THE COMPOSITION OF TIMBRE:
A MULTIDIMENSIONAL APPROACH

APPENDIX: PORTFOLIO OF COMPOSITIONS

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SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS FOR THE
DEGREE OF
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THE COMPOSITION OF TIMBRE: A COMPOSITIONAL APPROACH
APPENDIX: PORTFOLIO OF COMPOSITIONS

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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 [a], 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.

◊ 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.

Hollow Tones

Strong inhalation of air from the articulation of the syllable ‘Hoo’ [huː]. 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:

- \( \downarrow \) \( \frac{1}{4} \) tone lower
- \( \uparrow \) \( \frac{1}{4} \) tone higher
- \( \flat \) \( \natural \) Light inflection of tone down
- \( \flat \) \( \natural \) 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.

\( \text{\textsuperscript{\textfrak{b}} = \text{ca. 60}} \)

CARDBOARD MUTE
W/O MOUTHPIECE
(Whistle)

\( \text{pp} \text{--}\text{p} \text{--}\text{pp} \text{--}\text{p} \)

\( \text{pp} \text{--}\text{p} \text{--}\text{pp} \text{--}\text{p} \)

\( \text{p} \text{--}\text{pp} \text{--}\text{p} \)

\( \text{pp} \text{--}\text{p} \text{--}\text{pp} \text{--}\text{p} \)

*minimise the key sound as much as possible.
and it comes like a piece of light through the dust
and it comes like a piece of light through the dust

(9th partial)

pp → mp → p

(11th partial)

p

(15th partial)

(15th partial)

(p)

(f)

(mp)
and it comes like a piece of light through the dust

*Allow dyad multiphonics
to speak whenever possible.
Create a blurred timbre.
Minimise the key sound
as much as possible.
and it comes like a piece of light through the dust

(Sing)

(Fry) ord.

*Allow the voice to alter the timbre created.
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

\[ \text{¼} \] Quarter of tone down

\[ \text{½} \] Quarter of tone up

\[ \Delta \triangleleft \triangleleft \] Triangular-shaped notehead: Highest/lowest pitch possible.

\[ \Diamond \] Diamond-shaped notehead: Harmonic Fingering.

\[ \Box \] 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.


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

Jeté

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

III
P. S. [At the end of the fingerboard]
Bow high on the fingerboard, above the fingers.

IV
P. S. [At the end of the fingerboard]
Bow normally, very close to the pinching fingers.

Vc. I

III
P. S.
M. S. P.

IV
P. S.
M. S. P.

Vc. II

III
P. S.

Bow normally, very close to the pinching fingers.

IV
P. S.
Bow high on the fingerboard, above the fingers.
The Shimmer Beneath: A Scattering Attempt

II (open)
M. S. T.

JETÉ
[Attack only once jeté and let the natural bounce come to end before continuing to bow normally]

Vc. I

III
A. S.

P

PRACTICE MUTE

Vc. II

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

Vc. I

(M. S. T.)

M. S. P.

Vc. II
The Shimmer Beneath: A Scattering Attempt

31
Vc. I

36
Vc. I

40
Vc. I
The Shimmer Beneath: A Scattering Attempt
The Shimmer Beneath: A Scattering Attempt

Vc. I

MUTE OFF

Vc. II

M. S. P.
(Close to the Mute)

mp

Vc. I

74

IV

Vc. II

M. S. P.

IV ORD.

p

pp

mp

p

Bow Vib.

JETÉ

[Attack only once.
Let the bounce come
to end naturally]

IV

Vc. I

pp

B. B.

Vc. II

mp

III

A. S.

12 C. L.

Split Bridge
The Shimmer Beneath: A Scattering Attempt

Bow Vib.

Vc. I

Vc. II

pp

M. S. P.

pp

1/2 C. L.
Split Bridge

1/2 C. L.
Split Bridge

CRINI
JETÉ

JETÉ

pp

mf
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

\[ \downarrow \quad \text{Quarter of tone down} \]

\[ \uparrow \quad \text{Quarter of tone up} \]

\[ \Delta \quad \text{Triangular-shaped notehead: Highest pitch possible.} \]

\[ \rightarrow \quad \text{Gradual transition from a position/sound to another one.} \]

SOPRANO SAXOPHONE

Noteheads

\[ \square \quad \text{Square-shape notehead: Air Sound.} \]

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

\[ \diamond \quad \text{Diamond-shaped notehead: Aeolian Sound.} \]

A mix of air sound with determined pitch.
x

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.

- Jeté: 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

Soprano Sax in B♭

Viola

S. Sx.

Vla.

\( \text{Transposed Score} \)

\( \text{Soprano Sax in B♭} \)

\( \text{Viola} \)

\( \text{S. Sx.} \)

\( \text{Vla.} \)
Distorted Pieces of Something. Study on Light (when it rains)

S. Sx.

I
II
M. S. P. ORD. M. S. P. ORD. M. S. P.

Vla.

pp mf p mp

S. Sx.

17

Growling

Growling

III
M. S. P.
Close to frog
Normal bowing

Vla.

f

f mp

f mp
Distorted Pieces of Something. Study on Light (when it rains)

*Play the A from the mult. fingering

Growling Ord.

S. Sx.

\[\text{\textit{f}}\]

Close to frog Normal bowing

Vla.

\[\text{\textit{mf}} \quad \text{pp}\]

23

28

Rhyth. vib. (14 t.)

\[\text{\textit{mf}} \quad \text{pp} \quad 3 \quad 3 \quad 3\]

Bisb.

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

S. Sx.

\[\text{\textit{p}}\]

Vla.
Distorted Pieces of Something. Study on Light (when it rains)

S. Sx.

\[ \text{III C. L. B.
Jeté
[Attack only once.
Gliss. with bounce]} \]

\[ \text{III pizz.} \]

\[ \text{III pizz.} \]

Vla.

\[ \text{II S. F.} \]

\[ \text{mp} \]

\[ \text{mf} \]

\[ \text{mf} \]

\[ \text{f} \]

\[ \text{mp} \]

\[ \text{mf} \]
Distorted Pieces of Something. Study on Light (when it rains)
Distorted Pieces of Something. Study on Light (when it rains)
Distorted Pieces of Something, Study on Light (when it rains)
Distorted Pieces of Something. Study on Light (when it rains)
Distorted Pieces of Something. Study on Light (when it rains)
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 cm² 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

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>♮</td>
<td>Quarter-tone flat</td>
</tr>
<tr>
<td>♯</td>
<td>Quarter-tone sharp</td>
</tr>
<tr>
<td>♩</td>
<td>Slightly upper than sharp</td>
</tr>
<tr>
<td>♪</td>
<td>Gentle downward inflection</td>
</tr>
<tr>
<td>△</td>
<td>Triangular-shaped notehead: Highest pitch possible.</td>
</tr>
</tbody>
</table>
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 maintain 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

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.S.P.</td>
<td>molto sul ponticello</td>
</tr>
<tr>
<td>S. P.</td>
<td>sul ponticello</td>
</tr>
<tr>
<td>S. T.</td>
<td>sul tasto</td>
</tr>
<tr>
<td>ORD.</td>
<td>ordinario (normal place)</td>
</tr>
</tbody>
</table>

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).

- 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.

- 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 ethereal)

Solo Cello

MICHELE ABONDANO
2019–20

\[ \text{\( \text{i} = 55 \) } \]

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.

Tape on IV

\( \frac{4}{4} \) f

5 similar

Tape on IV

\( \frac{3}{4} \) p

Prepare the LH to take the tape.

pp

Tape on IV

\( \frac{5}{4} \) f

LH Finger slide (rubbing the tape)

\( \frac{3}{4} \) f
A Weightlessness Process (... or how to become ethereal)

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.
Explore the bowing area (S.P.) to make any possible overtone appear. This implies subtle changes of dynamics in sound.

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, roughed and loud, with high presence of overtones.

Release the accumulate energy on the following multiphonic.

Gradually, increase the bow pressure destroying the multiphonic.

Very Slow Bowing From the frog of the bow.
A Weightlessness Process (... or how to become ethereal)

Gradually, reduce the pressure of the finger on the string to leave it open.

Gradually, increase the bow pressure destroying the multiphonic

LH Finger slide (rubbing the tape)
Use less pressure on the tape to create a continuous timbre with more string resonance.

Gradually, increase the bow pressure without sound interruption.

Bow from the Frog with less pressure to create a rough, but continuous timbre.
A Weightlessness Process (… or how to become ethereal)
A Weightlessness Process [...] or how to become ethereal)

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.

POLYSTYRENE

Far away from the bridge. Timbre with high level of inharmonicity.
POLYSTYRENE
Far away from
the bridge

mf

II
MSP → ST → MSP

p

I
II
ST → ORD → SP → MSP

p

POLYSTYRENE
Close to the
bridge.

mp

I
II

p

Bow vib.
A Weightlessness Process (... or how to become ethereal)

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.

1/2 C.L.
Split Bridge

I (open)
II

(1)
(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

<table>
<thead>
<tr>
<th>Quarter of tone down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter of tone up</td>
</tr>
<tr>
<td>Gentle upward inflection</td>
</tr>
</tbody>
</table>

*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: olive.

⟨ŋ⟩  Voiced velar nasal. It is the sound of ‘ng’ in English. Example: sing.

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

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


- ‘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.

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 rhythmic 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

Edge of Sound Hole
Half of Fretboard
N\_

Bridge Side’s Edge
Fretboard Side’s Edge
Sound Hole

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.**
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.

*SOnly Headjoint
Air Sound

Wave Hand On/Off

Keep the hand in the area between the bridge and the sound hole edge.

Finger glissando on strings I and II.
Just An Attempt To Dissipate
Just An Attempt To Dissipate

S

\[<\delta>\]

\[mp\]

\[<\delta>\]

\[mp\]

A. Fl.

\[\text{Quasi T. Pizz.}\]

\[\text{Flz.\quad Growling}\]

B. Cl.

\[p\quad mp\quad mp\]

Gtr.

\[\text{similar}\]

R.H.

L.H.

\[3\quad 3\quad 3\quad 3\]
Just An Attempt To Dissipate
Just An Attempt To Dissipate

S

A. Fl.

B. Cl.

Ham. Gliss.

Flz.

Ord.

Wave Hand On/Off

pp

p

mf

Similar

pp

Similar

R.H.

L.H.

26
Join all the parts of the flute

Rub the wood of the guitar's back following the movement suggested by the line.
Just An Attempt To Dissipate
Just An Attempt To Dissipate

S

A. Fl.

B. Cl.

Flz.

Aeolian

Ord + Voice

*Voice is also transposed

Gtr.
Just An Attempt To Dissipate

Superball Mallet
Rub the wood of the guitar's back following the movement suggested by the line.
Punch the aluminium foil to break it.
Just An Attempt To Dissipate

VI
Rub the string with the Superball mallet.
Just An Attempt To Dissipate

S

A. Fl.

B. Cl.

Gtr.

[From the multiphonic]

similar

VI

p

75
Just An Attempt To Dissipate

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.
Flz.
Allow the multiphonic to break

ord.

p

mp

B. Cl.

mp

Gtr.
Just An Attempt To Dissipate

S

A. Fl.

B. Cl.

Gtr.

similar

mf

mp
Just An Attempt To Dissipate

S

Flz.
Allow the multiphonic
to break

A. Fl.

B. Cl.

Gr.
Just An Attempt To Dissipate

String VI
Bow Jeté
Keep the bow in the area between the sound hole and the bridge.
Just An Attempt To Dissipate

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.
Just An Attempt To Dissipate

S

Hummed Voice
Ord.

S. Tape

as static as possible...
T. Pizz. Ord.

A. Fl.

as static as possible...

B. Cl.

String VI
Bow Jeté

Grtr.

\( f \)
Hummed Voice

S

S. Tape

A. Fl.

B. Cl.

Gr.

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.
Just An Attempt To Dissipate

119  Hummed Voice

S

S. Tape

A. Fl.

B. Cl.

Gtr.

Allow the resonance as long as possible.

(Ord./Finger)
Harmonic
String VI | 5th Fret.
[Not the resulting pitch]
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.]


● 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.

Keep the voice at the same loudness as the instrument. Mimetise the attack with it.
We no longer sleep in the wind
We no longer sleep in the wind

Ord.

exaggerate / uneven vib.

subito mf

p

(5 s) (5 s) (5 s) (5 s)

pp

(5 s) p

(5 s) (5 s) (5 s) mp

(5 s) (5 s) (5 s) (5 s)

Flz.
We no longer sleep in the wind
We no longer sleep in the wind

- 9:00:00
  - 1: +/−
  - 2: slow f. vib.
  - 3: (1/4 t.)
  - 4: no vib.
  - 5: attack instrument, immediately after add voice
  - 6: slow f. vib.
  - 7: (1/4 t.)

- 9:15:00

- 9:30:00

- 9:45:00
  - 1: +/−
  - 2: slow f. vib.
  - 3: (1/4 t.)

- 9:00:00
  - 1: no vib.

- 9:30:00

- 9:45:00

- 10:00:00
  - 1: no vib.

- 10:30:00
  - 1: +/−
  - 2: attack the sound first, then place the hand at the labium

- 11:00:00
  - 1: slow f. vib.
  - 2: (1/4 t.)
  - 3: no vib.

- 11:20:00

- 11:00:00

- 11:20:00
We no longer sleep in the wind

Paste the aluminium foil covering the lip

subito silence

Ord.

slow f. vib. (1/4 t.)

no vib.

pp

pp
We no longer sleep in the wind
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.

←\rightarrow 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

\[
\begin{array}{c}
\text{String I}
\end{array}
\]

(1 tone down)

Parts of the instrument as named on the score
### Techniques

<table>
<thead>
<tr>
<th>Technique #1</th>
<th><strong>Paper Sheet</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>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.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technique #2</th>
<th><strong>Polystyrene</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>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.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technique #3</th>
<th><strong>Cello bow hair</strong></th>
</tr>
</thead>
</table>
| **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.** |

<table>
<thead>
<tr>
<th>Technique #4</th>
<th><strong>Cello bow</strong></th>
</tr>
</thead>
</table>
| **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.
<table>
<thead>
<tr>
<th>Technique Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toothbrush. Technique #2</strong></td>
<td>Take a soft toothbrush and place the bristles on String B0. Aline the brush with the string in a vertical direction. <em>Brush the string</em> according to the instructions on score. This technique implies vertical displacement along the string.</td>
</tr>
<tr>
<td><img src="imageATIVE" alt="Toothbrush Image" /></td>
<td></td>
</tr>
<tr>
<td><strong>Toothbrush. Technique #3</strong></td>
<td>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.</td>
</tr>
<tr>
<td><img src="imageATIVE" alt="Toothbrush Image" /></td>
<td></td>
</tr>
<tr>
<td><strong>Cello bow hair. Technique #4</strong></td>
<td>Take one set of <em>two threads</em> of cello bow hair and place it below the <em>two strings corresponding to G1</em>. Use both hands to perform this technique. <em>Rub the strings</em> with the hair according to the instructions on score. Take the <em>bunch</em> of cello bow hair and place it below the <em>three strings corresponding to D5</em>.</td>
</tr>
<tr>
<td><img src="imageATIVE" alt="Cello Bow Hair Image" /></td>
<td></td>
</tr>
</tbody>
</table>

*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

\[ \text{beat} = 66 \]

**Dry surface:** smoothly granulated.

**Paper Sheet**
Technique #1

**Strings III and IV**

\[ \text{mp} \]

\[
\begin{array}{cccc}
4 & 4 & 1 & 2 & 4 \\
4 & 4 & 4 & 4
\end{array}
\]

**Paper Sheet**
Technique #1

\[ \text{mp} \]

*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.*
Quietly, put the sheet aside.

**Toothbrush**

Technique #2

\*mp
106
suelo seco

Quietly, put the sheet aside.

**Toothbrush**
Technique #3

---

**Polystyrene**
Technique #2
(Strings III and IV)

---

Quietly, put the sheet aside.

**Toothbrush**
Technique #3

---

**Polystyrene**
Technique #2
(Strings III and IV)
**Toothbrush Technique #2**

3 4 4

**Toothbrush Technique #3**

2 4 4

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

---

**Cracked soil: hostile and broken.**

---

**Bow Hair Technique #4**

1 4

4 4

Slow mov. (left-right)

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

**Bow Hair**
Technique #3

**String III**

*mp*

<table>
<thead>
<tr>
<th>2</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

| *f* |
Prepare to play behind the bridge.

*\textit{mp}*

---

\textit{Bow Hair}
Technique #3

\textbf{String III} (B. B.)

80

\begin{align*}
\text{Slow mov. (left-right)} & \quad \text{Slow mov. (left-right)} \\
4 & \quad 2 \quad 3 \\
4 & \quad 4 \quad 4
\end{align*}

\begin{align*}
\text{Slow mov. (left-right)} & \quad \text{D. M.} \\
\text{Frame} \\
\text{Middle} \\
\text{Dampers}
\end{align*}

---

109

\begin{align*}
\text{suelo seco}
\end{align*}
Dust: Residual and dispersible.

Bow Technique #4

String 1 detuned 1 t. down (G)

\[ \text{Fret} \]

~~~

\[ \text{Nut} \]

M. S. T.

M. S. P.

\[ \text{Frame} \]

\[ \text{Middle} \]

\[ \text{Damper} \]

\[ \text{*f} \]

\[ \text{*mp} \]

\[ \text{Prepare to change the string.} \]

\[ \text{D. M.} \]

\[ \text{As flautato as possible.} \]

(Sounding)

(1)

(Vertical)

\[ \text{Bow Hair Technique #4} \]

\[ \text{Bridge} \]

\[ \text{Middle} \]

\[ \text{Frame} \]

\[ \text{*p} \]

\[ \text{Dust: Residual and dispersible.} \]

\[ \text{Bow Technique #4} \]

String 1 detuned 1 t. down (G)
111
suelo seco

mf
4 1 4
4 4 4

Bridge
Slow mov.
(left-right)

D. M.

112

pp
1 4
4 4

D. M.
suelo seco
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:

$\frac{1}{4}$ tone lower

$\frac{1}{4}$ 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 timbral 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 12th 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*

[Images of string instruments showing scordatura]

**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 (3 cm 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**

[Images showing string parts and notation]

**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

Harmonics

Harmonic finger pressure

Glissando

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

MICHELE ABONDANO
2020

\[ \text{Tempo} = 66 \]

Flute

4

\( \text{Can: open side down over steel spiral.} \)

Oboe

4

\( \text{Can: open side up. Bottom over steel spiral.} \)

Clarinet in B♭

4

\( \text{Can: open side down over steel spiral.} \)

Violin RH (Bow)

Vertical Bowing

MST

IV *scordatura* + preparation

MSP

mf

mp

Viola RH (Bow)

Vertical Bowing

MST

IV *scordatura* + preparation

MSP

mf

mp

Cello RH (Bow)

Vertical Bowing

MST

IV *scordatura* + preparation

MSP

mf

mp
'Melt' each multiphonic into the next one.
'Melt' each multiphonic into the next one.
'Melt' each multiphonic into the next one.
The Loneliness of the Rusted Things
The Loneliness of the Rusted Things

Fl.

Ob.

B♭ Cl.

Vln.

Vla.

Vc.
The Loneliness of the Rusted Things

- Fl.
- Ob.
- B♭ Cl.

Vertical Bowing
Horizontally Bowing
Polystyrene
Bow vib.

*Allow the bow to touch other strings or the polystyrene. (String IV)
Bow vib.

Diagonal Bowing

String III-IV

Diagonal Bowing
Horizontal Bowing

mf

Uneven, irregular interchange.
The Loneliness of the Rusted Things
The Loneliness of the Rusted Things
The Loneliness of the Rusted Things

Fl.
Ord.
132

Ob.
Ord.
Remove the reed

Bs Cl.

Vln.
Horizontal Bow.

Vla.
Horizontal Bow.

Vc.
Horizontal Bow.
Can: open side up.
Bottom over steel spiral.
The Loneliness of the Rusted Things

150

Fl.

Can: open side up.
Bottom over steel spiral.

Ob.

Can: open side up.
Bottom over steel spiral.

B♭ Cl.

Flz.      Ord.

Vln.

String IV: scordatura + preparation

Vla.

mf

Vc.

f
Can: open side down
over steel spiral.

Can: open side up.
Bottom over steel spiral.

(String II*-IV*: One finger)

Close to finger

Strings III - IV*: One finger

Close to finger

Close to finger

Close to finger

Close to finger

Close to finger
Fl.

Ob.

Bs Cl.

Vln.

Vla.

Vc.

Can: open side up.
Bottom over steel spiral.

No vib.

No vib.

No vib.

( String IV* )

( String IV* )

( String IV* )

Strings III - IV*

pp