

FUGA PERPETUA

BY YUVAL AVITAL

icon-sonic work for piano, cello, viola, bass clarinet, flute, video,
mobile sound theater, tapes, & a vocal crowd.



Commission: Ensemble Meitar and Third Ear, 2015

Premieres:

Teatro Comunale "L. Pavarotti" di Modena 12 March 2016

Brighton Festival 20 May 2016

Nottingham Festival 22 May 2016

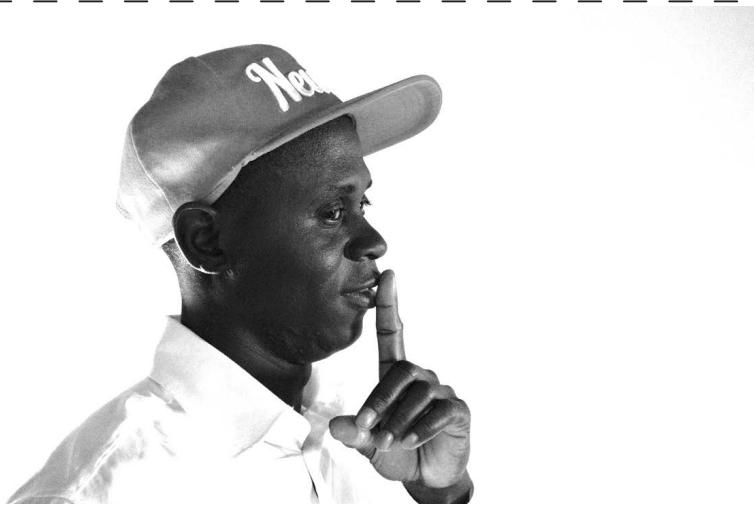


FUGA PERPETUA BY YUVAL AVITAL

Formation:

- Concert piano, uncovered (to be played also inside)
- Cello
- Viola
- Bass clarinet in Bb
- Flute (concert flute in do & piccolo)
- (Optional) Vocal crowd of non musicians (preferable some or all refugees hosted in the locations of the concerts).
- Tapes (8+2 loudspeaker system+subwoofer. reduced version available).
- Video (2 screens projection: first in front of musicians in tulle, second behind musicians with possibility of retro-projection. reduced version available).
- (Optional) Mobile sound theater (24 mobile loudspeakers, positioned in theater beneath audience seats)

Duration: 78 minutes

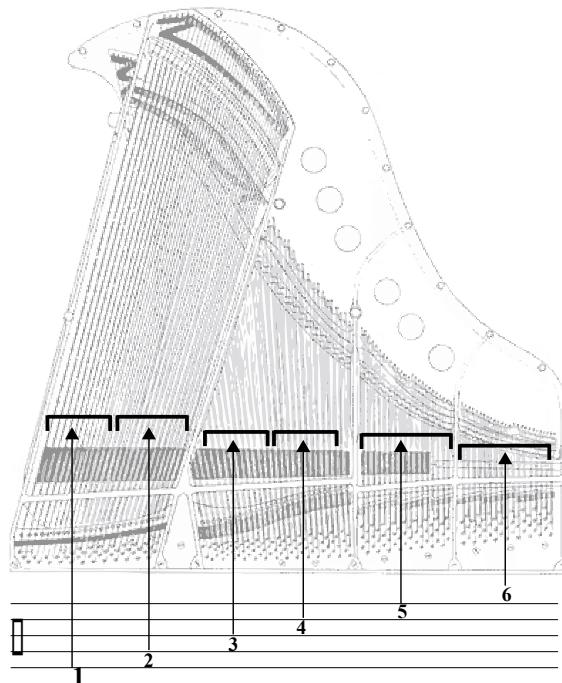


FUGA PERPETUA BY YUVAL AVITAL - preface (3):

piano:

The piano part has 5 systems:

- N. 1-3 covering 3 pitch clefs (sol+8va, sol & fa/fa-8va)
- N.4 elements to be played within the piano
- N.5 for monochord string bowed piano (at fa-8va clef), hand vintalator or Ebow (Sol clef).



INSINDE GRAND PIANO :

Grand piano should be uncovered and when played inside sustain pedal always pushed.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 1 2 3 4 5 6 7 8 9 10 11

inside the piano In.pno

A B

C D

A - Glissando :

1. down extra-low range
2. up extra-low range
3. down low range
4. up low range
5. down low-mid range
6. up low-mid range
7. down high-mid range
8. up high-mid range
9. down high range
10. up high range
11. down extra-high range
12. up extra-high range
- 13,14 - examples of continuous glissando (in both directions) in a given range.

B - hitting the strings (not single notes but a range, according mallet size) :

- 1,2 extra-low range
- 3,4 low range
- 5,6 mid range
- 7,8 high range
- 9-11 extra-high range

C - hitting metal frame (on its top) :

- I - lowest tone (longest metallic grid) till 5 - highest tone (shortest grid)

D - range for playing with superball mallets on the strings :

- I - lowest range till 5 - highest range.

FUGA PERPETUA BY YUVAL AVITAL - preface (4):

Mallets for playing within the piano:



1 - gong soft mallet 2- supeball 3 - mid hard plastic marimba mallet

ylon string bow (view bowed piano) 5- palm closed 6 palm opened 7 - winger tip 8 - coins (vertically on strings)
9-12 tibetan bowls in different manners

13 - light cymbal hanged on a string (touch lightly low strings to create metallic buzz). 14 - hand vintelator

BOWED PIANO CLEF:

The bowed piano clef is used for 3 elements: the first is long notes played with E-bow (will be indicated textually), the second using hand vintelators and the third using a monochord string bow:



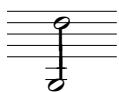
First suggested by the composer Curtis Curtis-Smith in 1972, the technique uses flexible bows made from monofilament nylon fishing-line which are then coated in rosin. The nylon is threaded under the strings, and the performer can coax a sustained tone from the piano. Bowed piano has since been adopted and expanded upon by various other composers, including George Crumb and more extensively by Stephen Scott.

For more information, watch : (http://www.hatchfund.org/showcase/bowed_piano_playing_tutorial). The bowed piano notes should be prepared in advance, and marked using either colored plastic handles or plastic rings in each edge. the notes to prepare are the following ones :

The bows of the piano should be prepared in advance, and I advice to create different handles for each section or group of sections, in a mode that the correct notes will be found easily. Here bellow is the list of bars in which this element is required:

* In sections R & S flutist will play the bowed piano while piano player will use hand vintelators and will play the piano part.

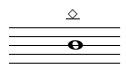
ADDITIONAL INDICATIONS PIANO:



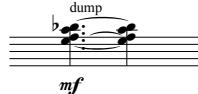
Cromatic clusters are marked with starting/ending note and a vertical line between them.



In some cases, specific notes are asked to be played with a pizzicato (within the piano). In these cases, they will appear in the standard clefs.



harmonics - lower note for the string and higher for harmonic to use (1st harmonic)



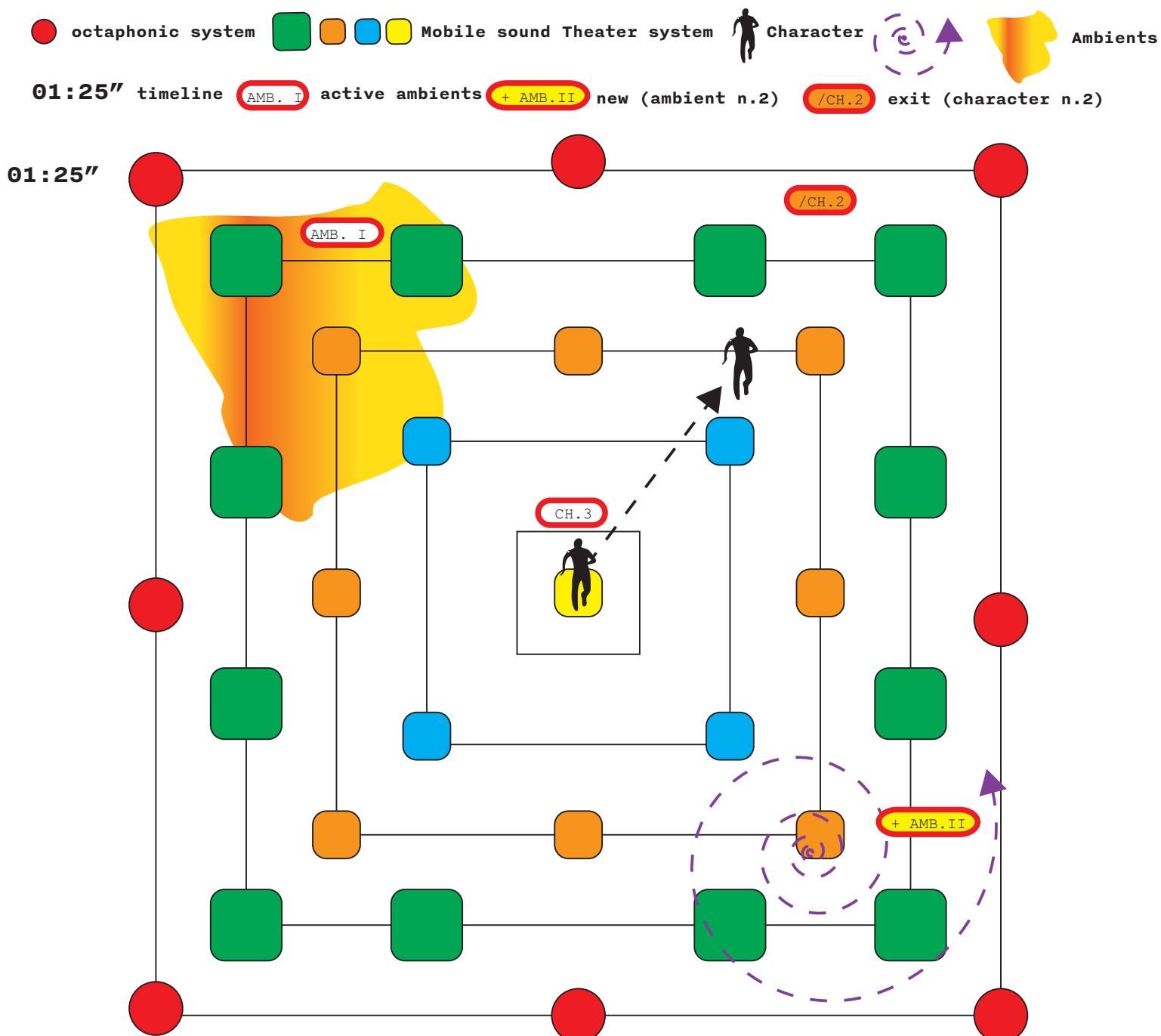
dump - block string resonance with hand (one hand playing the notes on the keyboard, the other blocks strings)

Mobile Sound Theater:

Developed with Dr.Tychonas Michalidis from Conservatoire of Birmingham (and realized by him), the "Mobile Sound Theater" is composed of 25 mobile loudspeakers spread between and underneath the seats of the audience, giving a strong physical sensation to the spatialization of sound in which events appear and a higher resolution to the sound movement also present in the octophonic spatialization.

The sonic events are divided to "Ambients" and "Characters", where each of them can contain a single tape as a group of tapes which change in a random matter according to the element's behaviours.
All of this appears in chart which functions as a dedicated score:

visual example of a Mobile Sound Theater scene



The behaviour of elements:

characters:



Standing Character (firm)



Wandering Character (slow or still, random movement)



Walking Character (slow, constant movement)



running Character (fast, constant movement)

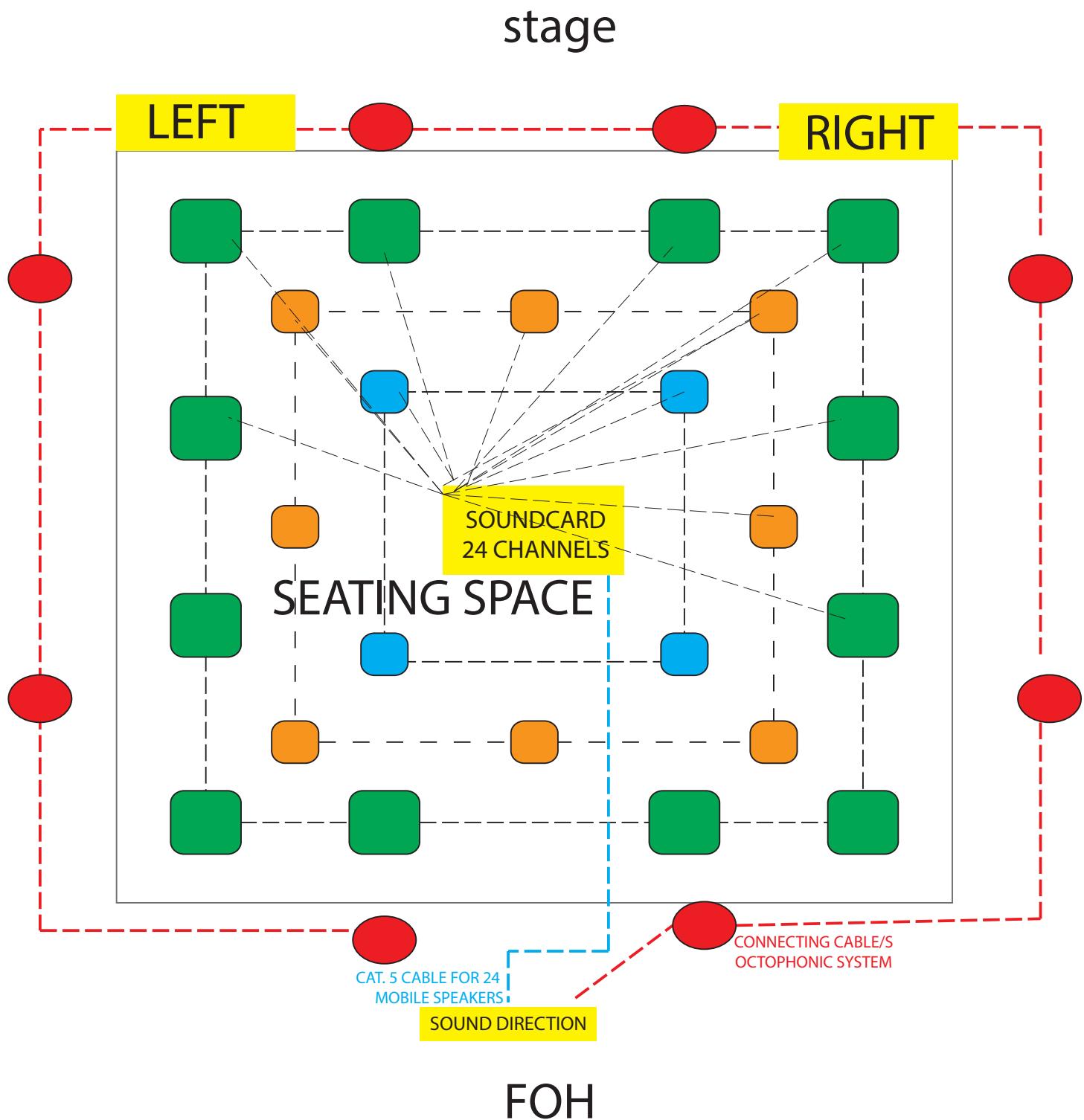


Fleeing Character (fast, random, unexpected)

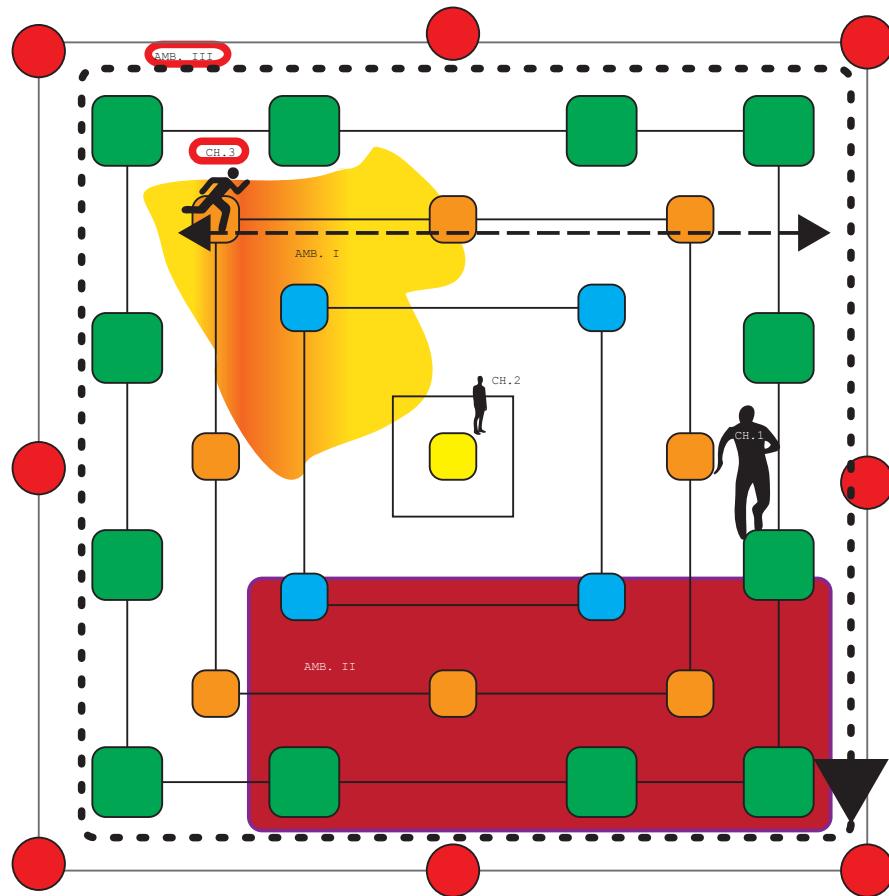
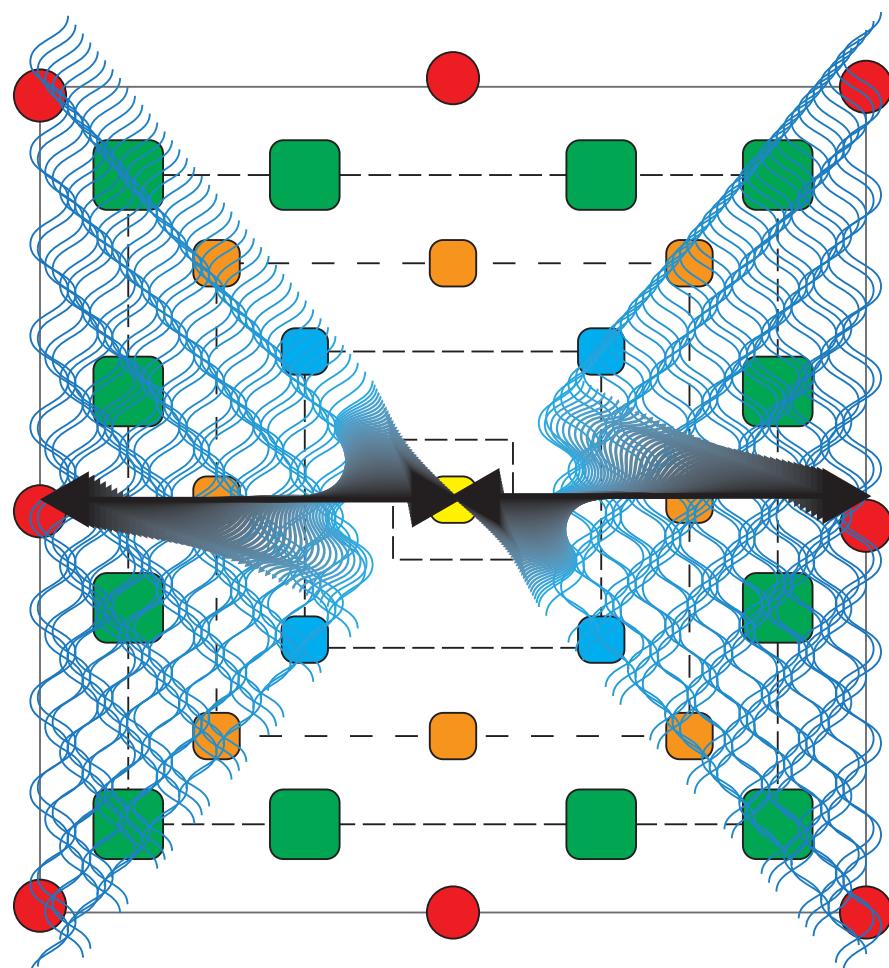


Fuga Perpetua Character (can move randomly in any manner)

Mobile Sound Theater - diagram:



Mobile Sound Theater - examples:

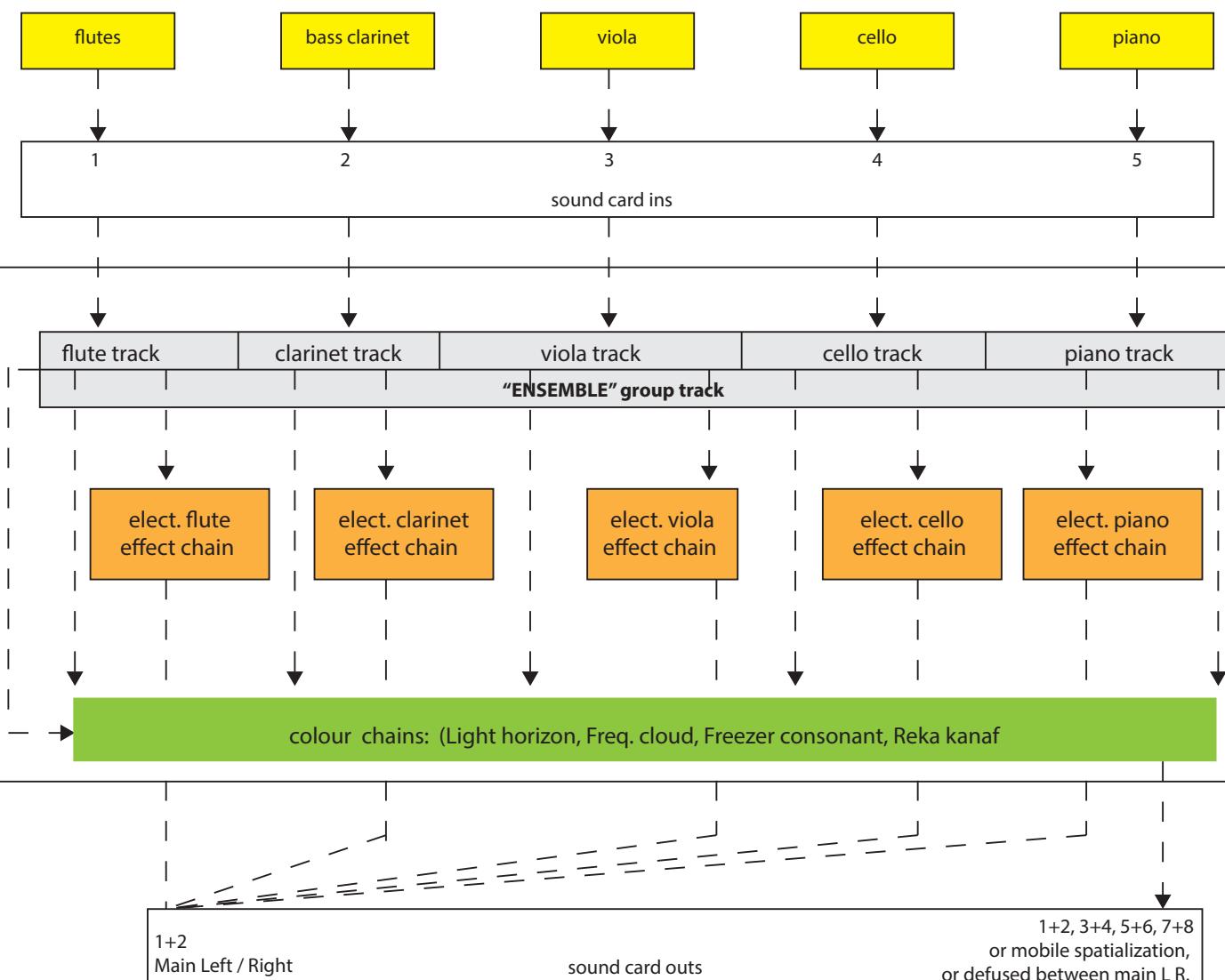


Live electronics:

The live electronics has as a score a chart with event numbers, timing in and event description (including also event ending) for each instrument or tutti. It also appears in the general score with the marking : **elect #**. The live electronics in Fuga Perpetua refer to live elaborations of the instruments of the quintet. The live electronics is made through Ableton live (9)+ Max for Live (Max/Msp 7.1). There is also a score table of all the effects and elaborations used in the piece, in a mode that future performances could use different softwares or programs by future electronic music artists. The live elaborations are automated inside the set, with a master controller which allows modifications and adjustments for each performance.

Each instrument enters with one channel to the sound card (also in the case of more than one microphone, like the grand piano). The 5 channels of the 5 instruments are grouped into a group track called "ensemble" which has some collective elaborations. Each instrument is send also to a return track which contains a dedicated chain of effects and live processing. These chains are identical (with one minor change in the piano chain). All chains exit in a main stereo Left & Right Speakers.

In addition, There are 4 colour or "ambient" multi-effects I use in the piece, which are shared both to all instruments as to the "ensemble" group. These chains create a very wide sound (a bit like a sonic ambient) and contain both Ableton as Max for live effects. The 4 return channels could be send to different speakers, according the performer's choices: (Main stereo, fixed speakers in the octophonic ring for each chain or moving spatialized sound for various events within the score in involving these chains.



Fuga Perpetua

icon-sonic opera for flute, bass clarinet, Viola, Cello, Piano,
Video, Tapes & Live electronics on the theme of refugees

time

Vla.

Vc.

use element ad. lib. also changing strings **p-ppp**

use element ad. lib. also changing strings **p-ppp**

0

0

D
03:25"
18

time

01'

04:25"

t.scr

TEXT SCORE N.2 - mainly silence (main part at tapes), all instruments from time to time vibrate (long notes / morse codes) hi MI note with unexpected timbers and sound production - echoing between one and another - but KEEPING ALSO A LOT OF SILENCE & SPACE FOR THE TAPE!!!

TUTTI: **pppp-mp**

E
04:25" ELECT. 7 ELECT. 8

time

19 a tempo $\text{d} = 48$ ($\circ = 5''$) 04:30" 04:50" 05:00" 05:10"

Picc.

change to piccolo no vib.

Vla.

Vc.

Pno.

In.Pno

05:10"
28

05:20"

05:30"

05:40"

05:50"

time

Picc.

Vla.

Vc.

Pno.

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Fuga Perpetua

ELECT.9

3

05:55" 37

time

06:05"

06:15"

06:25"

06:35" 25"

07:00"

Picc.

B. Cl.

Vla.

Vc.

Pno.

In.Pno.

time

06:05"

06:15"

06:25"

06:35" 25"

07:00"

no vib. molto vib. no vib.

p **p più possibile**

mf **mf**

ppp **mp**

fp **fp**

fp **fp**

p **mf** **mp**

fp **fp**

pp

8va **mf**

mf

8va **mf**

mf

pizz.

mp

④⑤

*add also soft scratches on strings with coin

ppp-mp

ELECT.10

EFFECT 11

ELET 12

ELECT.14

ELECT.13

This figure shows a musical score for orchestra and piano, page 45, measures 7:00 to 8:10. The score includes parts for Picc., B. Cl., Vla., Vc., Pno., and In.Pno. The time signature is common time. The score features various performance techniques such as slurs, grace notes, and dynamic markings like *p*, *mp*, *mf*, *ff*, and *pizz.*. Measure 7:00 starts with a forte dynamic in the brass section. Measures 7:10 to 7:30 show woodwind entries with slurs and grace notes. Measures 7:30 to 7:50 feature a transition with dynamic changes and woodwind entries. Measures 7:50 to 8:10 conclude with a final forte dynamic in the brass section.

Fuga Perpetua

ELECT.15

08:10"

08:20"

08:30"

08:40"

08:50"

09:00"

time

Picc

B. C1

Vla

Vc

Pno

In Pnc

time

100

B. C1

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Fuga Perpetua

5

76

time

09:50" 10:00" 10:10" 10:20"

Picc. *ff* *p più possibile* *sfz* *p*

B. Cl. *sfz* *mp* *f* *mp*

Vla. *f* *p più possibile* *mp*

Vc. *fp* *mp* *ppp*

84

time

10:30" 10:40" 10:50"

Picc. *p* *sfz* *f* *sfz* *sfz*

B. Cl. *f* *sfz* *f* *sfz* *sfz*

Vla. *f* *mp* *III^o* *III^o* *III^o*

Vc. *fp* *sfz* *sfz* *sfz* *sfz*

10:50"

time

11:00" 11:10" 11:20" 11:30" 11:40"

air

Picc. *fff* *fff* *t.r.* *tone* *jet whistle* *t.r.* *fff* *p più possibile*

B. Cl. *p* *sfz* *p* *sfz* *p* *sfz* *fff* *mp*

Vla. *mp* *loco* *IV^o* *III^o* *fff* *c.l.b.*

Vc. *sfz* *mp* *sfz* *sfz* *sfz* *mf*

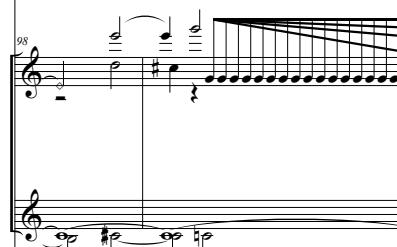
Pno. *p* *pizz.* *mf* *pizz.* *mf* *mf* *mf*

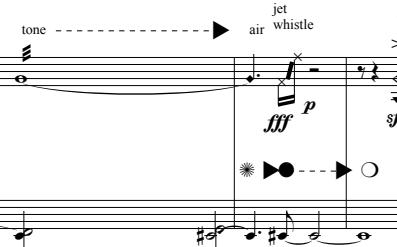
In.Pno. *p-mp* *damp* *sfz* *mf* *pp* *mf* *p-mp* *mf*

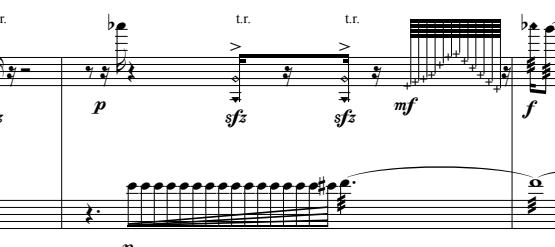
Fuga Perpetua

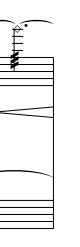
11:40"

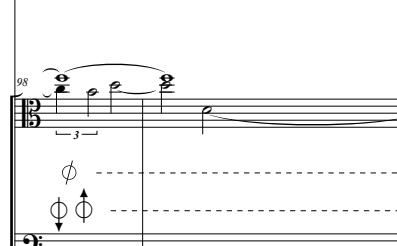
time

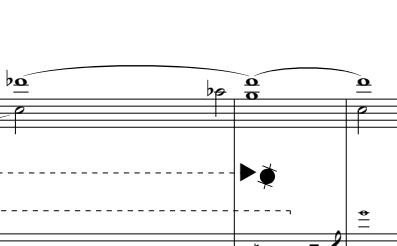
Picc. 

B. Cl. 

Vla. 

Vc. 

Pno. 

In.Pno. 

11:50"

tone jet whistle t.r.

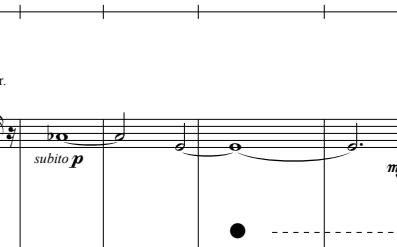
12:00"

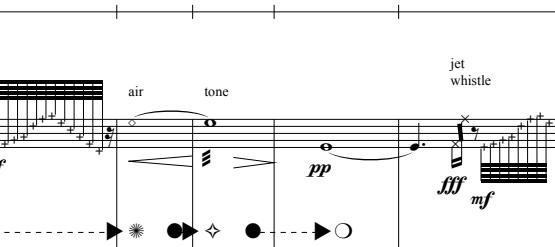
tr. tr. tr. f

12:15"

time

Picc. 

B. Cl. 

Vla. 

Vc. 

Pno. 

In.Pno. 

12:25"

12:35"

12:45"

12:55"

13:05"

13:15"

jet whistle

tr. subito **p** air tone pp ffff mf

f subito **p** mp

f subito **p** **mp**

no vib. molto vib. vib. cantabile

p-mp

13:15"

G ELECT.16

13:25"

13:40"

time

Piccc

B. Cl

Vla

for the entire section: chords muted arpeggiati, order and dynamics
1178 6-measure ending, 43rd and 44th measures, should follow this

A musical score page for piano and orchestra. The piano part (Pno.) is on the left, and the orchestra is on the right. Measure 117 starts with a dynamic of *mf*. The piano has arpeggiated chords. The orchestra consists of two violins, one cello, and one double bass. Measures 118-119 show sustained notes with wavy lines above them, and the piano has arpeggiated chords. Measure 120 begins with a dynamic of *pp*, followed by *f*, and ends with *f*. The piano has a sixteenth-note arpeggio. The orchestra dynamics are *p-mp* and *mp*.

13:40"

13:50"

13:55"

time

Picc

B-61

Vla

Vc

Fuga Perpetua

13:55"

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

In.Pno

14:05"

125

126

127

128

129

130

131

132

133

134

135

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1000

Fuga Perpetua

9

14:15"

129 time

Picc. 

B. Cl. 

Vla. 

Vc. 

Pno. 

loco 

ff 

ff 

ff 

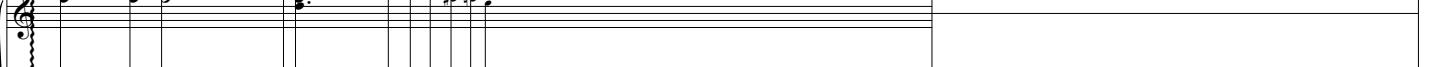
ff 

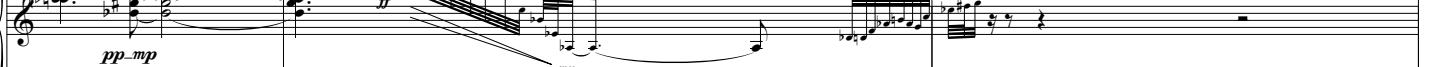
ff 

ff 

ff 

ff 

ff 

ff 

ff 

ff 

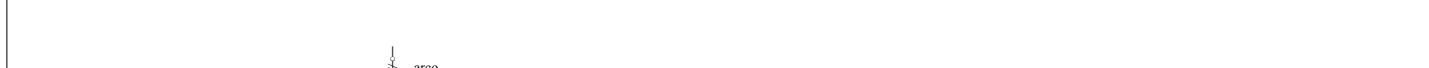
14:25"

14:40"

131 time

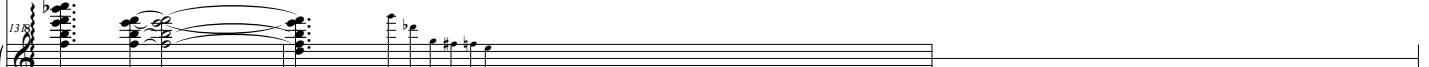
Picc. 

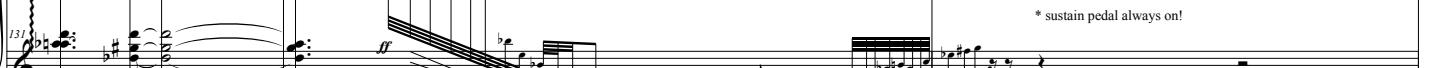
B. Cl. 

jet whistle 

p più possibile 

Vla. 

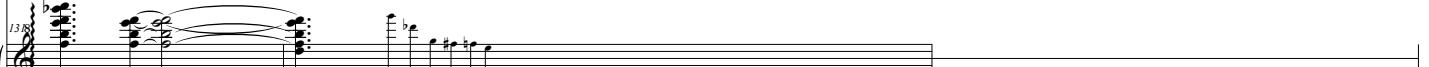
mp-mf 

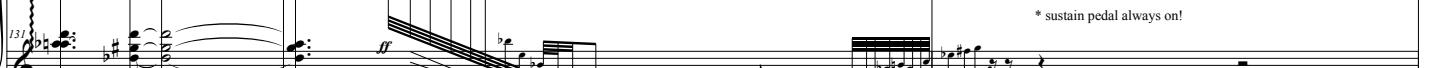
ff 

ff 

ff 

Vc. 

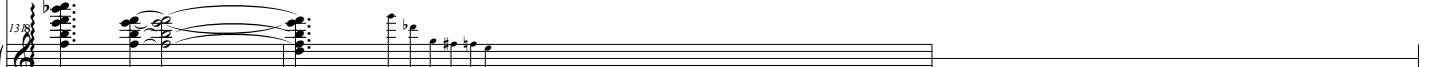
mp-f 

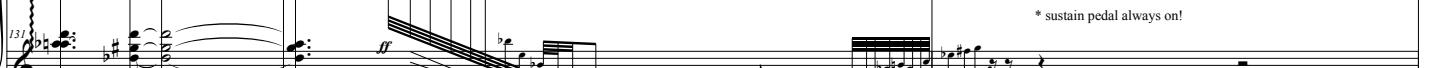
ff 

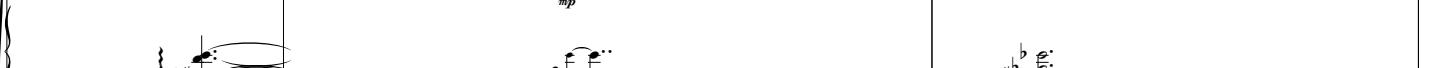
ff 

ff 

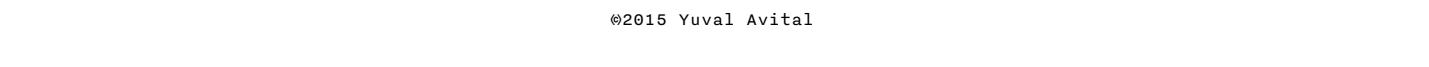
Pno. 

pp-mp 

ff 

ff 

ff 

ff 

* sustain pedal always on!

Fuga Perpetua

14:40"

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

14:50"

14:55" 137 time

Picc. *air*

B. Cl. *fp* *fp* *fp* *fp*

Vla. *fp* *A tallone* *ppp* *ff*
ff *mp* *ppp* *ff*

Vc. *ff* *pp* *ff*

Pno. *mp* *pp* *ff* *mp*

In.Pno. *ff* *ff* *ff* *ff* *ff* *ff*

15:10"

15:10"

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

15:15"

H

141

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

15:25"

Fuga Perpetua

15:25"

time

Picc. *p più possibile*

B. Cl. *f* *mp*

Vla. *fp* *pizz.* *arco*

Vc. *fp*

Pno. *mf ff*

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

15:40"

I corsa perpetua N.1 , meccanico - $\text{♩} = 68$ ($\text{o} = 7.1''$)

time

Vc. *mf ff*

Pno. *f*

Vla. *ff*

Vc. *ff*

Pno. *f*

ff

16:10" .ca

151

time

Vla.

Vc.

Pno.

ff

f

153

time

Vla.

Vc.

Pno.

154

time

Vla.

Vc.

Pno.

f

155

time

B. Cl.

Vla.

Vc.

Pno.

ff

ff

f

8va

Fuga Perpetua

16:45" .ca

156

time

B. Cl.

Vla.

Vc.

Pno.

156

f

157

8va

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

157

158

8va

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

In.Pno.

158

159

8va

sfz

17:01" .ca

time

Picc. 159

B. Cl.

Vla.

Vc.

Pno. 159

160

Picc. 160

B. Cl.

Vla.

Vc.

Pno. 15ma

161

Picc. 161

B. Cl.

Vla.

Vc.

Pno. 161

8va

161

Fuga Perpetua

162 17:22" .ca

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

162

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

163

15ma

8va

163

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

164

8va

164

165 17:43" .ca

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

8va

166

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

8va

8va

167

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

8va

8va

Fuga Perpetua

168 18:04" .ca

time

Picc.

Vla.

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

18:38" .ca

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

173

8va-

173

f

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

174

8va-

174

f

18:52" .ca

align with timeline

18"

J

time

Picc.

B. Cl.

Vla.

Vc.

Pno.

175

175

175

175

175

175

19:10"

19:30"

time

176 subito $\text{♩} = 60$

Picc. jet whistle ff mp

B. Cl.

Vla. mp

Vc.

Pno.

176

176

176

176

176

176

K ELECT .17

22:00"

time

t.scr

TEXT SCORE N.3:
PIANO - soft textures inside the piano with mallets and superball, when song enter the video - interact.
Refugee crowd - stand up and perform following elements, two refugees walk slowly toward the stage:
- Wind and rivers;
- "Earth": Low notes (men only);
- "Light": Ululation (women only, very rare); elements are performed freely.
*When "Talla's song" starts, make mainly wind & rivers (all softer) When reaching sign, All refugees except the two on stage go to their seats.

Piano & Crowd FADEOUT (10")

23:00"

02'

25:00"

time

t.scr

TEXT SCORE N.4:
Refugee crowd (opt). Two of the Refugee crowd on stage performs (with microphones) the "four prayers" element:
- FATHER: gesture & whisper in different modes in native language, can send him a message.
- Mother: gesture & whisper in different modes in native language, can send her a message.
- LIGHT: gesture & whisper in different modes in native language, can add words freely.
- AGAINST DARKNESS: gesture & whisper in different modes in native language, can add words freely.

Pno. bow. P

E - BOW HARM.
VARIATE HARMONICS

E - BOW TONE
VARIATE BUZZING