APPENDIX 1

Poem *Idílio* (*Idyll*) by Antero d' Quental

Portuguese	**Form**	**English**[1]
Quando nós vamos ambos, de mãos dadas,		When we two walk together, hand in hand,
Colher nos vales lírios e boninas,	**A**	And pluck the lilies growing by the mill.
E galgamos dum fôlego as colinas		And clamber, never stopping, up the hill
Dos rocios da noite inda orvalhadas:		Where last night's dewdrops, yet untarnished, stand;
Ou, vendo o mar, das ermas cumeadas,		Or, from the treeless summit, view the strand
Contemplamos as nuvens vespertinas	**B**	And watch the evening clouds that slowly fill
Que parecem fantásticas ruínas		The far horizon, forming at their will
Ao longe, no horizonte, amontoadas:		Fantastic ruins of a sunken land:
Quantas vezes, de súbito, emudeces!		How suddenly, at times, you cease to speak,
Não sei que luz no teu olhar flutua;	**C**	Your fingers quiver, colour leaves your cheek.
Sinto tremer-te a mão, e empalideces...		And in your eyes a fire unwonted darts!
O vento e o mar murmuram orações,		Ocean and wind together seem to pray;
E a poesia das cousas se insinua	**A'**	The poetry of nature makes its way,
Lenta e amorosa em nossos corações.		Subtle and loving, deep within our hearts.

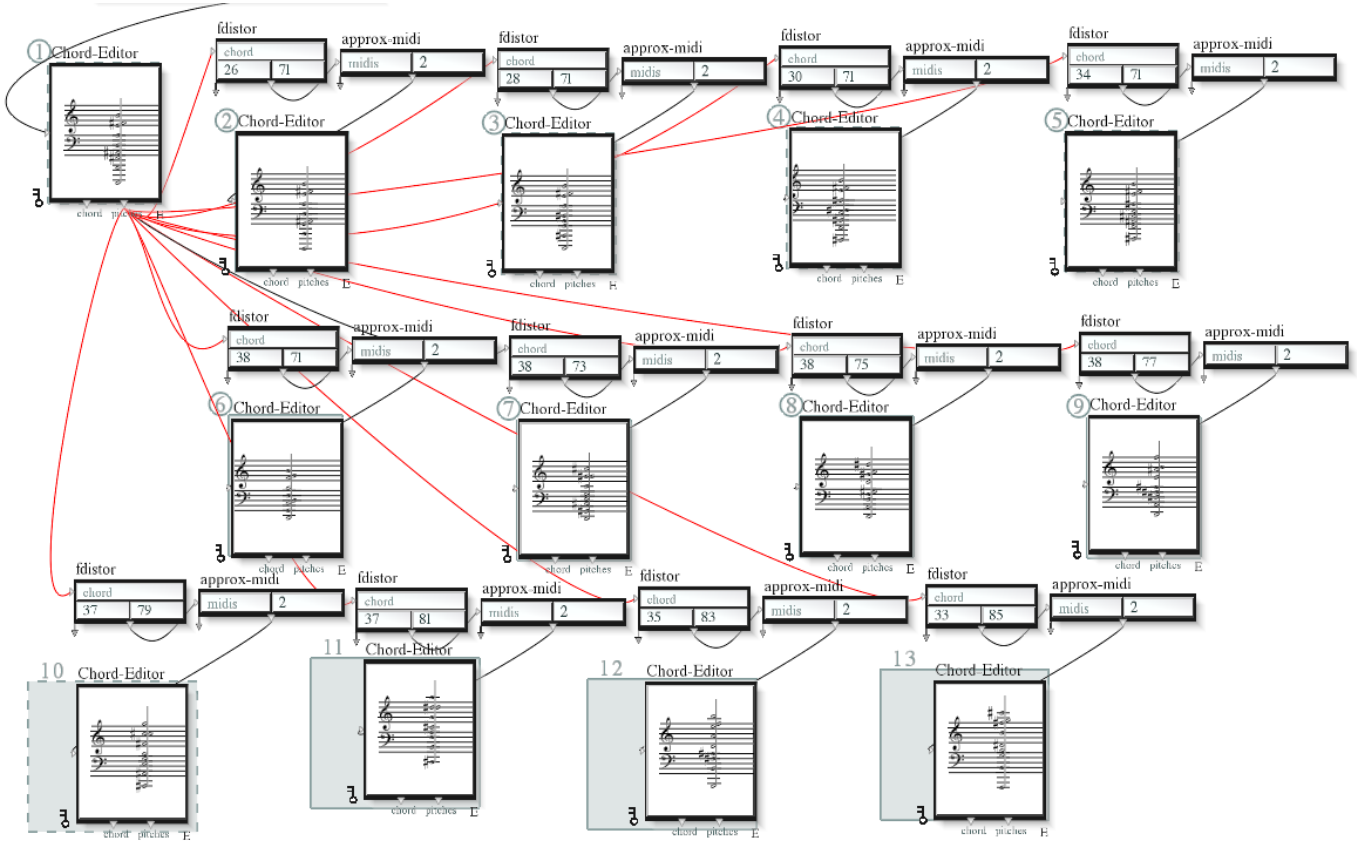
[1] Translated by Lígia Malheiro.

APPENDIX 2

***La Mer Soulevée* - section A microform**

Winds	a	b	a	c	b	b	a	a	b	e		a		a	f	a	b	d	b
Brass											e								
Strings				c		d	a			e	e	f			f				
Measures	1-5	6-7	8-10	11-12	13-14	15-16	17 - 24		25-27	28-30	31 - 33		34 - 40			41-42	43-47	48-51	52-54

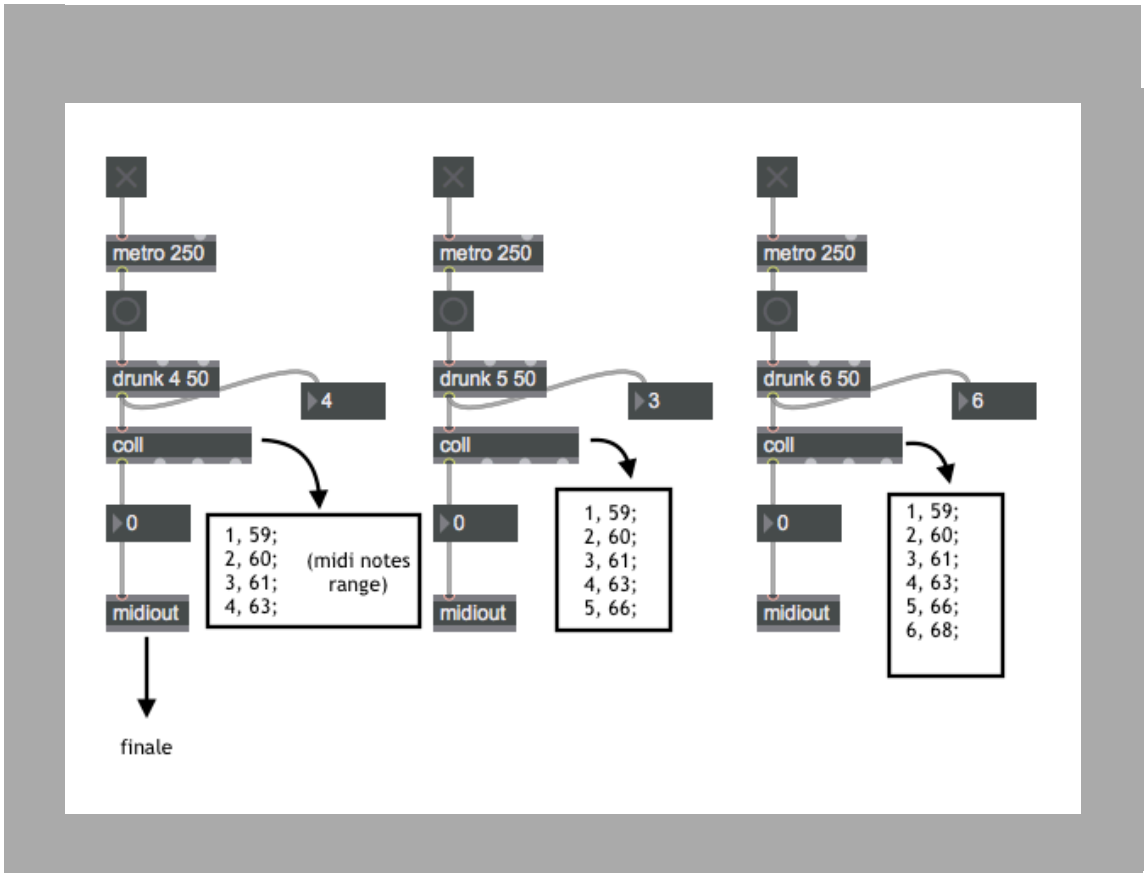
APPENDIX 3



PWGL patch for the generation of chord sequences in section **B**.

APPENDIX 4

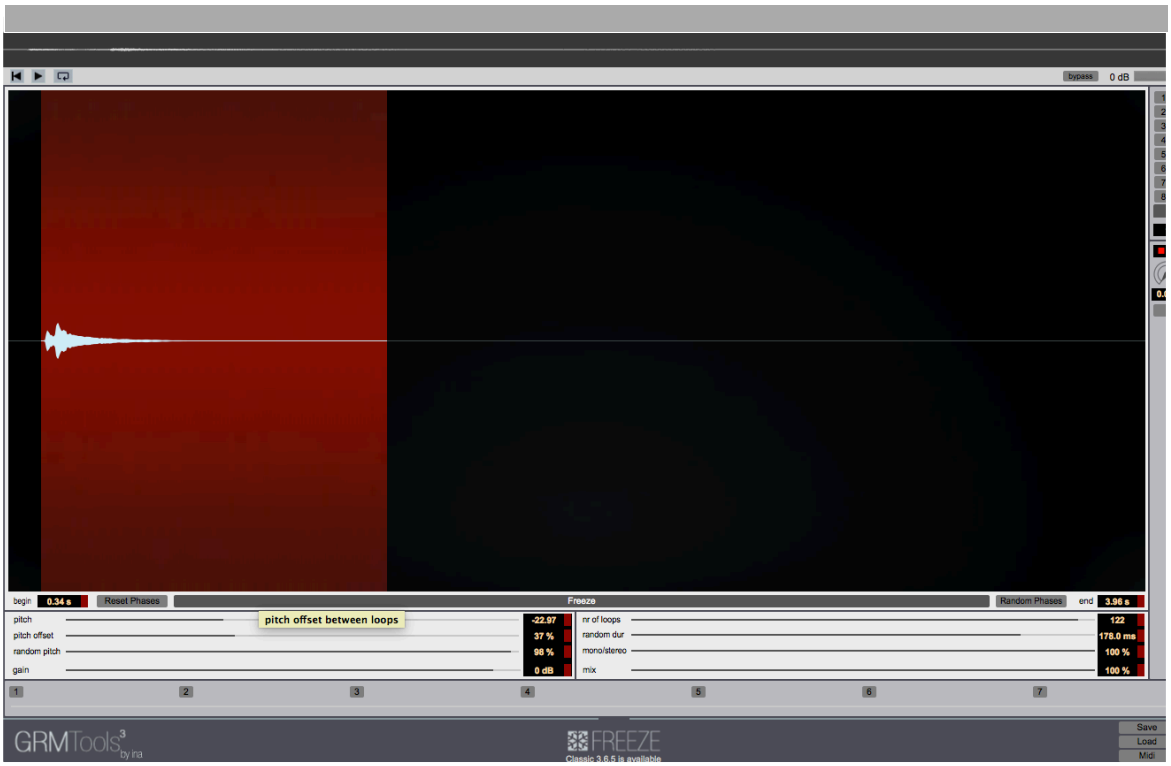
***La Fontaine Rouge* – example of the Max/MSP patch for generation of pitch material**



APPENDIX 5



Distortion plugin used in the second climax of the piece (7:26) for additional timbre variety.



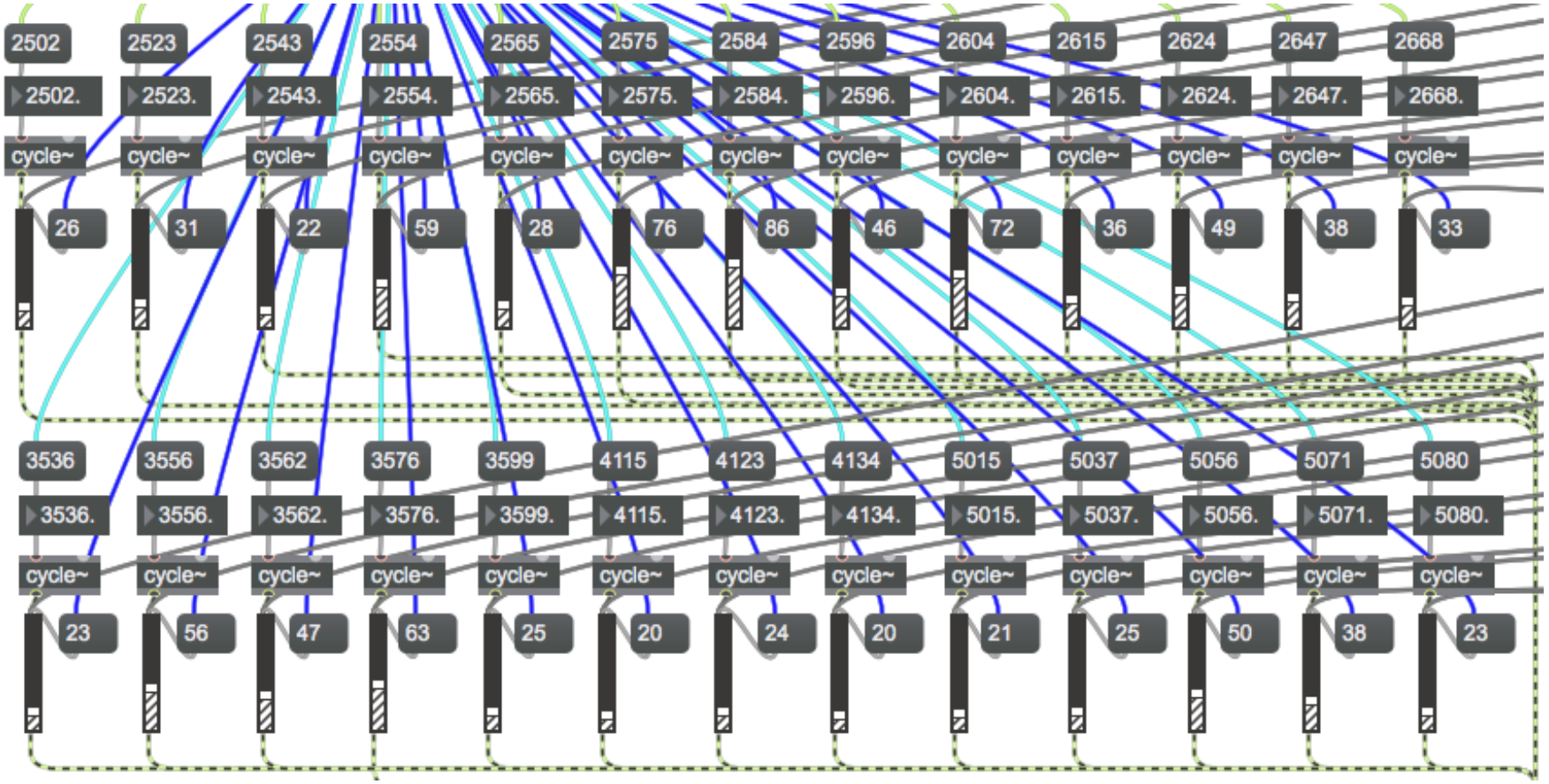
Process for the bell texture in 7:26. I experimented combining the different pitch parameters and the result was an array of several layers of bells creating a chaotic texture.

APPENDIX 6

***Ad eternum* – frequency values extracted from the bell main source, by using AudioSculpt.**

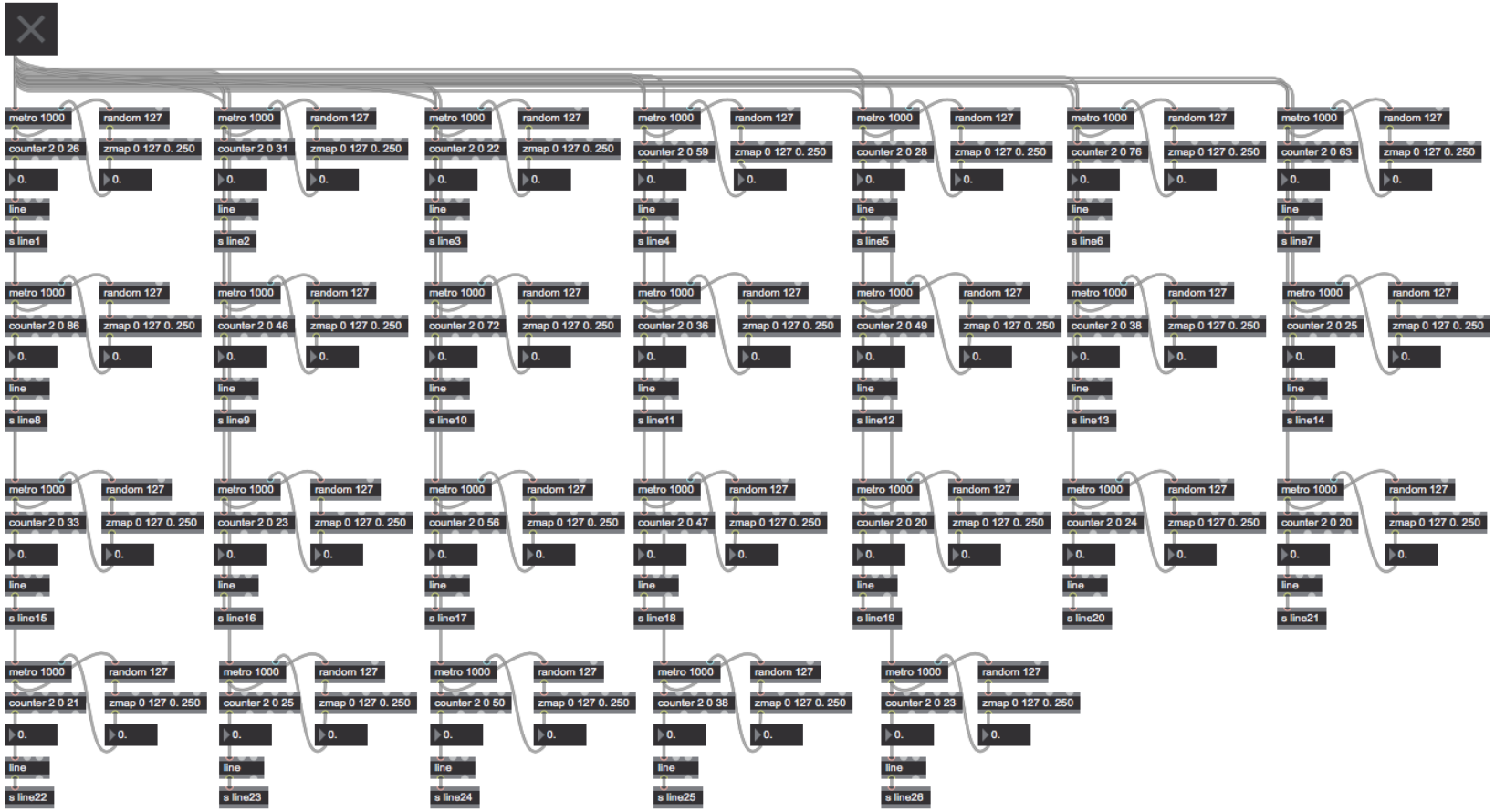
2502.532959 Hz	3536.479004 Hz
2523.200195 Hz	3556.718262 Hz
2543.659912 Hz	3562.100342 Hz
2554.759277 Hz	3576.380615 Hz
2565.485596 Hz	3599.790283 Hz
2575.097900 Hz	4115.510254 Hz
2584.512695 Hz	4123.012207 Hz
2596.135010 Hz	4134.727539 Hz
2604.855957 Hz	5015.312012 Hz
2615.341309 Hz	5037.228516 Hz
2624.325195 Hz	5056.461426 Hz
2647.829590 Hz	5071.974609 Hz
2668.796875 Hz	5080.469238 Hz

APPENDIX 7



Frequency data individually inserted in Max/MSP (patch *FREQUENCIES*)
Technique of additive synthesis to build the bell sound.

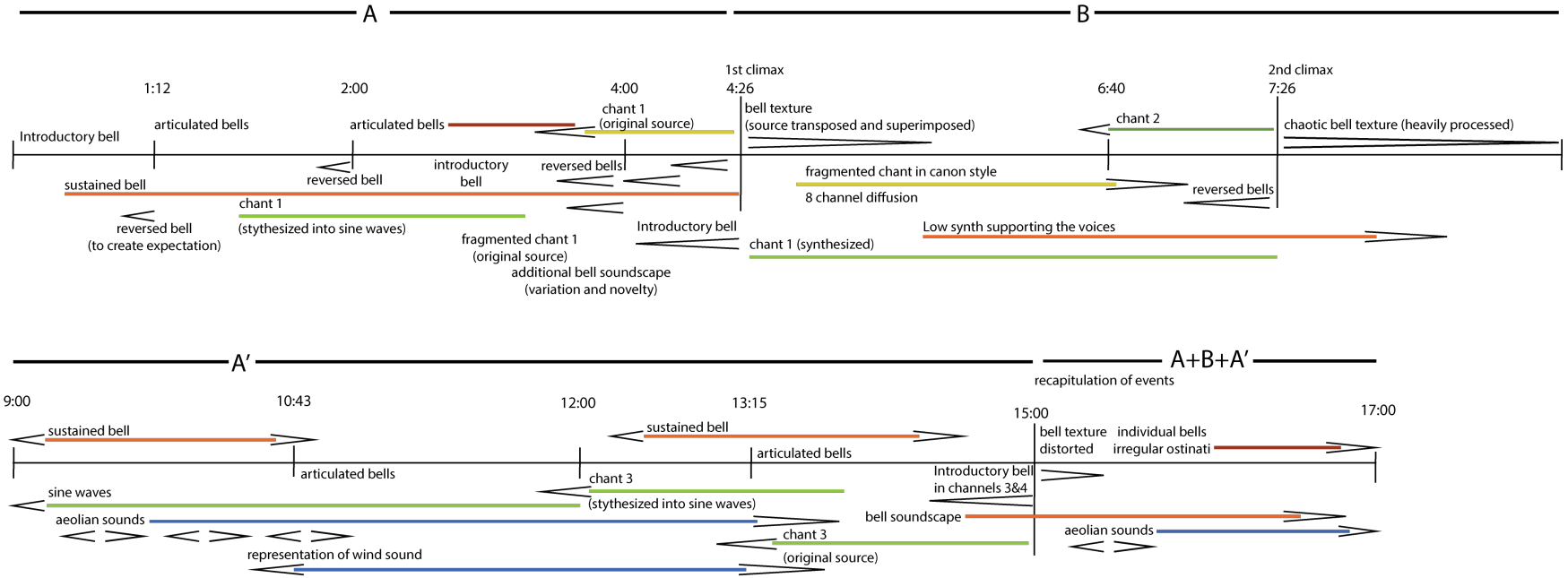
APPENDIX 7



Individual frequency amplitude control (patch *AMPLITUDE CONTROL*). The *counter* object is set to mode 2 (up and down movement), which in turn is being controlled by random velocities.

APPENDIX 8

Ad eternum final form



APPENDIX 9

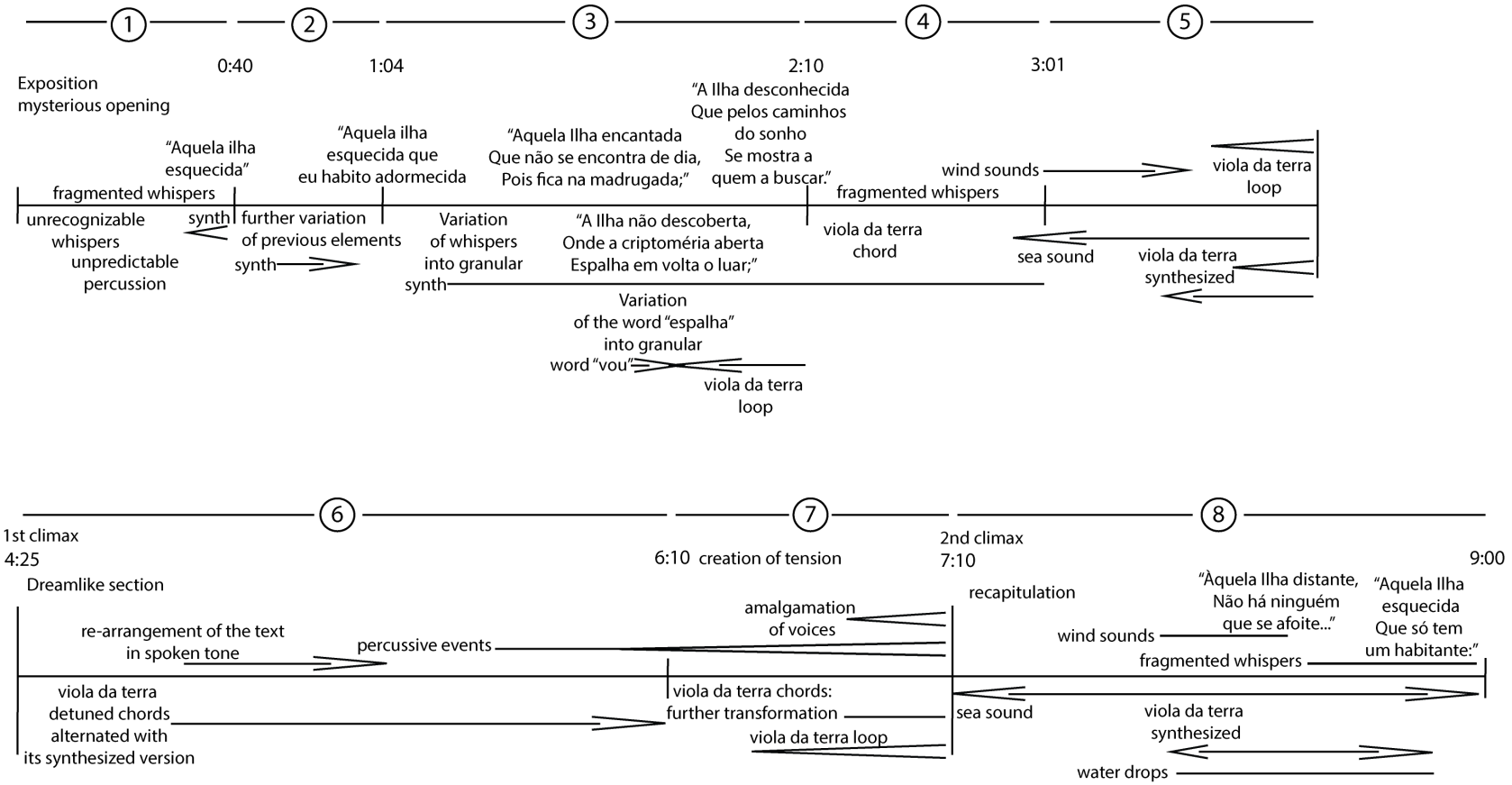
Review of *Ad eternum*

"On the second night I sat close to the central 'sweet spot' of the surround sound system, and it made a huge difference to the convincingness of the effect. The brief, rapid succession of bell chimes with which Ângela Da Ponte opened her performance was extraordinarily effective in creating an acoustic and imaginative illusion of medieval religious architecture; the variety of sounds, both 'indigenous' (chants, chimes) and 'extraneous' (electronic tones and pulses), with which composer then filled this space all seemed like they belonged there." by Nathan Thomas[2] on BEAST & SoundKitchen Pantry Sessions concert.

[2] "Fluid Radio is an independent online internet radio station and blog focusing on a wide spectrum of experimental music." [Accessed online from http://www.fluid-radio.co.uk/2015/01/pantry-sessions-2/ 26 January 2015).

APPENDIX 11

Diáspora final form

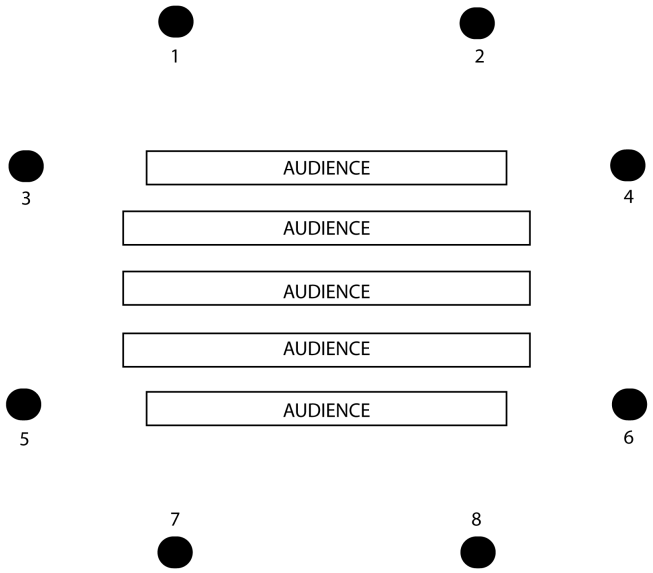


APPENDIX 12

First stanza	Selected Consonants	IPA	Sonic qualities
*A**q**uela Ilha e**sq**ue**c**ida*	**q**	Plosive (velar)	Short; articulated; development of a granular texture
	s/ c	Fricative (palate-alveolar/ alveolar)	White/ pink noise
***Q**ue eu habi**t**o adorme**c**ida*	**t**	Plosive (dental)	Short, articulated
***Q**ue à noi**t**e eu vou habi**t**ar*			
Third stanza			
A ilha não descoberta, *Onde a criptoméria aberta*			
*Es**p**alha em volta o luar;*	**p**	Plosive (labial)	Short, articulated; development of a granular texture

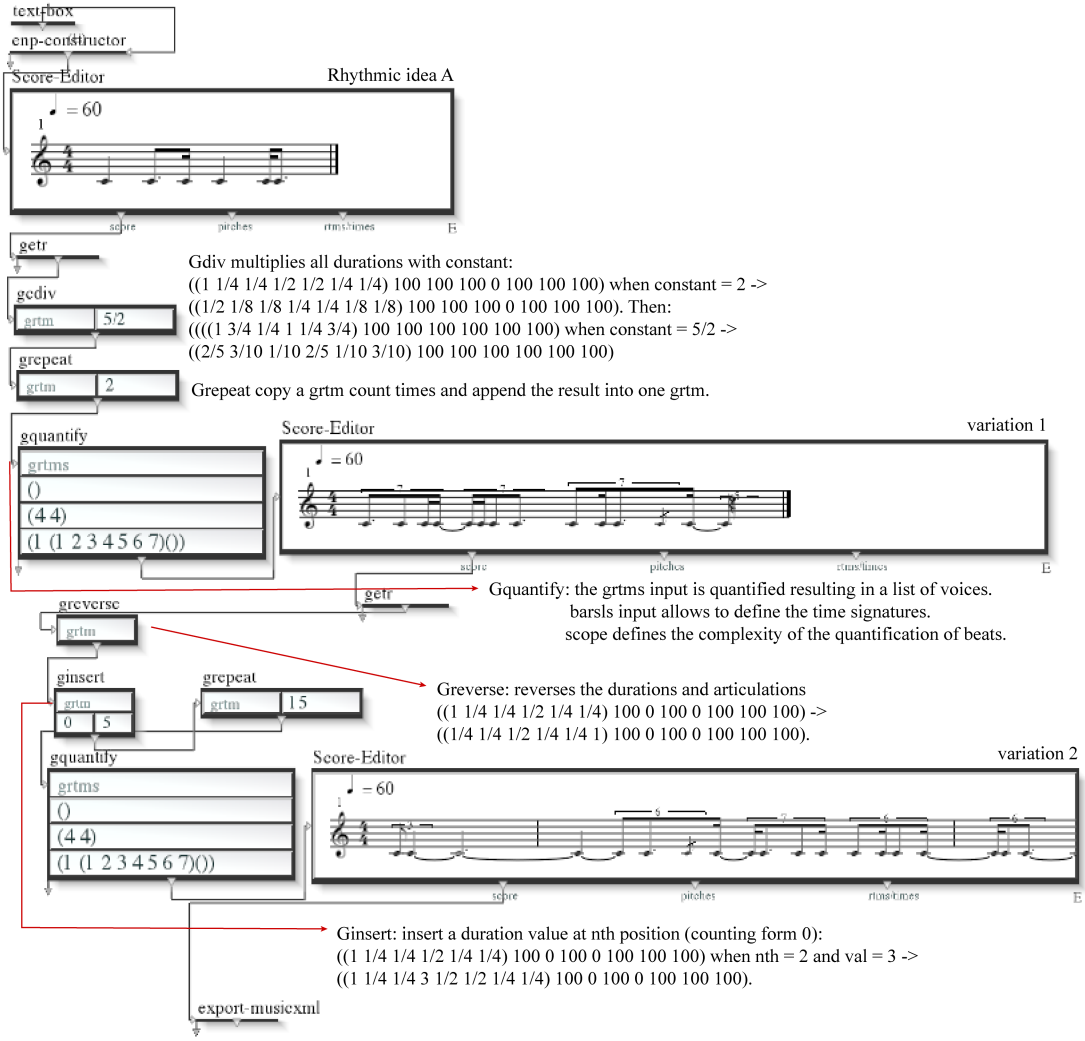
APPENDIX 13

Loudspeaker Setup



APPENDIX 14

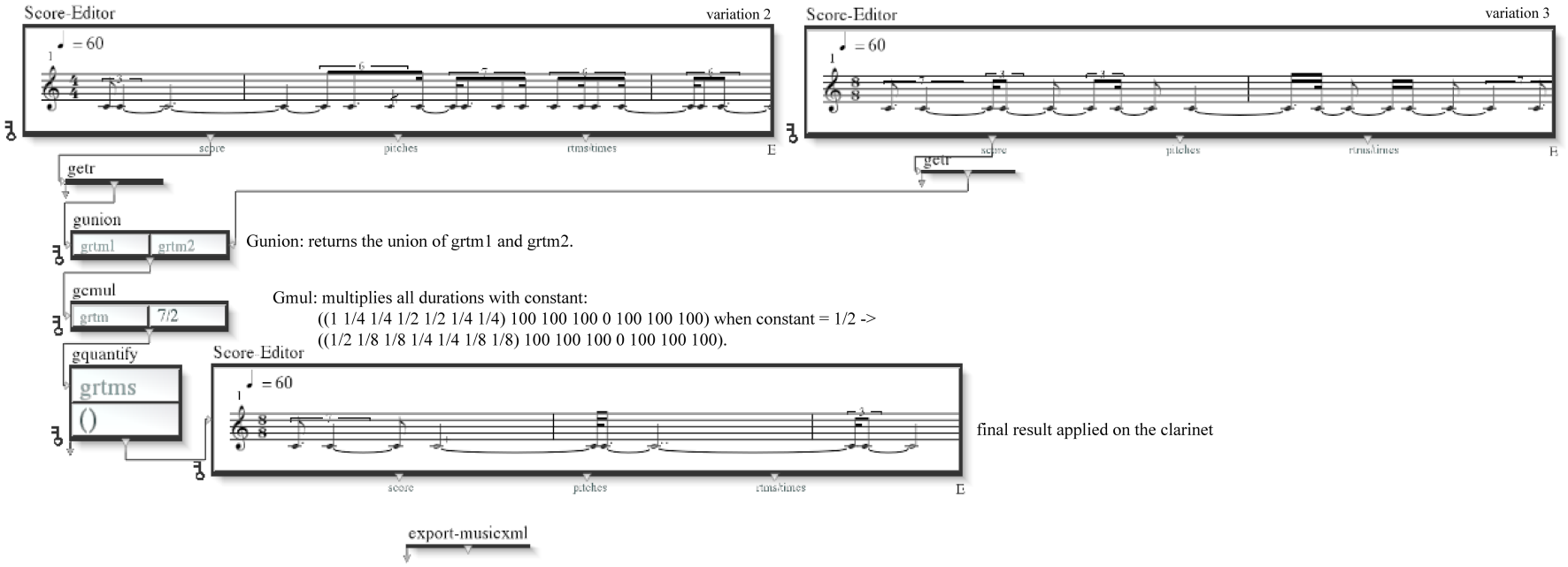
Cinq étapes sur une ligne I – rhythmic material



I used the Grhtythm library to generate and vary my rhythmic material. Grhythm stands for 'gestural rhythms'and was originally developed by Magnus Lindberg during the 1980s where several versions appear inside the Patchwork library. Now it has been adapted to the PWGL environment.[4] The example above shows a correlation of rhythms where I experimented with the Gdiv, Grepeat, Greverse and Ginsert boxes.

[4] Kuuskankare, Laurson, Norilo, Sprotte (2002-2016).

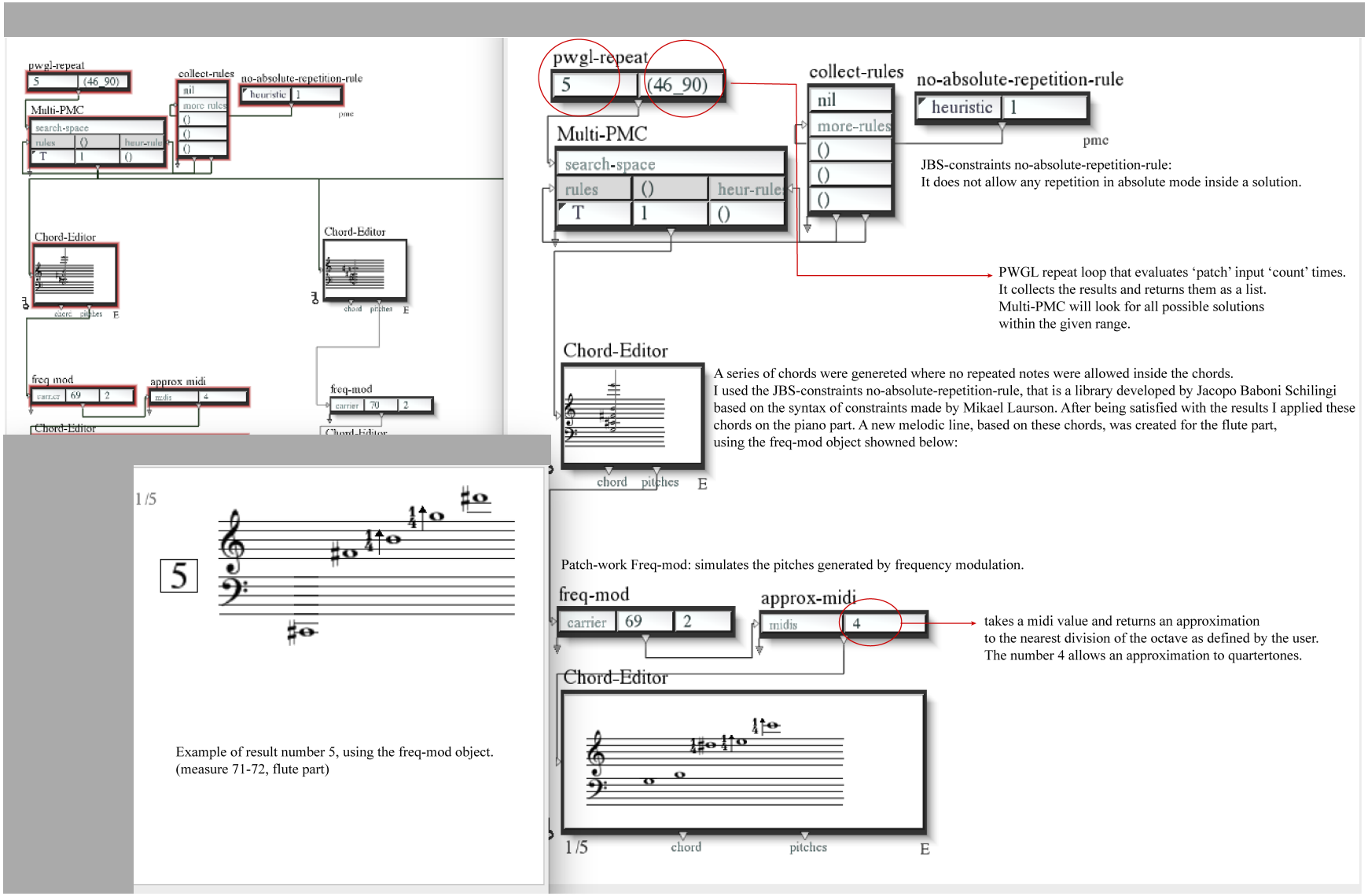
APPENDIX 14



Another patch was created to further vary my previous material. I combined variation 2 with variation 3 (in which the latter followed the same procedures as in variation 2) where I was finally satisfied with the result. Then applied it on the clarinet part on the beginning of the piece.

APPENDIX 15

Cinq étapes sur une ligne I – Harmonic elaboration of section B



APPENDIX 16

Poem *Ao Desconcerto do Mundo* (*On the disharmony of the world*) by Luíz Vaz de Camões

Portuguese	**English**[5]
Os bons vi sempre passar, No mundo graves tormentos; E para mais me espantar, Os maus vi sempre nadar Em mar de contentamentos.	I watched the world tasking Good men with adversity, And, on my further asking, Evil I saw basking In an ocean of prosperity.
Cuidando alcançar assim O bem tão mal ordenado, Fui mau, mas fui castigado: Assim que, só para mim, anda o mundo concertado.	When I tried to question Why goodness was disdained, I was called bad, and arraigned. It seems I'm the only one For whom matters are so ordained.

[5] Translated by Lígia Malheiro.

APPENDIX 17

Media files performance information

La Mer Soulevée
Orquestra Sinfónica do Porto Casa da Música
Conductor: Takuo Yuasa

La Fontaine Rouge
Percussion: Nuno Simões

(des)Integrasons
EXAUDI
Conductor: Mark Knoop

Cinq étapes sur une ligne I
Hermes Ensemble
Conductor: Koen Kessels

Ao Desconcerto do Mundo
Sond'Ar-te Electric Ensemble
Conductor: Pedro Neves

Fantasia/Percussivo
Viola da terra and electronics: Ângela da Ponte

Sketches
Birmingham Contemporary Music Group
Conductor: Christopher Austin
Viola da terra: Ângela da Ponte