

La rupture inéluctable

for bass clarinet and electronics

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La rupture inéluctable

Quatre méditations sur nos états métastables

À Heather

I. Vanitas vanitatum omnia vanitas

(vanité des vanités, tout est vanité)

Ecclésiaste

II. Memento Mori

(Souviens-toi que tu mourras)

locution latine

III. Timor mortis conturbat me

(La peur de la mort me perturbe)

3^{ème} nocturne, matine de l'office des morts

IV. Carpe diem quam minimum credula postero

(Cueille le jour présent et sois le moins confiant possible en l'avenir)

Horace, Odes

Le bonheur est si fragile, une sorte d'équilibre précaire et improbable : une bulle de savon multicolore. Comment peut-on en jouir pleinement, malgré le vertige que donne sa précarité? Il semble qu'une réflexion sur l'impermanence fut et sera toujours au cœur de la conscience de soi, tant pour l'individu que pour la société. Cette permanence devrait m'apaiser.

La rupture inéluctable est une commande de Heather Roche avec l'aide du Conseil des Arts du Canada, créée par la commanditaire le 3 novembre 2011 au CIRMMT, Montréal.

La rupture inéluctable

Four meditations on our metastable states.

For Heather

I. Vanitas vanitatum omnia vanitas

(Vanity of vanities; all is vanity)

Ecclesiastes

II. Memento Mori

(Remember you will die)

Latin phrase

III. Timor mortis conturbat me

(the fear of death disturbs me)

third Nocturn of Matins of the Office of the Dead

IV. Carpe diem quam minimum credula postero

(Seize the Day, trusting as little as possible in the future)

Horace, Odes

Happiness is so fragile, a kind of precarious and improbable balance: a multicolour soap bubble. How can one fully enjoy it despite the vertigo its transience induces? It seems that reflection on impermanence was, and forever will be, at the heart of self-conscience, both for the individual and society. This permanence should soothe me.

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Notes on the notation

General:

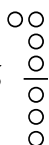
The score is transposed in Bb, including the electronics part when notes are indicated. The latter is notated to its simplest element, and is not intended to be an extensive description of the electronic parts and processes.

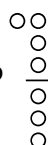
Patch/Cue/Pedals

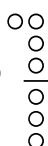
The piece requires a simple technical setup as indicated in the next section. On the score, the only contribution from the performer is in the form of cues given by the pedal, which are indicated in boxed bold numbers. They should be given exactly where the arrow points. The automatic cues are in rounded italic pale grey numbers and they are there for indication only.

Note heads:

The note heads are describing different fingerings, to help the readability. There are four cases:

1) a crosshead B⁴ (as in measure 1) refers to this fingering 

2) a crosshead A^{#4} (as in measure 19) refers to 

3) a crosshead C^{#6} (as in measure 28) refers to 

4) a triangle head on G⁵ (as in measure 49) refers to an overblown multiphonic.

Accents:

The accents are used to specify the hardness of the attacks:

- + is the hardest, i.e. a slap tongue followed by a note, as if saying [p] before the note;
- ^ is the second hardest, as if saying [t] before the note;
- no accent means normal attack, as if saying [d] before the note;
- o means a transition between noise and note, as if saying [f] for very long before the note;

Durations of notes:

The indicated rhythms and tempos should be followed rigorously, both for onsets and ends. The only exceptions to this rule are the breathing marks (like at the end of measure 3) where the pause is unmetred.

The note ends are notated in three different ways:

- 1) when a note is tied to a silence (like at measure 15), it means to hold it at full intensity for the notated duration, then to finish it tapering its end, like in classic performance practice;
- 2) when a note is not tied to a silence (like all the notes of the first system), it means to hold it for its full length at the same intensity and to end it at the exact duration, abruptly;
- 3) when a note is tied to a silence but has a crescendo sign at its end, it means to articulate a push of the volume at the end of the note, as to jump in the silence.

Notes on the second movement (Measures 116 to 155):

There are three specific textures needed to be performed, which mix noise, overblown choked multiphonic and fundamental note at different levels:

- 1) texture A (measures 116 and 118) starts with a slap tongue (+), then has in equal balance the overblowing and the fundamental, in a fragile unsettled balance between the two, and ends with the crescendo to jump in the silence, as demonstrated in the audio example in appendix;
- 2) texture B (measures 121, 124, 127, 129, 132, 134, 136) is an even more fragile balance, where the fundamental is more suppressed, and the noise/breath element is more present. Each element is now a third of the sound, in unsettled balance, and the onset and ends are soft, as in the example;
- 3) texture C (measures 140 and 142) are now mostly noise/breath, with the fragile upper notes appearing about a quarter of the time. There is no more fundamental, hence the notation of the higher pitch only, but the latter can topple to the next harmonic, as demonstrated in the example.

Notes on the fourth movement (Measures 219 to 303):

The pulse in this movement, which emerges from a more and more assertive panning, is the actual tempo in the actual meter: 5/8 at 142 bmp, with implied double time in the octavation.

The electronic part is actually made of chords from notes sampled in real time. To facilitate the reading, notes were indicated on the score only when the chords are changing.

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Technical Setup

The piece needs a simple setup consisting of:

- one silent cuing pedal. It could be replaced by any other cuing means (i.e. a thumb switch);
- one mono source from the bass clarinet. One compact microphone, as linear as possible, placed in hyper-proximity to the instrument, is sufficient;
- a full range reproduction system, ideally in narrow LCR disposition behind the performer. The system needs to reach 30 Hz without distortion, therefore a subwoofer is needed most of the time;
- a low latency low noise floor professional computer sound soundcard;
- a computer running Cycling74's Max5 (version 5.1.9 or greater)

How to run the performance patch – calibration and run-through

- 1) turn on the patch
- 2) follow onscreen instructions to get sound out and proper levels
- 3) adjust the level of cue 47 to be overall just a little louder than the acoustic instrument. It is important to note that there should never be any amplification of the instrument. You can start directly at the certain cues from within the `practice_points` window.
- 4) reset the patch with the panic button

How to run the performance patch – concerts

- 1) turn on the patch
- 2) turn the dac on and check that the clarinet level is moving
- 3) raise the volume to 100
- 4) press cue 0
- 5) press the pedal: if you see cue 1, you are ready to go.

How to refine the performance patch – advanced features

There are two built-in ways to refine the overall quality of the performance. The first is the built-in acoustic correction features. If you replace the audio files in the folder called `Corrections` by correction impulse responses, computed for instance by the HISStools you can make the sound input and outputs more linear, as demonstrated in the paper by Harker and Tremblay. For more info, please see the HISS website at <http://www.hisstools.org/>

The second method is to go set different gains of the different components according to the following perceived intentions. A performer might want change some parameters to better fit their instrument sound or performance intentions. The levels can be change in the performance patch, in the subpatcher called *cueing*, within the object called *qlist*. The following composition intentions should be respected:

First Movement:

- the synthesis level (`halo_vol`) should emerge from the silence, and always be behind the instrument, in crescendo throughout the 1st movement;
- octaver and distortion should never be louder than the acoustic source, but just augment it.
- at measure 91, the halo should blend completely with the source;

Second Movement:

- all the synthesiser ducking (`playerX_ratio` and `_thresh`) should be do with 1) the fundamental as loud as the clarinet, following quite tightly 2)the noisy scratch should be more difficult to trigger (on louder notes only) and 3)the harmonic layer should be even harder, but with a very long decay;

Third Movement

- beware of not putting the fixed tape part too loud. Again this should overwhelm the acoustic instrument a little, but not more. The held part (hold_vol) should be at the same level than the acoustic source.

Fourth Movement

- blend the held parts (hold_vol) just a little under the acoustic source, in continuous crescendo throughout the movement;

- the octaviating part (hold_fx_vol) is barely audible at the beginning of the movement, and gets progressively louder but never as loud as the acoustic source;

- the big bass notes should (playerX_vol) should be very full, louder than the low bass clarinet notes, but still not loud enough to overpower the higher *sf* melody.

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I. Tensed and urgent

Score in Bb

1

♩=130

Bass Clarinet

Electronics

6

11

2

16

3 18 sec

4 ♩=133

crash synth bell

ducked bells

20

26

5

6

7

distortion

back to bells

32

bells are richer and faster

37

$\text{♩} = 136$

hold

disto squared

43

hesitant

a tempo

pp

ff

octaver dirt replaces disto

49

ff

bells have more and more attack

54

$\text{♩} = 139$

f

more ducking

59

disto comes back

66

bells are denser, disto disappears

72

♩=142

78

disto is back | octave dirt is added

85

♩=120

p

rall.

10 sec

♩=110

8^{va}

ppp

disto and octave fade out... | and delay appears | fragile synthetic halo

91

♩=115

(8)

3 sec

3 sec

96

♩=105

(8)

3 sec

3 sec

♩=110

101

8 sec $\text{♩} = 130$

f *ff*

hold last note | disto is back | octave dirt replaces disto the synth bells are back, distorted too

107

the fat synth is following you

II. Anxious

113

10 sec | 1 breath (ca. 10 sec)

texture A

fff

the fat synth is more present | fat synth attack and sustain

117

4 sec | 1 breath (ca. 10 sec) | 15 sec | 4 sec | 1 breath (ca. 9 sec)

texture A | texture B

fff *fff* *mp*

fat synth attack | a further layer is added | an articulated pedal is following you

122

5 sec | 1 breath (ca. 9 sec) | 5 sec

texture B

mp

the articulated pedal continues

127

4 sec | 5 sec | 2 sec | 5 sec

texture B | texture B

mp *mp*

the articulated pedal continues

132 38

1 breath (ca. 9 sec) 1 breath (ca. 10 sec) 5sec

texture B *mp* texture B *mp*

the articulated pedal continues a new articulated synth follows you whilst slowly going to silence

136 39

4sec 5sec 2sec 7sec 1 breath (ca. 9 sec) 7sec 1 breath (ca. 9 sec)

texture B *mp* texture C *p* texture C *p*

the fragile synthetic halo is back

143 40 7sec 41 ♩=120

flick the mic

149

154 42 ♩=120 43

8 sec III. Like a yell *fff*

159 44 45

165

46

47

169

48

49

173

50

51

176

52

53

180

54

55

186

55

56

193

56 57 58

chaos with emerging random notes

197

59 60 61

201

62 63 64

205

65 66 67

209

68

216

IV. wabi-sabi

69

mp

223

70 71 72

232

73 74

241

75 76 77 78 79

251

80 81 82 83

mf

261

84 85

271

86 87 88

281

89 90 91 92 93

p

Detailed description: This system contains measures 281 to 296. The treble clef staff features a melodic line with a long slur over measures 89-93. The bass clef staff provides harmonic support with chords and moving lines. A dynamic marking of *p* (piano) is present.

289

94 95 96 97

mf

Detailed description: This system contains measures 289 to 296. The treble clef staff continues the melodic line with a slur over measures 94-97. The bass clef staff continues the harmonic accompaniment. A dynamic marking of *mf* (mezzo-forte) is present.

297

98 99

ff sf sf sf sf

Detailed description: This system contains measures 297 to 305. The treble clef staff has rests in measures 98-101, followed by a melodic phrase in measure 102. The bass clef staff has a rhythmic accompaniment of eighth notes. Dynamic markings include *ff* (fortissimo) and *sf* (sforzando).

306

100 101

freejazz gliss up and down

sf sf sf sf sf sf sf

Detailed description: This system contains measures 306 to 311. The treble clef staff features a series of slurs and accents over notes, with a box labeled "freejazz gliss up and down" spanning measures 100 and 101. The bass clef staff continues the rhythmic accompaniment. Dynamic markings include *sf* (sforzando).

312

102 103 104

freejazz gliss up and down

sf sf sf sf sf sf sf

Detailed description: This system contains measures 312 to 319. The treble clef staff continues the melodic line with slurs and accents, with a box labeled "freejazz gliss up and down" spanning measures 103 and 104. The bass clef staff continues the rhythmic accompaniment. Dynamic markings include *sf* (sforzando).

320

105 106

sf sf sf sf sf sf sf

Detailed description: This system contains measures 320 to 327. The treble clef staff continues the melodic line with slurs and accents, with a box labeled "freejazz gliss up and down" spanning measures 105 and 106. The bass clef staff continues the rhythmic accompaniment. Dynamic markings include *sf* (sforzando).

325 10 sec 107 ♩ = 35

to silence

p

329

108