

Grégoire Lorieux

Passage de la lumière

String Quartet with electronics

Commission of the french Ministry of Culture

2009

«Ce passage de la lumière est dédié, en toute amitié, au quatuor Multilatérale.»

Program Note

Some films, damaged, blurred or retouched, sometimes give a thick and touchy consistency to light. With black and white especially one works on the volatile matter of the light plans. The string quartet, though monochrome at first listening, does express that this kind of expressive, solid or small brightness variations.

What is dark or bright in a bow movement will be separated by electronics, as the skin peeled of a fruit: to reveal the resonances enclosed in the roughness of a crushed sound or bring attention to the flick of hair on a rope nearly choked, amplify and let them to hear in remote places; darken or brighten the dark heart of the quartet, first dig, raise, "ensilence" its surrounding space, until it freezes.

Unlike the shadows that close slowly on Joan Fontaine in Hitchcock's *Suspicion*, musicians extricate themselves first from the heavy brutal black they produce themselves. As a metal object in the dark, electronics desperately hang their little light. The fist of shadow that surrounds relaxes until the apparition of electronics that hid behind them: a luminous canvas of silence, which is torn up and gradually violently darken.

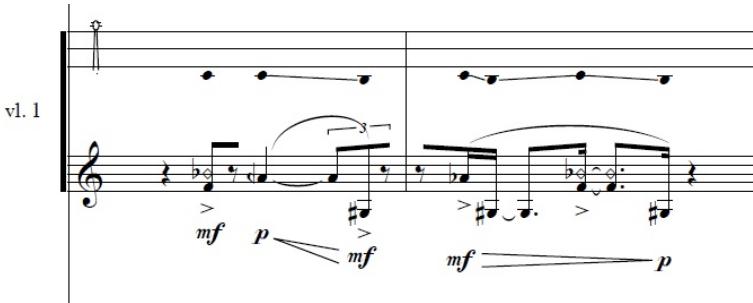
Grégoire Lorieux

NOTATION

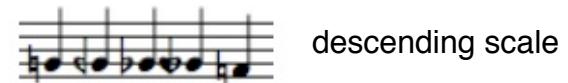
Music is notated on 2 staves.

The upper staff indicates bow movements (right hand).

The down staff is the regular staff (left hand).



General



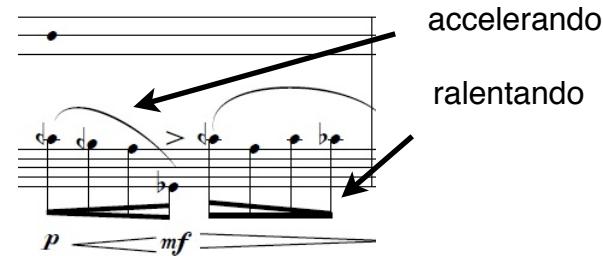
descending scale

Quarter tone notation :



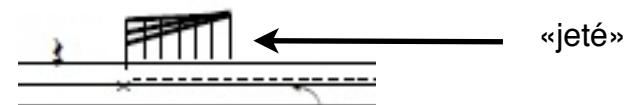
ascending scale

Agogic variations :



accelerando

ralentando



«jeté»



sfzpp

Instrumental notation

Upper staff :

Position on the bow on the string

*this key is a schema
for the fingerboard*

on the bridge molto sul ponticello sul ponticello normal position sul tasto molto sul tasto al ditto

Examples :



begin the note molto sul pont and
end it on the bridge (breath effect)



play only on the bridge (breath effect)

Rotation of the bow



battuto / tratto depending on the context

Examples :

A musical score example illustrating bowing techniques. It shows two staves. The left staff shows a 'passage from sul pont to sul tasto.' with a red dashed line indicating the path of the bow. The right staff shows a 'passage from sul pont to sul tasto by rotating the bow to col legno tratto' with a red dashed line and a curved arrow indicating the rotation. A vertical box labeled 'vertical bow' covers both staves. Another vertical box on the right indicates 'bow position ad.lib btw. indicated positions' with a double-headed vertical arrow.

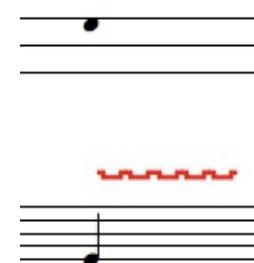
passage from sul pont to sul tasto.

passage from sul pont to sul tasto by rotating the bow to col legno tratto

vertical bow

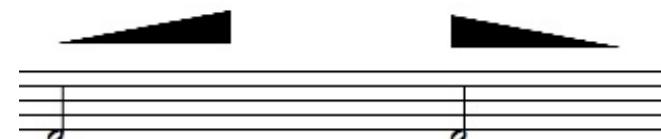
bow position ad.lib btw. indicated positions

Bow pressure :

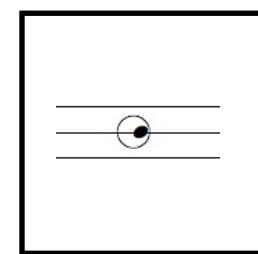


«perforated sound» : slow bow + excessive pressure

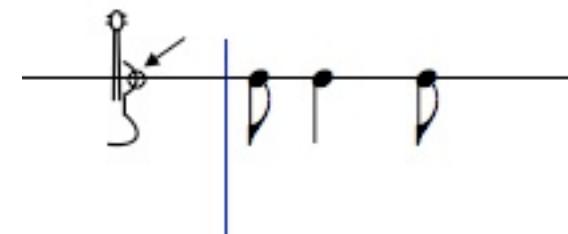
Variations of bow pressure



«**bow tap**» : play a note with the bow + hit the fingerboard with the wood of the bow through the hair



Play on the body of the instrument :

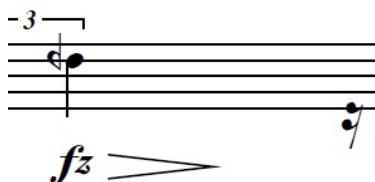


(gettato is possible!)

attaque avec
"bow tap"

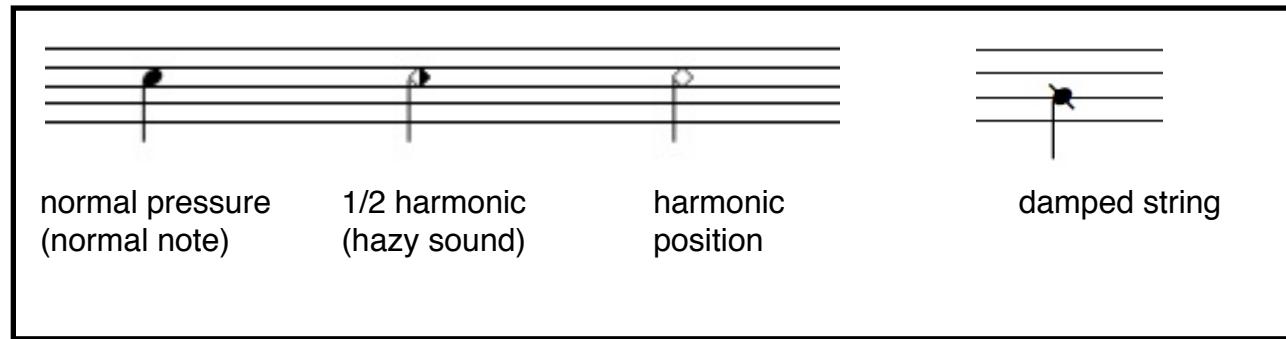


Example:

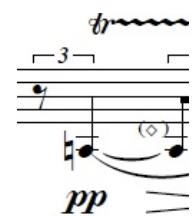


Down staff

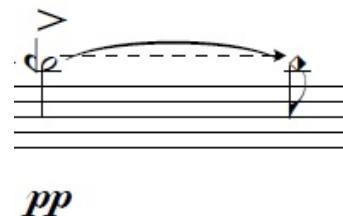
Finger pressure



Examples :



trill btw. cello open
string and
harmonic note



progressively release
pression of the finger.

Damped strings:

Musical notation example showing damped strings. The staff has a key signature of one sharp (F#). There are four horizontal lines labeled I, II, III, and IV from top to bottom. An arrow points to the fourth line (IV), which is highlighted with a blue box. The notes are marked with a small black dot on the first line, followed by a vertical line and a small black dot on the second line, indicating a damped string. The notes are also marked with a wavy line above them.

«tab key» : to show the change with 4-line staff : read 1 string
by line

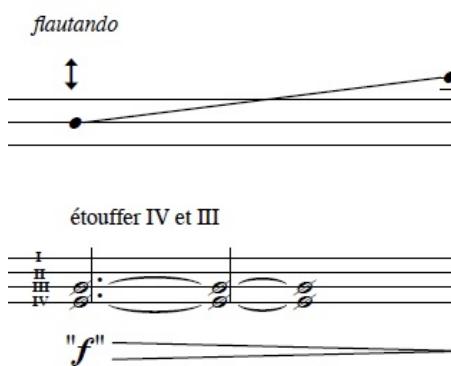
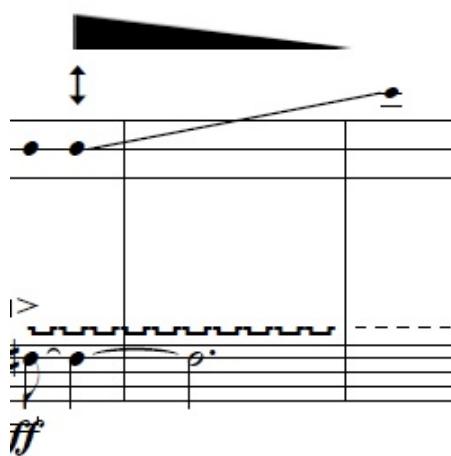
SPECIAL

de plus en plus de note

vl1, mes. 1 : «keep on string»
perforated sound, keep the bow on the string without breath

vl1, mes. 4 : «more and more note»
when moving to the bridge, more and more pitch is perceived

a., mes. 9 : piano perforated sound
more dull sound when playing at the high on fingerboard.

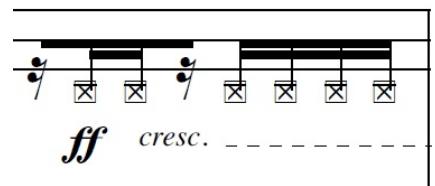


vcl, mes. 1 :
perforated sound with vertical bow. You may hear down octave of the sound.
Don't release the pressure too fast.

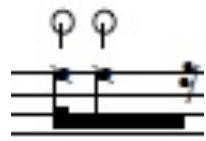
vl2, mes. 8 :
-strings IV et III damped (toward the nut)
- «f» indicates more bow speed
- vertical bow with few pressure.
- You hear a modulated breath.

vcl, mes. 10 :
fast bow slide
quasi flautando

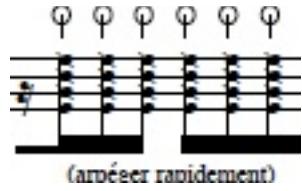
frapper avec le doigt
sur le chevalet



vl2., mes. 223 :
strike hard with the finger on
the bridge



vl2 , mes. 222 :
bartok pizz on damped string I



vl2., mes. 224 :
bartok pizz. on 4 strings with
arpeggio

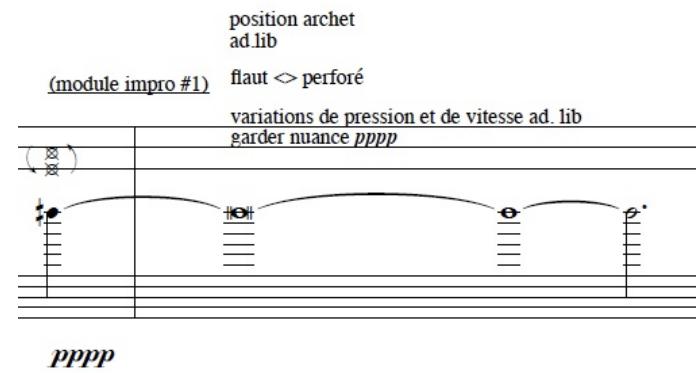
Improvisation modules

There are 3 «free» modules for very long sounds.

impro module #1

vl. 1, mes. 17,

vcl , mes 77

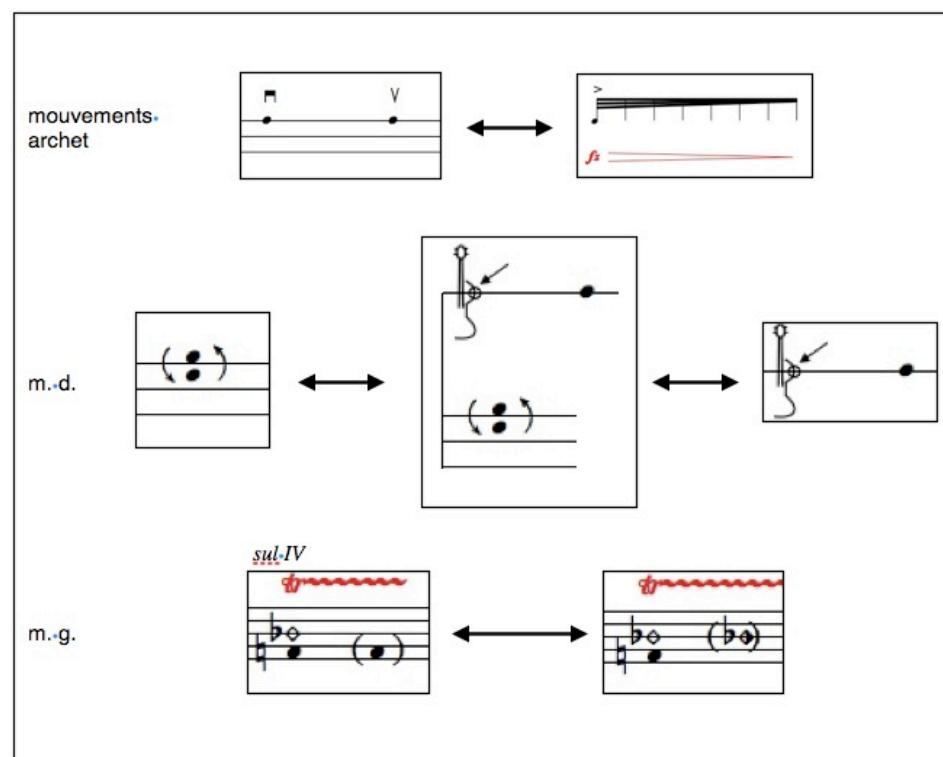


« bow position ad. lib
flautando \diamond perforated
variation ad lib. of bow
pressure and speed.
keep pppp.»

Module impro #2

a, mes. 71,

v1 , mes 78

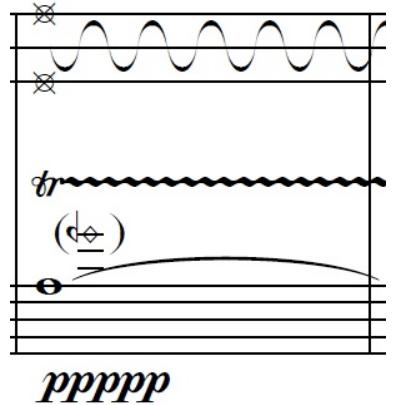


separated parameters :

- bow movements (incl. gettatto)
- bow position (on the fingerboard, on the body + on the fingerboard, on the body only)
- trill around and harmonic position
- arrows indicate to go freely from one to the other
- for viola (m.71) play one octave down than the vl1.

(module impro #3)

Module impro #3
vcl, mes. 78,



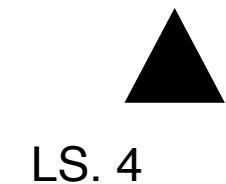
trill btw open string and natural 7th
harmonic. bow moves from
fingerboard to bridge, with half-col-
legno.

Setup :

«background»

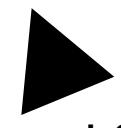


LS. 3



LS. 4

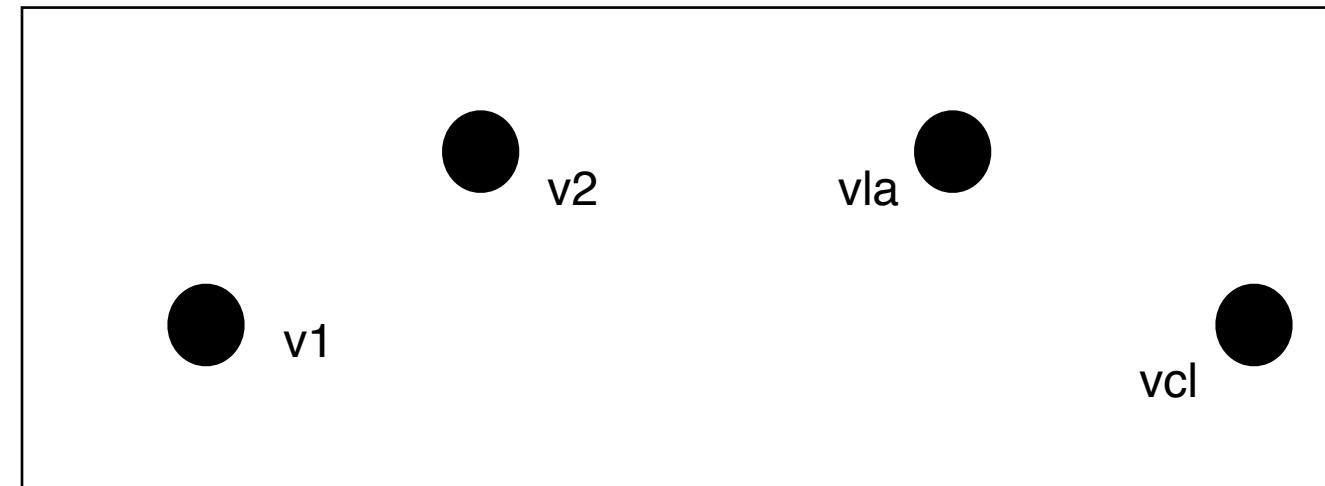
«foreground»



LS. 1



LS. 2



AUDIENCE

TECHNICAL RIDER

Passage de la lumière,
String quartet w/ electronics

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gregoirelorieux@gmail.com

PA system

- 4 loudspeakers (preferred systems : L-Acoustics, d&b), system power must be coherent with venue size
- Low frequency loudspeakers reinforcement is preferred.
- Digital mixing desk (preferably Yamaha DM 1000/DM 2000)
- All necessary connections between the mixing desk and the stage (2 microphone lines minimum)

Microphones

- 4 [DPA 4061](#) with [holder for strings](#)

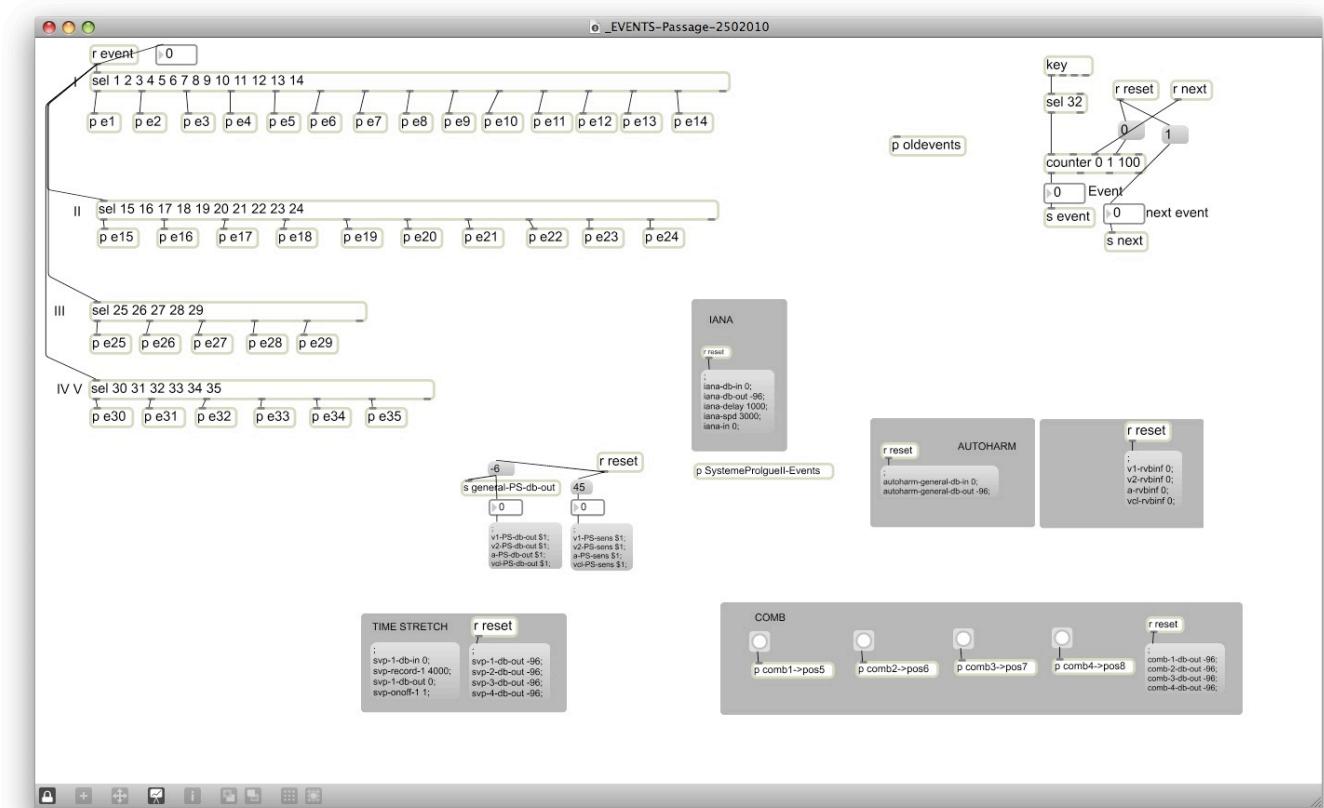
MIDI and computer system

- 1 computer with all software materials required (see : «Documentation» note)
- 1 sound card (type FireFace 400 or equivalent)
- 1 midi interface (type BCF2000 - needs a footswitch input in jack 6'35')

The electronic part is made with 2 MaxMSP patches (version 5.1 or more recent) :



«Passage-Patch» deals with the treatments
 . «Passage-Events» remotely controls the treatments.



This string quartet has two movements : the first with the whole string quartet (ca. 13 mn) and the second only for cello solo (ca 3'30 mn).

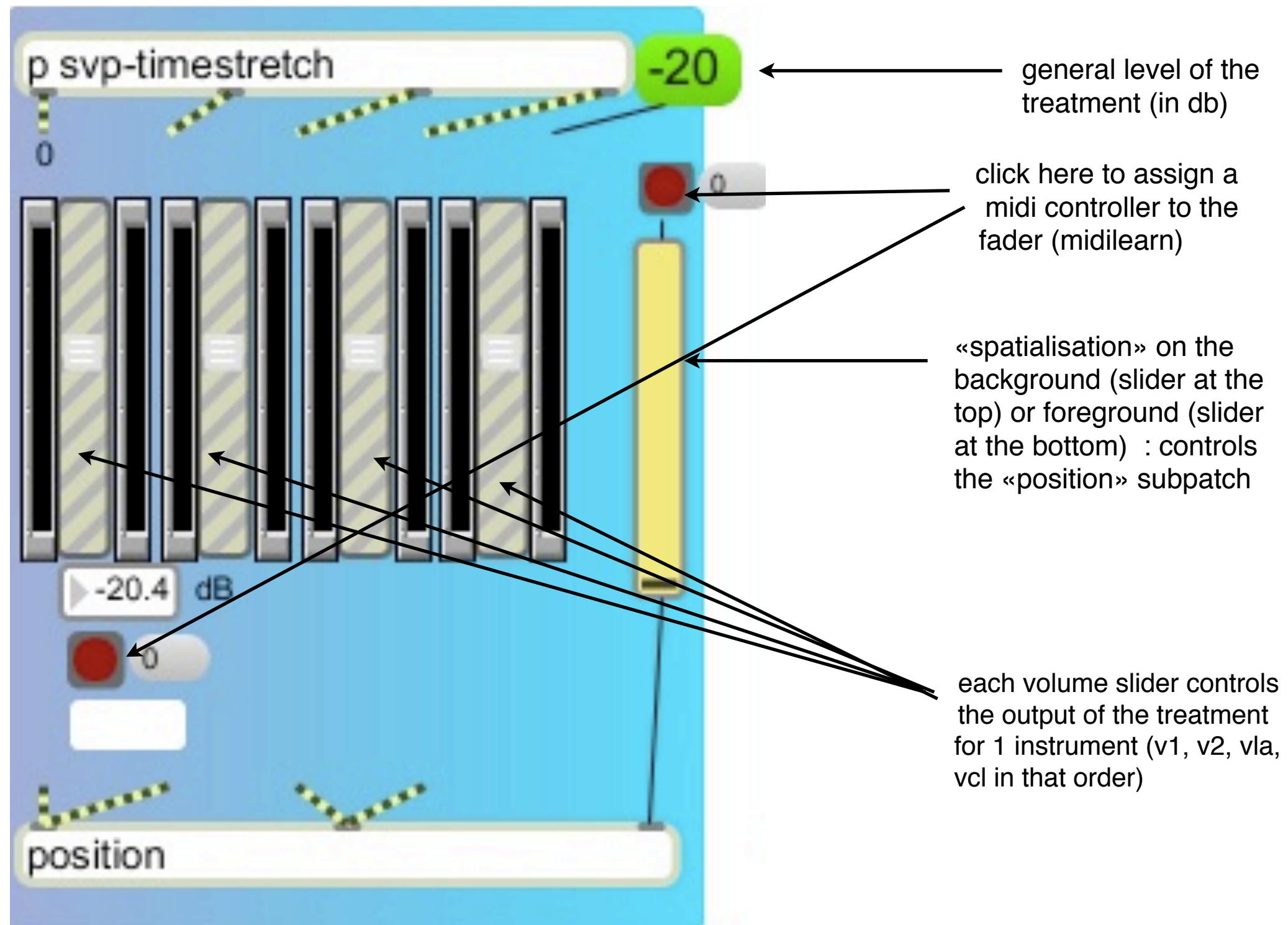
Description of treatments (blue background) :

- **rvbinf -> reverbspat + mungevcl** : reverberation (with ircam's spat) often used for its infinite reverb. Combined with a treatment on the cello for the 2 movement.
- **SystemeProloguell & SystemeProloguelli** : like in the last part of Prologue for viola, by Gérard Grisey, instruments are used to trigger sound samples. For **SystemeProloguell**, the harmonicity rate controls the triggering of pre-recorded string instrument sounds. For **SystemeProloguelli**, the amplitude. So check the calibration of this amplitude and harmonicity data (that come from a yin~ object) when these treatments are on, on the «ANALYSE» subpatcher.
- **HARMAUTO** : transposition of 2 octaves lower combined with a compression of the quartet.
- **special-harmo** : progressive transposition 2 octaves lower (glissando)
- **comb** : comb filter
- **iana** : analysis et additive resynthesis
- **svp-timestretch** : time stretch with separate mix of noisy part and sinusoidal part.
- **munge-global** : granulation at the output of **SystemeProloguelli**.

Description of sound file players (red background) :

- **sfplay-Sinus** : quadriphonic sounds : «quasi-larsen», made with the cross-synthesis technique.
- **sfplay-sequences** : stereo sounds you have to spatialize (foreground or background)
- **sfplay-vcl** : sounds for the 2nd movement. Stereophonic sounds dédiés au second mouvement. Stereo sounds you have to spatialize (foreground or background), but rather in background.

During the rehearsal or the concert, the Computer Music Musician controls the output level of each treatment on the main window of the «Passage-Patch» patcher. Press the space bar to trigger events for the first movement, and «v» for the 2nd movement.

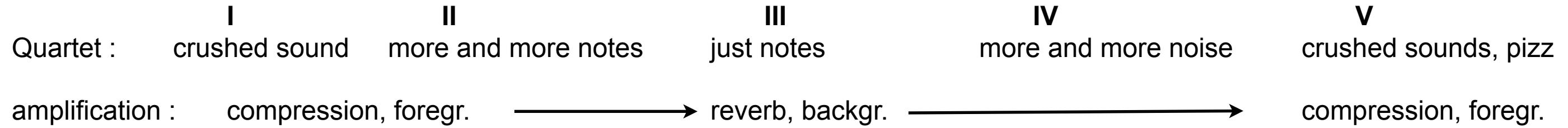


Amplification is important

The amplification of the quartet is as much important as the electronic part.

In the first movement, the noisier is the quartet, the more compressed and placed on the foreground it must be. Less noisy quartet means more reverberation and amplification on the background loudspeakers.

Given the score, amplification must follow this :



(1) harm auto ON

(2) v2 : tstretch 2,5 sec.

Électronique

amplification : *f*, plan frontal,
compression

5
4

3

5
4

Brusque, sombre, intense
(lourd, clos)

8
4
3

9
4

de plus en plus de note

Violon 1

(rester à la corde)

f

ff

ff

ff

ff

ff

Violon 2

(à la corde) (IV)

ff

ff

ff

ff

ff

étouffer IV et III

"*f*"

Alto

(à la corde)

ff

ff

ff

ff

ff

ff

ff

Violoncelle

(rester à la corde)

ff

ff

ff

ff

ff

ff

9 3 "Sinus" : sequence A
 Elec.
 5 4 [A] 8 4 3 4 1 4 5 4 3 4

The musical score consists of four staves. The top staff is for an electric instrument, showing a continuous sine wave-like line with various performance markings. The second staff is for 'vl. 1' (violin 1), the third for 'vl. 2' (violin 2), and the bottom two for 'a.' and 'vcl.' (double bass). The score features complex rhythmic patterns, dynamic markings like ff, f, pp, and p, and various performance techniques indicated by arrows and lines. Measure numbers 9, 3, 4, 5, and 6 are marked above the staves. Specific performance instructions include 'Intense' and 'f' for the violins, and 'ppp' and 'pp' for the double bass.

Élec.
 16 6 sinus : sequence B
 7 v1 : tstretch 5 sec.
 8 sinus : sequence C

5 **4** **B**
15 **4**
 position archet ad.lib
 (module impro #1) flaut < perforé
 variations de pression et de vitesse ad.lib
 garder nuance *pppp*

vln. 1
pp *ff* *pppp*

vln. 2
pp *ff* *ff*

a.
ff *p* *ff*

vcl.
comme une ombre
pp *ppp* *pp*

3 **4** **C**
f *f* *ff*
ff > *p* *p*

Intense
"f"
"f" *p*
(II)
p

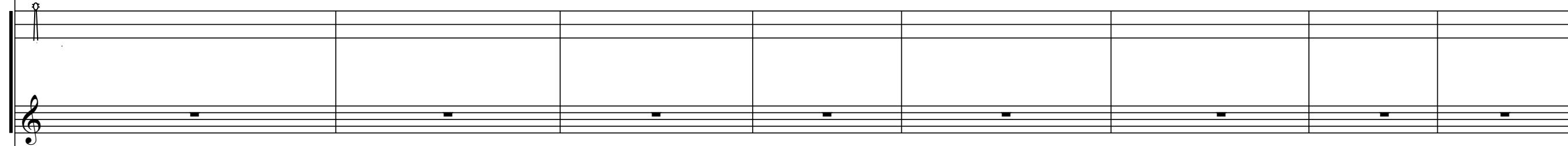
Intense
"f" *"p"*

Intense
"f"

Élec.

4 2
4

vl. 1



vl. 2

p

(IV)

pp

a.

f

flaut.

p *p* *p*

f

vcl.

p

p

"*p*"

f > *mf* > *p*

"*f*"

30

(10) v2 : harmo-special OFF
 v2 : t-stretch 4s
 a : comb OFF

(11) Sinus : sequence D

Élec.

12
45
4 D7
45
47
4

vl. 1

sourdine

*ff**ff pp ff p*

vl. 2

étouffer au sillet

sourdine

*ff ff ff**ff ff p*

a.

sourdine

de plus en plus de note

*ff**ff ff**ff pp ff > p*

vcl.

sourdine

*ff**ff**ff pp pp > ff*

(35) (12) Sinus : sequence E
 Élec.
 (13) Sinus : sequence F

5 4 [E] 4 2 4 [F] 5 4 3 4 2 4 3 4

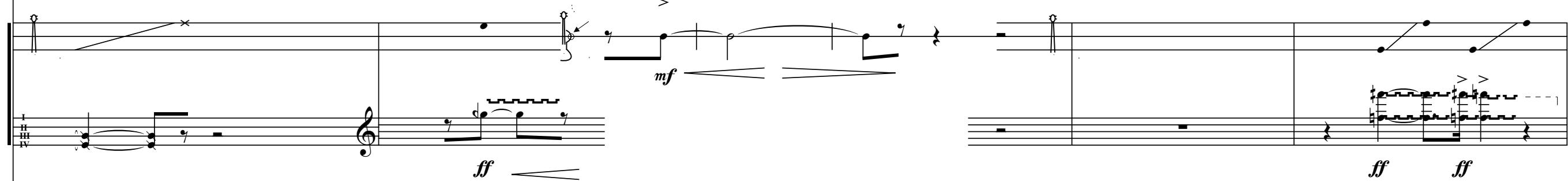
vln. 1
 vln. 2
 a.
 vcl.

42

Élec.

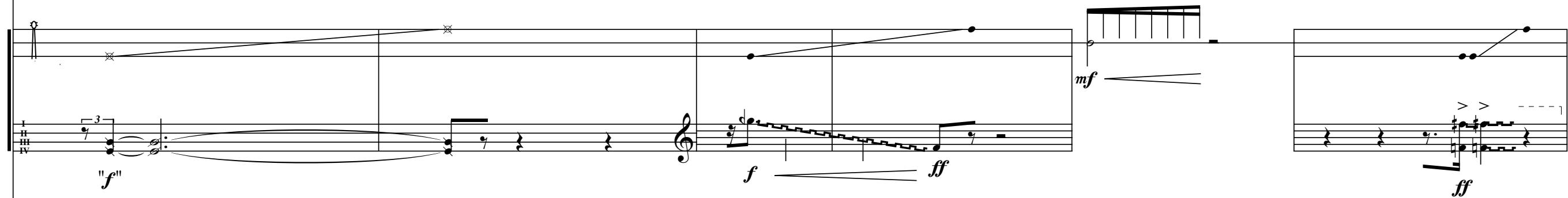
4
43
42
44
45
4

vl. 1

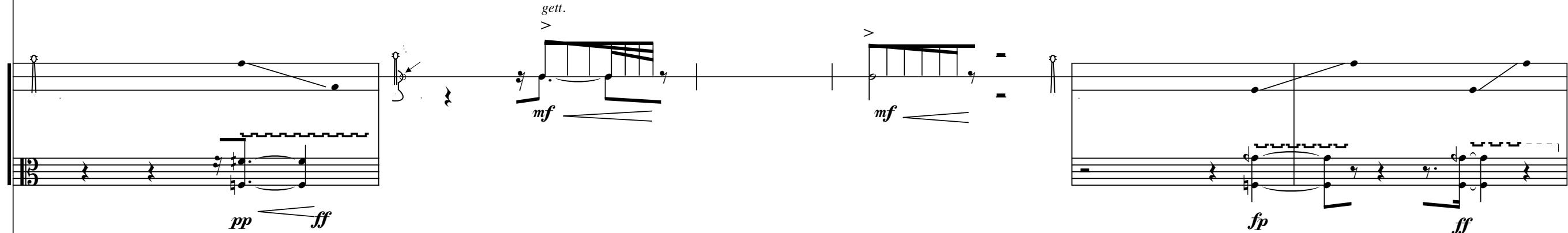


gett.

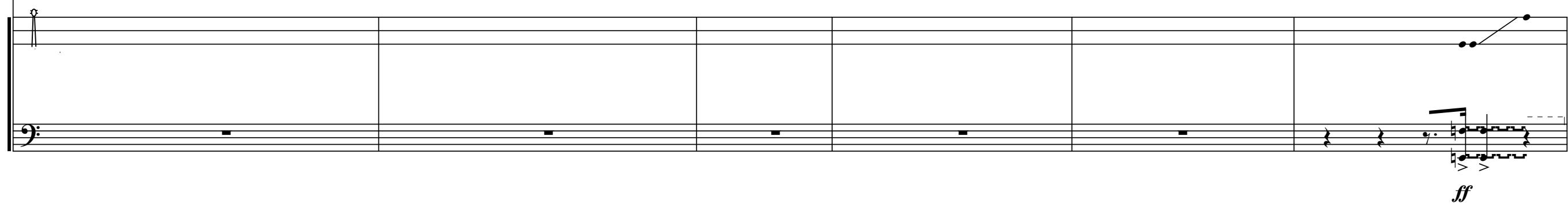
vl. 2



a.



vcl.



(48) (14) Sinus : sequence G
 Autoharm : fadeout long

(15) Sinus : sequence H
 Systeme-Prologue II : ON

Élec. [Speaker icon]

2 G 4 2 H

4 4

Rall. $\bullet = 80$

vln. 1

ff "f" "p"

vln. 2

ff "f" "p"

Rall. pp < f mf < =

a.

ff

Rall. "f" "p"

vcl.

ff ff mf > f >

55

16 v1 : tstretch 6,7 s
vcl : tstretch 6s
vcl : harm-special 7s

Élec.

3
4

vl. 1

mf

3 —

mf

v1.2

Ø (1/2 col legno)

(IV)

a.

(jeté mesuré)

vcl.

1

mf

mf ————— *f* —————

60

Élec.

 v1 : tstretch 4s
 17 : tstretch 4s
 vcl : tstretch 6s
5
44
42
4
I6
43
4

vl. 1

v1

pp *mf*

f

ff

"*f*" "*p*"

vl. 2

v2

pp < *f*

mf

mf

ff

a.

a.

mf

f

ff

"*f*" "*p*"

vcl.

vcl.

mf

f

ff

pp *f*

ff

"*f*"

65

Élec.

(18) a : comb ON

4
4 J3
44
43
4

vl. 1

vln. 1

vl. 2

vln. 2

a.

a.

vcl.

vcl.

72

Élec.

2
4

19 a : comb OFF

20 vcl : comb ON
vcl : tstretch 15 sec.

flaut.

vl. 1

attaque avec "bow tap"

vl. 2

a.

vcl.

ppp

fz > p

ppp

ppp

fz — p

fz — p

ppp

module impro #1

- position archet ad.lib
- flaut <> perforé

variations de pression et de vitesse ad. lib

garder nuance pppp

p

pp

p

pppp

ppp

K

(77)

(21) v1 : comb ON, fade in
 vcl : comb OFF
 "son long"

Élec.

(22) vcl : comb ON fade in
 Systeme-Prologue III : ON

vl. 1

vl. 1

MODULE IMPRO #2

mouvements-archet

m.d.

sul IV

m.g.

pp

vl. 2

vl. 2

flaut.

a.

pp < p pp p pp

vcl.

(module impro #3)

sourdine

ppppp

pp

87

(23) v1 : comb OFF, fade out
vcl : comb OFF, fade out(24) v1 : tstretch 8s
v2 : tstretch 8s
vcl: tstretch 6s

Élec.

2
4

L

8
44
4

+ bow tap

vcl. 1

vcl. 2

a.

vcl.

espressivo

sourdine

pp *pp* *p* *ff*

f *p*

ff

Amplification : le quatuor est très réverbéré

et projeté sur le plan arrière.

Au contraire les sons issus de "systemePrologueIII" sont projetés à l'avant

96 (25) SystèmePrologue II OFF

Élec.

4 M Hésitant, puis de plus en plus affirmé. Expressif
4 = 60

(26) v2 : réverb ∞ (1s d'ouverture)

3 4 2 4 flaut.

"p" environ 10s accorder IV en sol# sourdine pp

vl. 1

flaut. environ 10s sourdine pp

vl. 2

flaut., hésitant sourdine espressivo pp ppp p pp p pp p pp p pp p

a.

environ 10s

vcl.

environ 10s

flaut.

(105)

(27) v1: réverb ∞ (2s)
a : réverb ∞ (2s)

(28) vcl: réverb ∞ (2s)

Élec.

3
44
46
4

vl. 1

Musical score for strings and electric instrument. The score consists of four staves. The top staff is labeled "Élec." and has a tempo marking of 105. The second staff is labeled "vl. 1" and the third is "vl. 2". The bottom staff is labeled "a." and "vcl.". The score is divided into measures by vertical bar lines. Measure 1 (3/4 time) starts with a single note on the electric staff. Measures 2-3 (4/4 time) show various rhythmic patterns for the strings, including eighth and sixteenth notes, with dynamics like *pp*, *p*, and *mp*. Measure 4 (6/4 time) continues with similar patterns. Measure 5 (4/4 time) includes dynamic markings like *pp sub.* and *pp*. Measure 6 (6/4 time) concludes with a dynamic *pp*.

vl. 2

Continuation of the musical score. The strings (vl. 1, vl. 2, and a.) play sustained notes with slurs. The electric instrument (Élec.) and vcl. (bottom staff) provide harmonic support. Measure 1 shows sustained notes. Measures 2-3 feature eighth-note patterns with dynamics *pp* and *p*. Measures 4-5 show sustained notes again. Measure 6 concludes with a dynamic *pp*.

a.

Continuation of the musical score. The strings (vl. 1, vl. 2, and a.) play sustained notes with slurs. The electric instrument (Élec.) and vcl. (bottom staff) provide harmonic support. Measure 1 shows sustained notes. Measures 2-3 feature eighth-note patterns with dynamics *pp*, *p*, and *mp*. Measures 4-5 show sustained notes again. Measure 6 concludes with a dynamic *pp*.

vcl.

Final continuation of the musical score. The strings (vl. 1, vl. 2, and a.) play sustained notes with slurs. The electric instrument (Élec.) and vcl. (bottom staff) provide harmonic support. Measure 1 shows sustained notes. Measures 2-3 feature eighth-note patterns with dynamics *pp* and *ppp*. Measures 4-5 show sustained notes again. Measure 6 concludes with a dynamic *pp*.

110

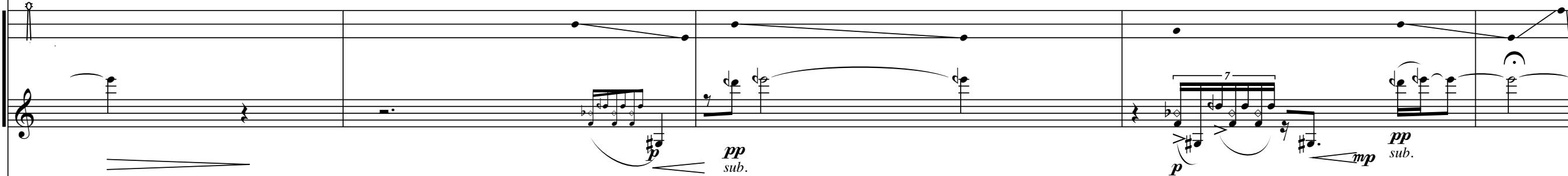
Élec.

2
4

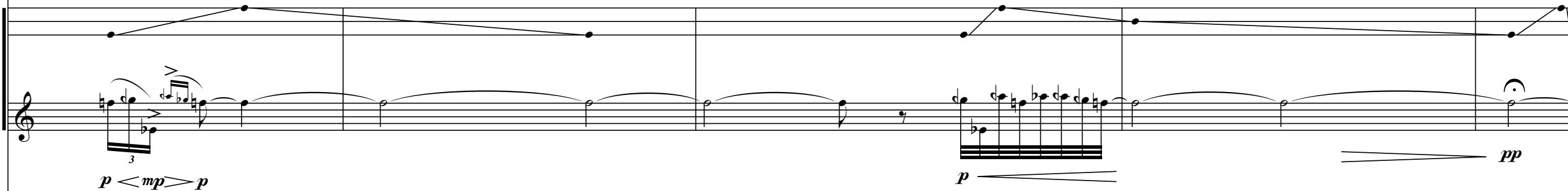
4
4

2
4

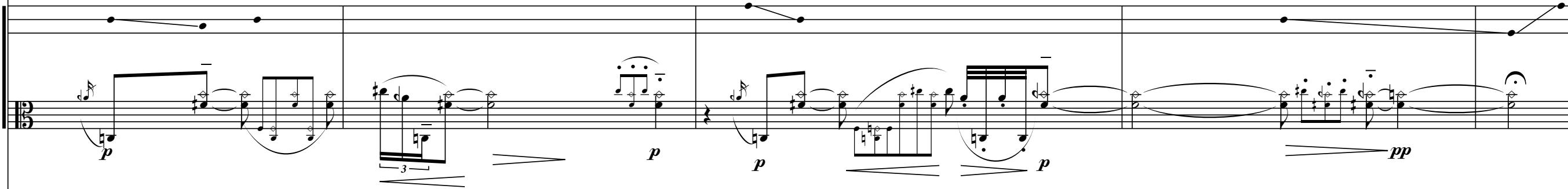
vl. 1



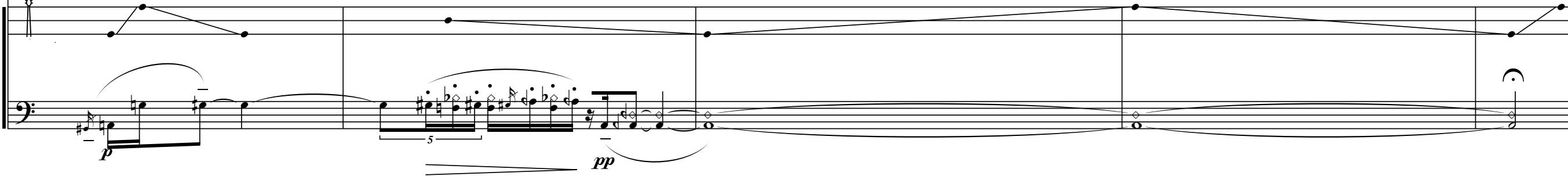
vl. 2



a.



vcl.



Élec.

 $\frac{5}{4}$ N $\frac{2}{4}$ $\frac{4}{4}$ $\frac{2}{4}$

vl. 1

Musical score for violin 1 (vl. 1). The score consists of four staves. The first staff starts with a measure in $\frac{5}{4}$ time, indicated by a circled 'N'. The second staff begins in $\frac{2}{4}$ time. The third staff begins in $\frac{4}{4}$ time. The fourth staff begins in $\frac{2}{4}$ time. The score includes dynamic markings: p , mp , and p . A performance instruction 'ôter sourdine' is placed in a box above the first staff. The music features various note heads and stems, with some notes connected by horizontal lines.

vl. 2

Musical score for violin 2 (vl. 2). The score consists of four staves. The first staff starts in $\frac{2}{4}$ time. The second staff begins in $\frac{4}{4}$ time. The third staff begins in $\frac{2}{4}$ time. The fourth staff begins in $\frac{2}{4}$ time. The score includes dynamic markings: pp , mp , and p . The music features various note heads and stems, with some notes connected by horizontal lines.

a.

Musical score for alto (a.). The score consists of four staves. The first staff starts in $\frac{2}{4}$ time. The second staff begins in $\frac{4}{4}$ time. The third staff begins in $\frac{2}{4}$ time. The fourth staff begins in $\frac{2}{4}$ time. The score includes dynamic markings: mf , p , mp , p , and mf . The music features various note heads and stems, with some notes connected by horizontal lines.

vcl.

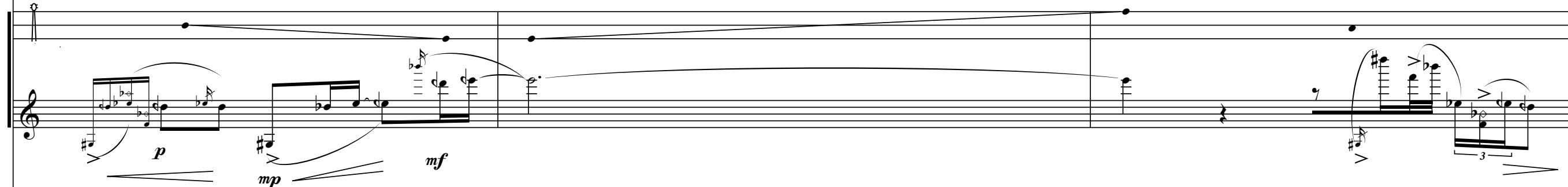
Musical score for cello (vcl.). The score consists of four staves. The first staff starts in $\frac{2}{4}$ time. The second staff begins in $\frac{4}{4}$ time. The third staff begins in $\frac{2}{4}$ time. The fourth staff begins in $\frac{2}{4}$ time. The score includes dynamic markings: mf , mp , and p . The music features various note heads and stems, with some notes connected by horizontal lines.

120

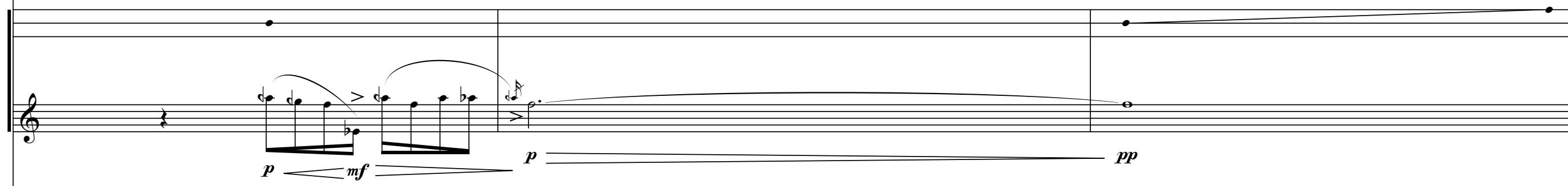
Élec.

3
4

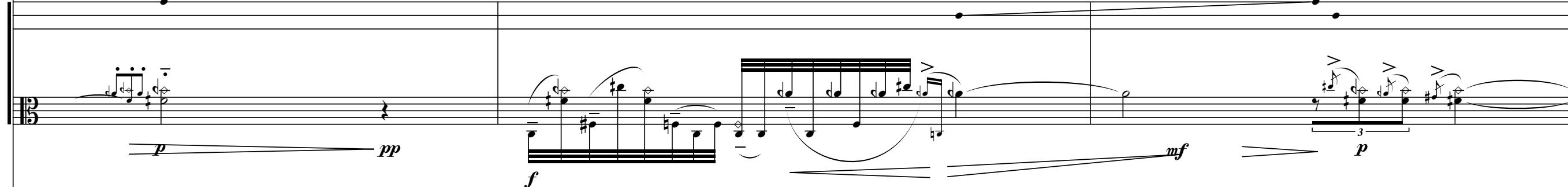
vl. 1

4
4

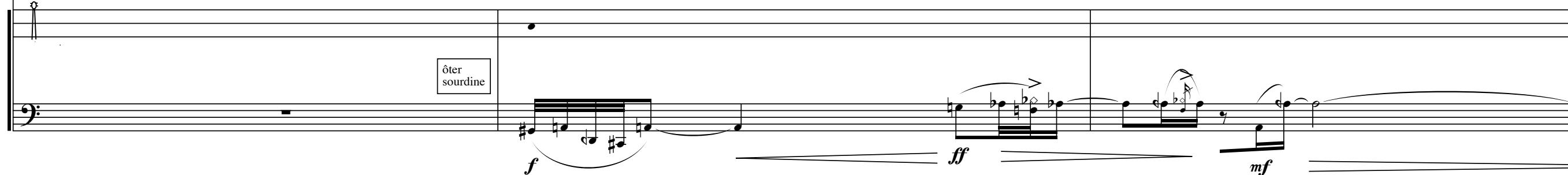
vl. 2



a.



vcl.



123

Élec.

O

vl. 1

fz *f* *p* *f* *f*

vl. 2

p *p* *mf* *p*

pter
sourdine

a.

f *f* *f* *mp*

vcl.

p *p*

This musical score page contains five staves. From top to bottom: 1) An electronic instrument part (Élec.) with a small square dynamic symbol. 2) An Oboe (O) part with a square dynamic symbol. 3) A Violin 1 (vl. 1) part with a treble clef, key signature of one sharp, and various dynamics (fz, f, p). 4) A Violin 2 (vl. 2) part with a treble clef, key signature of one flat, and dynamics (p, p, mf, p). A box labeled "pter sourdine" is placed above the second measure of this staff. 5) A Bassoon (a.) part with a bass clef and dynamics (f, f, mp). 6) A Cello (vcl.) part with a bass clef and dynamics (p, p). Measure lines divide the page into four measures. Measure 1: Élec. (square), O (square), vl. 1 (fz), vl. 2 (p), a. (f), vcl. (p). Measure 2: Élec. (square), O (square), vl. 1 (f), vl. 2 (p), a. (f), vcl. (p). Measure 3: Élec. (square), O (square), vl. 1 (p), vl. 2 (mf), a. (f), vcl. (p). Measure 4: Élec. (square), O (square), vl. 1 (f), vl. 2 (p), a. (mp), vcl. (p).

Élec.

3
4

4
4

vl. 1

vl. 2

a.

vcl.

Dynamic markings and performance instructions:

- Violin 1: \times *mf* \times *mp*
- Violin 2: *pp*, *p* \times *mf* \times *p*
- Alto (a.): *f*, *f* *sub.*, *f* *sub.*, *mf*
- Cello (vcl.): *f*, *mf*, *pp*

Élec.

5
43
4 P4
4

Musical score for strings and electric instrument. The score consists of four staves: Electric (top), violin 1 (second), violin 2 (third), and cello/bass (bottom). The time signature changes from 5/4 to 3/4 (marked P) to 4/4. The electric part has a single note. The violins play eighth-note patterns with dynamic markings: $<mf$, p , f , mf , f_z , p , and f . The cellos play eighth-note patterns with dynamics: mf , p , mp , 6 , mp , and mf .

Continuation of the musical score. The electric part has a single note. The violins play eighth-note patterns with dynamics: mf , p , mp , 6 , mp , and p . The cellos play eighth-note patterns with dynamics: mf , p , mp , 6 , mp , and p .

Continuation of the musical score. The electric part has a single note. The violins play eighth-note patterns with dynamics: p , f , mf , p , and mf . The cellos play eighth-note patterns with dynamics: p , mf , p , mf , and p .

Continuation of the musical score. The electric part has a single note. The violins play eighth-note patterns with dynamics: p , $>f$, $>$, mp , p , p , mp , and mf . The cellos play eighth-note patterns with dynamics: p , mp , 3 , 3 , p , p , mp , and mf .

Élec.

vl. 1

Musical score for violin 1 (vl. 1). The score shows two measures. In the first measure, the violin plays eighth-note patterns with grace notes, dynamic *mf*, and a measure number 5. In the second measure, it plays sixteenth-note patterns with grace notes, dynamic *f*, and a measure number 5. The score concludes with a dynamic *p*.

vl. 2

Musical score for violin 2 (vl. 2). The score shows two measures. In the first measure, the violin plays eighth-note patterns with grace notes, dynamic *p*, and a measure number 3. In the second measure, it plays sixteenth-note patterns with grace notes, dynamic *p*, and a measure number 3. The score concludes with a dynamic *mf*.

a.

Musical score for alto (a.). The score shows two measures. In the first measure, the alto plays eighth-note patterns with grace notes, dynamic *mp*, and a measure number 3. In the second measure, it plays sixteenth-note patterns with grace notes, dynamic *mp*, and a measure number 3. The score concludes with a dynamic *p*.

vcl.

Musical score for cello (vcl.). The score shows two measures. In the first measure, the cello plays eighth-note patterns with grace notes, dynamic *p*, and a measure number 5. In the second measure, it plays sixteenth-note patterns with grace notes, dynamic *mp*, and a measure number 3. The score concludes with a dynamic *mp*.

Élec.

Q

This musical score page contains four staves of music:

- Élec. (Top Staff):** An electronic instrument part consisting of two short vertical bars on a single staff.
- vln. 1 (Second Staff):** Violin 1 part. It features a dynamic section starting at **f**, followed by **mf**, **f**, **p**, **mf**, and **f**. The notation includes various slurs, grace notes, and bowing markings.
- vln. 2 (Third Staff):** Violin 2 part. It follows a similar pattern of dynamics (**mf**, **f**, **p**, **mf**, **f**) and includes slurs and grace notes.
- vcl. (Bottom Staff):** Cello part. It includes dynamics (**mp**, **p**, **mf**, **mp**), slurs, grace notes, and a measure containing a bass clef and a circled 'o' symbol.

141

Baisser peu à peu la réverb ∞

Élec.

Musical score page 141 featuring four staves:

- Élec. (Top Staff):** An electronic track indicated by a small square icon. The instruction "Baisser peu à peu la réverb ∞" is written above it.
- vln. 1 (Second Staff):** Violin 1 part. The music consists of six measures. Measure 1 starts with a sustained note followed by eighth-note patterns. Measures 2-5 show more complex eighth-note figures with grace notes and slurs. Measure 6 ends with a dynamic **f**. Measure 7 begins with a dynamic **f**, followed by eighth-note patterns.
- vln. 2 (Third Staff):** Violin 2 part. The music consists of six measures. Measure 1 has a dynamic **p**. Measures 2-5 show eighth-note patterns. Measure 6 ends with a dynamic **pp**.
- a. (Fourth Staff):** Double bass (cello) part. The music consists of six measures. Measure 1 has a dynamic **p**. Measures 2-5 show eighth-note patterns. Measure 6 ends with a dynamic **p**.
- vcl. (Bottom Staff):** Double bass (cello) part. The music consists of six measures. Measure 1 has a dynamic **p**. Measures 2-5 show eighth-note patterns. Measures 6-7 show eighth-note patterns with dynamics **pp** and **p**.

The score uses standard musical notation with stems, note heads, and rests. Various dynamics (e.g., **p**, **pp**, **f**) and performance instructions (e.g., grace notes, slurs, triplets, sixteenth-note patterns) are included. Measure numbers are implied by the vertical grid lines.

Élec.

R

vl. 1

8va

8va

c# eb

c#

vl. 2

espr.

mp p mp p

a.

pp

mp

p

pp

vcl.

>pp

p

p

>pp

149

29

son 9.1
 v1+v2+a+vcl : rvb∞ OFF -> delay 12s -> rvb∞ ON (ouverture 18s)
 v1+v2+a+vcl : iana (ouv 20s, delay 13s) (à placer sur le plan lointain)

Élec.

Élec. (top staff, mostly silent)

vcl. 1 (second staff):
 Measures 1-4: Rhythmic patterns with grace notes, dynamic *mp*, dynamic *mf*, and slurs.
 Measures 5-8: Rhythmic patterns with grace notes, dynamic *mf*, and slurs.
 Measures 9-12: Rhythmic patterns with grace notes, dynamic *mp*, and slurs.
 Measures 13-16: Rhythmic patterns with grace notes, dynamic *mf*, and slurs.

vcl. 2 (third staff):
 Measures 1-4: Sustained notes with grace notes, dynamic *mp*, and slurs.
 Measures 5-8: Sustained notes with grace notes, dynamic *mp*, and slurs.
 Measures 9-12: Sustained notes with grace notes, dynamic *p*, and slurs.
 Measures 13-16: Sustained notes with grace notes, dynamic *p*, and slurs.

a. (fourth staff):
 Measures 1-4: Sustained notes with grace notes, dynamic *p*, and slurs.
 Measures 5-8: Sustained notes with grace notes, dynamic *mp*, and slurs.

vcl. (bottom staff):
 Measures 1-4: Sustained notes with dynamic *pp*.

Élec.

Rall. $\bullet = 50$

vl. 1

(8^{va})-

réaccorder IV en sol

Rall.

vl. 2

Rall.

a.

Rall.

vcl.

(157)

(30) son 9.2
Système Prologue II ON

Élec.

S

T ♩ = 50

*Lumineux, pur
Calme, plein*

attendre la fin
du son élec.

vl. 1

pizz. (♩) f pizz. (♩) f Très pur pp

vl. 2

pizz. (♩) f pizz. (♩) f pp

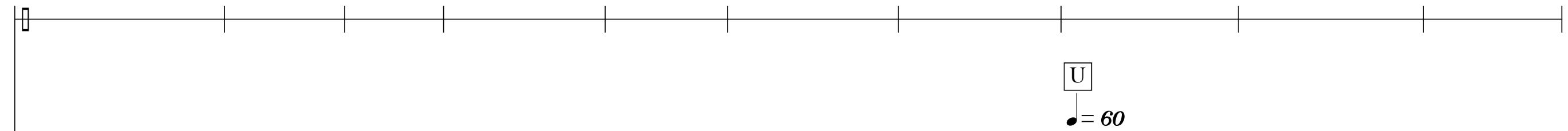
a.

pizz. (♩) f pizz. (♩) f pp

vcl.

pizz. (♩) f pizz. (♩) f très pur pp

Élec.



Accel.- - -

vl. 1

pp

Accel.- - -

vl. 2

III
IV
pp
mp
pp

Accel.- - -

a.

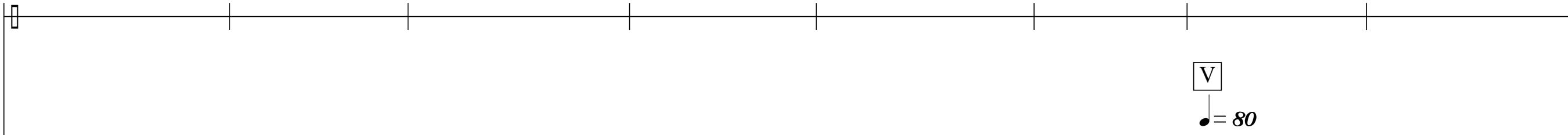
poco vib.
pp
mp
pp

Accel.- - -

vcl.

poco vib.
pp
mp
pp

Élec.



Accel.- - -

vln. 1

vln. 2

vcl.

espr., poco vib.

mp > p

mp == pp

Accel.- - -

vln. 1

vln. 2

vcl.

sim.

mp > p

mp == pp

Accel.- - -

vln. 1

vln. 2

vcl.

poco vib.

expr.! >

p > p

fz p

Accel.- - -

vln. 1

vln. 2

vcl.

poco vib.

pp

p < mp

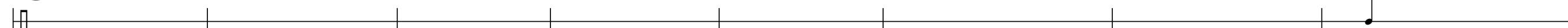
p

Intense, vib.

189

(31) vcl : tstretch 5s.

Élec.

6
4

Accel.-

vl. 1

p ————— *pp*

p ————— *mp* *p*
sub.

p ————— *mp*

p ————— *pp*

Accel.-

vl. 2

p ————— *pp*

p ————— *mf* *pp* ————— *mp*

pp

p ————— *pp*

Accel.-

a.

fzp

p ————— *mp*

p

p ————— *mp*

p ————— *mp* *mp* ————— *p*

V ————— *pp*

Accel.-

vcl.

pp

mp ————— *mp*

pp

mp ————— *pp*

p ————— *pp*

SystemePrologueII OFF
SystemePrologueIII ON
Sinus : sequence X
(32) v1+v2+a+vcl : rrb ∞ 4sec.
AUTO-HARM : ON
iana : OFF
munger : ON ws 5000 ms.

Élec.

197

baisser la reverb ∞

(33) vcl : Harmo-special ON 12s
munger ws 4000 ms.

X En tension, de plus en plus voilé
(vers le sombre)

3
4

4
4

5
4

3
4

5
4

$\text{♩} = 60$

vl. 1

ppp

ppp

ffz pp

pp

vl. 2

ppp

ppp

sfz pp

sfz p

a.

ppp

ppp

sfz pp

pp

p

vcl.

ppp

p

204

(34) rvb ∞ OFF
vcl : harmospecial OFF
munger ws 3500ms

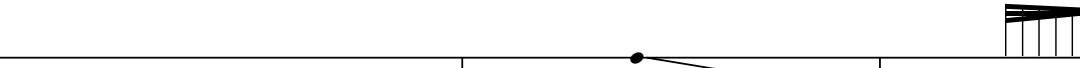
Élec.

4
4

vl. 1

*sfp*

vl. 2

*espr.**mp*

a.

*mf*

vcl.

*Intense**mp**mf**f*

211

35 m

(35) munger ws 2000 ms

36

(36) munger ws 1000 ms

37m

(37) munger ws 500 ms

Élect

Y

3
4

4
4

2
4

vl.

A musical score for string instruments, likely cello or bass, featuring five staves. The first staff uses a treble clef and shows a sustained note followed by a grace note and a sixteenth-note pattern. The second staff uses a bass clef and includes dynamic markings *p*, *ff*, and *f*. The third staff features a wavy line and a vertical double bar line with a repeat sign. The fourth staff shows a sixteenth-note pattern with a fermata over the last note. The fifth staff ends with a fermata and contains the text "pizz. étouffer". Various slurs, grace notes, and bowing marks are present throughout the score.

vl. 3

Musical score for string quartet, page 2, measures 11-12. The score consists of four staves: Violin 1 (top), Violin 2, Cello, and Double Bass. Measure 11 starts with a sustained note on the Violin 1 staff. Measure 12 begins with a dynamic *f*. The Violin 1 staff features a wavy line and a grace note. The Violin 2 staff has a sustained note with a fermata. The Cello staff shows a sixteenth-note pattern. The Double Bass staff has a sustained note. Measure 13 starts with a dynamic *f*. The Violin 1 staff has a sixteenth-note pattern. The Violin 2 staff has a sustained note. The Cello staff has a sixteenth-note pattern. The Double Bass staff has a sustained note. Measure 14 starts with a dynamic *ff*. The Violin 1 staff has a sixteenth-note pattern. The Violin 2 staff has a sustained note. The Cello staff has a sixteenth-note pattern. The Double Bass staff has a sustained note.

8

A musical score page for a string quartet. The top staff features a melodic line with grace notes and slurs. The bottom staff shows rhythmic patterns with 'pizz.' markings. Dynamics include 'mf', 'f', 'ff', and accents. Measure 11 ends with a fermata over the top staff's melody. Measure 12 begins with a dynamic 'mf' and a rhythmic pattern on the bottom staff. The top staff has a 'pizz.' marking. Measure 13 starts with a dynamic 'f'. The top staff has 'arco' markings. Measures 14 and 15 show 'pizz.' markings on the top staff and 'arco' markings on the bottom staff. Measures 16 and 17 show 'ff' dynamics and rhythmic patterns. Measure 18 concludes with a dynamic 'ff' and a rhythmic pattern.

vcl.

Musical score for string quartet (Violin 1, Violin 2, Viola, Cello) in 2/4 time. The score shows two measures of music. Measure 11 starts with a dynamic of ***f***. The Violin 1 part has a sustained note with a circle above it, followed by a short note. The Violin 2 part has a sustained note with a circle above it, followed by a short note. The Viola part has a sustained note with a circle above it, followed by a short note. The Cello part has a sustained note with a circle above it, followed by a short note. Measure 12 starts with a dynamic of ***ff***. The Violin 1 part has a sustained note with a circle above it, followed by a short note. The Violin 2 part has a sustained note with a circle above it, followed by a short note. The Viola part has a sustained note with a circle above it, followed by a short note. The Cello part has a sustained note with a circle above it, followed by a short note. Measure 13 starts with a dynamic of ***f***. The Violin 1 part has a sustained note with a circle above it, followed by a short note. The Violin 2 part has a sustained note with a circle above it, followed by a short note. The Viola part has a sustained note with a circle above it, followed by a short note. The Cello part has a sustained note with a circle above it, followed by a short note. Measure 14 starts with a dynamic of ***ff***. The Violin 1 part has a sustained note with a circle above it, followed by a short note. The Violin 2 part has a sustained note with a circle above it, followed by a short note. The Viola part has a sustained note with a circle above it, followed by a short note. The Cello part has a sustained note with a circle above it, followed by a short note.

219

Élec.

(38) munger ws 5000 ms

(39) munger ws 250 ms
Système PrologueIII OFF
AUTOHARM OFF
amplification : ff4
4

vl. 1

étouffer I

étouffer IV

ff

Z

vl. 2

φ

ff***ff******ff***

>>>>>>>>

pizz.

— 3 —

φ

φ

φ

φ

pizz.

a.

ff***ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff***

étouffer IV

vcl.

ff***ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff******ff***

225 (40) munger ws 200ms (41) munger ws 100ms (42) munger ws 50ms (43) munger ws 0ms
 Élec. munger : fade out

3
4 **2**
Brutal, sourd

The musical score consists of four staves:

- Élec.**: An electric instrument part with a single note at measure 225 and a sustained note with a 'fade out' instruction at measure 41.
- vl. 1**: Violin 1 part, featuring sixteenth-note patterns and dynamic markings **fff** and **>ffff**.
- vl. 2**: Violin 2 part, featuring sixteenth-note patterns, pizzicato (pizz.) markings, and dynamic markings **fff** and **>ffff**.
- a.**: Cello part, featuring sixteenth-note patterns, pizzicato (pizz.) markings, and dynamic markings **fff** and **>ffff**.
- vcl.**: Bassoon part, featuring sixteenth-note patterns and dynamic markings **fff** and **>ffff**.

 Measure numbers 225 through 43 are indicated above the staves, with specific performance instructions (ws duration) for each muner event. The time signature changes from 3/4 to 2/4 at measure 41.

II-1 6 = 80
4 *Brusque, sourd (clos)*

Violoncelle

(II) $\overbrace{p}^3 < \overbrace{mf}^3$
 $p > pp$
 $p < mf < f$
 $p \overbrace{f}^> fz <$
 $p_{sub.} \overbrace{mf}^> p < mf$
 $p \overbrace{mf}^> f > p \overbrace{fz}^> p < mf$

II-5 3
4

vcl.

$f > p = pp$
 $p < f fz <$
 mp
 $p \overbrace{fz}^> p \overbrace{mf}^> f$

II-9 3
4

vcl.

$mf > p > f > p$
 $mf > p$
 $< f < > mf$
 $ffz > p < mf = p$
 $mf < ffz > f = p$
 $quasi gett.$

(1/2 col legno)
(+ tap)
(col legno)

II-13 $\frac{5}{4}$

vcl.

(9) $\frac{3}{4}$

(10) $\frac{3}{4}$

(11) $\frac{3}{4}$

p mf p _{sub.} pp

p f

pp _{sub.}

pizz.

p f p mf

p pp

II-17 $\frac{4}{4}$

vcl.

$\frac{5}{4}$

(12) $\frac{6}{4}$

(13) $\frac{6}{4}$

p f fz

mp

p fz

mf

f mf p mp

fz p

II-21 $\frac{2}{4}$

vcl.

$\frac{5}{4}$

(14) $\frac{3}{4}$

$\frac{5}{4}$ (15)

mf $> p$

mf $>$

$< f <$

$> mf$

ffz p

$< mf =$

p

$>$

quasi gett.

p

p mf f _{sub.}

Rall.

II-25 $\frac{4}{4}$ $\frac{2}{4}$

vcl.

(16) f_z f_z p pp $pizz.$ p

(17)

(18) ff pp $< ff_z$ $f_z < ff > mf$ $+ tap$ 3 3

p

II-29 $\frac{3}{4}$ $\frac{2}{4}$ $\frac{4}{4}$ $Rall.$ $\frac{5}{4}$ $\text{J} = 50$ $\frac{4}{4}$ $Rall.$

vcl.

(19) $molto vib.$ $ff_z ff$ $f_z f$ mf

(20)

(21) p

(22) $mf < ffp > pp$ $ff_z < pp$ ff p mf f p

(0)

II-34 $\frac{5}{4}$ $\text{J} = 40$ $\frac{4}{4}$

vcl.

p $ff_z p$ 3

ff_z

ff $mf < f$

p $sub.$ $mf < pp$

pp $ff_z > mf$ f_z p

$molto vib.$

