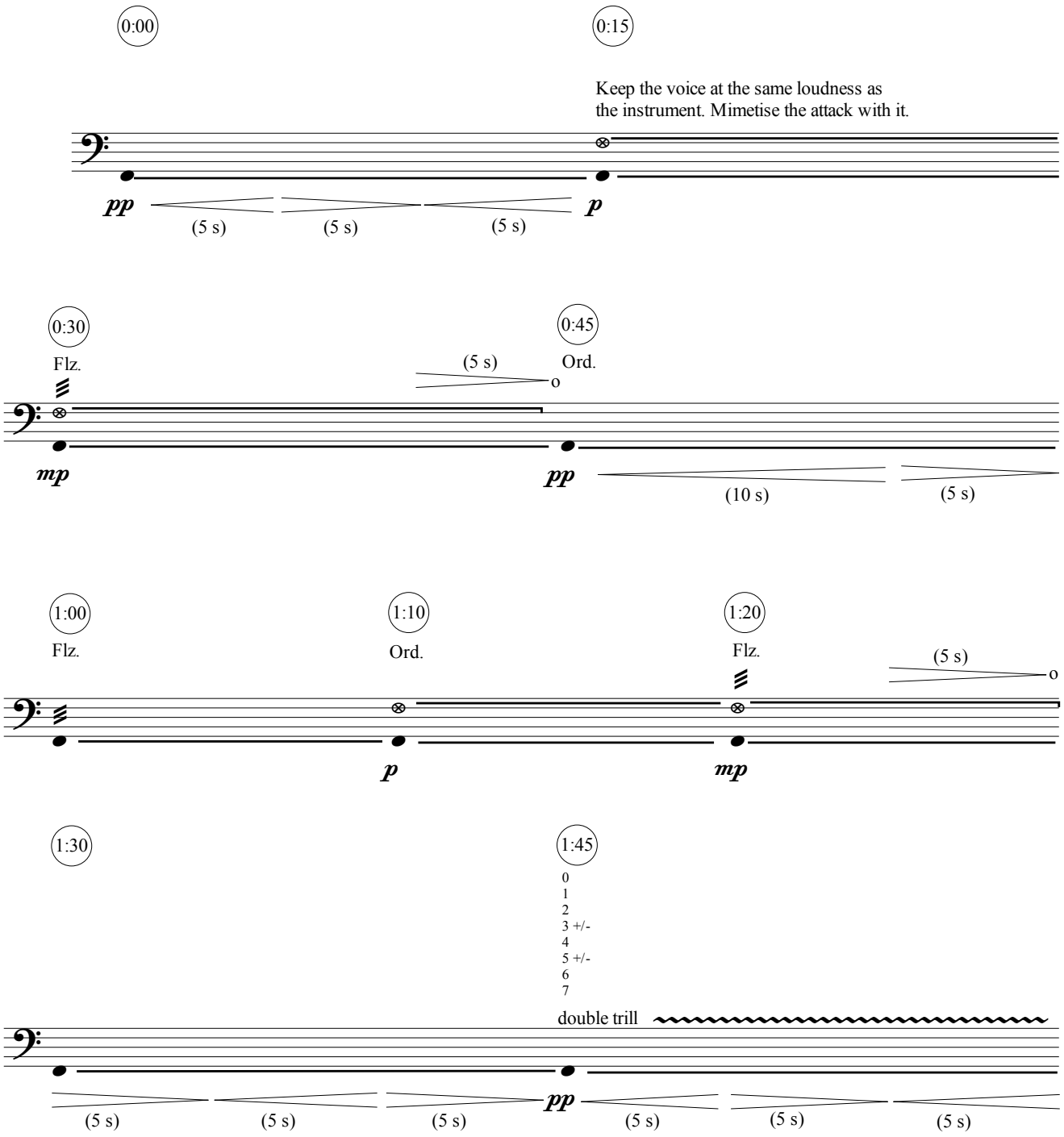
We no longer sleep in the wind

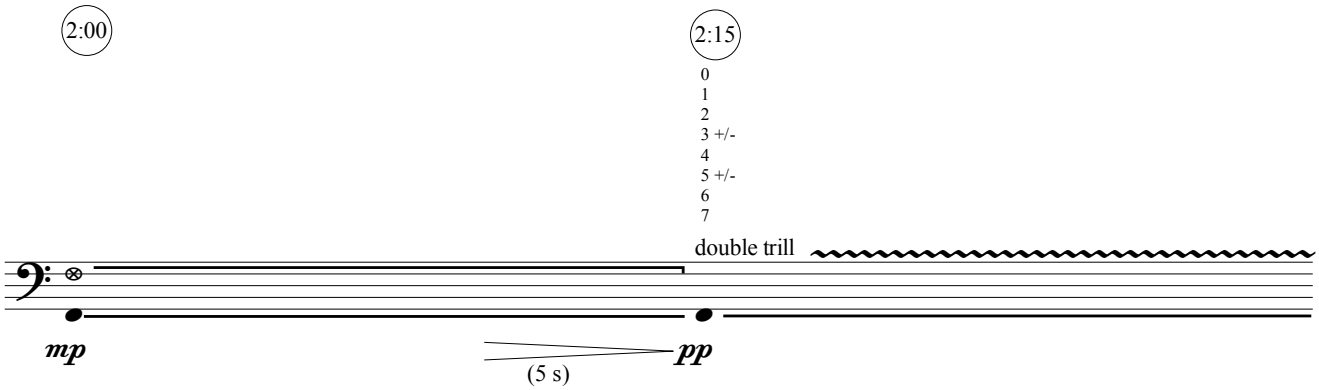
Solo Paetzold double bass recorder

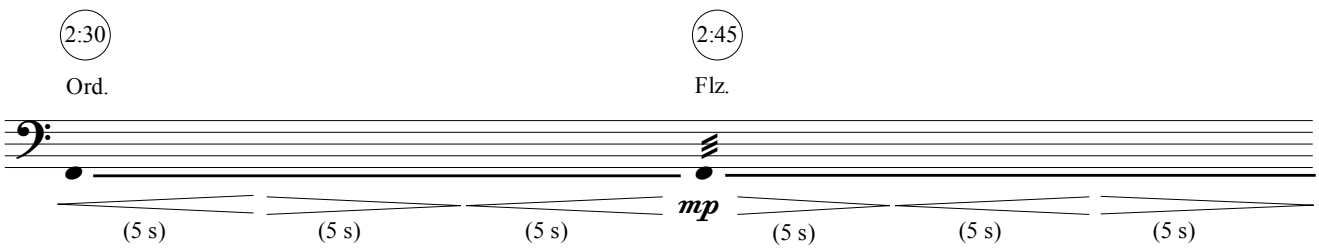
for Sylvia Hinz

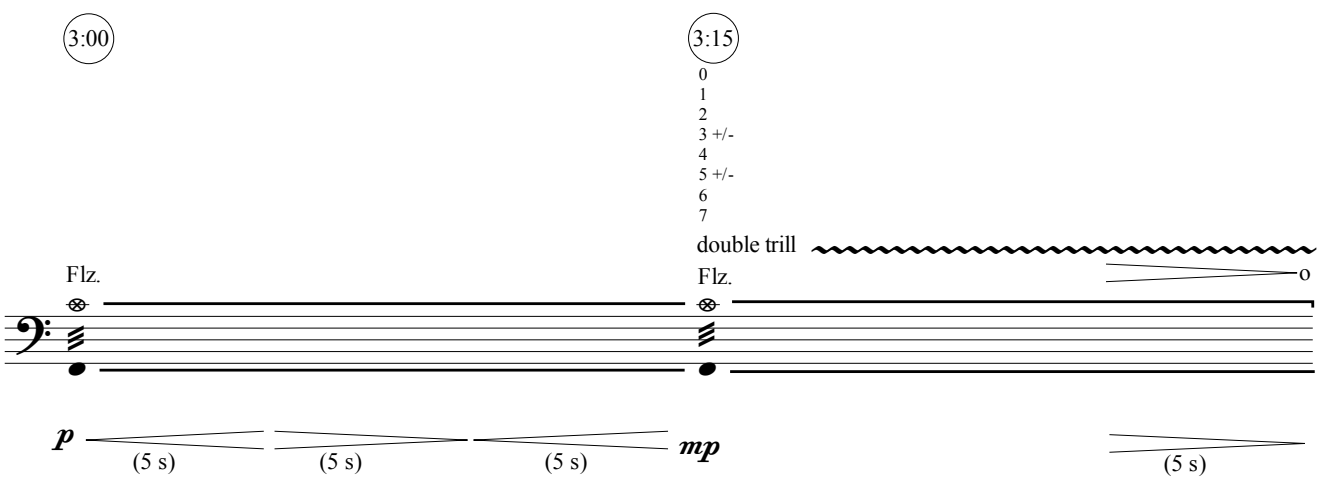
MICHELE ABONDANO
2020

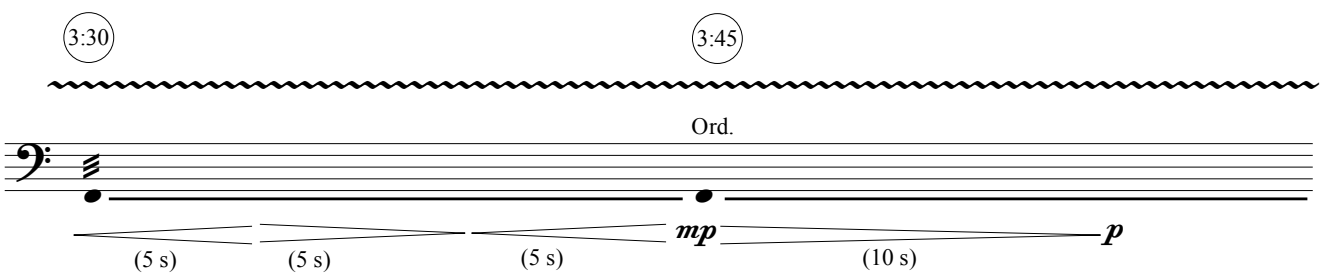
*Always integrate the breath sound to timbre as much as possible.

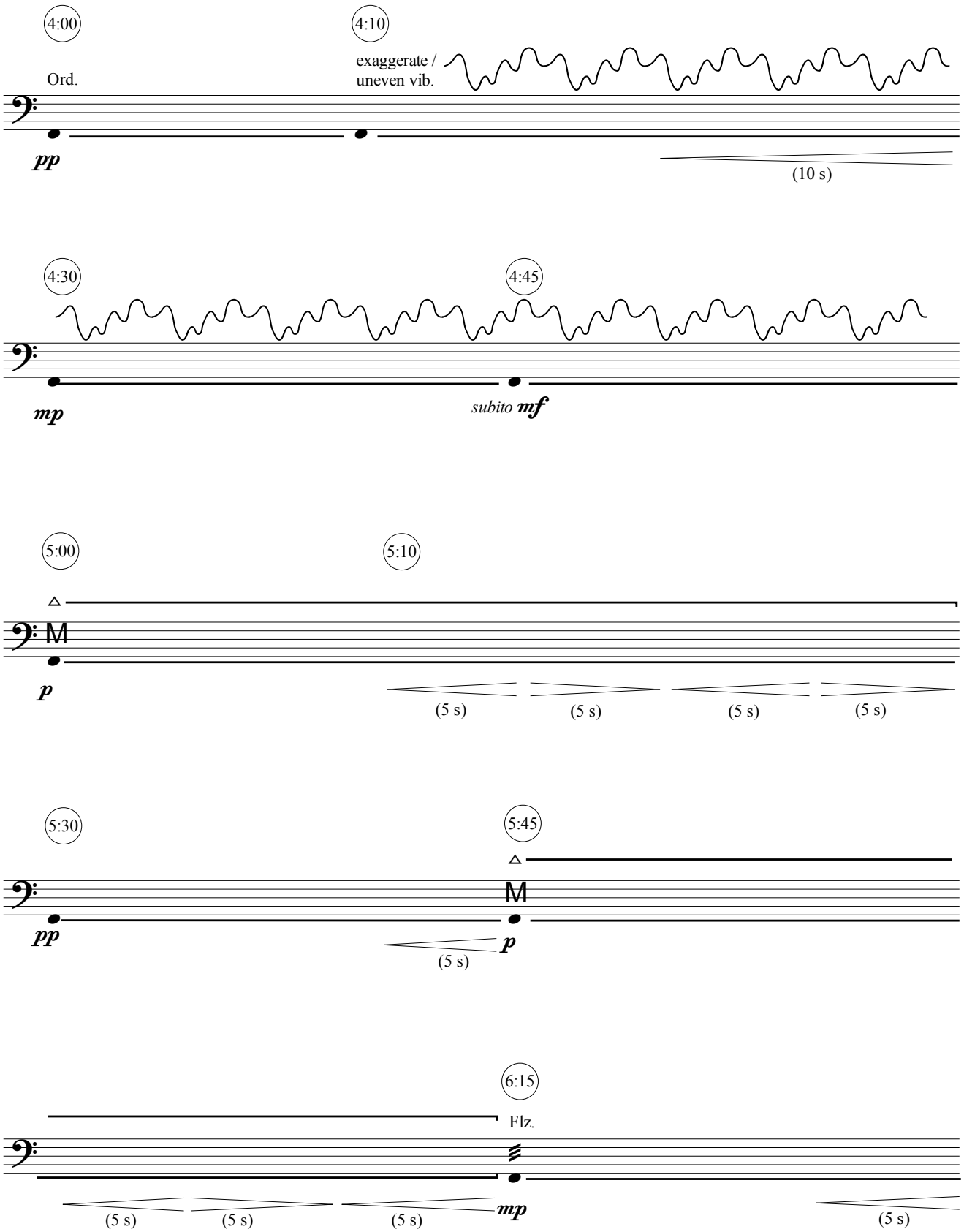


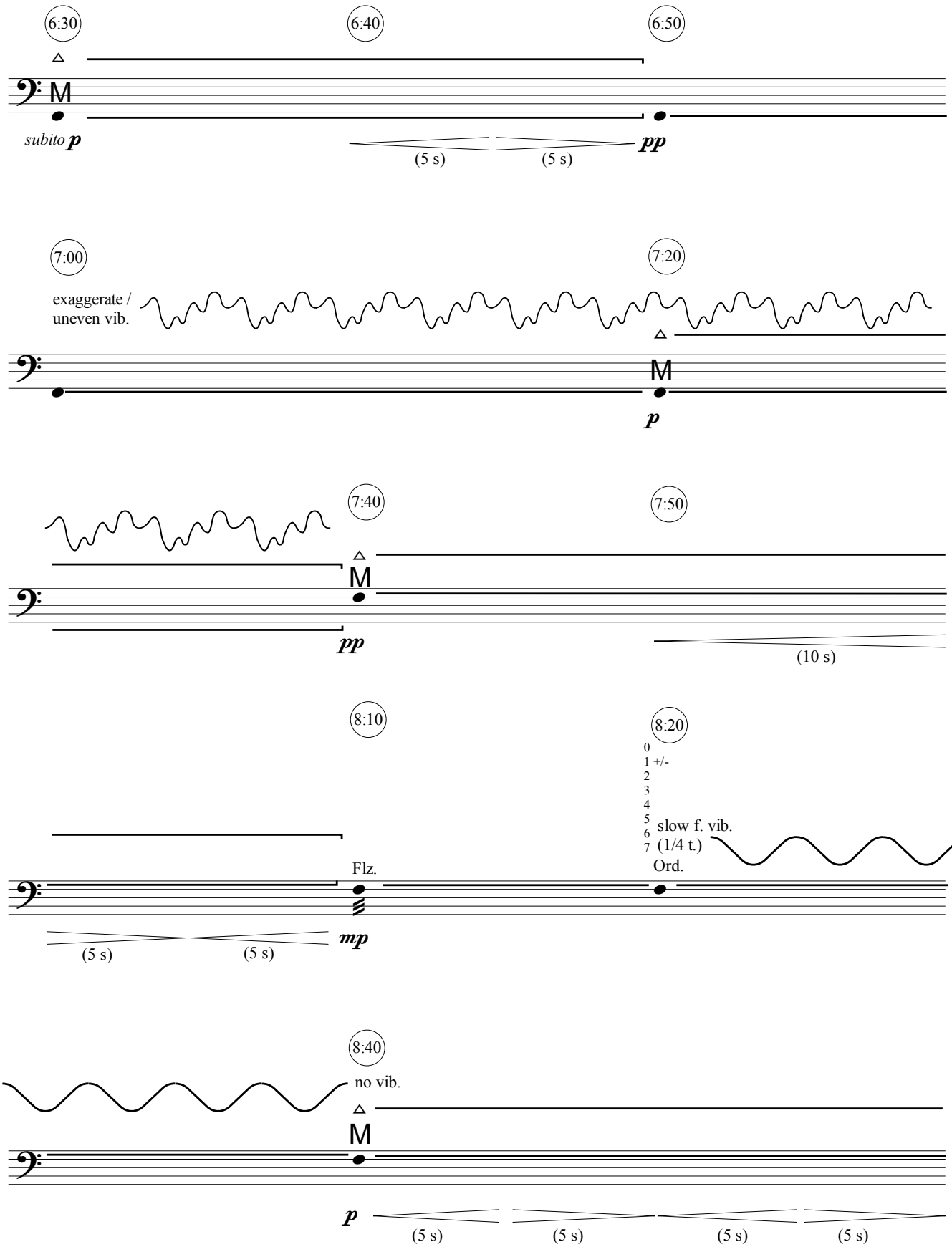

2:00
2:15
0
1
2
3 +/-
4
5 +/-
6
7
double trill
mp
pp
(5 s)

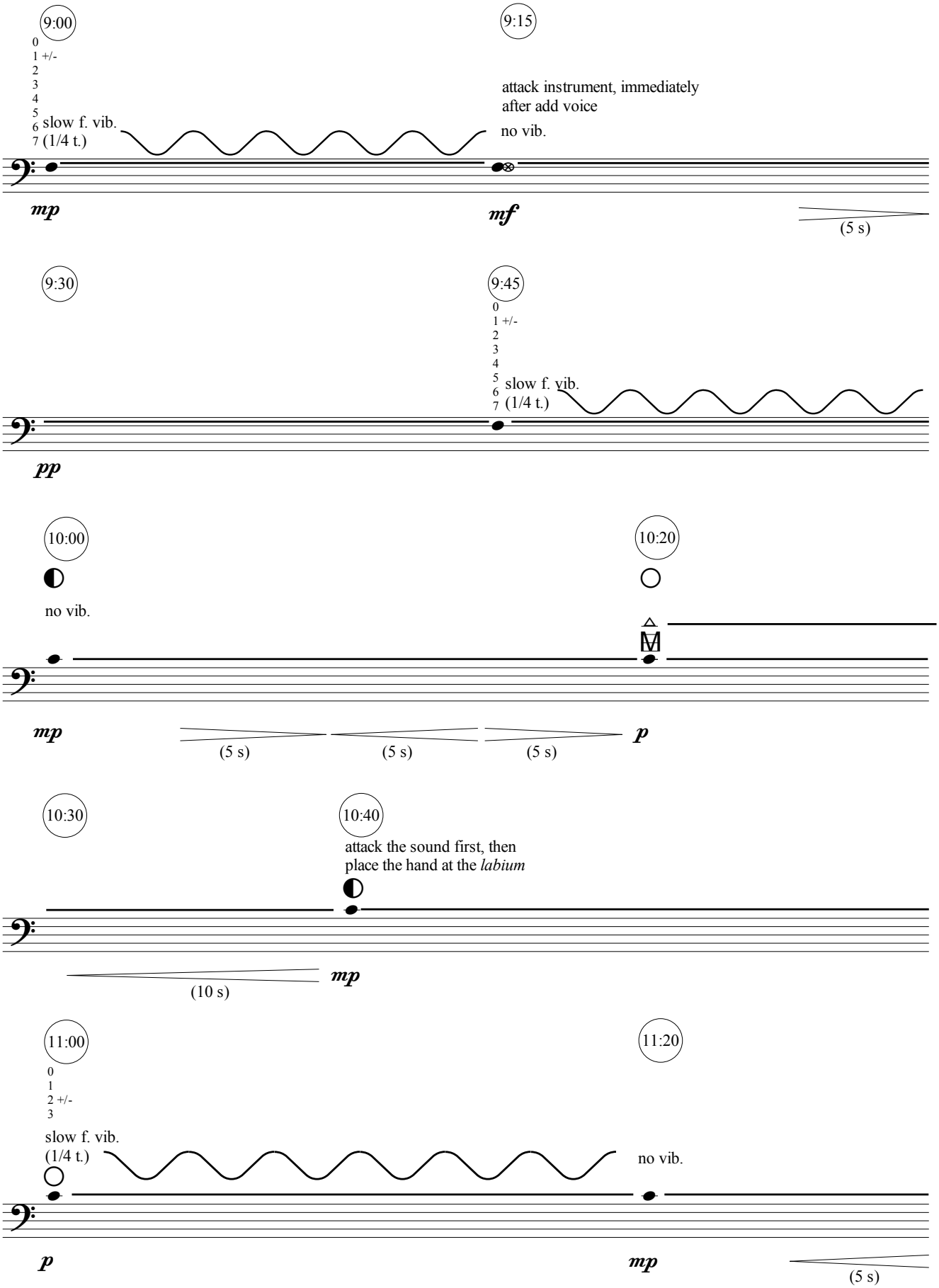

2:30
Ord.
2:45
Flz.
mp
(5 s)
(5 s)
(5 s)
(5 s)
(5 s)
(5 s)

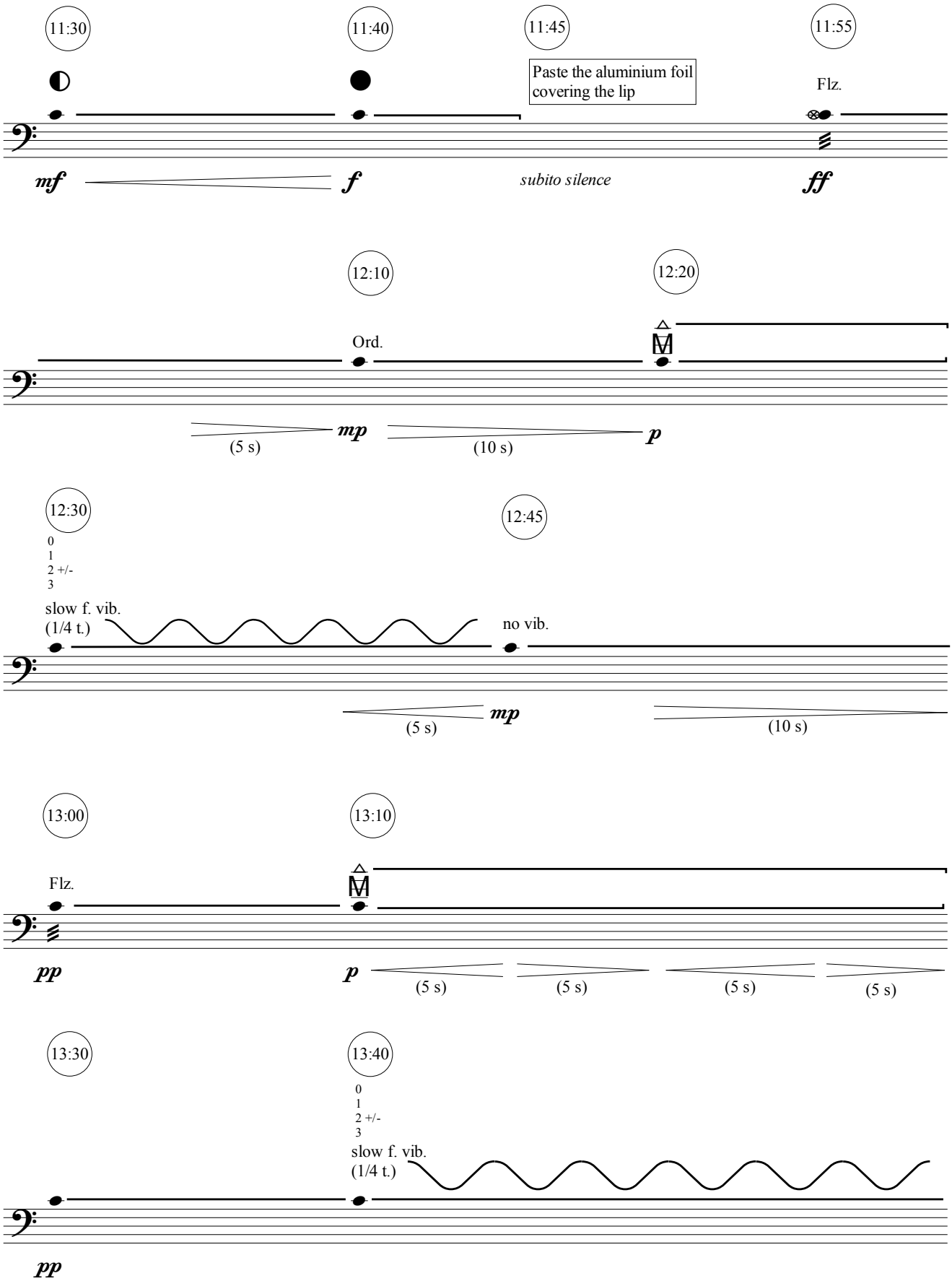

3:00
3:15
0
1
2
3 +/-
4
5 +/-
6
7
double trill
Flz.
Flz.
o
p
mp
(5 s)
(5 s)
(5 s)
(5 s)

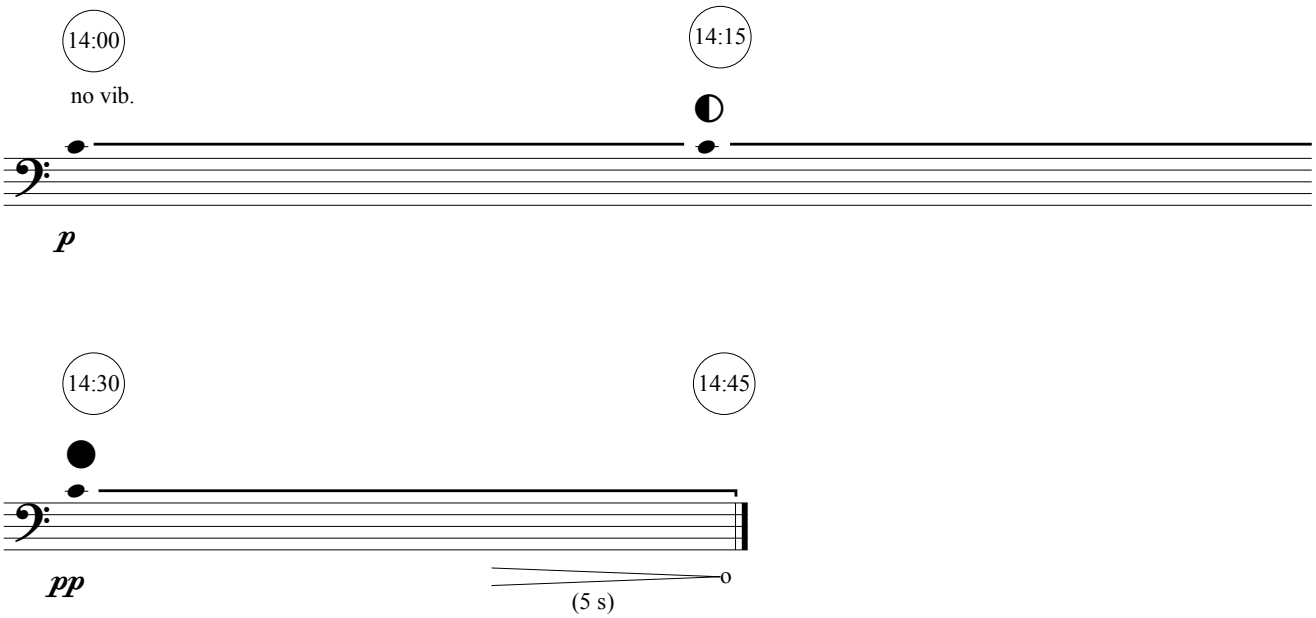

3:30
3:45
Ord.
mp
p
(5 s)
(5 s)
(5 s)
(10 s)


4:00
4:10
Ord.
exaggerate /
uneven vib.
pp
(10 s)
4:30
4:45
mp
subito mf
5:00
5:10
M
p
(5 s)
(5 s)
(5 s)
(5 s)
5:30
5:45
M
pp
p
(5 s)
6:15
Flz.
mp
(5 s)
(5 s)
(5 s)
(5 s)


6:30
6:40
6:50
M
subito p
pp
(5 s)
(5 s)
7:00
7:20
exaggerate /
uneven vib.
M
p
7:40
7:50
M
pp
(10 s)
8:10
8:20
0
1 +/-
2
3
4
5
6
7
slow f. vib.
(1/4 t.)
Ord.
Flz.
mp
(5 s)
(5 s)
8:40
no vib.
M
p
(5 s)
(5 s)
(5 s)
(5 s)


9:00
0
1 +/-
2
3
4
5
6 slow f. vib.
7 (1/4 t.)
mp
9:15
attack instrument, immediately
after add voice
no vib.
mf
(5 s)
9:30
pp
9:45
0
1 +/-
2
3
4
5
6 slow f. vib.
7 (1/4 t.)
10:00
no vib.
mp
(5 s)
(5 s)
(5 s)
10:20
p
10:30
(10 s)
10:40
attack the sound first, then
place the hand at the labium
mp
11:00
0
1
2 +/-
3
slow f. vib.
(1/4 t.)
p
11:20
no vib.
mp
(5 s)


11:30
11:40
11:45
11:55
Paste the aluminium foil covering the lip
Flz.
mf
f
subito silence
ff
12:10
12:20
Ord.
mp
(5 s)
(10 s)
p
12:30
0
1
2 +/-
3
slow f. vib.
(1/4 t.)
12:45
no vib.
mp
(5 s)
(10 s)
13:00
13:10
Flz.
pp
p
(5 s)
(5 s)
(5 s)
(5 s)
13:30
13:40
0
1
2 +/-
3
slow f. vib.
(1/4 t.)
pp


14:00
no vib.
14:15
p
14:30
14:45
pp
(5 s)

suelo seco

Amplified cello and piano

For Ivana Peranic and Rachel Fryer

Commissioned by Illuminate Women's Music

MICHELE ABONDANO

2020–21

suelo seco

Amplified cello and piano

Performance Notes

The score doesn't make a reference to the resulting pitches generated from the instrumental techniques. The notation used is a kind of map for the displacement in terms of distance and speed. Therefore, rather than using clefs, there is a graph for specific parts of the instruments in which the performer should play. There is only one exception for the specific notation of a cello harmonic.

Time is set up in conventional measures, however the notation doesn't use figures. Beats should be counted while following specific instructions for the friction movement.

Dynamics are determined by the speed of the movement, thus a long distance in short time requires a fast displacement that will be naturally louder than a slow one (this may be more evident with some objects than others). As a consequence, the notation of **mp* is used as a general instruction to look for an initial level of pressure that allows the movement and displacement while generating a perceivable timbre in terms of loudness. Likewise, **f* or **p* are used to indicate a particular emphasis on the friction, coherently with the physical conditions of each element. In the light of this, dynamics will organically correspond to the kind of movement and displacement, as well as the materiality of the object used to friction the strings. There is only one exception for the notation of dynamics when the cellist is using the bow, which allows a more specific instruction.

Three textures perceived on the dry soil (English translation for 'suelo seco'), inspired this composition: first, the experience of a *dry surface*, almost homogeneous, soft, condensed, but not static; second, the *cracked soil*, broken, granular, hostile and crumbly at the same time; finally *dust*, the residue, multiple particles that drift in the wind and fall down to the soil again forming fragile layers ready to scatter at any impulse. The exploration of dryness is an opportunity to study the fragility of timbre from the particular and intimate experience of contact. Therefore, performers are invited to approach their instruments as dry soil territories and move on them to discover new textural identities.

The piano pedal(s) should never be used in any section of the piece to emphasise the exploration of dryness as a consequence of friction.

Duration: 6 minutes

Cello and objects

1 *paper sheet* (letter or A4 size, have other sheets available in case it needs to be replaced during the performance)
1 piece of *polystyrene foam* (as big as it feels comfortable to control with one hand)
2 sets of *2 threads of cello bow hair* (it is necessary to rosin the hair before using it)
1 cello bow

Piano and objects

1 *paper sheet* (letter or A4 size, have others available in case it needs to be replaced during the performance)
1 *soft toothbrush*
1 set of *2 threads of cello bow hair* (it is necessary to rosin the hair before using it)
1 *bunch of cello bow hair* (1/8 of a hank–it is necessary to rosin the hair before using it)

Notation of friction movement

⟵ Horizontal movement to the *left*.

Keep the element at the string point indicated on score and rub by pulling it to the left hand. There shouldn't be displacement along the string, the contact point should remain the same. Movement should be *as slow as possible* at least something different is indicated on score.

⟶ Horizontal movement to the *right*.

Keep the element at the string point indicated on score and rub by pulling it to the right hand. There shouldn't be displacement along the string, the contact point should remain the same. Movement should be *as slow as possible* at least something different is indicated on score.

⟷ Horizontal movement alternating left and right.

This technique is equivalent to a *tremolo*. Keep the element at the string point indicated on score and rub by pulling it to the left and right hand *as fast as possible*.

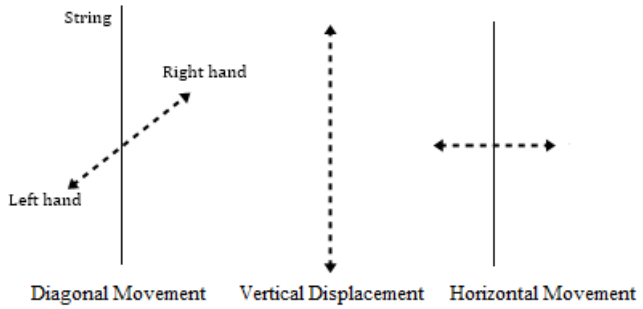
〰 Vertical movement alternating up and down.

This technique is equivalent to a *tremolo* when using the brush or the compressed polystyrene. Keep the element at the point on the string indicated on score and rub up and down along the string *as fast as possible* restricting the displacement of the element to a very short distance.

↗ ↘ Vertical displacement.

Rub the element along the strings from one point to another one (one direction), according to the instruction on score. Although the displacement should be vertical, the arrows are diagonal to keep the relation of time-distance, so the arrow point indicates *where* and *when* to stop. Speed of displacement is determined by the amount of beats in which the next point must be reached. Keep a steady pace in the displacement.

Important: *vertical displacement* should be always approached from a *vertical movement*, that is, moving the element with both hands up and down along the string. However, sometimes there is also the possibility of *Diagonal Movement* [D. M.], which is specifically indicated on score. In these cases, one hand is higher than the other, and the vertical displacement occurs at the same time that the string is rubbed by pulling the element from left to right continuously.



Amplification

Amplification in this piece works as a microscope: rather than intensifying the sound, it is thought as a magnifier of the inside of timbre, its movement, its structure, its behaviour.

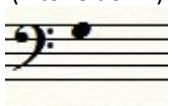
Piano: two omnidirectional condenser microphones; one for the bass strings (B0, G1), and one for the treble strings (D5). Both should be placed in direction to the specific strings in order to capture the sound along them (vertically). *Cello*: one omnidirectional condenser microphone capturing at the f-holes. The stands should be strategically placed avoiding any interruption of movement and displacement around the instruments by the performers. The signal of the microphones goes directly to the mixer to be sent to stereo speakers according to the position of the instruments on stage.

Cello

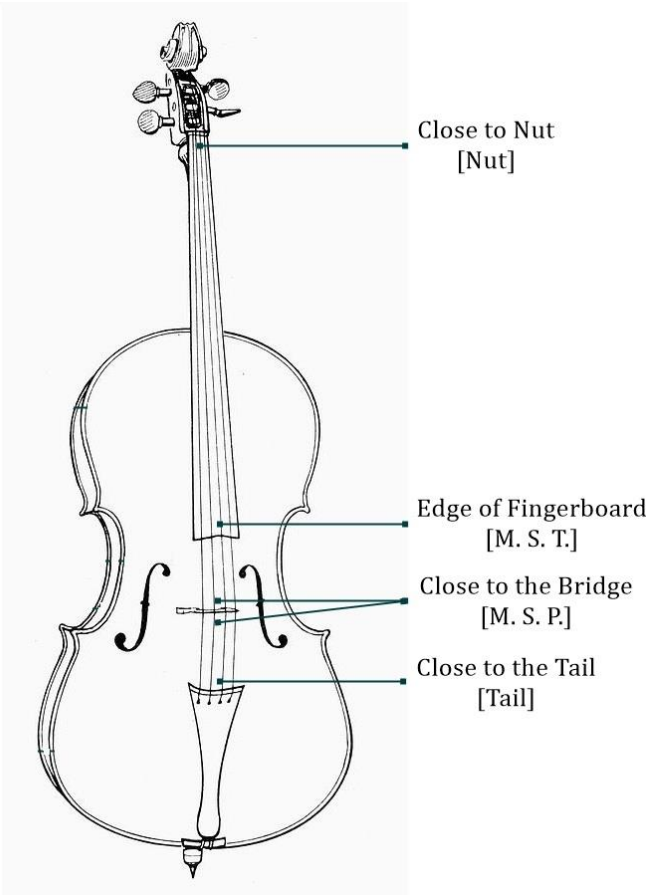
Scordatura

String I

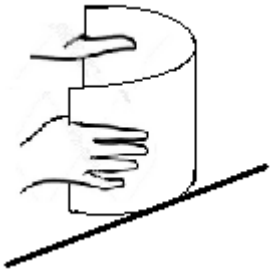
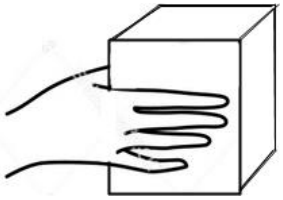
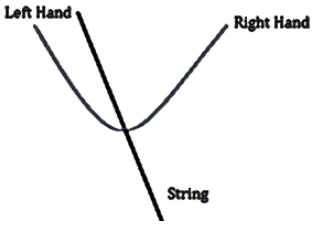
(1 tone down)



Parts of the instrument as named on the score

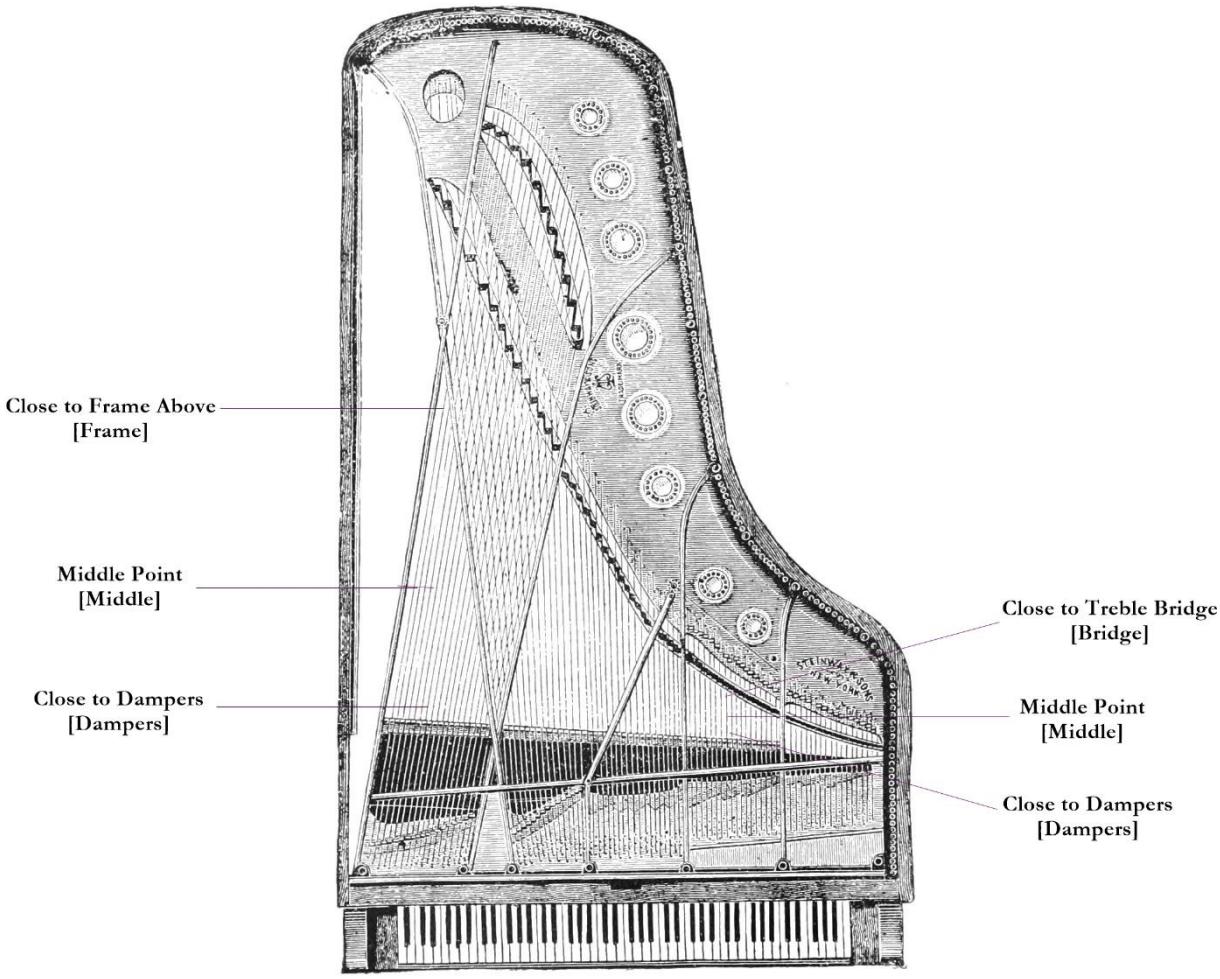


Techniques

Paper Sheet. Technique #1 	Take a landscaped paper sheet by the extremes and make an arch. *Scrape the strings* with the bottom edge of the paper. In case the edge loses firmness, change the side of the paper to have a better friction.
Polystyrene. Technique #2 	*Rub the strings* with a piece of polystyrene foam. The speed and distance of the displacement or the kind of movement are determined on the score.
Cello bow hair. Technique #3 	Take a set of two threads of cello bow hair. Place it below *String III*. Repeat the procedure with the second set below String III but this time *behind the bridge*. Use both hands to perform this technique. *Rub the strings* with the hair according to the instructions on score. **It is necessary to prepare this technique in advance. Place each set of hair before starting to play. Leave it hanging from the string when not used.*
Cello bow. Technique #4 	Use the bow on *String I* following the instructions of movement and displacement given on score. **It is necessary to detune the string 1 tone down before starting to play the piece.*

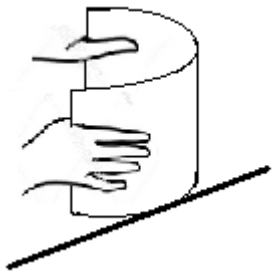
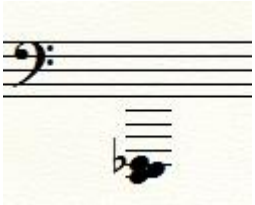
Piano

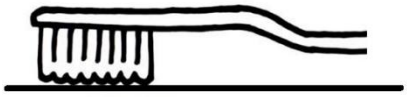
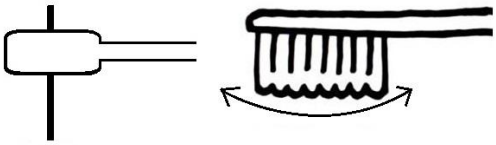
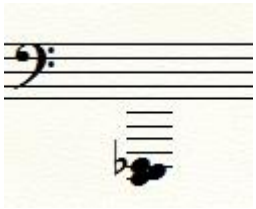
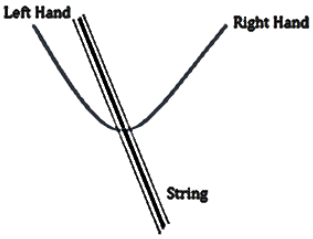
Parts of the piano as named on score



*It is recommended that the pianist stand at the tail and bent side of the piano to facilitate the performance of the piece.

Techniques

Paper Sheet. Technique #1 	Take a landscaped paper sheet by the extremes and make an arch. *Rub the strings* B0, C1, and D-flat 1 with the bottom edge of the paper.  In case the edge loses firmness, change the side of the paper to have a better friction.

Toothbrush. Technique #2 	Take a soft toothbrush and place the bristles on String B0. Aline the brush with the string in a vertical direction. *Brush the string* according to the instructions on score. This technique implies vertical displacement along the string. 
Toothbrush. Technique #3 	Place the bristles on Strings B0, C1 and D-flat1. This time the brush should be perpendicular to the strings. Brush the strings in a single horizontal movement according to the instruction on score. There is no vertical displacement along the strings, the point of contact should remain the same. 
Cello bow hair. Technique #4 	Take one set of *two threads* of cello bow hair and place it below the *two strings corresponding to G1*.  Use both hands to perform this technique. *Rub the strings* with the hair according to the instructions on score. Take the *bunch* of cello bow hair and place it below the *three strings corresponding to D5.*  **It is necessary to prepare this technique in advance. Insert the hair before starting to play. Leave it hanging from the strings when not used.*

suelo seco

for Ivana Peranic and Rachel Fryer
Commissioned by Illuminate Women's Music

MICHELE ABONDANO
2020-21

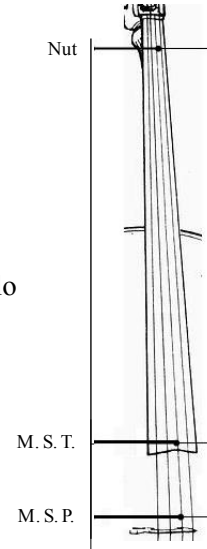
♩ = 66

Dry surface: *smoothly granulated.*

Paper Sheet
Technique #1

Strings III and IV

Cello

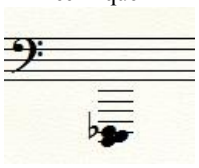


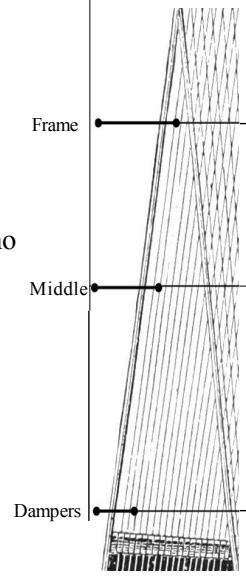
***mp**

4/4 1/4 2/4 4/4

Paper Sheet
Technique #1

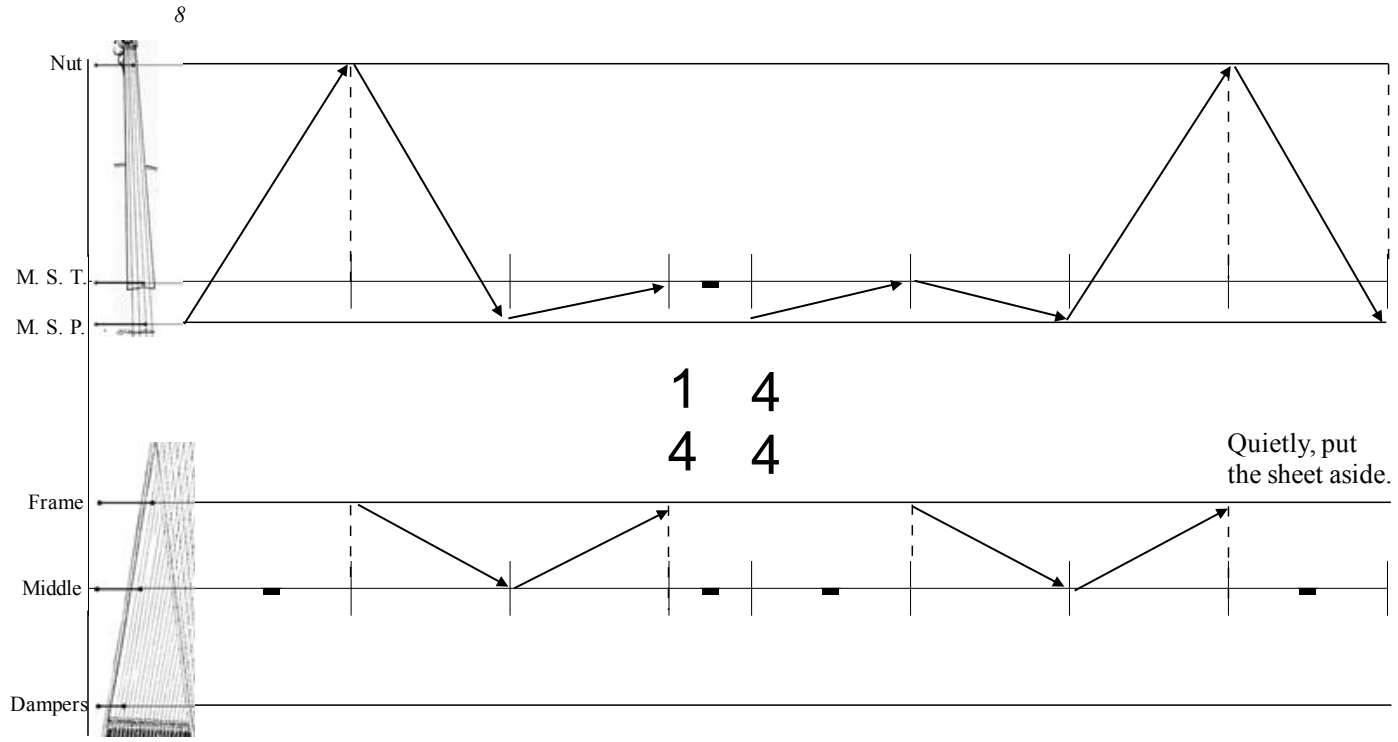
Piano



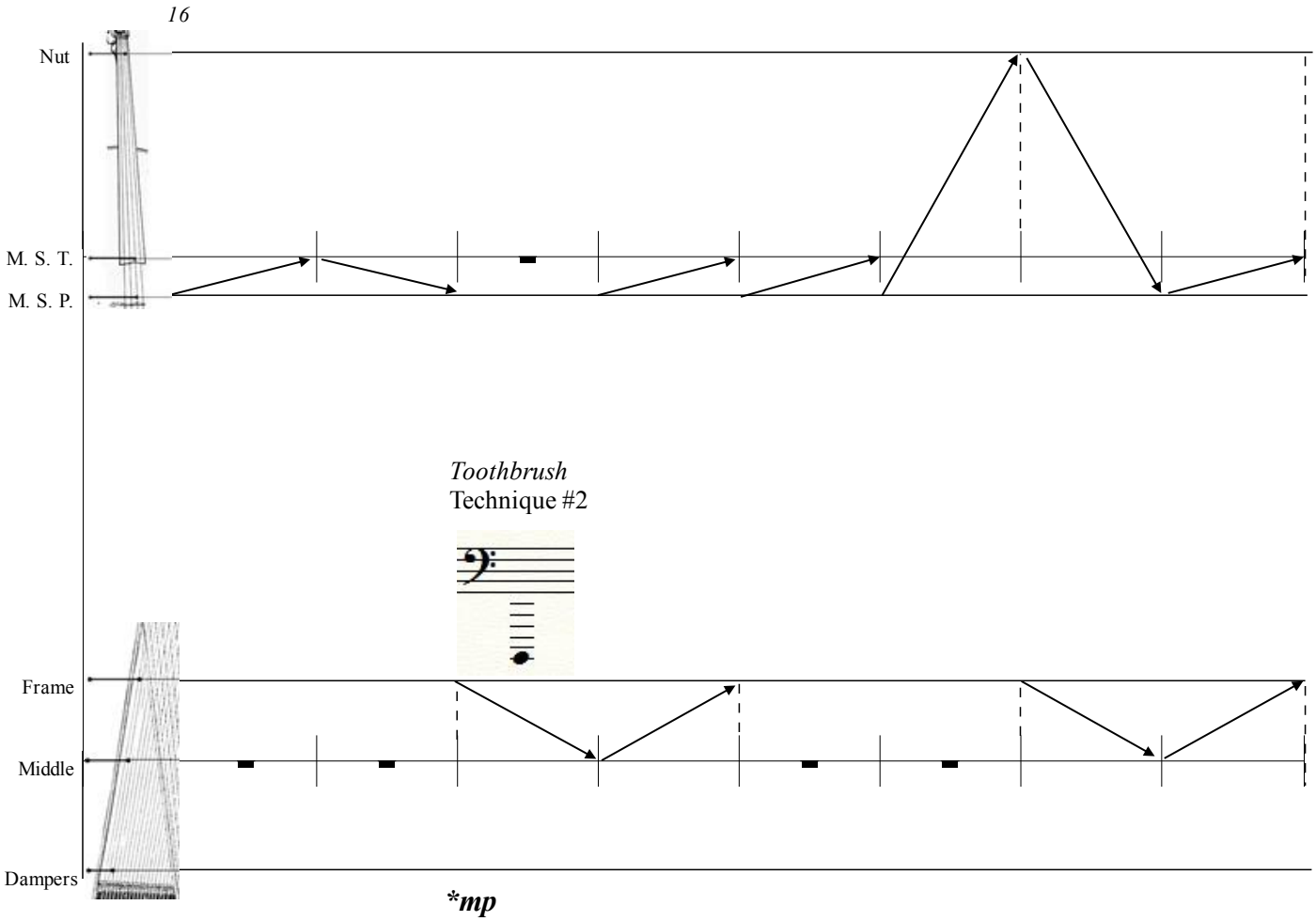


***mp**

*Cello and Piano:
Keep a level of pressure that allows the displacement and produce a consistently perceivable sound. The speed determines the dynamics, thus it is expected that a fast movement sounds louder.

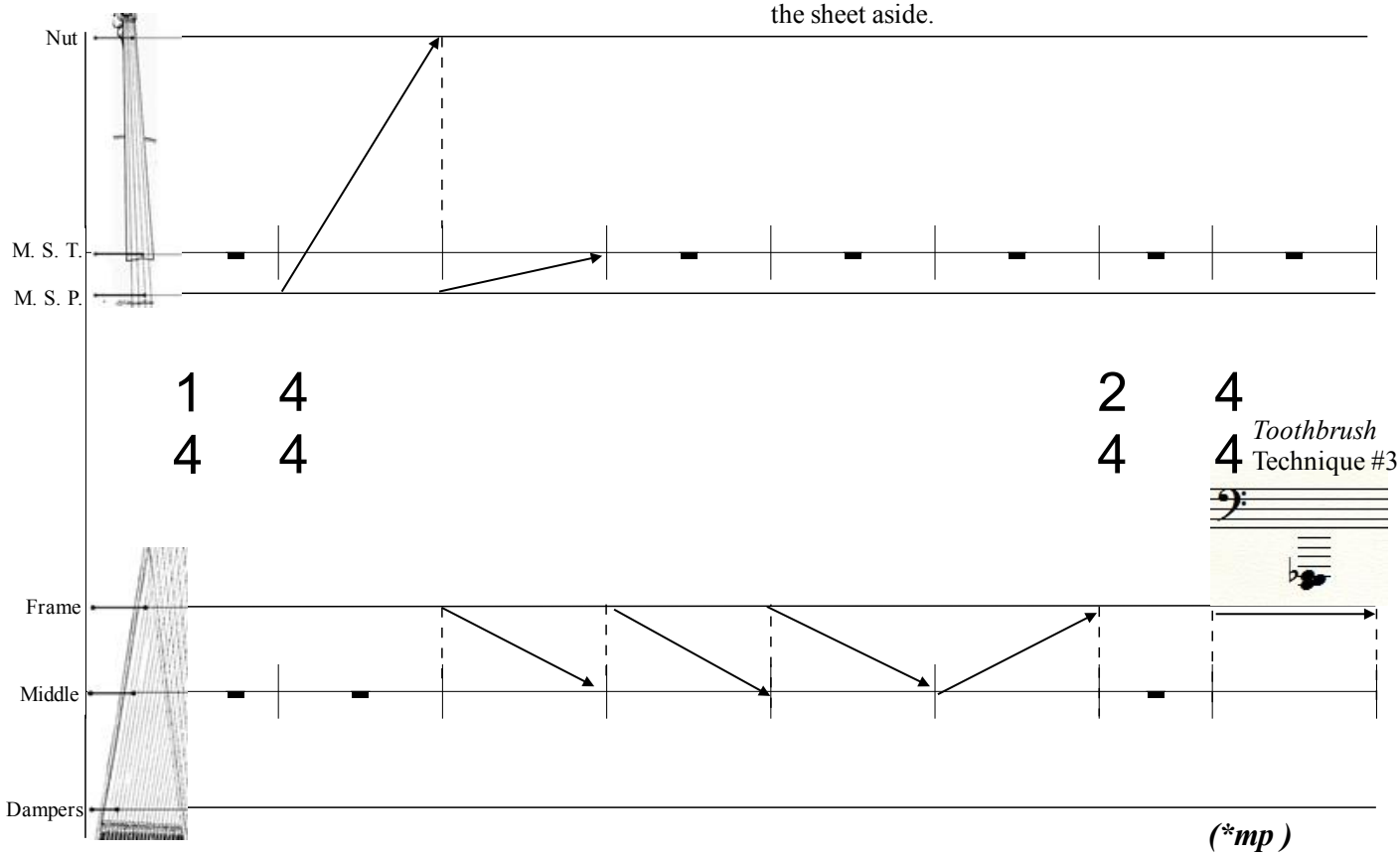

8
Nut
M. S. T.
M. S. P.
1 4
4 4
Quietly, put
the sheet aside.
Frame
Middle
Dampers

//


16
Nut
M. S. T.
M. S. P.
Toothbrush
Technique #2
Frame
Middle
Dampers
mp

24

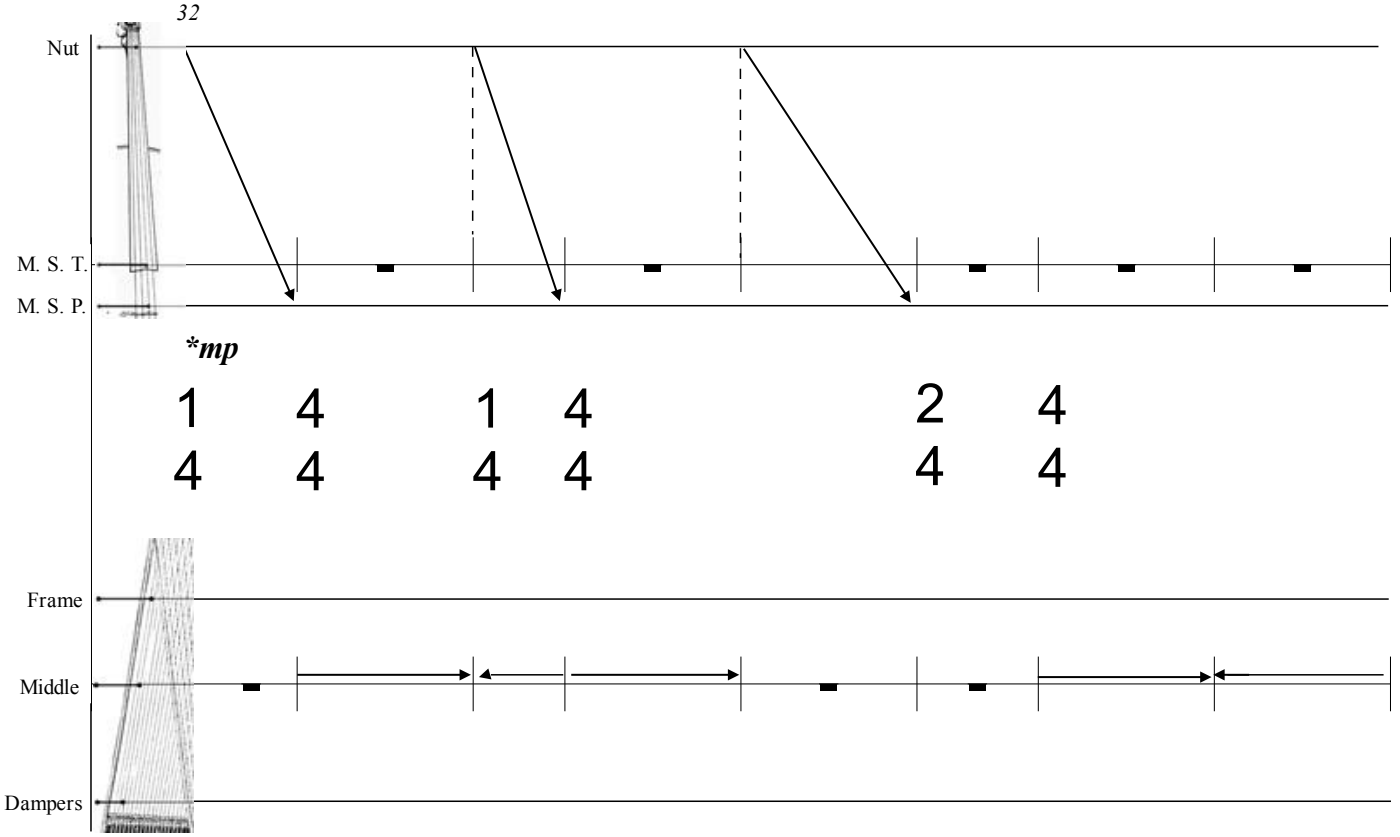
Quietly, put
the sheet aside.



//

Polystyrene
Technique #2
(Strings III and IV)

32



40

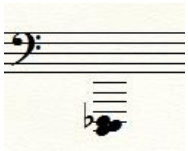
Nut
M. S. T.
M. S. P.

3/4 4/4

Toothbrush
Technique #2

2/4 4/4

Toothbrush
Technique #3



Quietly, put the brush aside.
Prepare to change of string.

Frame
Middle
Dampers

(*mp)

Cracked soil: *hostile and broken.*

//

47

Nut
M.S.T.
M.S.P.

1/4 4/4 1/4 4/4

Bow Hair
Technique #4

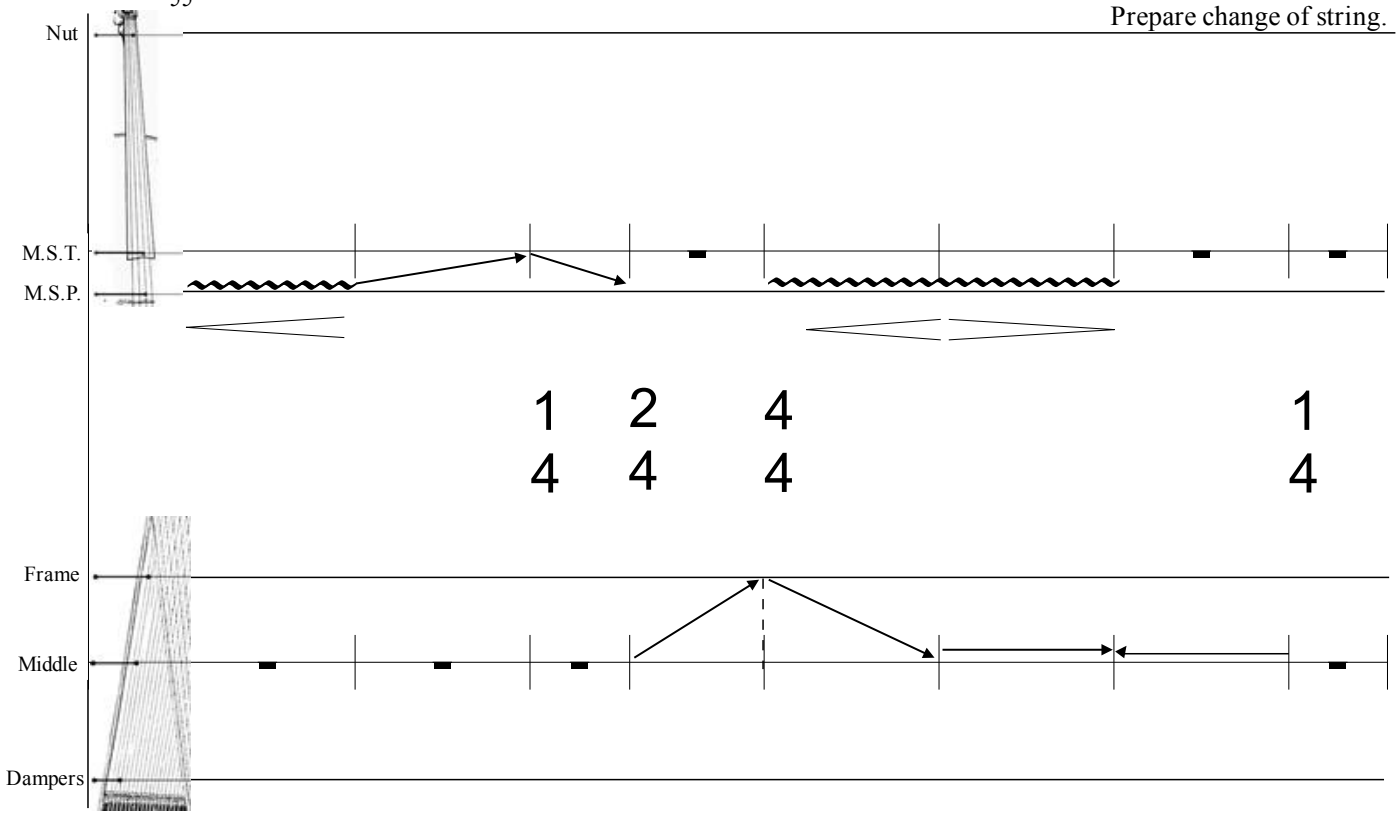
Slow mov.
(left-right)

Frame
Middle
Dampers

****mp***

Quietly, put the
polystyrene aside.
Prepare change of string.

55

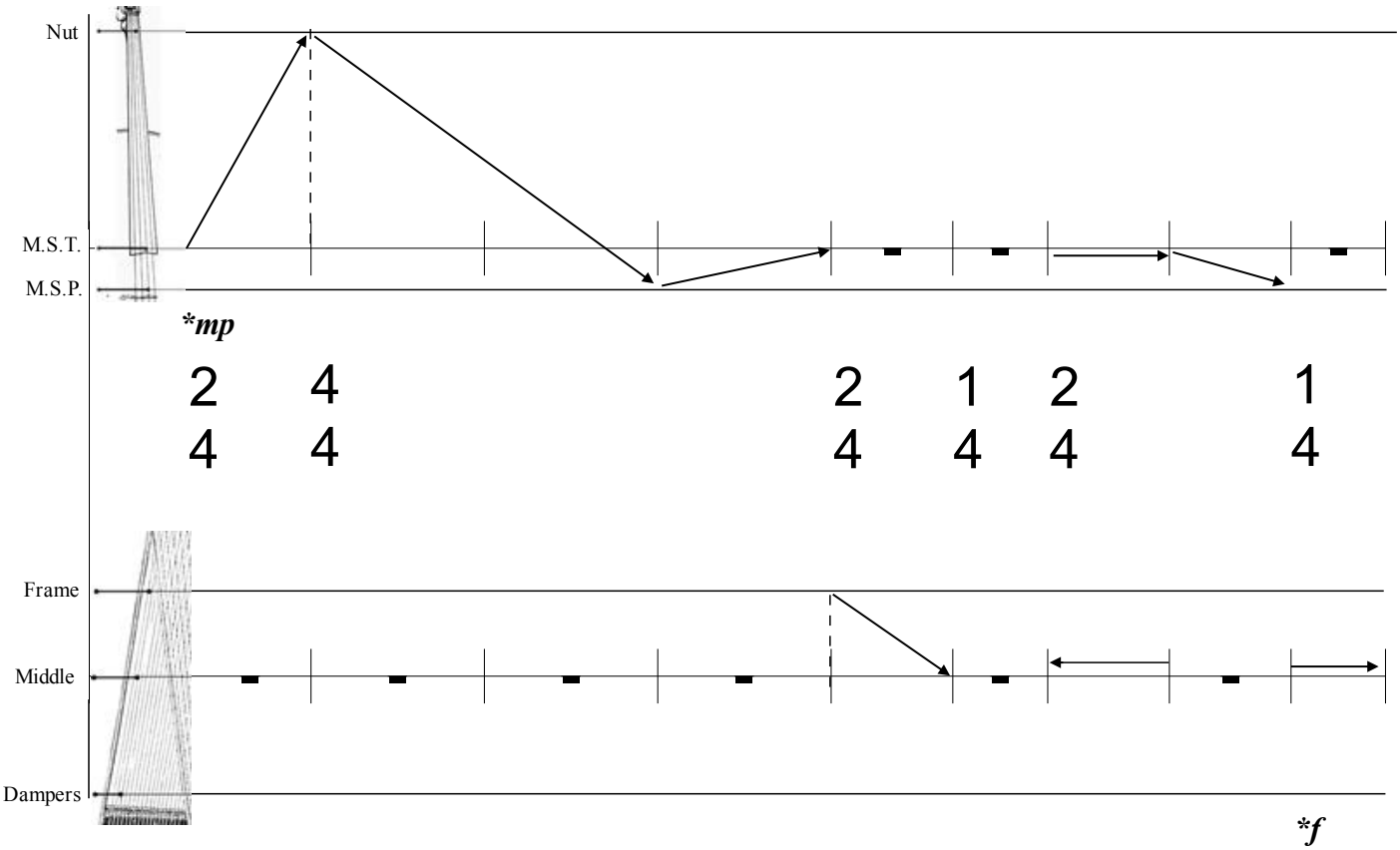


//

Bow Hair
Technique #3

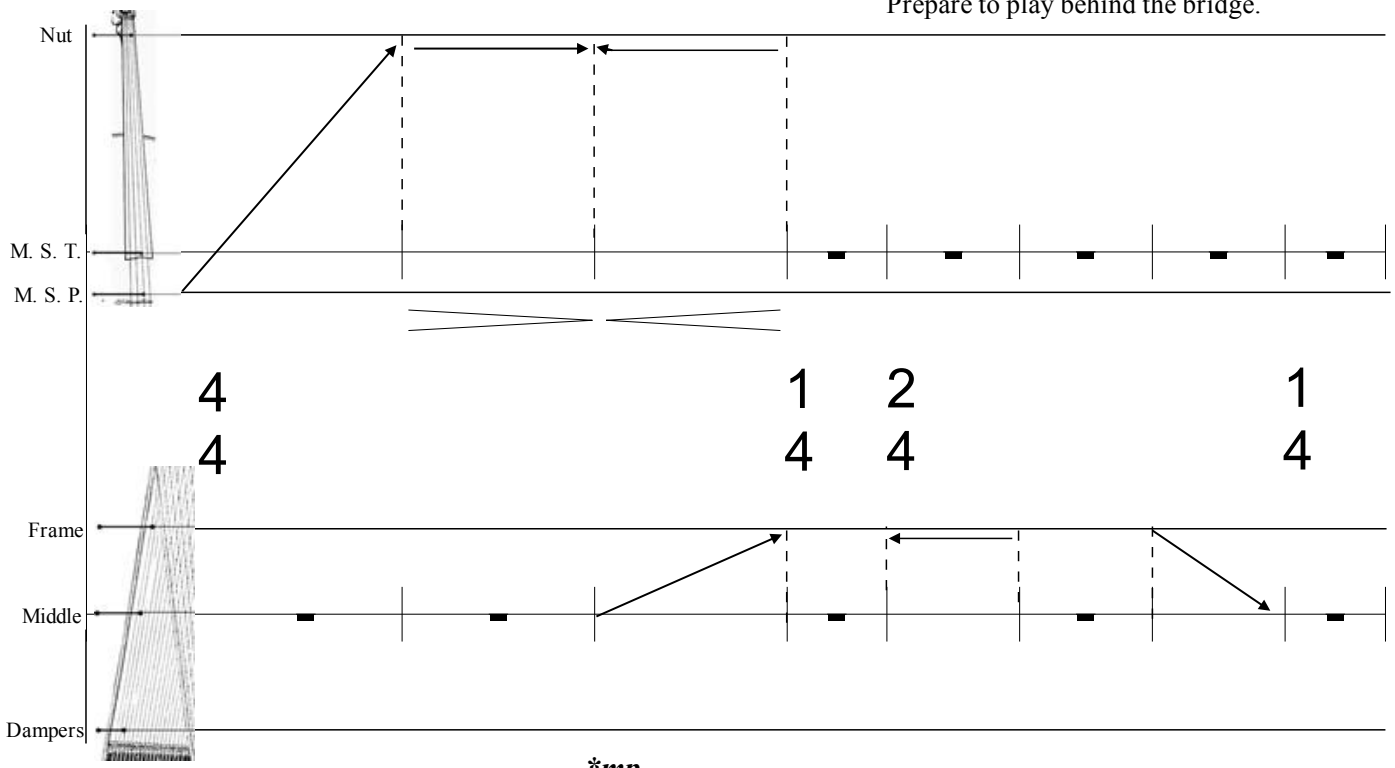
String III

63



72

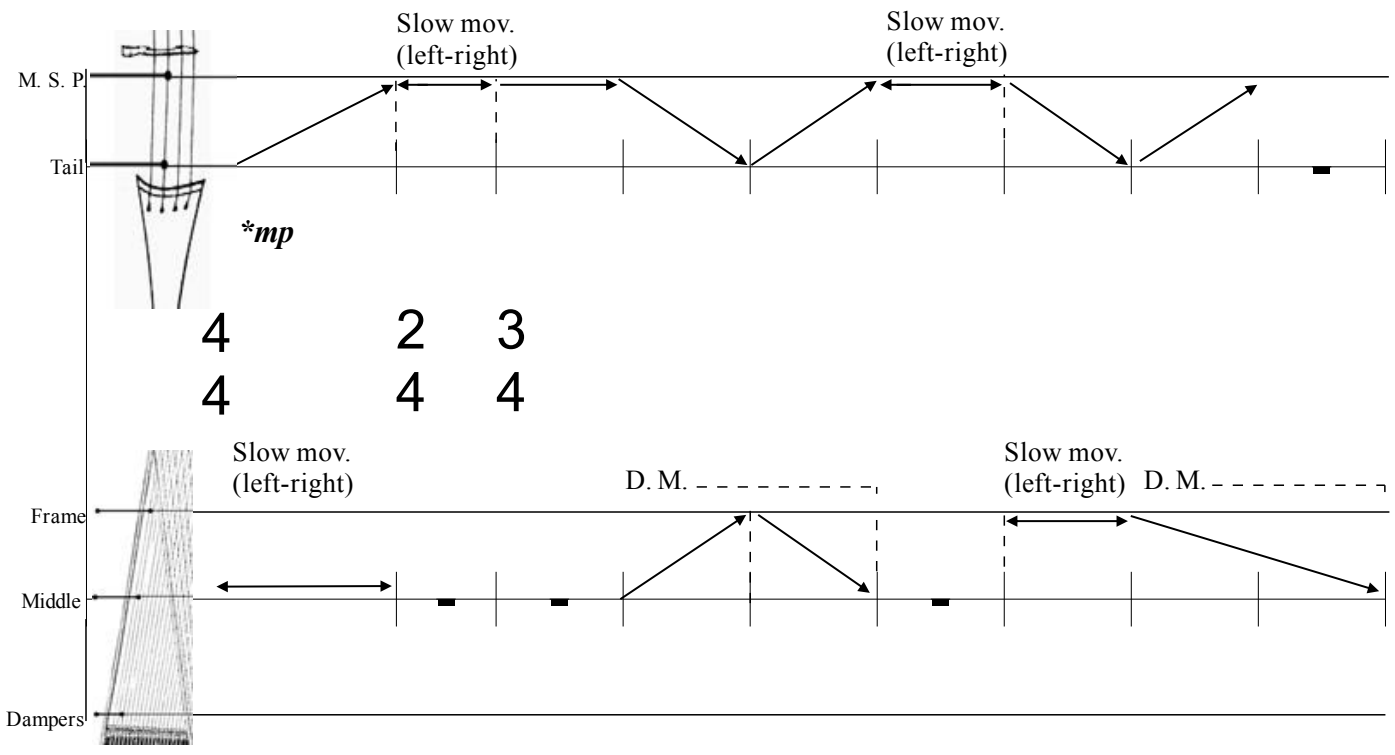
Prepare to play behind the bridge.



Bow Hair
Technique #3
String III (B. B.)

//

80

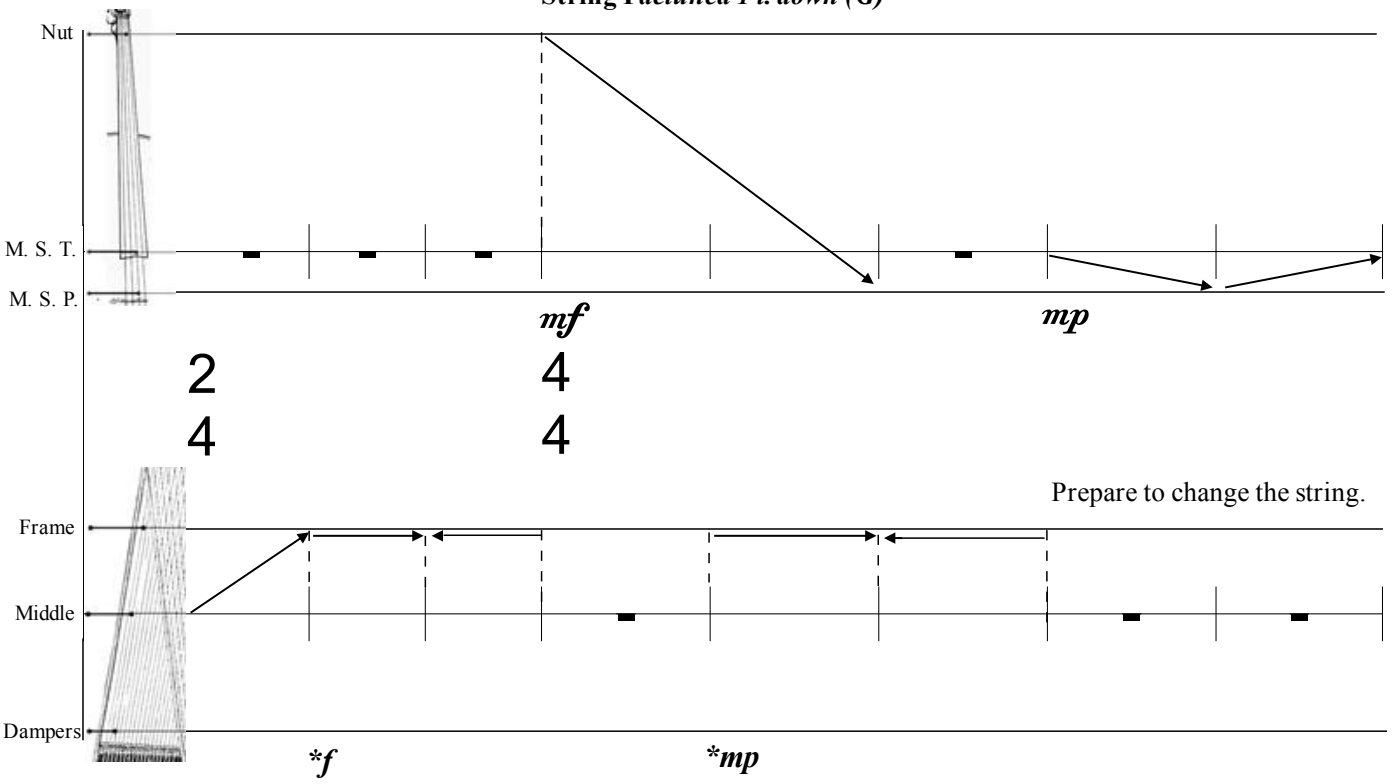


Dust: *Residual and dispersible.*

Bow
Technique #4

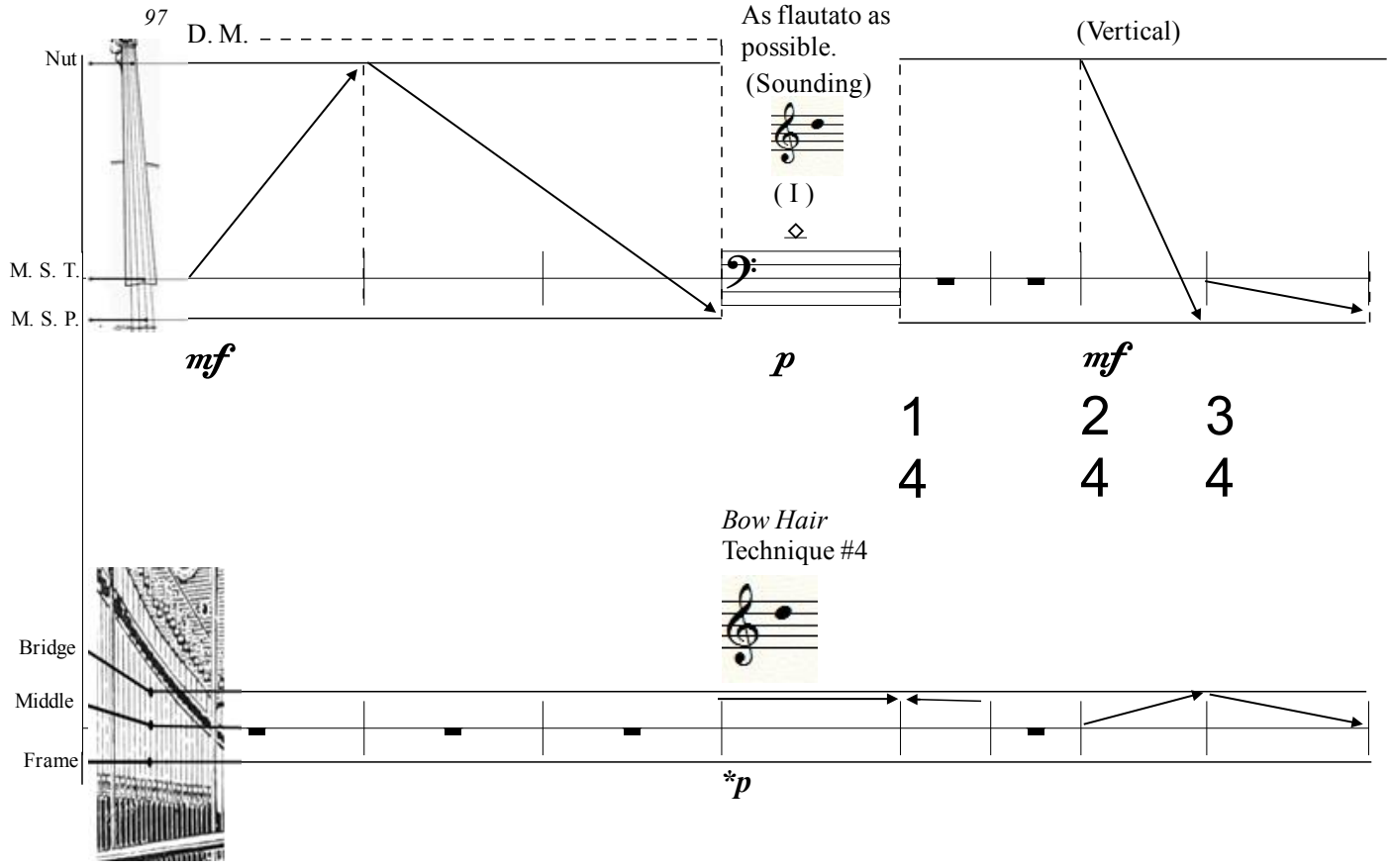
89

String I *detuned 1 t. down (G)*



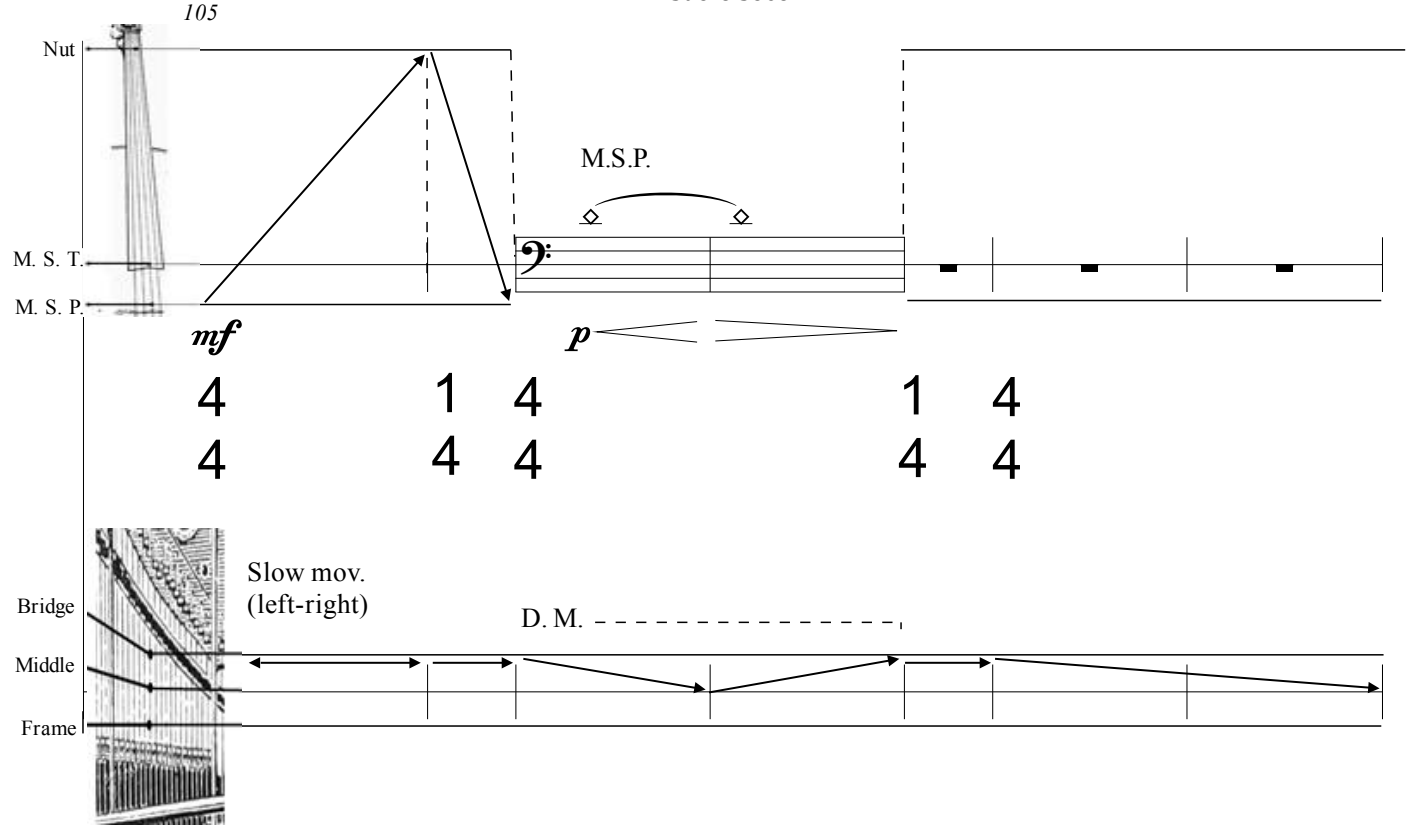
//

97



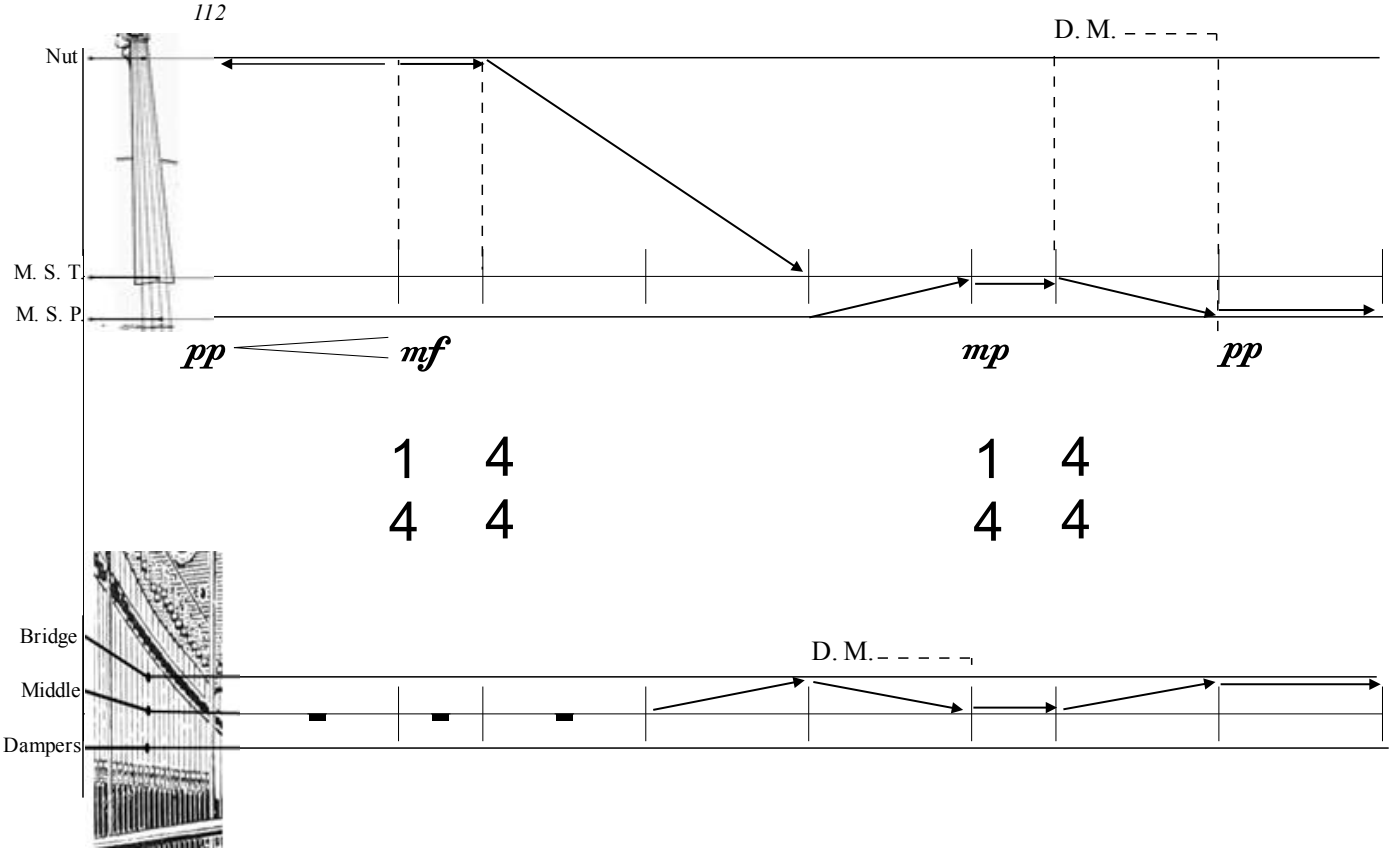
suelo seco

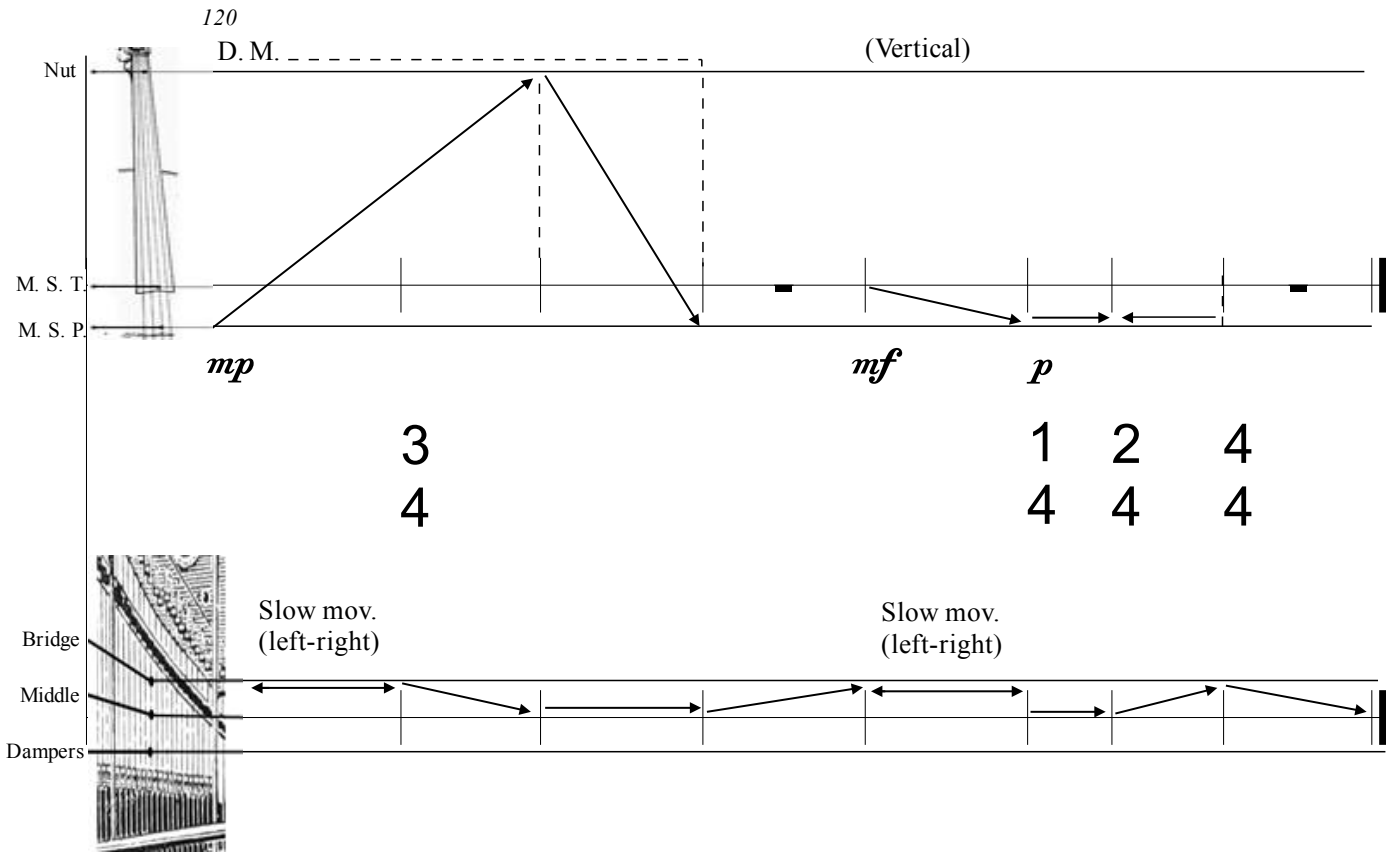
105



//

112




120
D. M.
(Vertical)
Nut
M. S. T.
M. S. P.
mp
mf
p
3
4
1
4
2
4
4
4
Slow mov.
(left-right)
Slow mov.
(left-right)
Bridge
Middle
Dampers

The Loneliness of the Rusted Things

For Riot Ensemble

Flute, Oboe, Clarinet, Violin, Viola, and Cello

MICHELE ABONDANO

2020

The Loneliness of the Rusted Things

For Riot Ensemble

Performance Notes

The piece is an exploration of rust as a timbral experience where different dimensions of the oxidation process on an imaginary object seem to be amplified to perceive the subtle details of its transformation. The relentless consequences manifest through sudden squeaks that may seem contemplated from a completely distorted perspective.

Score in C

Duration: 10 minutes.

General microtonal notation:

𝅘𝅥	¼ tone lower
♯	¼ tone higher
𝄲	Light inflection of tone down
𝄳	Light inflection of tone up

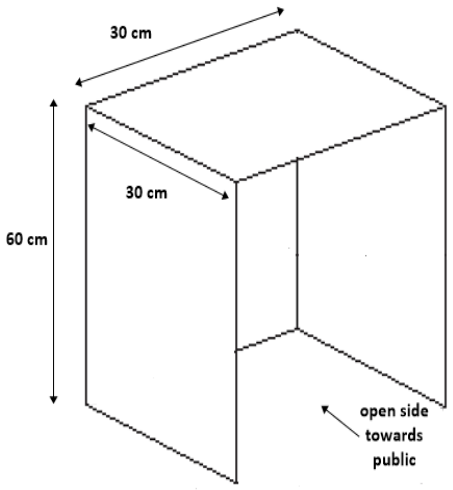
Woodwind

Techniques

Can + steel spiral

Flute metal can: 8cm diameter and 11cm height (560g contained as reference).
Oboe metal can: 6cm diameter and 9 cm height (300g contained as reference).
Clarinet metal can: 7cm diameter and 10 cm height (400g contained as reference).

Note: remove the paper (label) that wraps the can to avoid damping the sound.



Put the steel spiral on a wooden box or table. Measures are approximated. The wood helps to amplify the resonance naturally. One box/table should be closed to the chair of each performer to allow them to play this technique in the same position they play the instrument (sited, without displacement).

Place the empty metal can over the steel spiral making all the circle points be in contact with it. It may be necessary to spread the spiral enough to meet each can diameter.

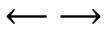
Metal can position instructions

Open side down: the can hole is directly over the spiral; however, the edges should be always in contact with the spiral.

Open side up: the can bottom is directly on the spiral, so the whole base is in contact with it.

Kind of movement

Circular movement. Press the edge of the metal can on the steel spiral following its circle shape. The speed of each circle is determined by the duration of the figure written.



Horizontal movement. Press the metal can on the steel spiral and drag it left or right on the table.

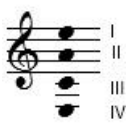
Press the metal can on the steel spiral and rub the table surface from left to right as fast as possible.

Aeolian sound	Notated with a diamond-shaped notehead. Mix of air with pitch.
Air sound	Notated with a square-shaped notehead. Indeterminate pitch; nonetheless the fingering for the written pitch should be held to ease the timbral transition.
Bisbigliando	Alternate the fingerings notated for the same pitch following the written rhythm pattern.
Glissando	All glissandi should be by lip technique and start immediately with the note.
Double Trill	Trill alternating two fingerings that involves the fast movement of two fingerings with uneven or irregular speed of interchange (avoid a regular alternation). The resulting pitches may include microtonal variations or even multiphonics. The objective is creating a veiled and flickering trimbral texture.
Multiphonics	The corresponding fingering is notated in each case. Performers may use the technical resources necessary to make the multiphonic bloom. Therefore, dynamics instructions are guidelines for the timbral development, and performers should use the air pressure needed for each multiphonic. Oboe beating multiphonic: the pitch inside parenthesis functions as the beater on the normal pitch. The resulting timbre should present a granular, shifting texture.
Flutter tongue (Flz.)	Instruction accompanied by the symbol on each note.
Harmonics	For flute, the fundamental fingering is expressed with a diamond-shaped notehead while the resulting pitch (harmonic) is distinguished by the traditional small circle above the normal notehead. For oboe, the resulting pitch (harmonic) is notated with the small circle above, so the performer can decide the most convenient way to produce it. Finally, for the clarinet, a normal notation for the fingering pitch is used while the resulting harmonic is notated with a diamond-shaped notehead. This technique requires to remove the register key and overblow the harmonic. A fundamental pitch can sneak a 12^{th} below the fingering pitch, it is more likely to occur in the tremolo.

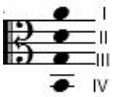
Vibrato	*Slow lip vibrato ¼ tone*. Push the pitch up and down by a quarter of tone by changing the lip pressure and position. *Irregular vibrato*. Uneven change of pitch and speed. *Intensity vibrato*. Change of loudness starting from the dynamic notated. It can be regular or irregular as indicated by the corresponding graphic.
Only reed (Oboe)	Remove the reed and play it according to the instructions. Notation doesn't include resulting pitches, so the performer should control the sound by the corresponding technique and dynamics.

Strings

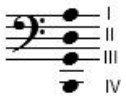
Scordatura



VIOLIN



VIOLA



VIOLONCELLO

Preparation

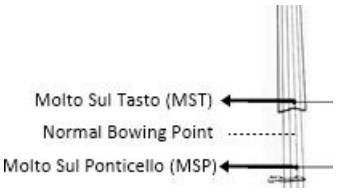
1. Wrap 4 cm of *String IV* with **aluminium foil** (6 cm for cello) from the closest point to the nut.

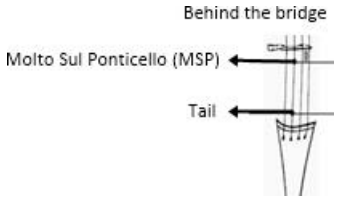
   Note: Since the violoncello is in a vertical position, it may be needed to use a little piece of masking tape to keep the aluminium foil in place. If used, paste it to the nut at the top of the foil.

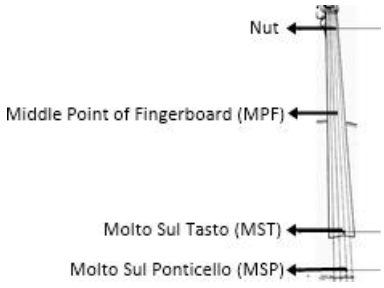
2. Insert a **block of polystyrene** between *Strings I and II behind the bridge but close to it.* The width size depends on the distance between the strings to hold it firmly by itself. The length may be 2 cm (3cm for cello). Allow the polystyrene to exceed the string level so it is easier to bow on it.

Notation uses graphics to indicate position and displacement of both fingering (Left Hand) and bow (Right Hand). Sometimes, normal clefs are used to determine specific pitches (Left Hand).

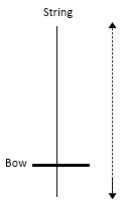
Strings parts as notated on score



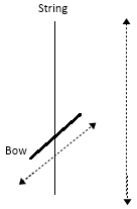




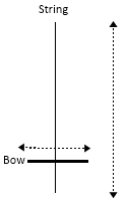
Techniques



Vertical Bowing: Place the bow in horizontal position in relation to the string (perpendicular to it). The displacement should be in a parallel movement (along the string) according to the points to be reached as indicated on score. There is no movement between tip-frog in this technique.

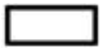


Diagonal Bowing: Place the bow in diagonal position in relation to the string. The displacement should be in a parallel movement (along the string) while moving the bow from tip to frog, and vice versa. The displacement is determined by the points to be reached as indicated on score. When there is no displacement, keep bowing in the required position (diagonal) on the same point.



Horizontal Bowing (normal): Place the bow in horizontal position in relation to the string (perpendicular to it). The displacement should be in parallel movement (along the string) while moving the bow from tip to frog, and vice versa. The displacement is determined by the points to be reached as indicated on score. When there is no displacement, keep bowing in the required position on the same point (horizontal).

Very heavy pressure of bow.



Normal pressure of bow.

Very light finger pressure

Notated with a square-shaped notehead. It should be less than harmonic pressure and the resulting pitch is indeterminate, and shifting depending on the bowing place.

Harmonics

Fingering pitch notated with a diamond-shaped notehead. For unusual fingering harmonics, the resulting pitch is notated above in parenthesis only the first time it appears, as a reference.

Harmonic finger pressure

Notated with a diamond-shaped notehead, it indicates to use the level of pressure of a harmonic fingering over the open string. Although this technique leads to a determined harmonic, in this case it is an exploration of displacement in which the resulting pitch may be affected by the bowing and fingering place. Therefore, the performer is expected to follow the instructions without pursuing a determinate pitch.

Glissando

All glissandi should start immediately with the note. The speed is determined by distance (interval or instrument position) and duration (figure or beats).

Vibrato

Bow vibrato: Change of bow pressure following the written rhythm pattern.

Finger vibrato: The change of pitch can be either by a regular or irregular movement of finger.

Irregular vibrato: Uneven change of pitch and speed.

Intensity vibrato: Change of loudness level according to the graphic instruction. It can be either regular or irregular.

Two strings: One finger

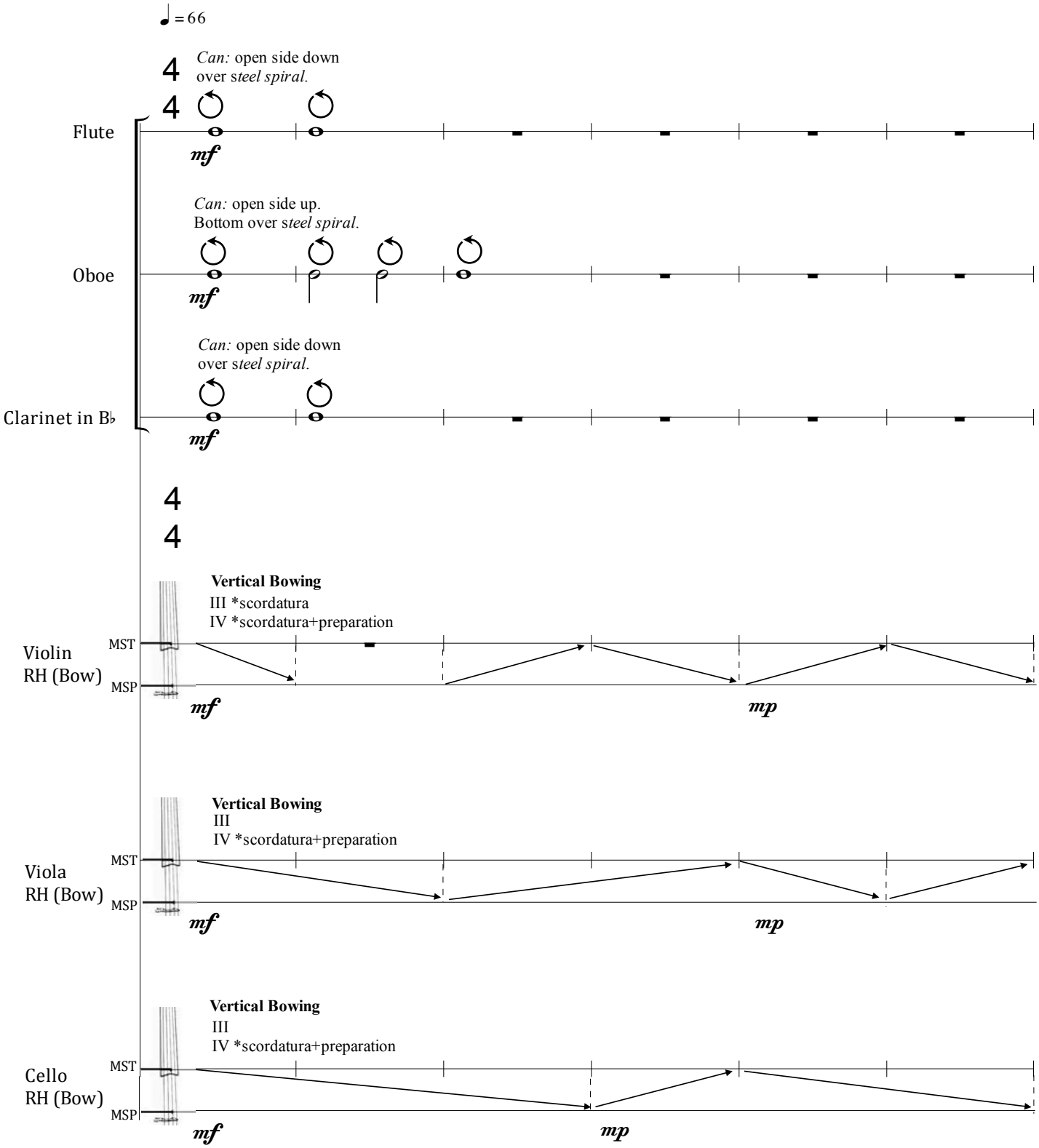
Place the finger on the lowest string using harmonic pressure on the notated pitch. The next higher string should be slightly touched by the back part of the same finger on the point notated with a square-shaped notehead (very light finger pressure, like an untended mistake), producing an indeterminate pitch, an unpredictable squeaky timbre.

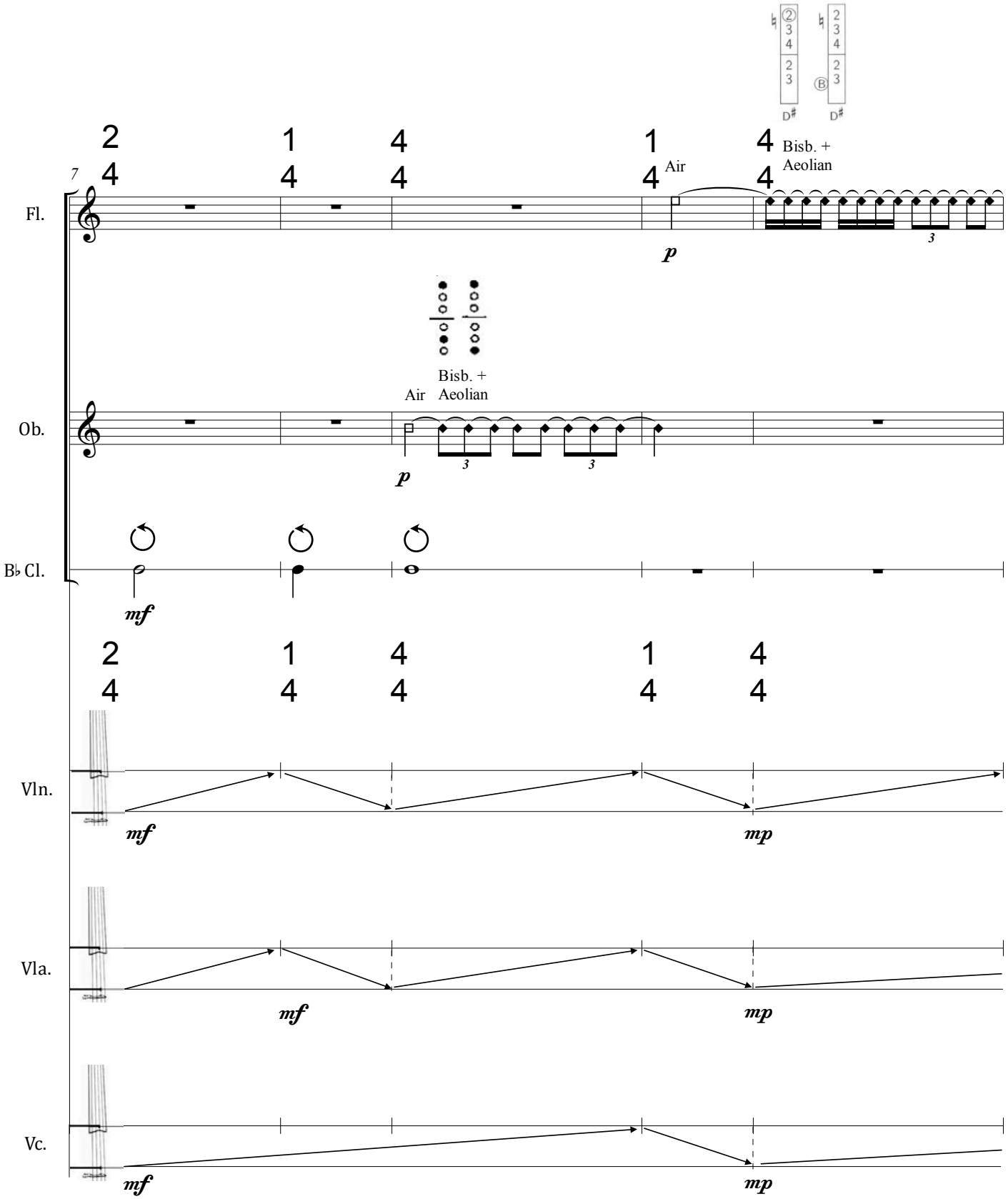
The Loneliness of the Rusted Things

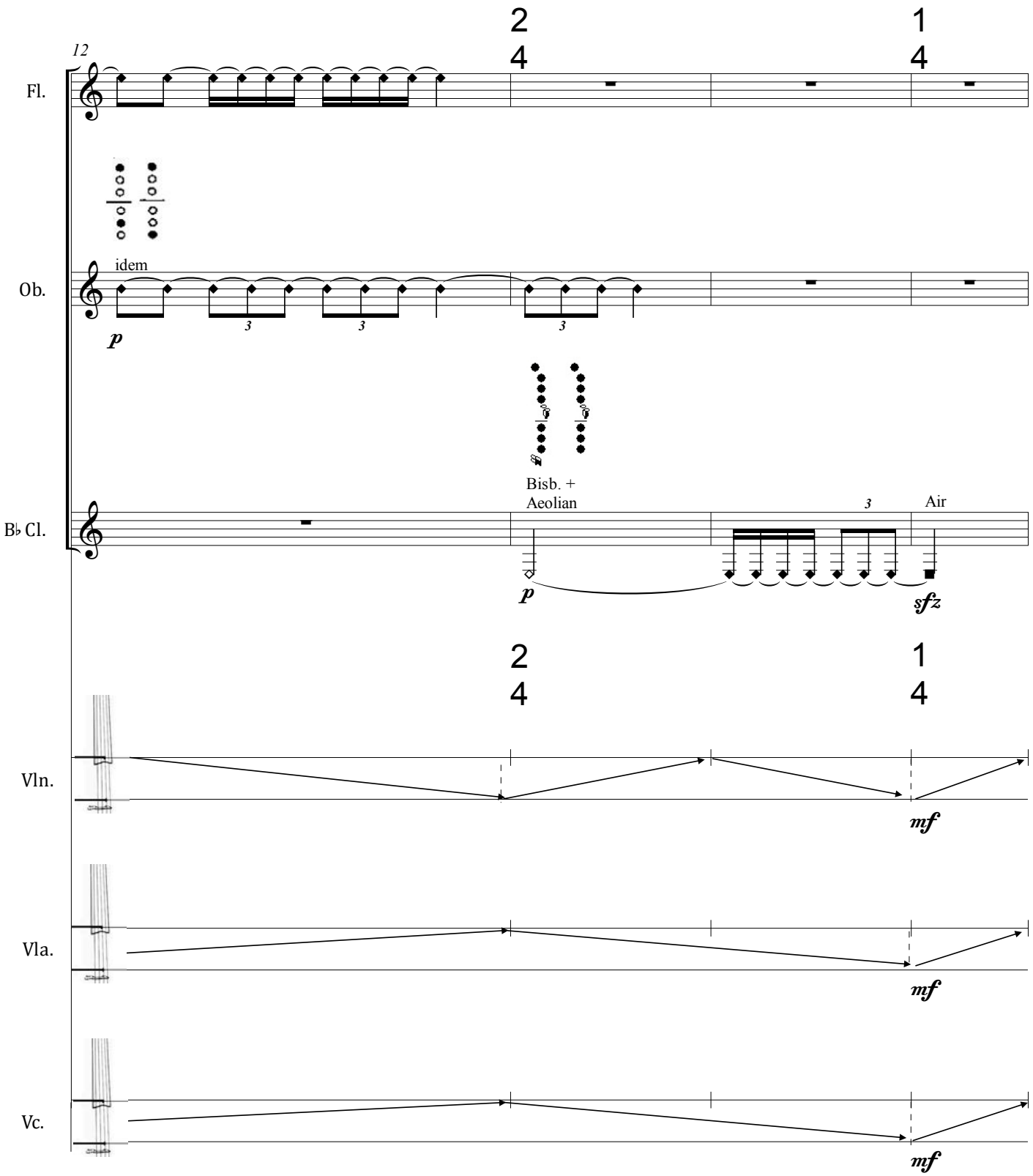
For Riot Ensemble

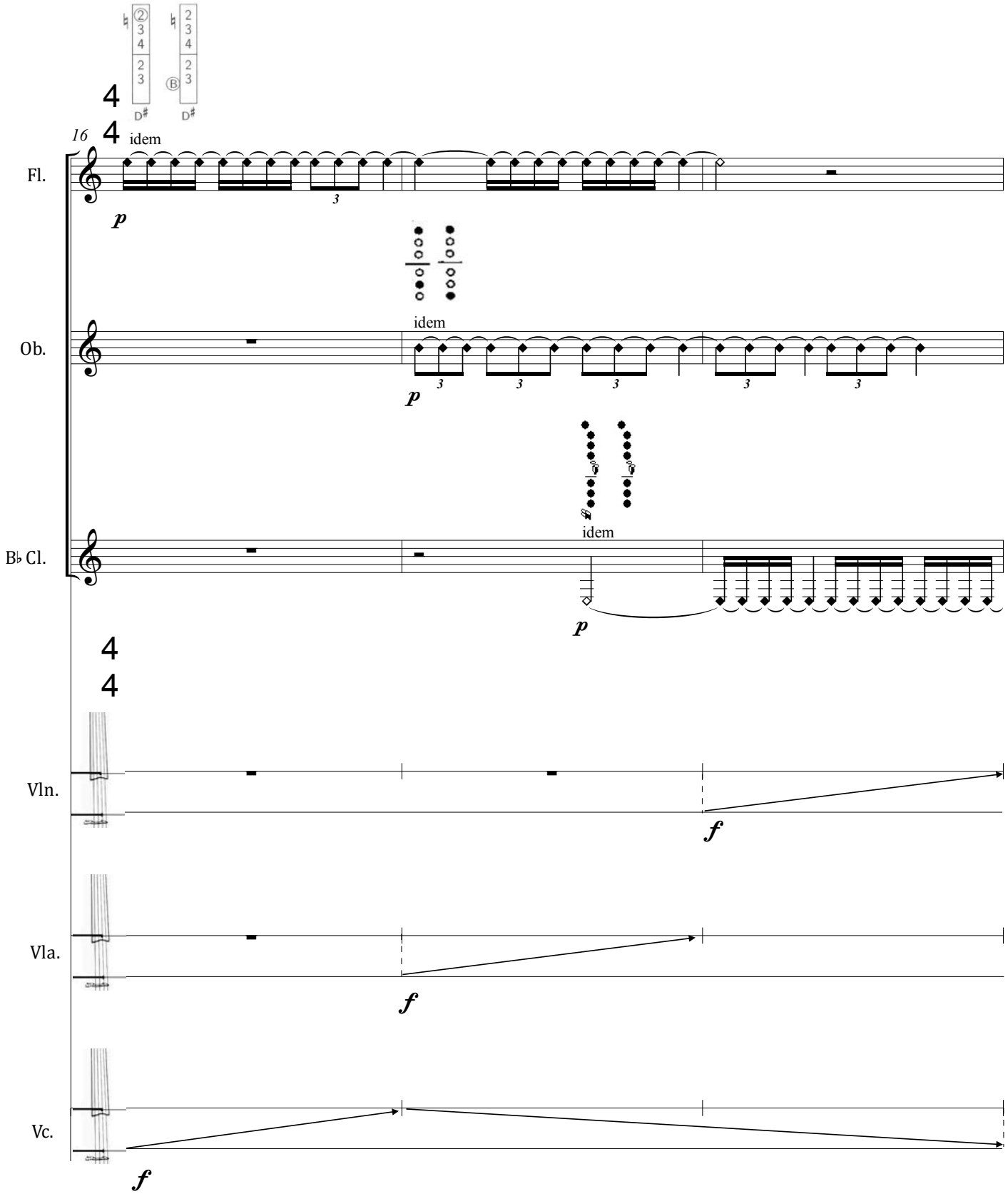
Score in C

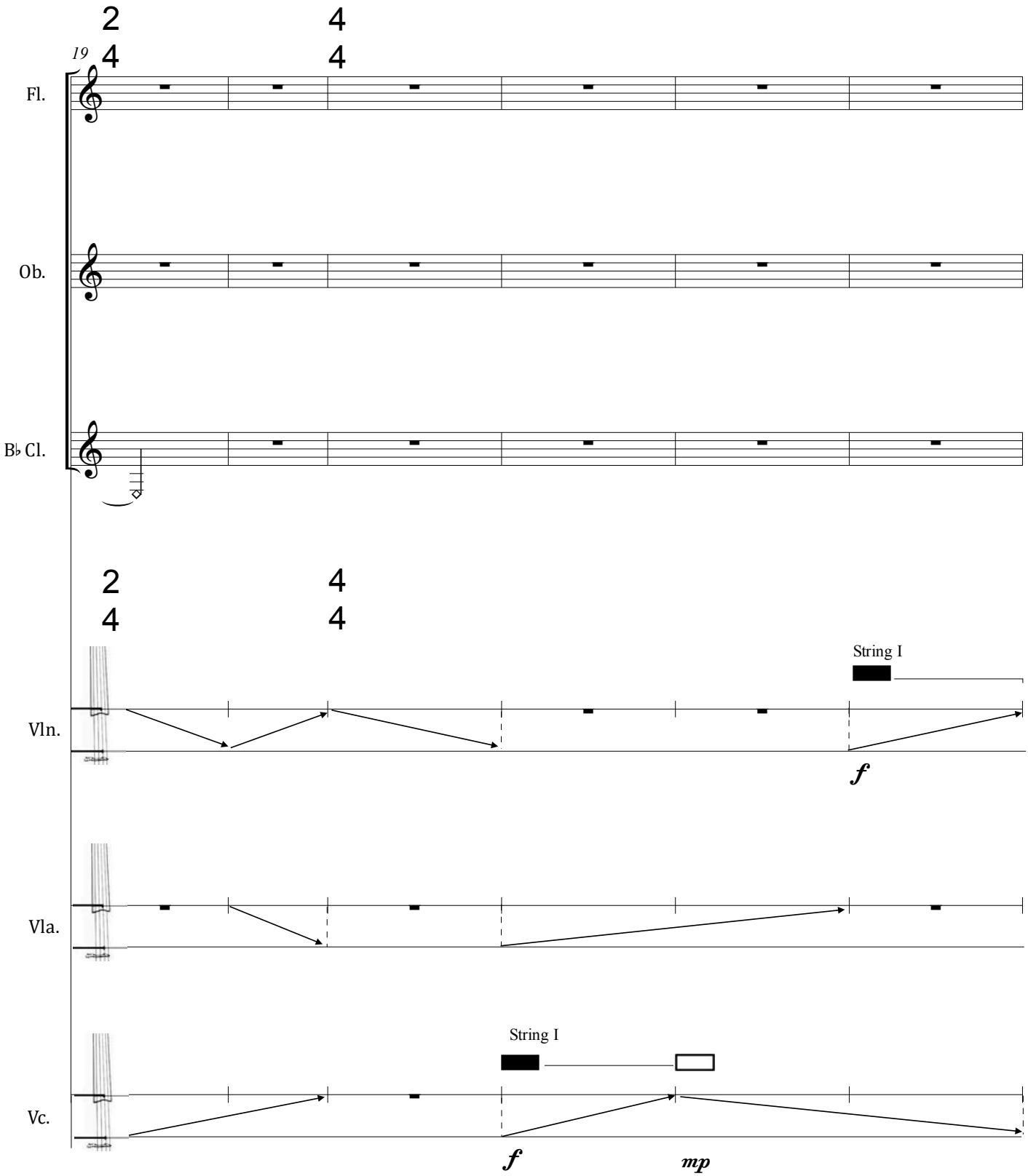
MICHELE ABONDANO
2020

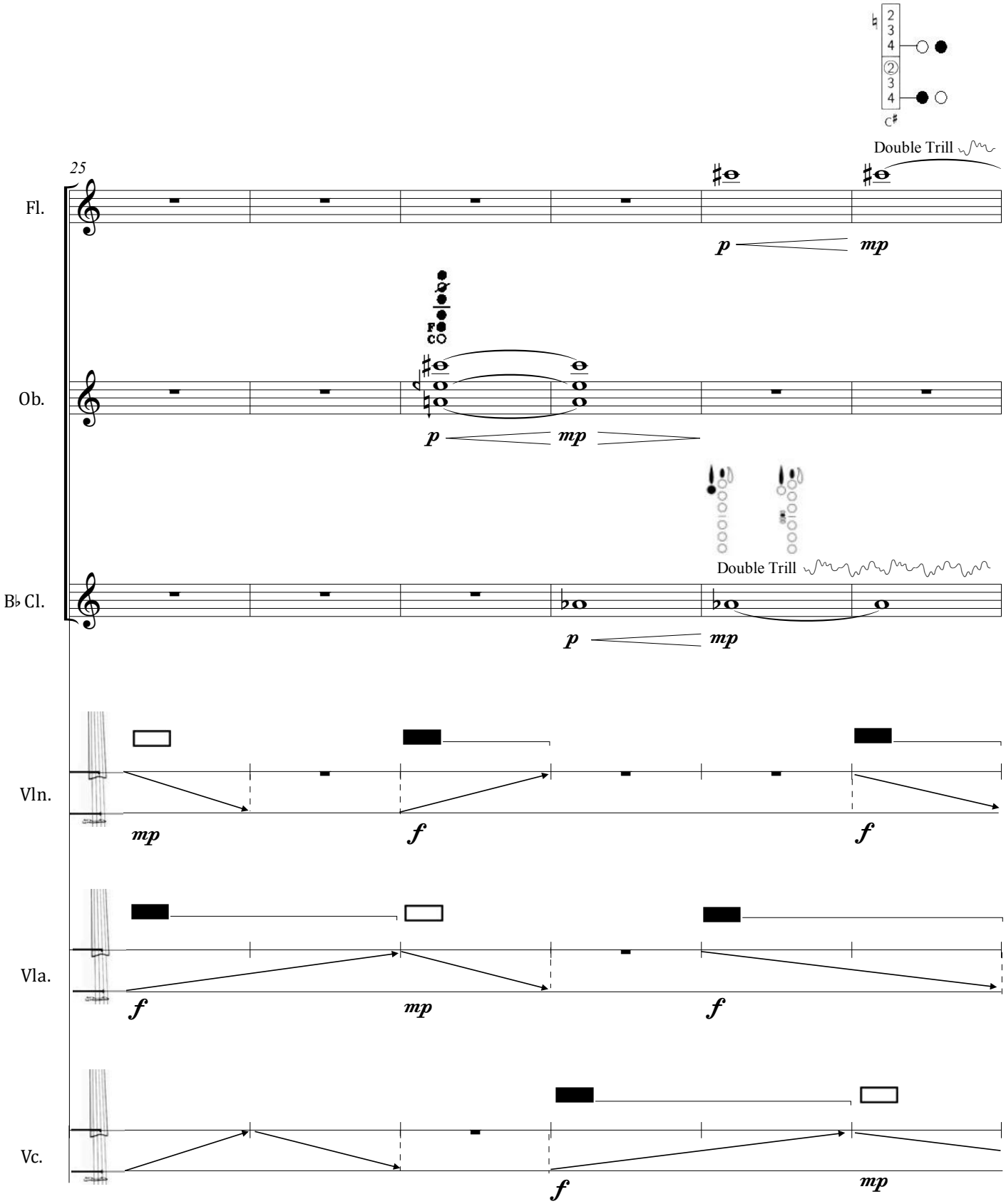


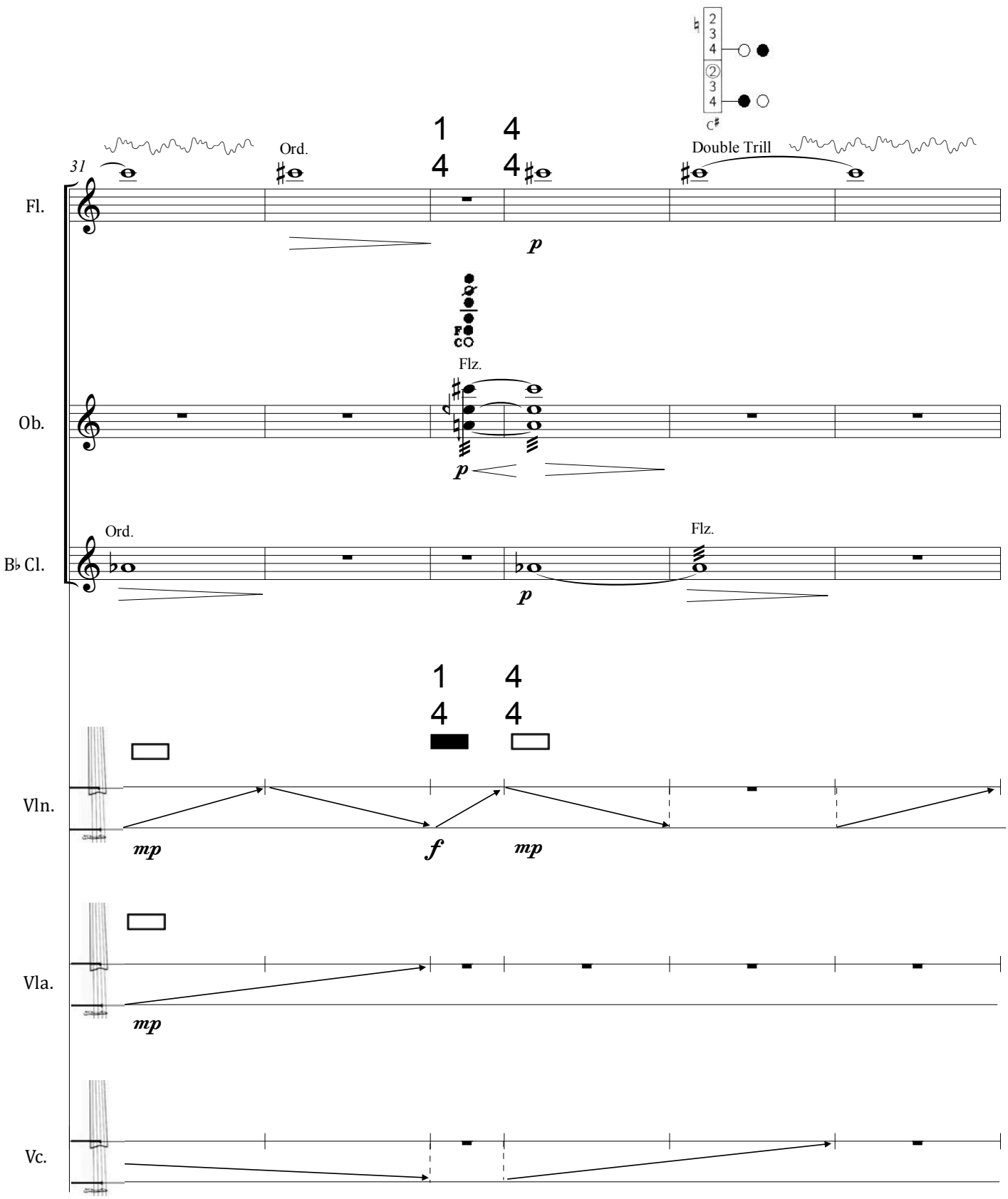

7
Fl.
Air
Bisb. +
Aeolian
p
Ob.
Air
Bisb. +
Aeolian
p
B♭ Cl.
mf
Vln.
mf
mp
Vla.
mf
mp
Vc.
mf
mp


12
Fl.
Ob.
idem
p
Bisb. +
Aeolian
Air
B♭ Cl.
p
sfz
Vln.
mf
Vla.
mf
Vc.
mf

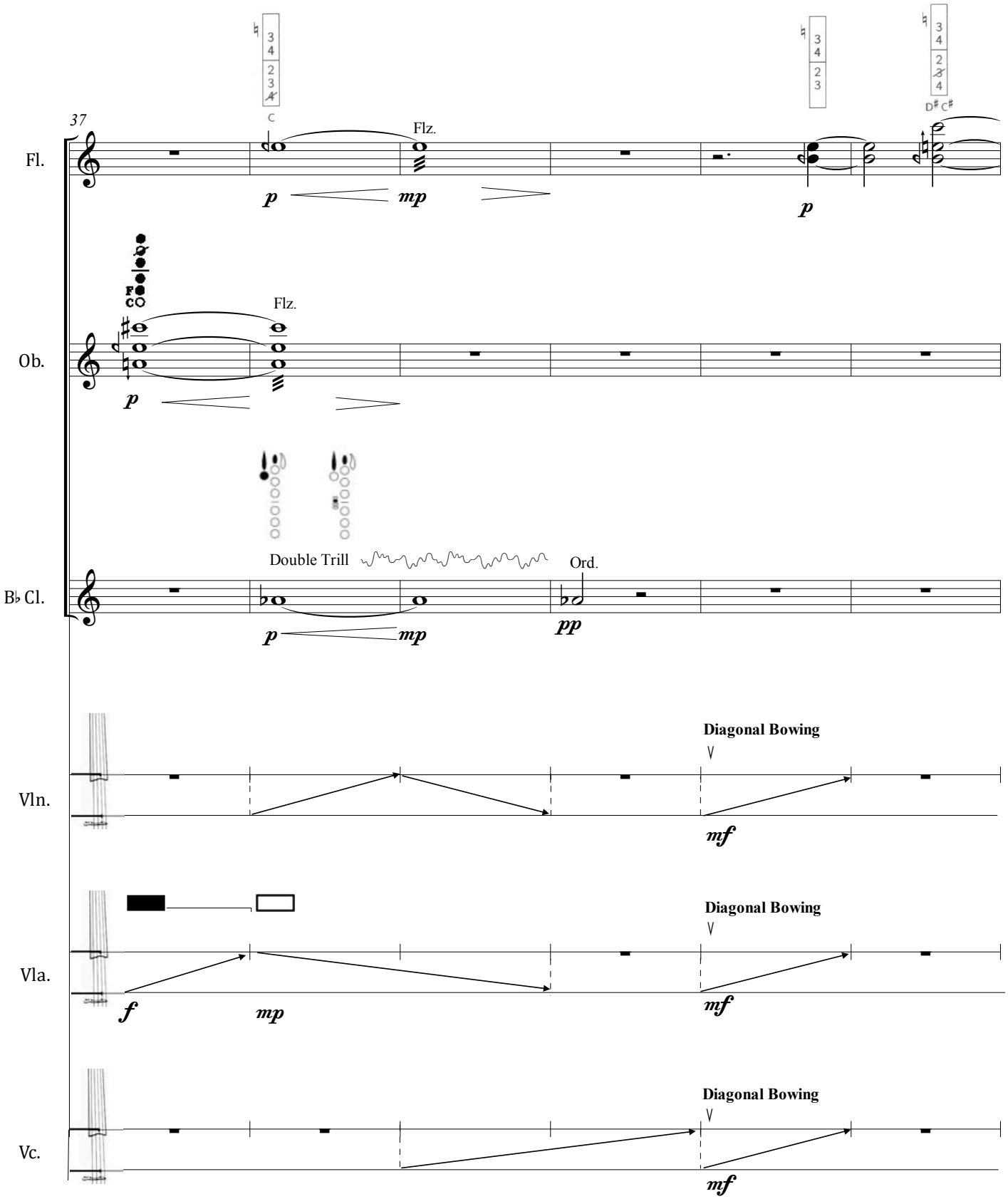

16
idem
Fl.
Ob.
idem
B♭ Cl.
idem
Vln.
Vla.
Vc.

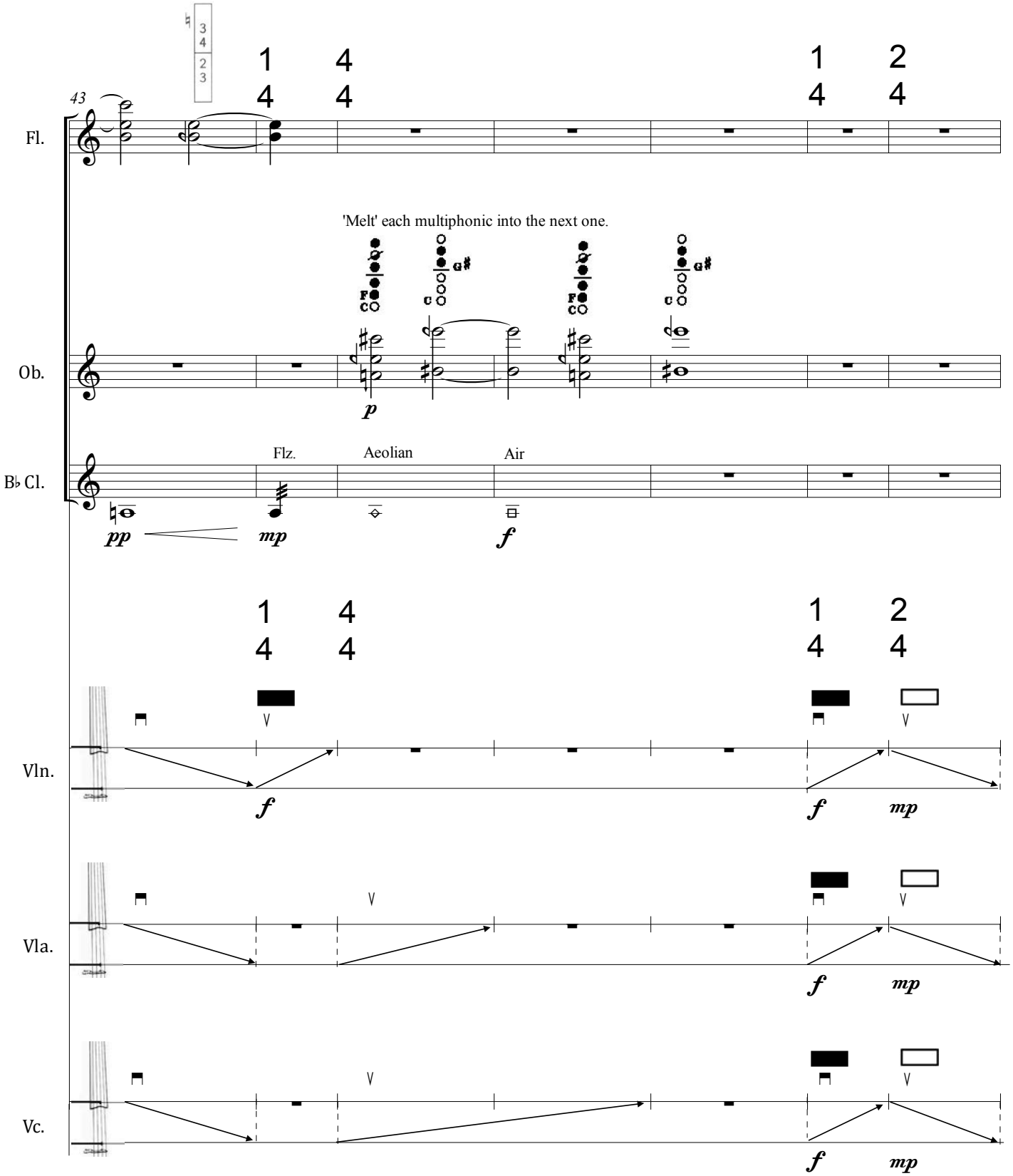

19
Fl.
Ob.
B♭ Cl.
Vln.
String I
f
Vla.
Vc.
String I
f
mp

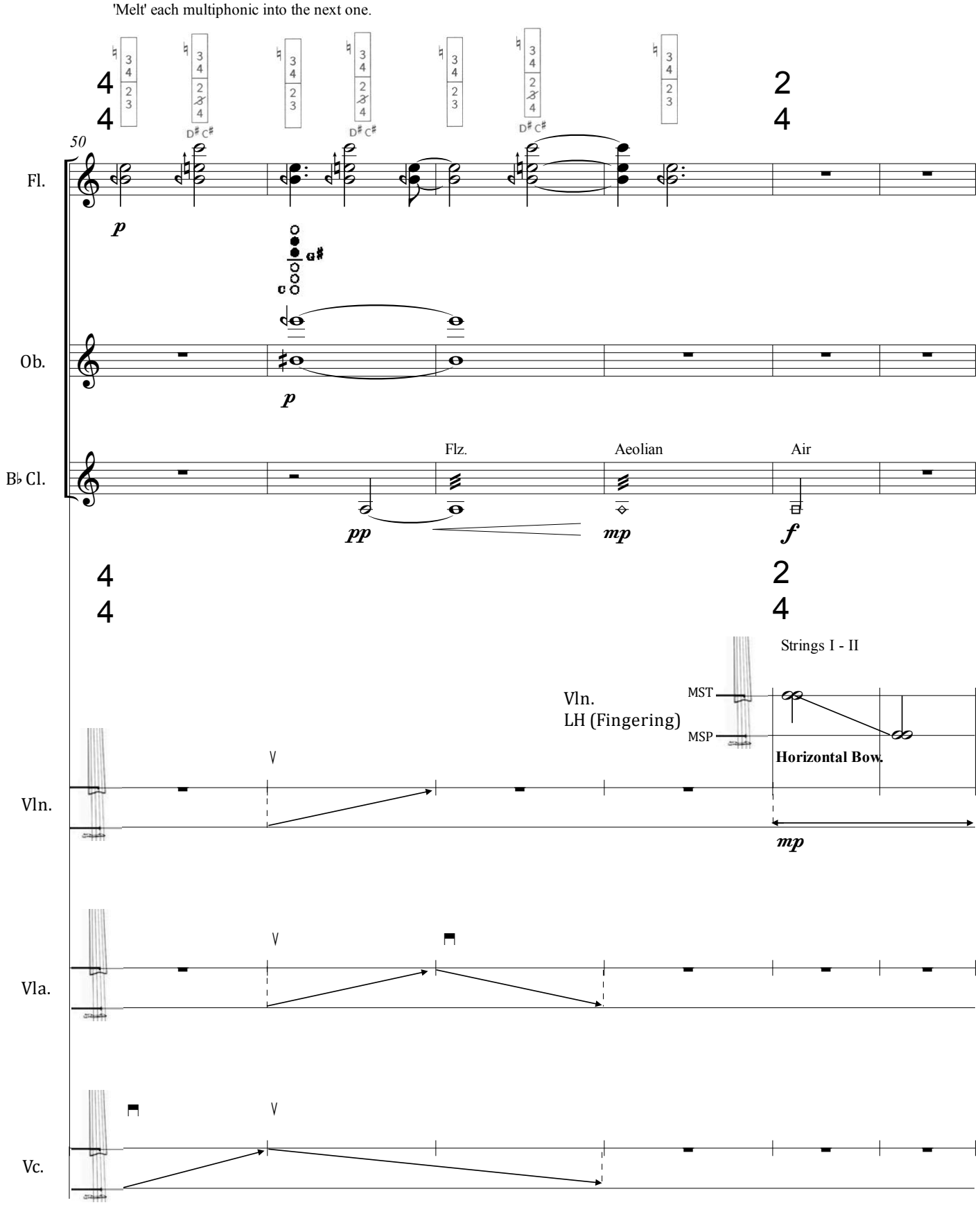

25
Fl.
Ob.
B♭ Cl.
Vln.
Vla.
Vc.
Double Trill
Double Trill
p
mp
f

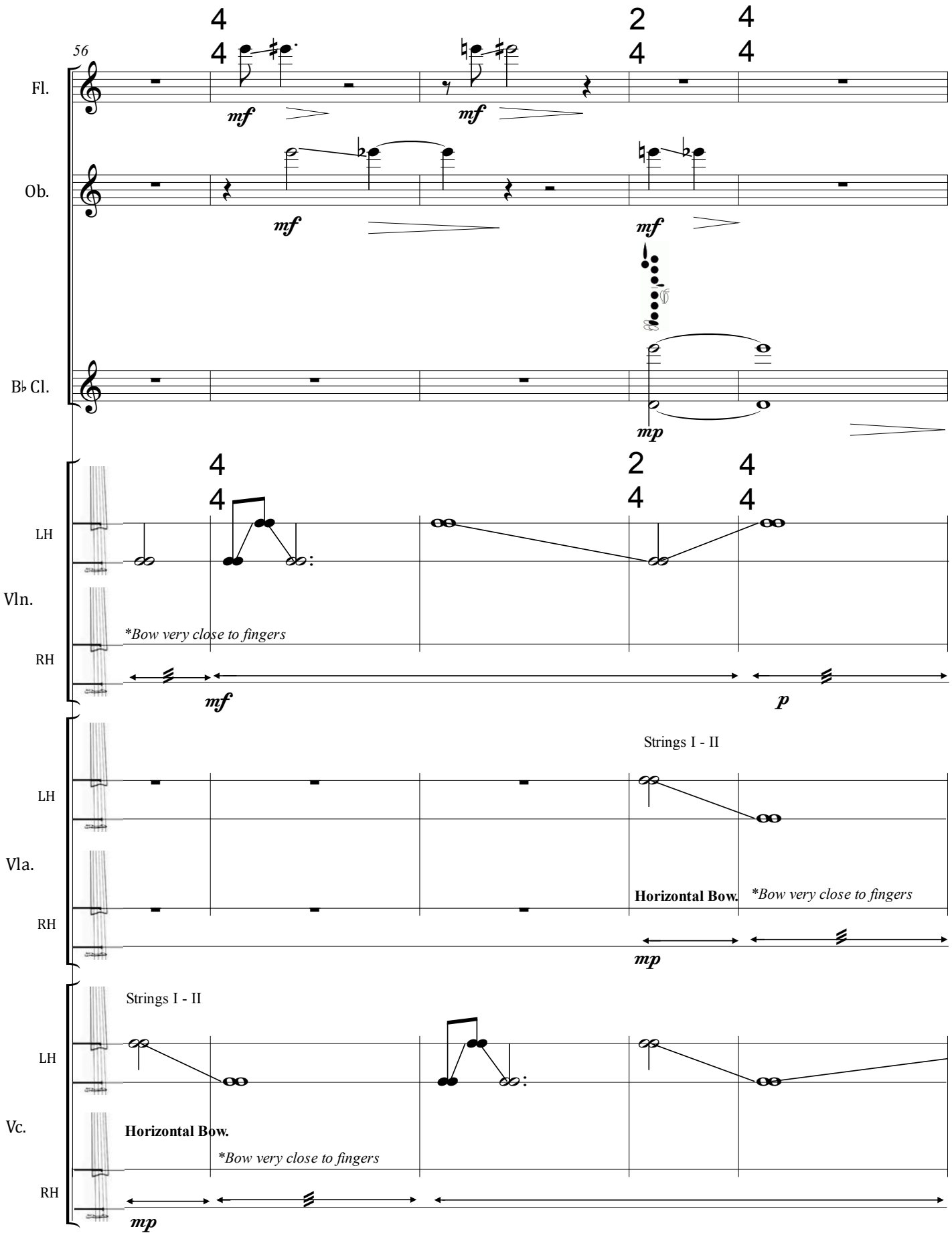

31
Ord.
Double Trill
Fl.
p
Flz.
Ob.
p
Ord.
Flz.
B♭ Cl.
p
Vln.
mp
f
mp
Vla.
mp
Vc.

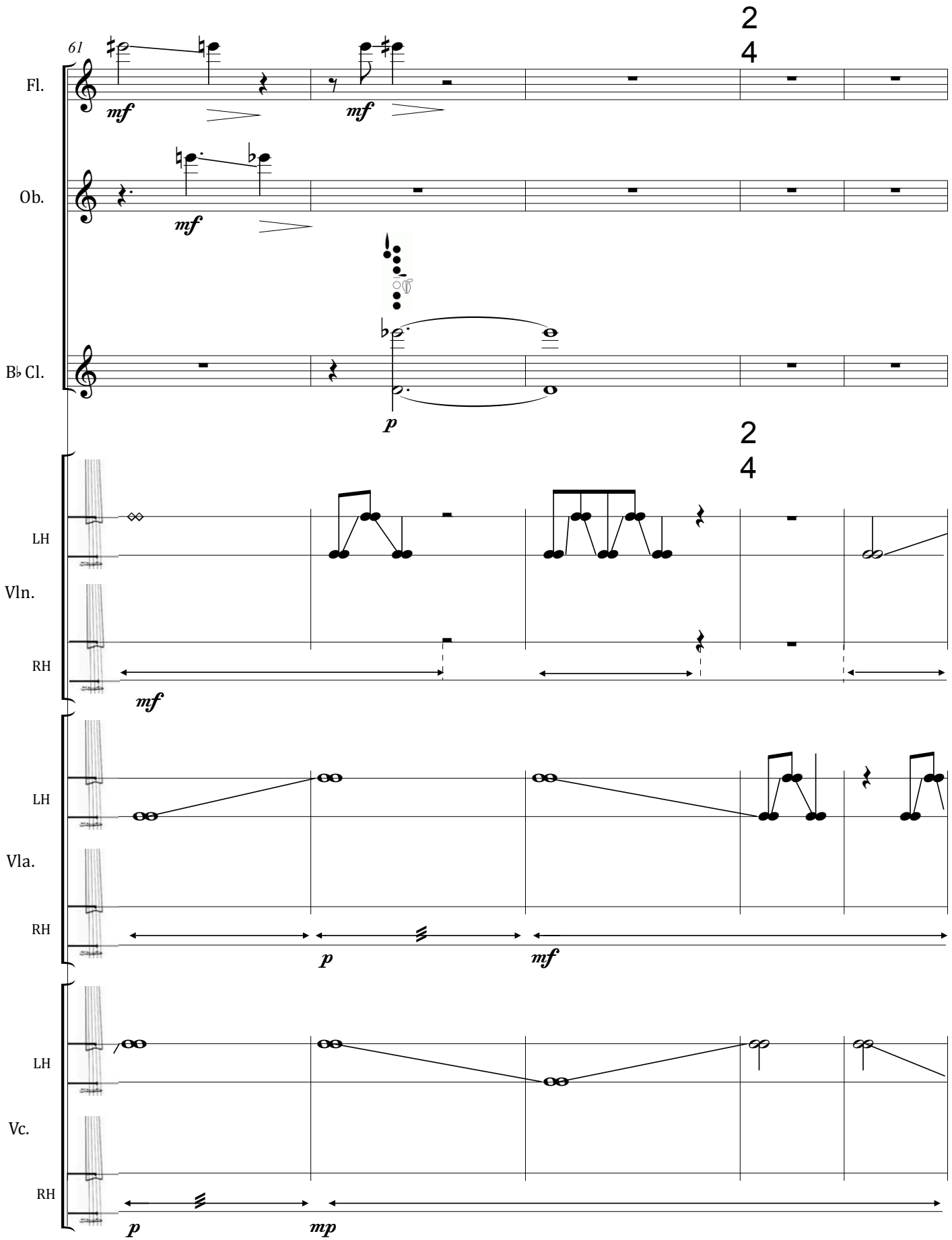
'Melt' each multiphonic into the next one.

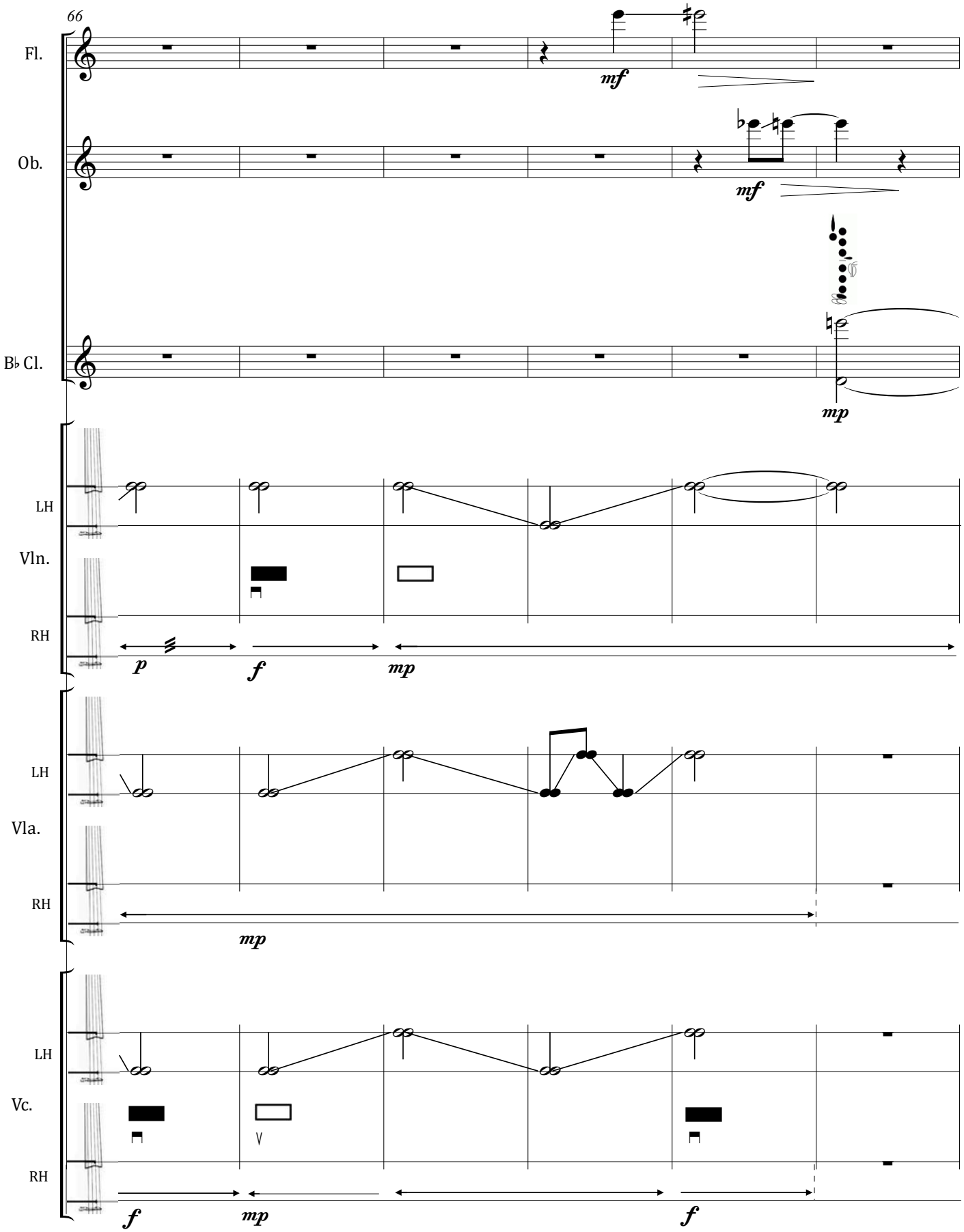


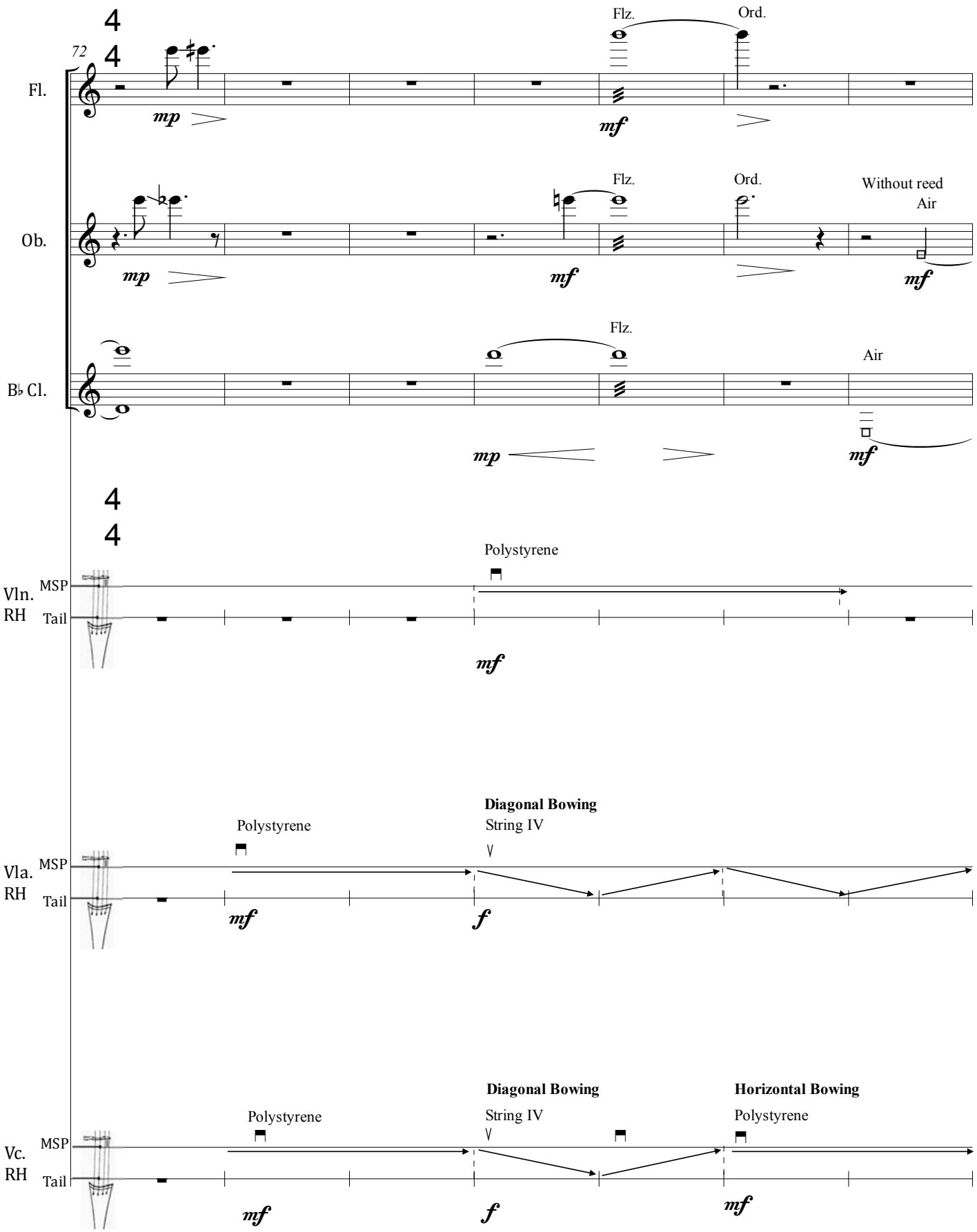

43
Fl.
'Melt' each multiphonic into the next one.
Ob.
p
B♭ Cl.
Flz.
Aeolian
Air
pp
mp
f
Vln.
f
f
mp
Vla.
f
mp
Vc.
f
mp

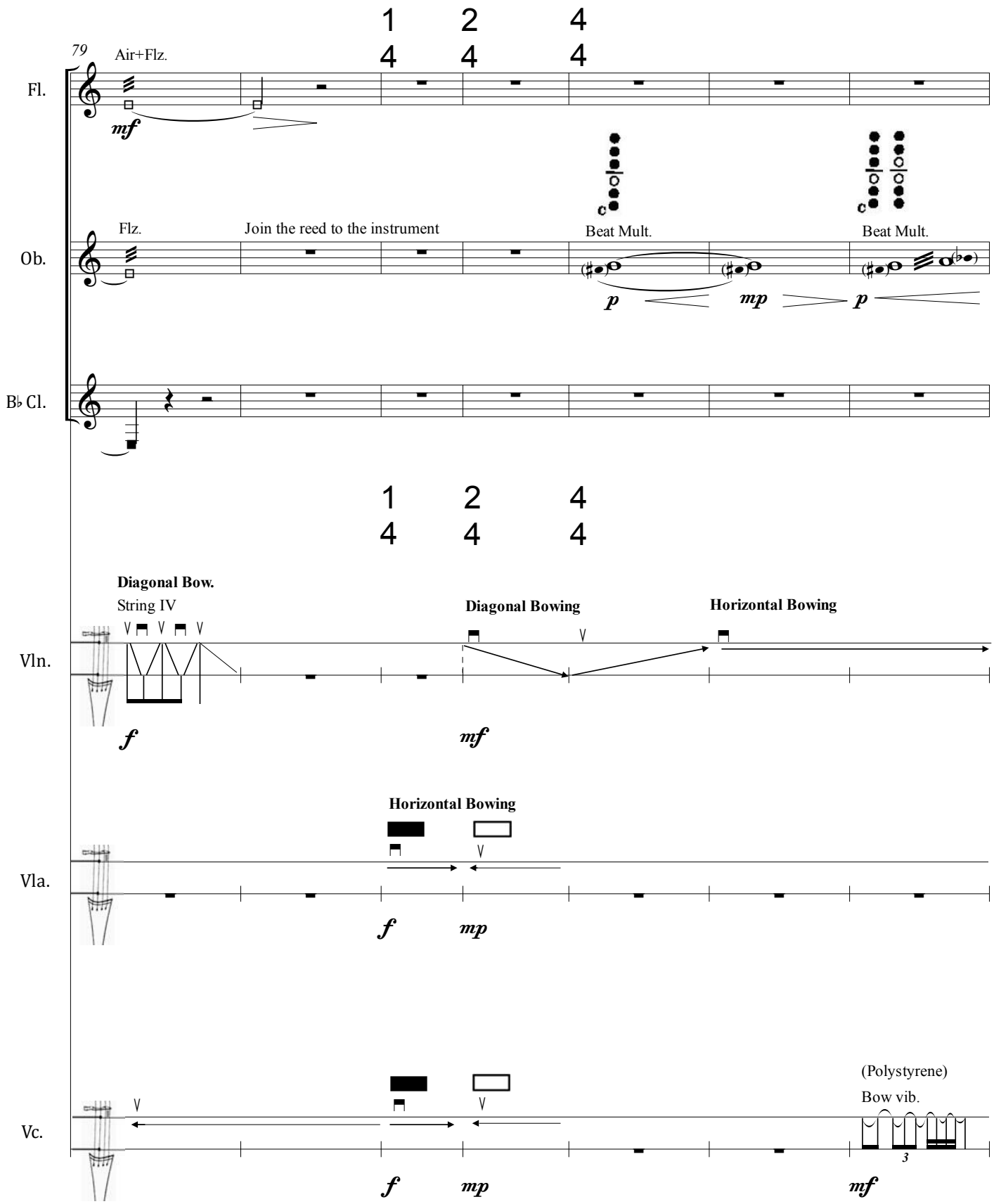

'Melt' each multiphonic into the next one.
50
Fl.
Ob.
B♭ Cl.
Flz.
Aeolian
Air
Vln.
LH (Fingering)
MST
MSP
Strings I - II
Horizontal Bow.
Vla.
Vc.

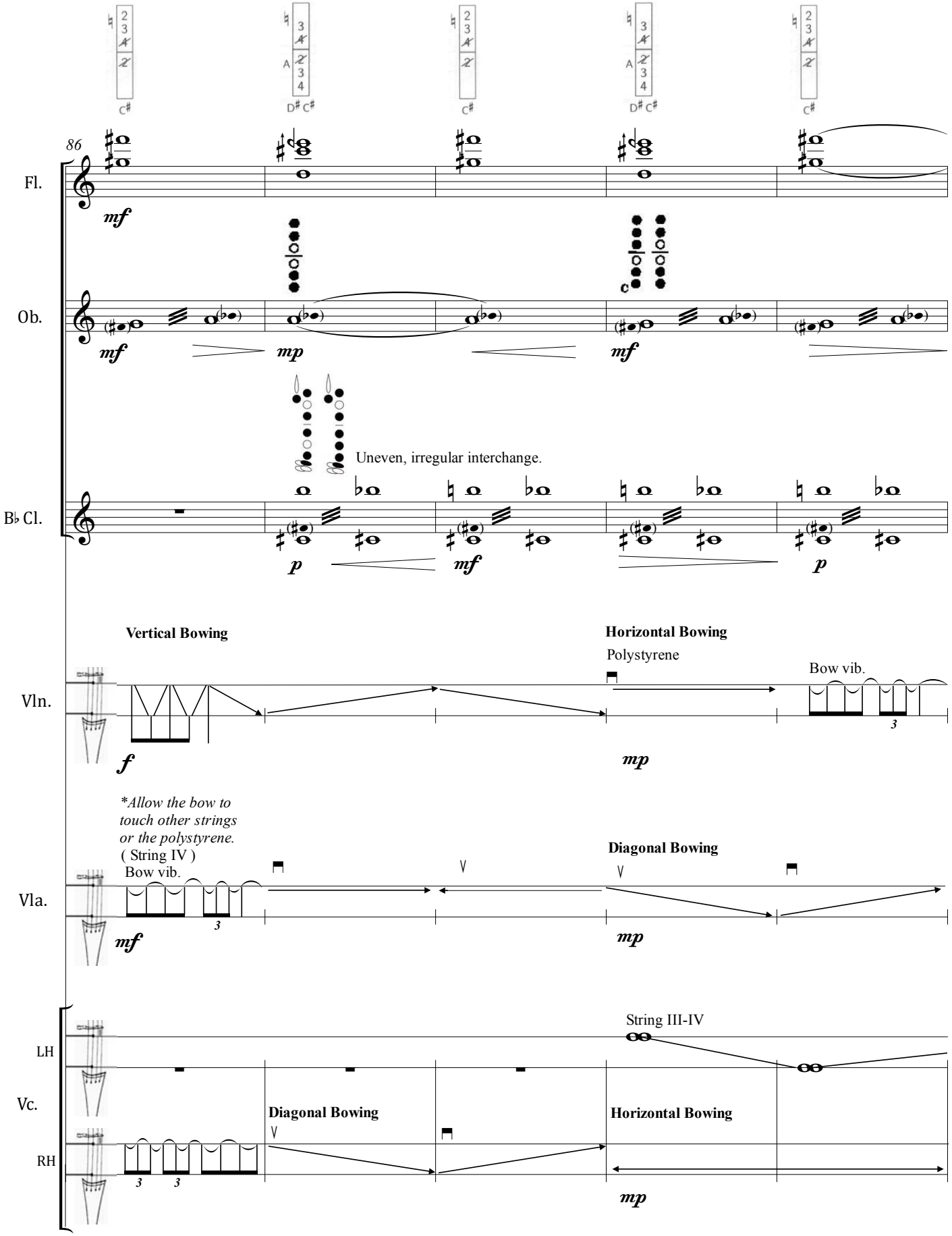

56
Fl.
mf
mf
Ob.
mf
mf
B♭ Cl.
mp
LH
Vln.
RH
*Bow very close to fingers
mf
p
LH
Vla.
RH
Strings I - II
Horizontal Bow.
*Bow very close to fingers
mp
LH
Vc.
RH
Strings I - II
Horizontal Bow.
*Bow very close to fingers
mp

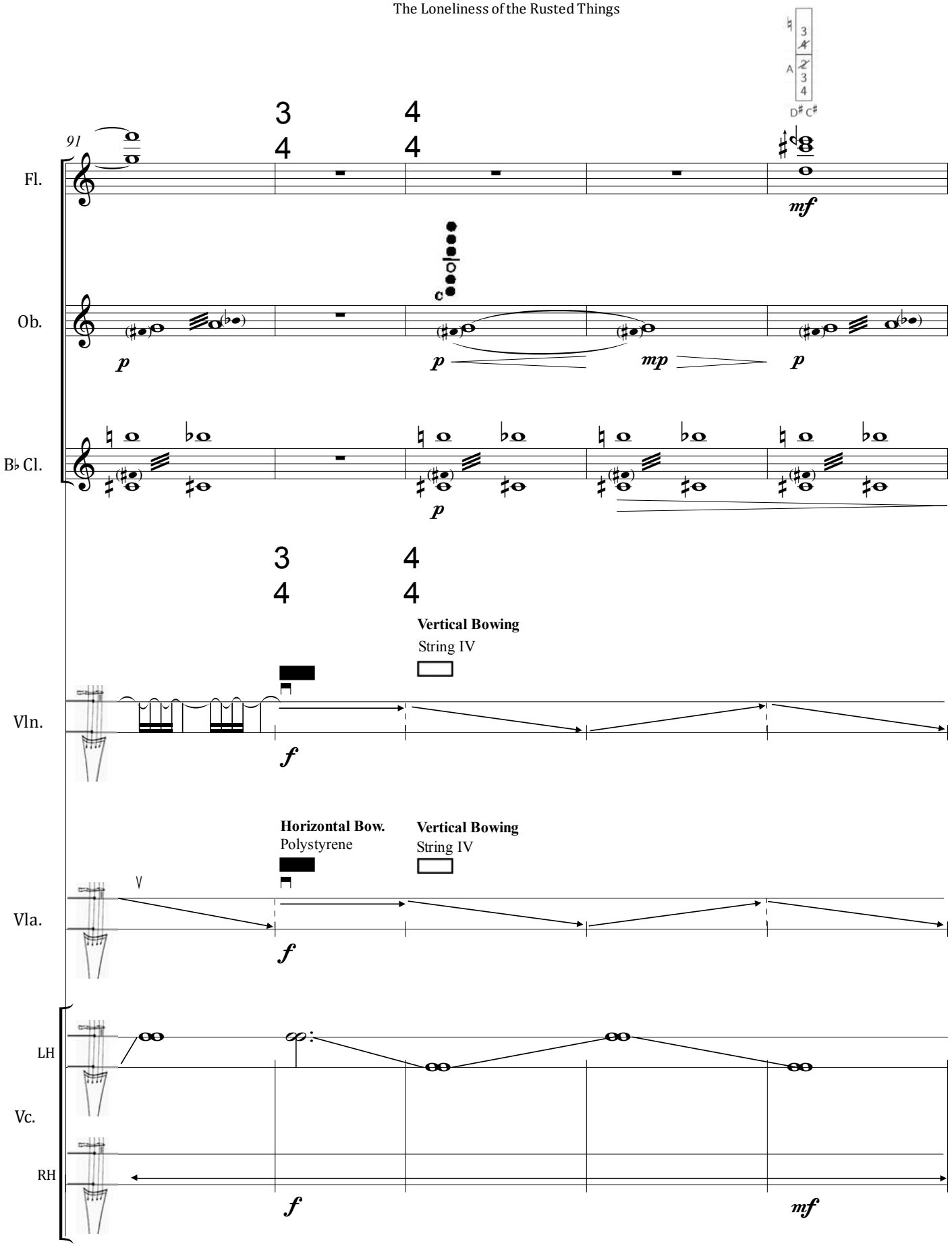

61
Fl.
mf
mf
2
4
Ob.
mf
B♭ Cl.
p
2
4
LH
Vln.
RH
mf
LH
Vla.
RH
p
mf
LH
Vc.
RH
p
mp

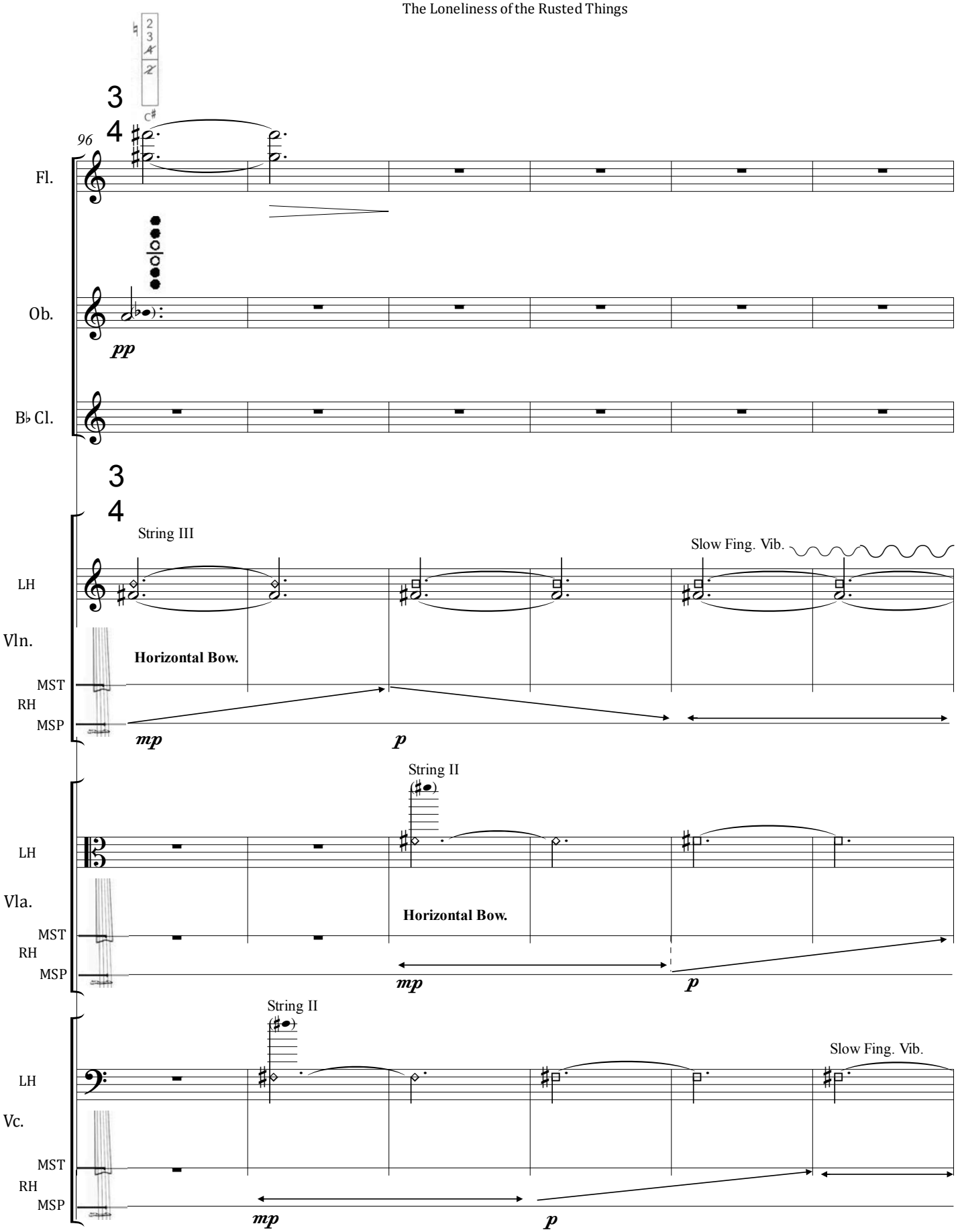

66
Fl.
mf
Ob.
mf
B♭ Cl.
mp
LH
Vln.
RH
p
f
mp
LH
Vla.
RH
mp
LH
Vc.
RH
f
mp
f

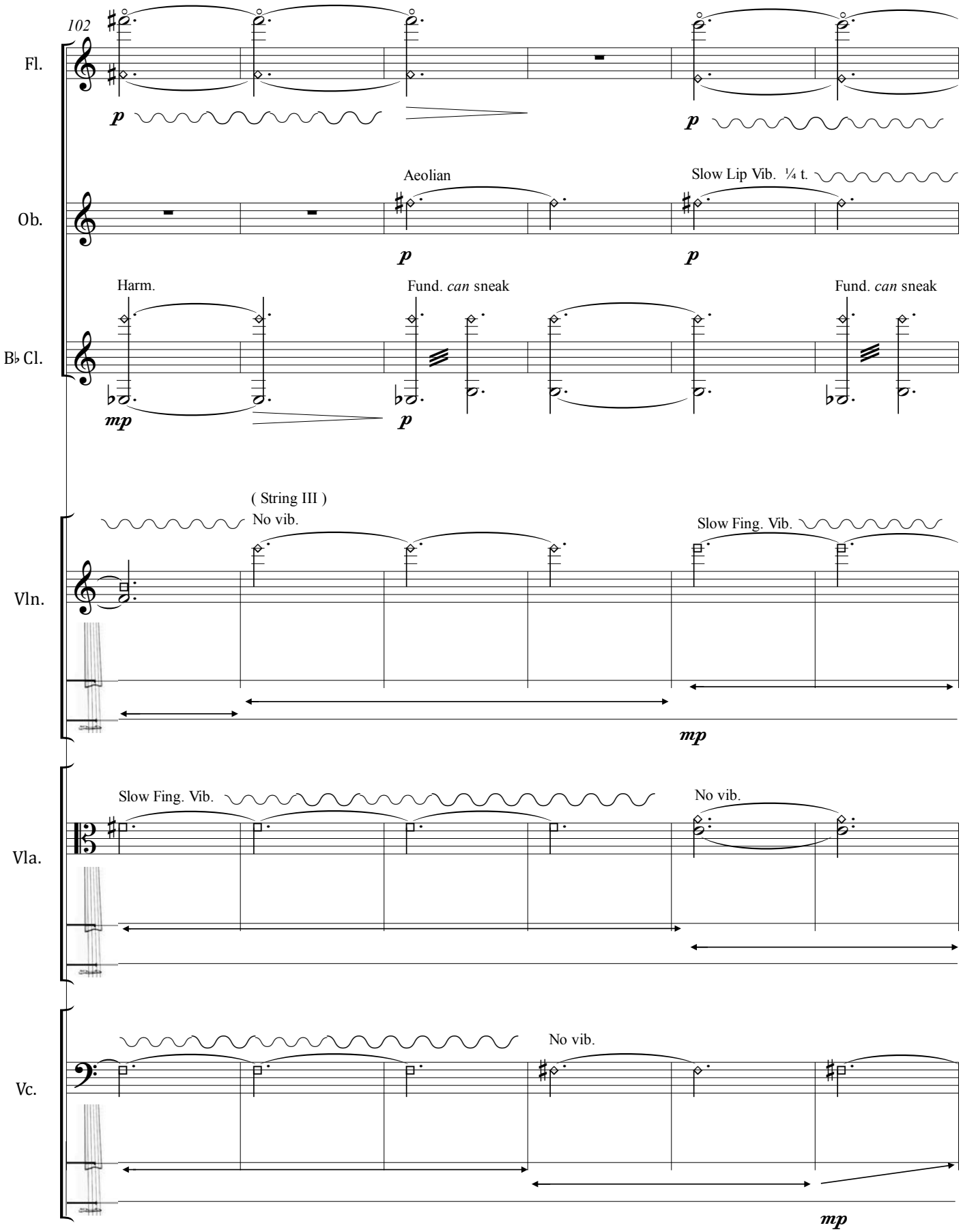

72
Fl.
Ob.
B♭ Cl.
Vln.
RH
Vla.
RH
Vc.
RH
MSP
Tail
Flz.
Ord.
Without reed
Air
Polystyrene
Diagonal Bowing
String IV
Horizontal Bowing
mp
mf
f

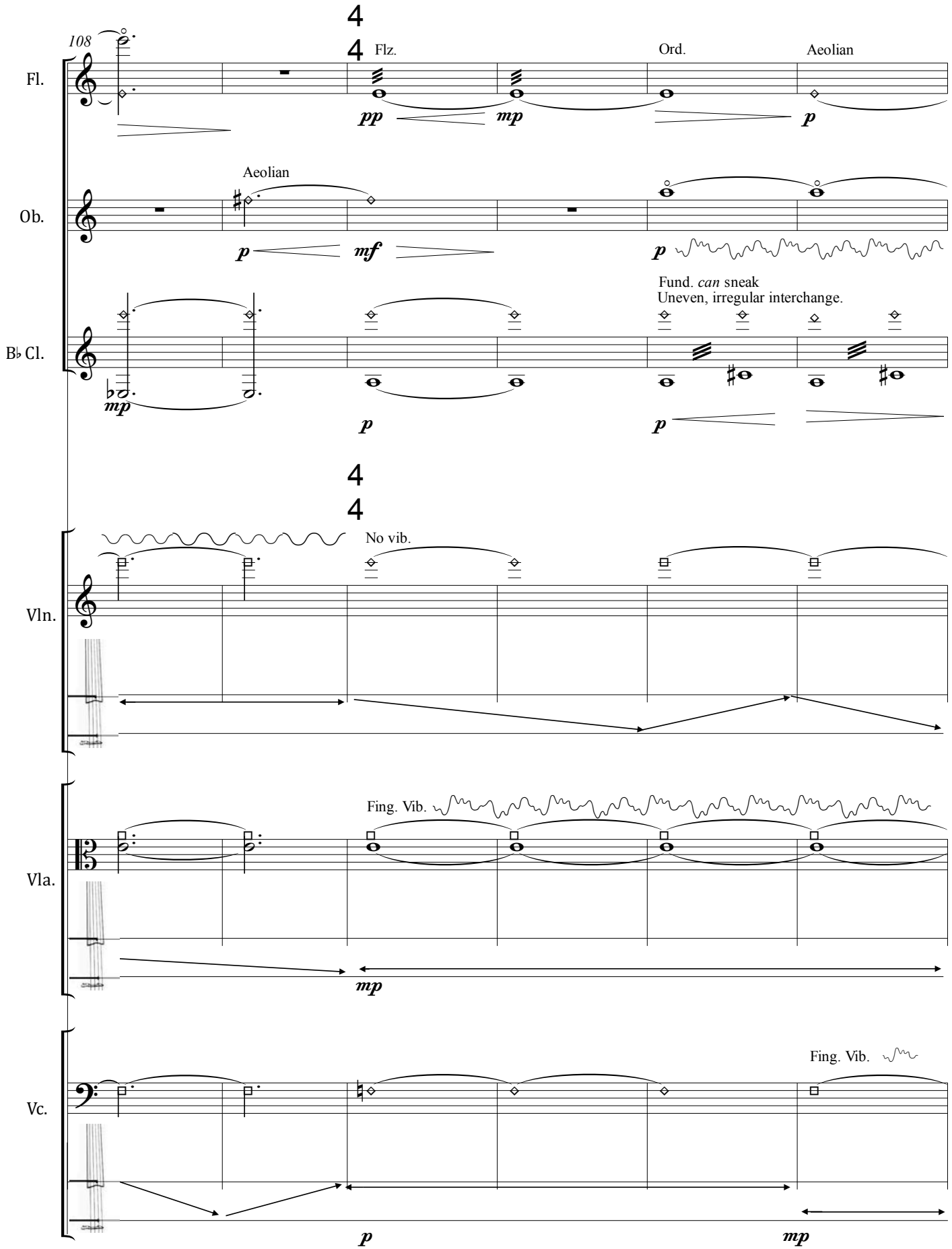

79
Air+Flz.
Fl.
mf
Flz.
Join the reed to the instrument
Beat Mult.
Beat Mult.
Ob.
p
mp
p
B♭ Cl.
Diagonal Bow.
String IV
Diagonal Bowing
Horizontal Bowing
Vln.
f
mf
Horizontal Bowing
Vla.
f
mp
(Polystyrene)
Bow vib.
Vc.
f
mp
mf

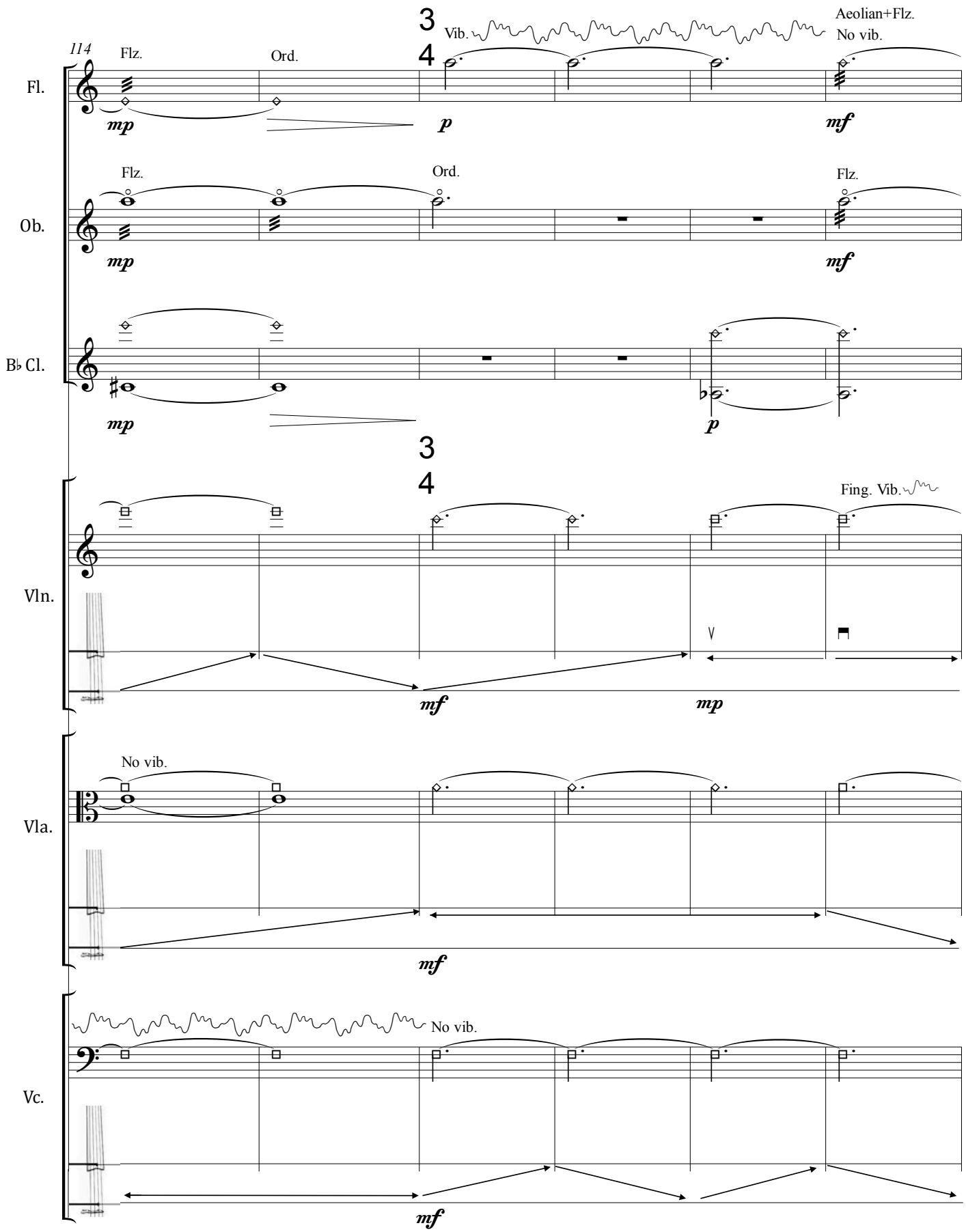

86
Fl.
mf
Ob.
mf
mp
mf
Uneven, irregular interchange.
B♭ Cl.
p
mf
p
Vertical Bowing
Horizontal Bowing
Polystyrene
Bow vib.
Vln.
f
mp
*Allow the bow to touch other strings or the polystyrene.
(String IV)
Bow vib.
Diagonal Bowing
Vla.
mf
mp
String III-IV
LH
Vc.
Diagonal Bowing
Horizontal Bowing
RH
mp

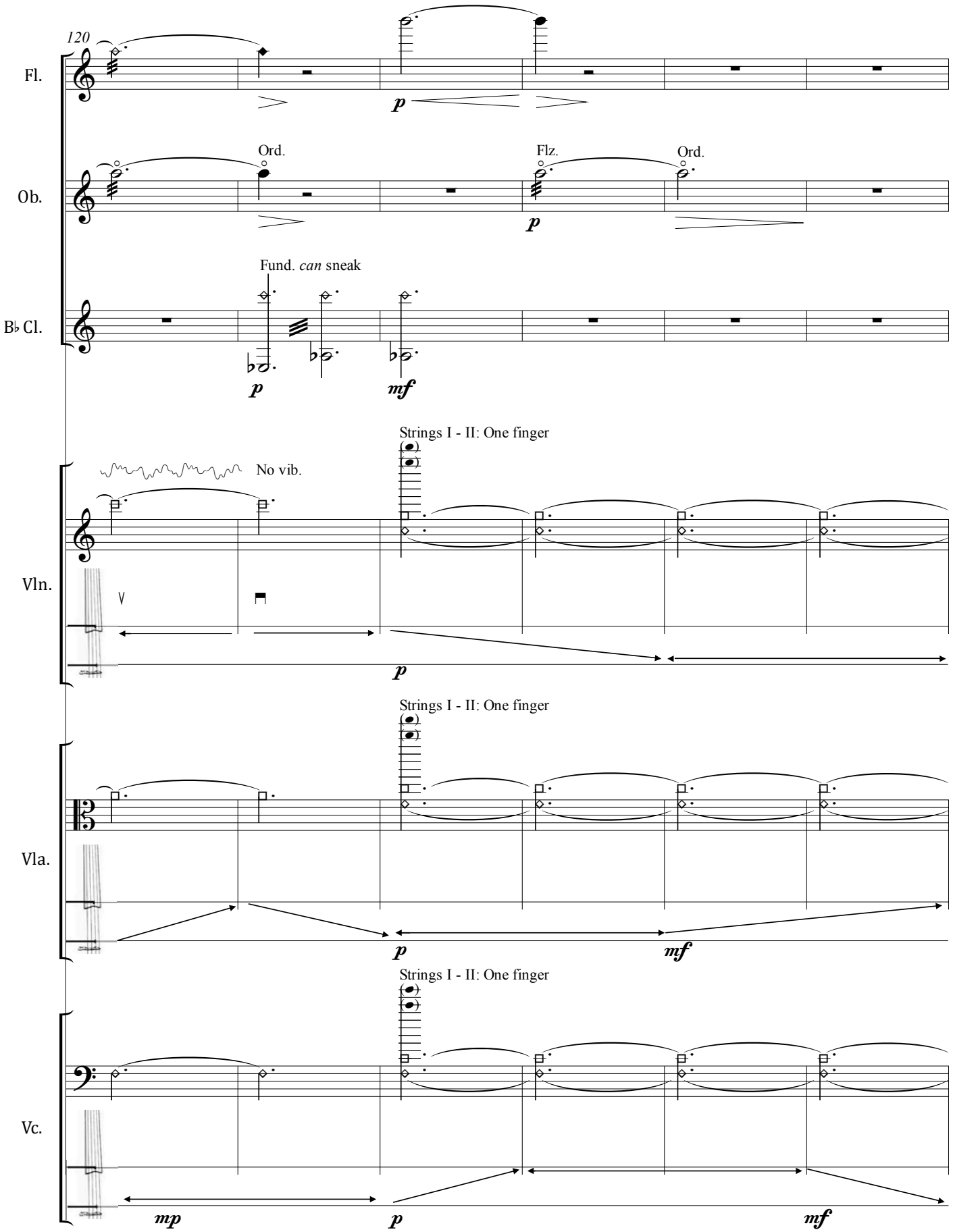

91
Fl.
Ob.
B♭ Cl.
Vln.
Vla.
LH
Vc.
RH
3/4 4/4
mf
p
mp
Vertical Bowing
String IV
f
Horizontal Bow.
Polystyrene

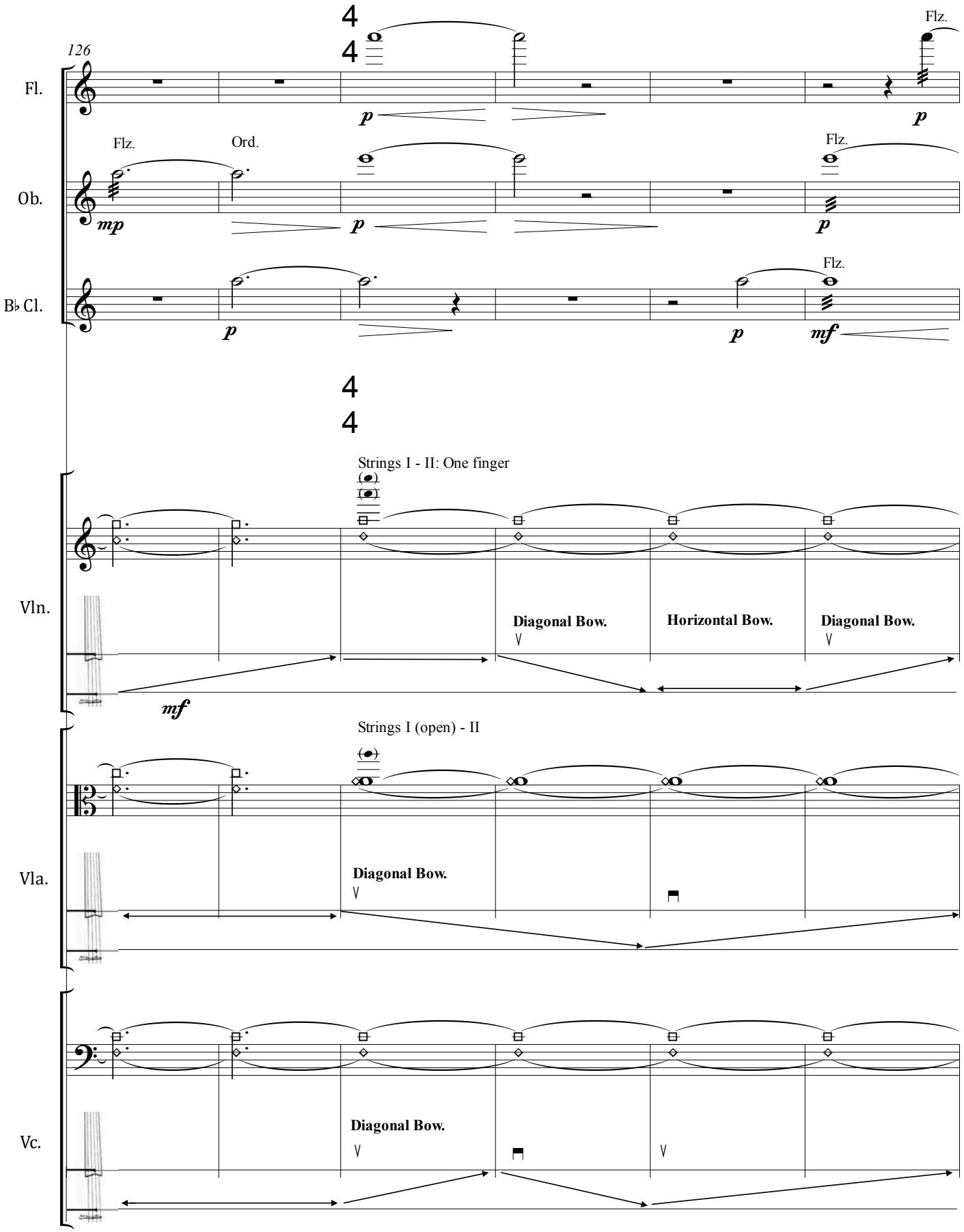

96
Fl.
Ob.
pp
B♭ Cl.
String III
Slow Fing. Vib.
LH
Vln.
Horizontal Bow.
MST
RH
MSP
mp
p
String II
LH
Vla.
Horizontal Bow.
MST
RH
MSP
mp
p
String II
Slow Fing. Vib.
LH
Vc.
MST
RH
MSP
mp
p

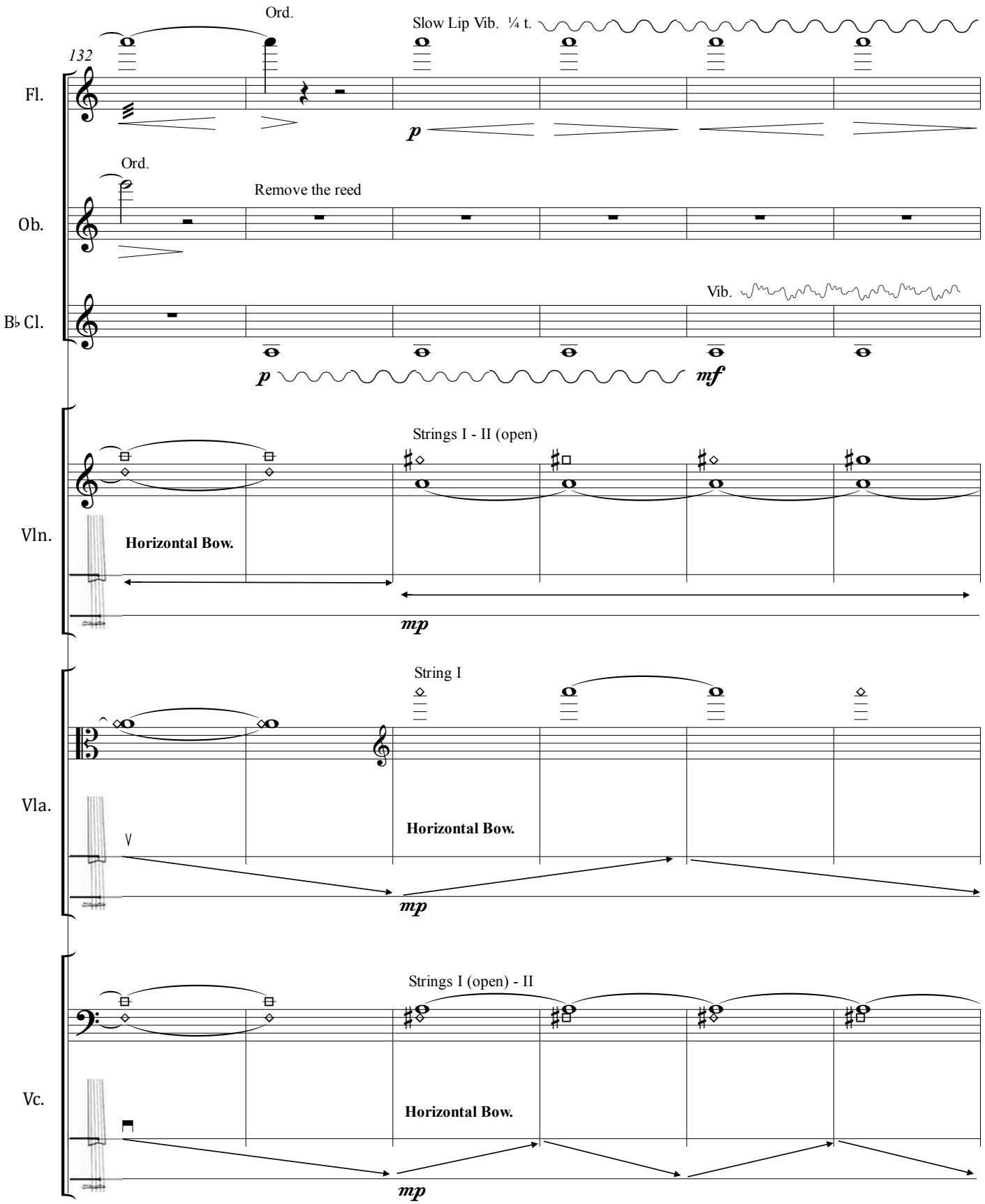

102
Fl.
p
p
Ob.
Aeolian
Slow Lip Vib. ¼ t.
p
p
B♭ Cl.
Harm.
Fund. *can* sneak
Fund. *can* sneak
mp
p
Vln.
(String III)
No vib.
Slow Fing. Vib.
mp
Vla.
Slow Fing. Vib.
No vib.
Vc.
No vib.
mp

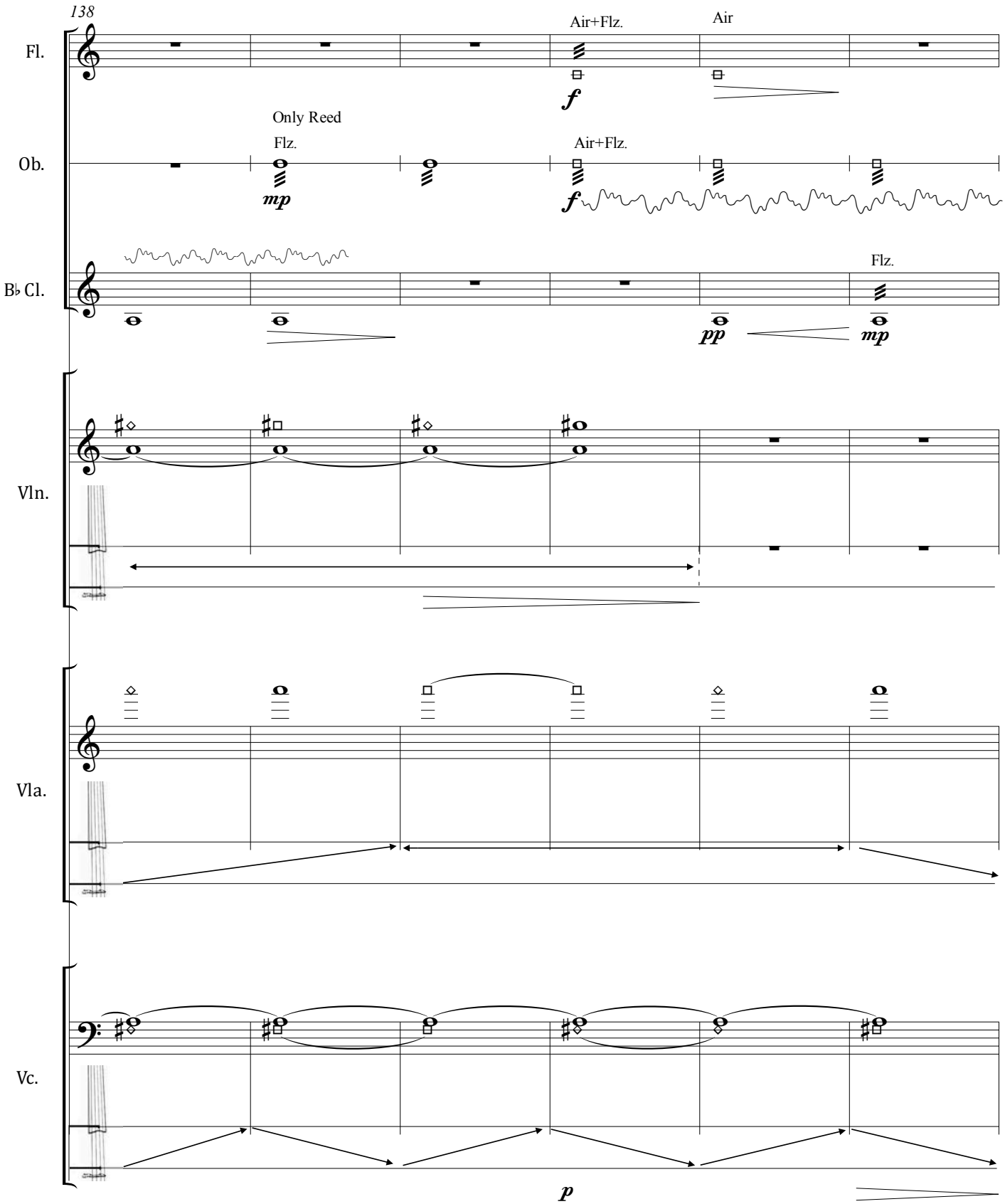

108
Fl.
Flz.
Ord.
Aeolian
pp
mp
p
Ob.
Aeolian
p
mf
p
B♭ Cl.
Fund. *can* sneak
Uneven, irregular interchange.
mp
p
p
Vln.
No vib.
Vla.
Fing. Vib.
mp
Vc.
Fing. Vib.
p
mp

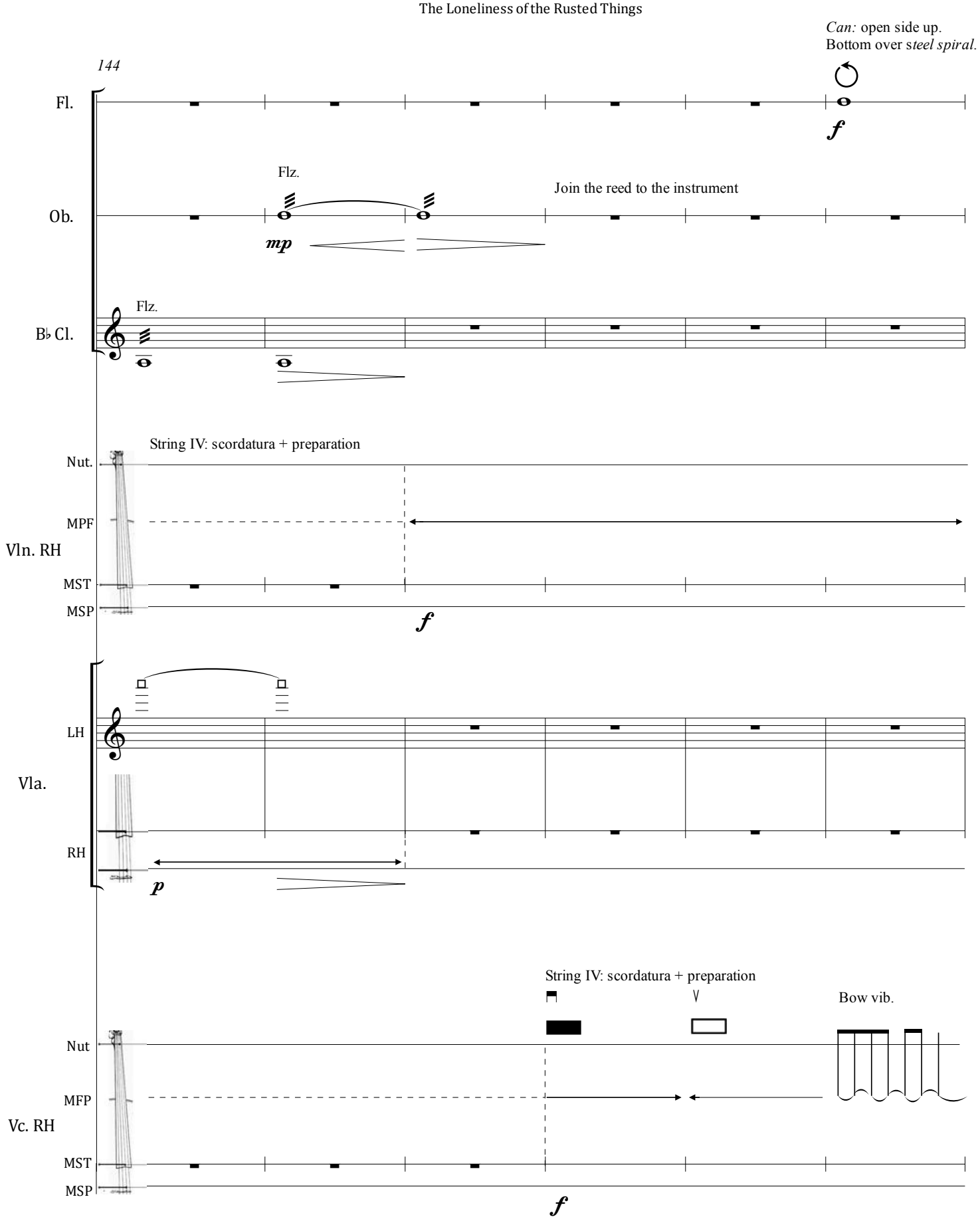

114
Fl.
Flz.
Ord.
Vib.
Aeolian+Flz.
No vib.
mp
p
mf
Ob.
Flz.
Ord.
Flz.
mp
mf
B♭ Cl.
mp
p
Vln.
Fing. Vib.
mf
mp
Vla.
No vib.
mf
Vc.
No vib.
mf

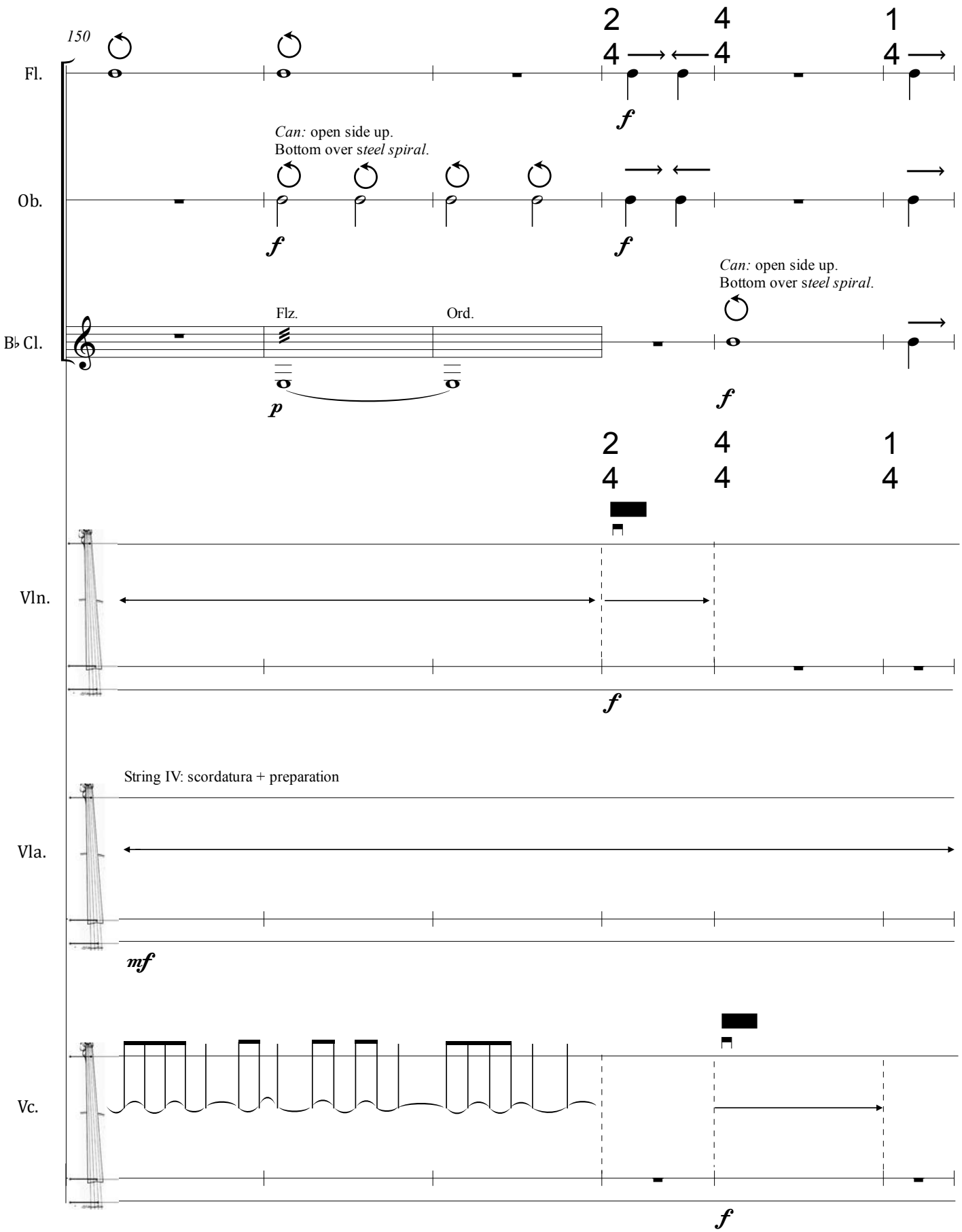

120
Fl.
p
Ord.
Flz.
Ord.
Ob.
p
Fund. can sneak
B♭ Cl.
p
mf
Strings I - II: One finger
No vib.
Vln.
p
Strings I - II: One finger
Vla.
p
mf
Strings I - II: One finger
Vc.
mp
p
mf

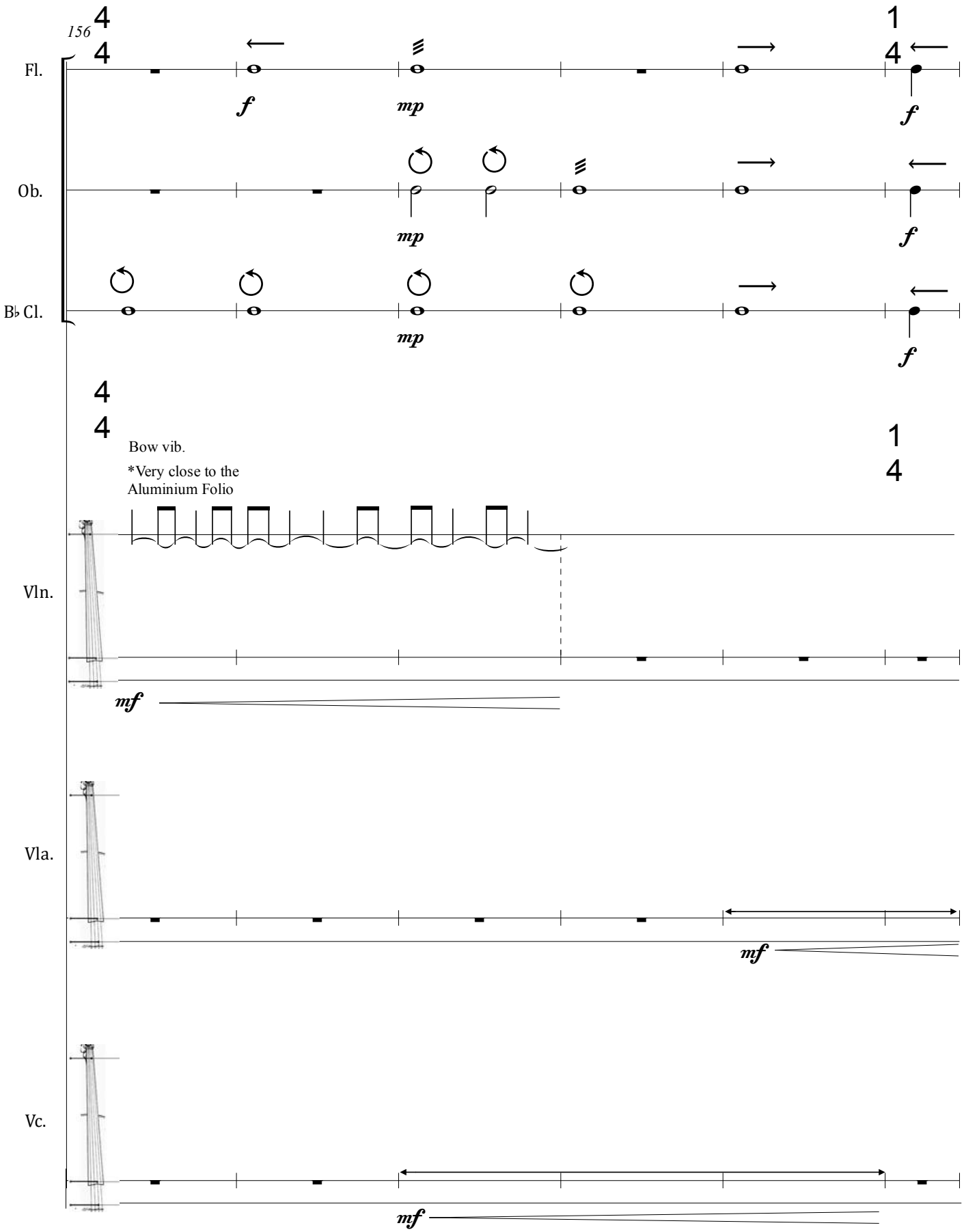

126
Fl.
Ob.
B♭ Cl.
Vln.
Vla.
Vc.
Flz.
Ord.
Strings I - II: One finger
Diagonal Bow.
Horizontal Bow.
Strings I (open) - II

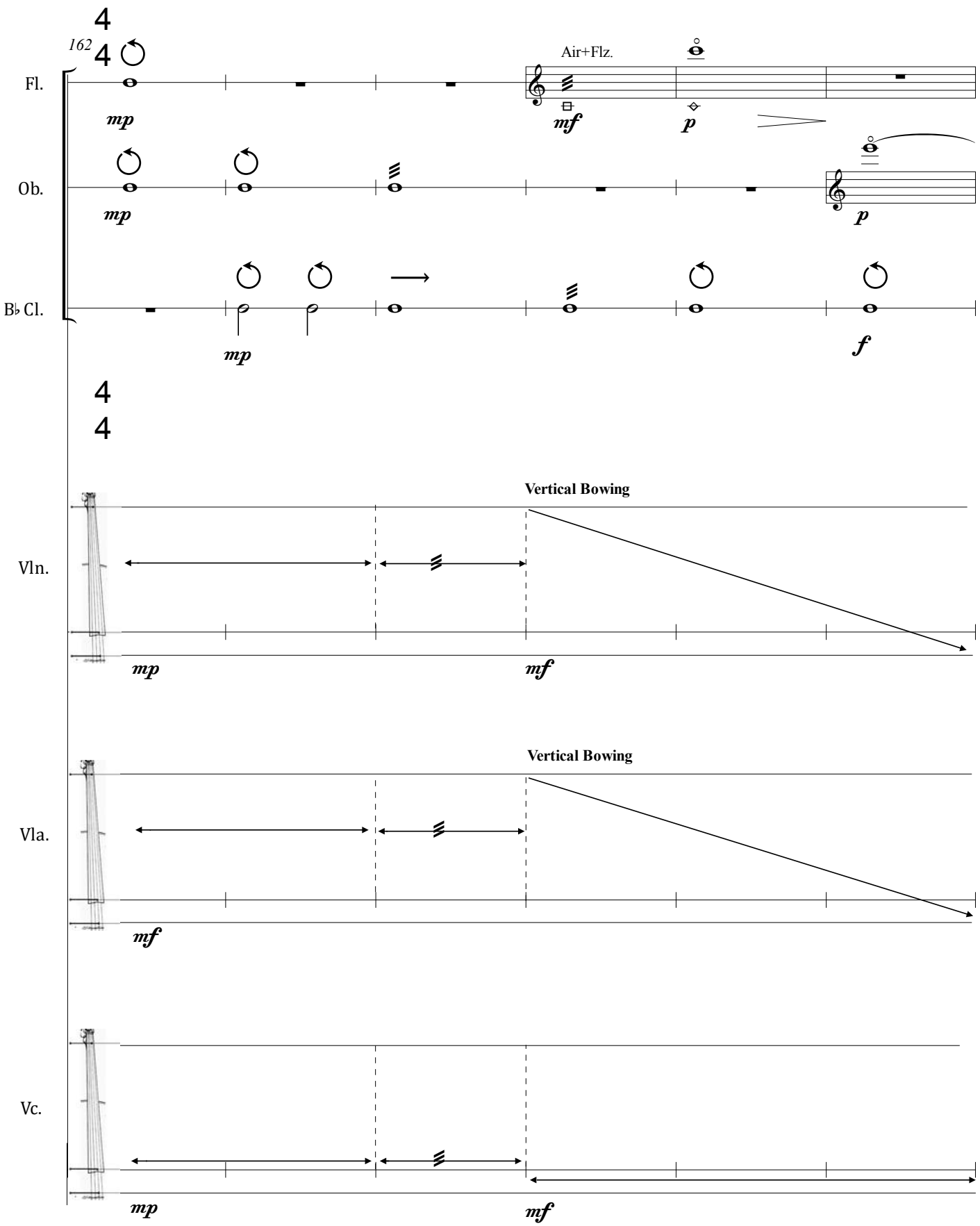

132
Fl.
Ord.
Slow Lip Vib. ¼ t.
p
Ob.
Ord.
Remove the reed
B♭ Cl.
Vib.
p
mf
Vln.
Strings I - II (open)
Horizontal Bow.
mp
Vla.
String I
Horizontal Bow.
mp
Vc.
Strings I (open) - II
Horizontal Bow.
mp

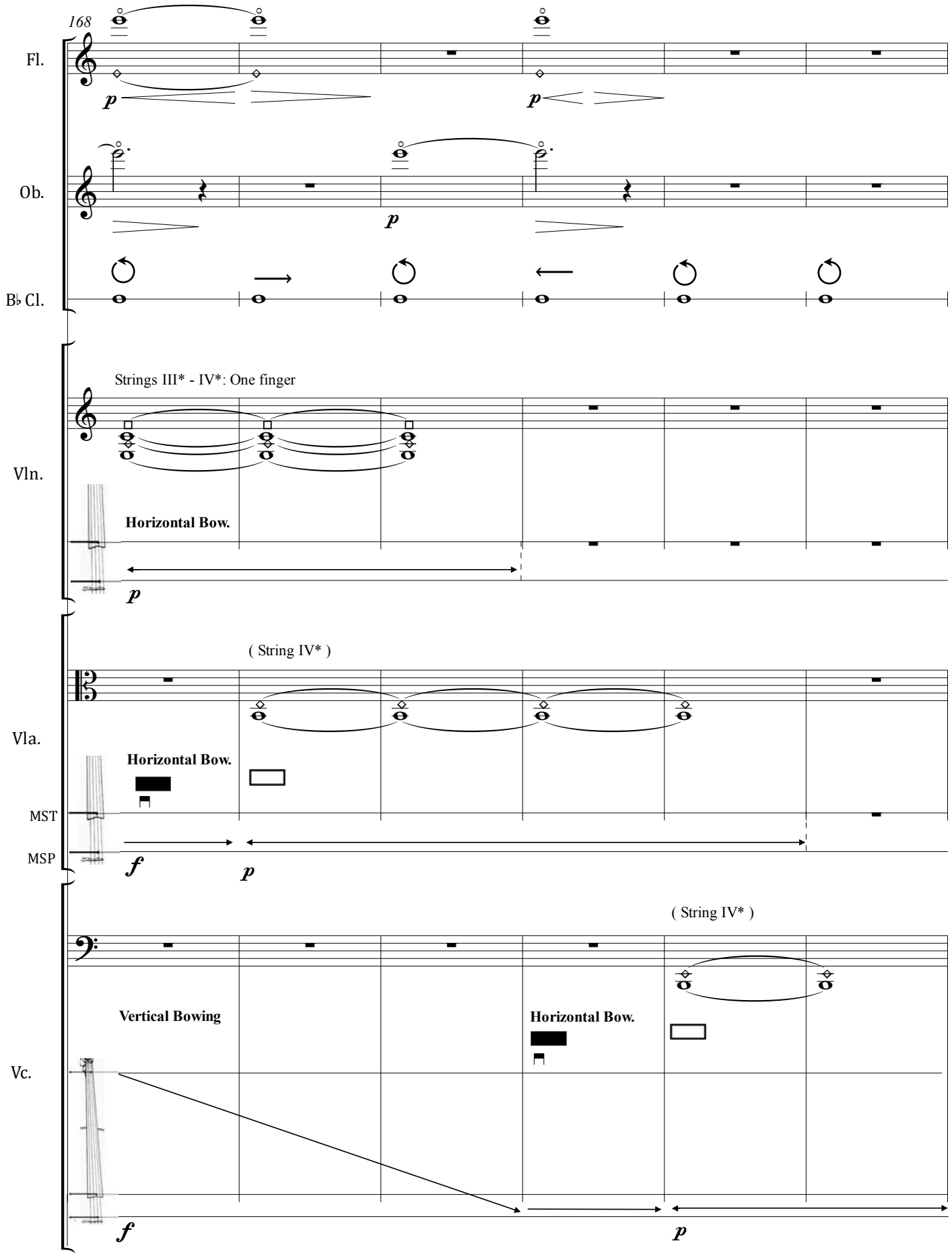

138
Fl.
Air+Flz.
Air
f
Only Reed
Flz.
Ob.
mp
Air+Flz.
f
B♭ Cl.
Flz.
pp
mp
Vln.
Vla.
Vc.
p

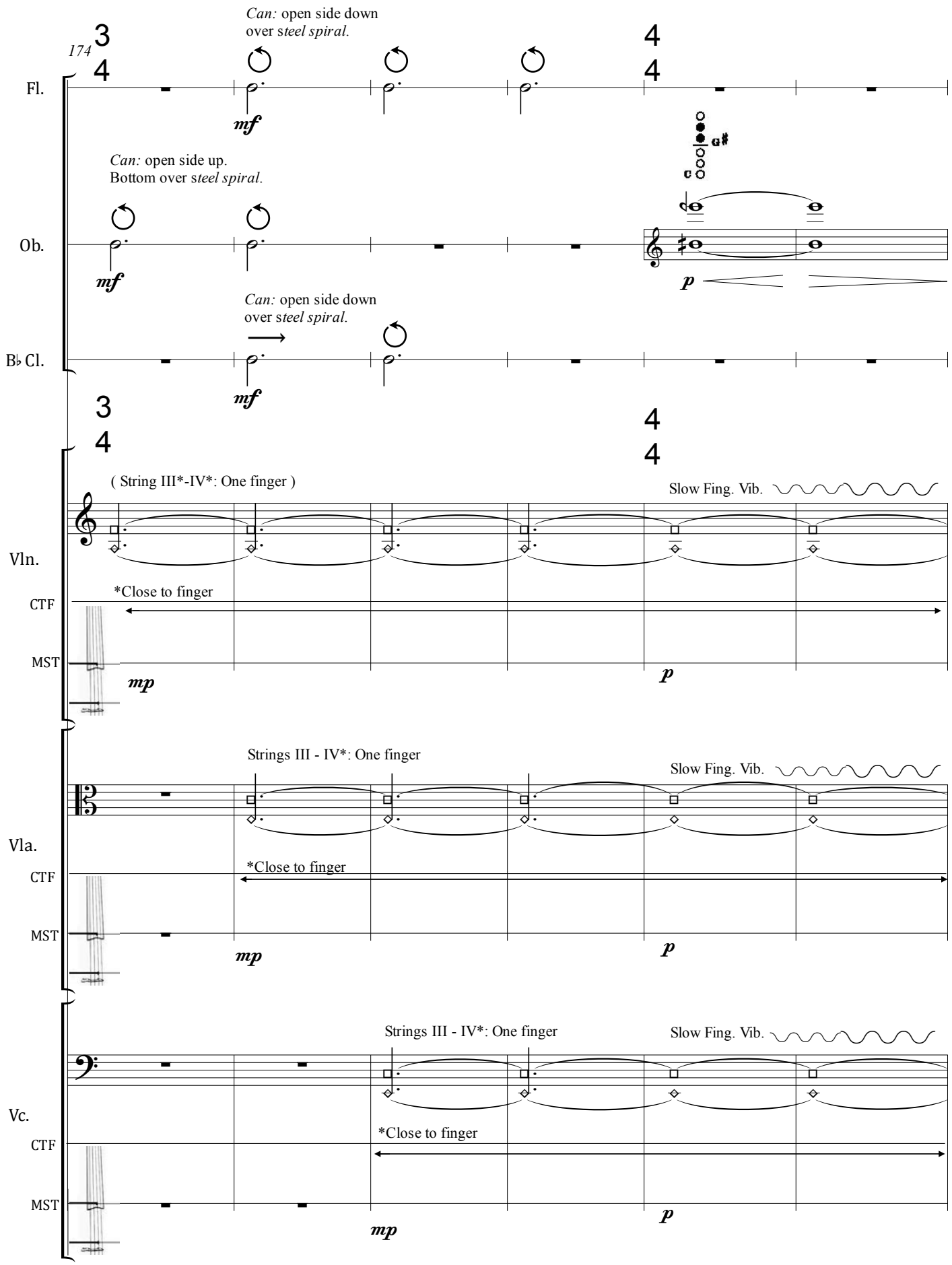

Can: open side up.
Bottom over s*teel spiral.*
144
Fl.
f
Flz.
Join the reed to the instrument
Ob.
mp
Flz.
B♭ Cl.
String IV: scordatura + preparation
Nut.
MPF
Vln. RH
MST
MSP
f
LH
Vla.
RH
p
String IV: scordatura + preparation
Bow vib.
Nut
MFP
Vc. RH
MST
MSP
f

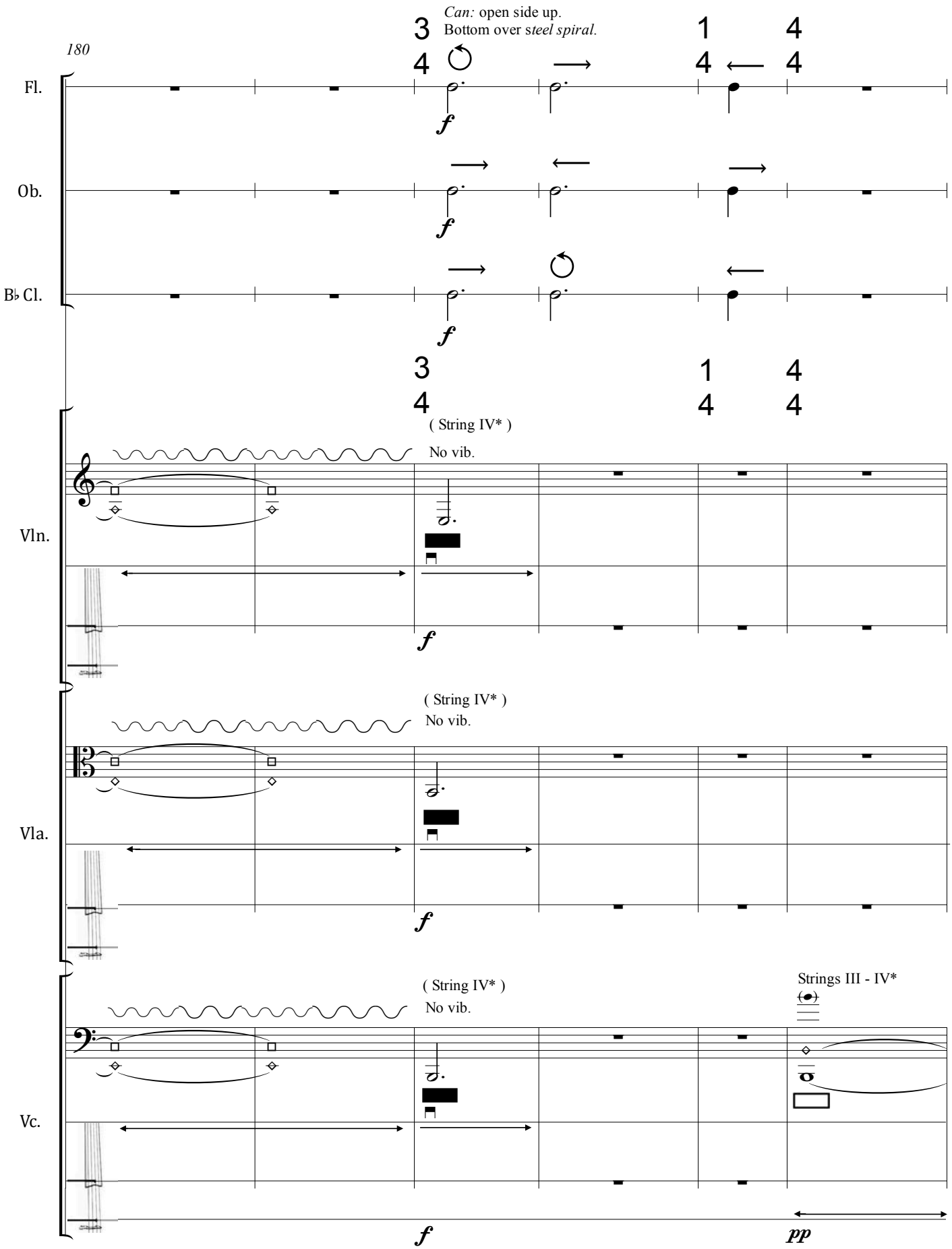

150
Fl.
Ob.
B♭ Cl.
Vln.
Vla.
Vc.
Can: open side up.
Bottom over steel spiral.
Flz.
Ord.
String IV: scordatura + preparation

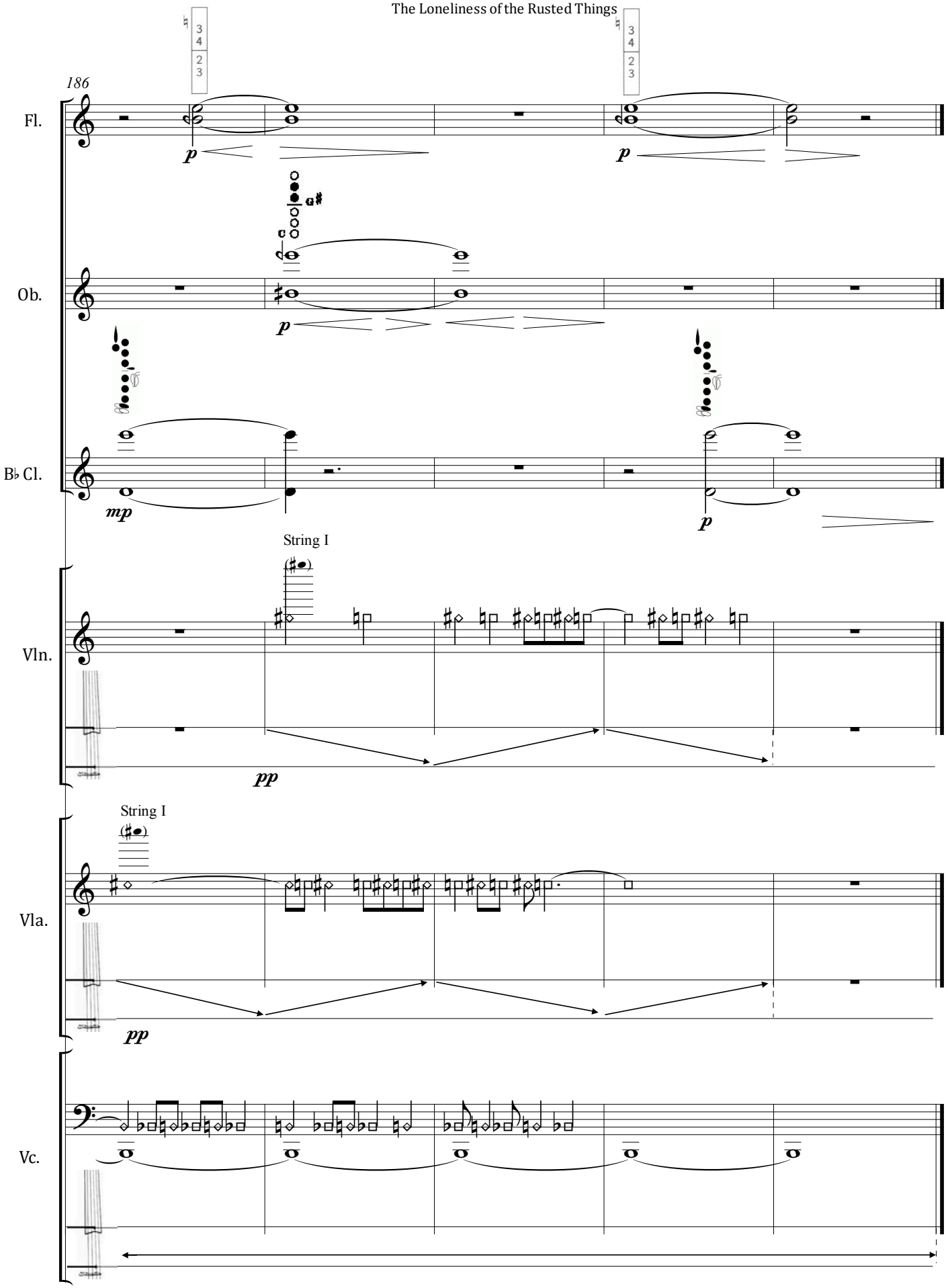

156
Fl.
Ob.
B♭ Cl.
Vln.
Vla.
Vc.
Bow vib.
*Very close to the Aluminium Folio
f
mp
mf


162
Fl.
Air+Flz.
mp
mf
p
Ob.
mp
p
B♭ Cl.
mp
f
Vln.
Vertical Bowing
mp
mf
Vla.
Vertical Bowing
mf
Vc.
mp
mf


168
Fl.
p
p
Ob.
p
B♭ Cl.
Strings III* - IV*: One finger
Vln.
Horizontal Bow.
p
(String IV*)
Vla.
Horizontal Bow.
MST
MSP
f
p
(String IV*)
Vertical Bowing
Horizontal Bow.
Vc.
f
p


174
Fl.
Ob.
B♭ Cl.
Vln.
Vla.
Vc.
CTF
MST
Can: open side down over steel spiral.
Can: open side up. Bottom over steel spiral.
Can: open side down over steel spiral.
(String III*-IV*: One finger)
Slow Fing. Vib.
*Close to finger
Strings III - IV*: One finger
mf
mp
p


180
Can: open side up.
Bottom over steel spiral.
Fl.
Ob.
B♭ Cl.
(String IV*)
No vib.
Vln.
(String IV*)
No vib.
Vla.
(String IV*)
No vib.
Strings III - IV*
Vc.
f
pp


186
Fl.
Ob.
B♭ Cl.
Vln.
Vla.
Vc.
String I
String I
p
mp
pp