

Rachel Beja  
*Frammenti di memoria abolita*  
2021  
création 2021  
2021



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The setup and the execution of the electroacoustic part  
of this work requires a Computer Music Designer (Max expert).

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## Work related information

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### Performance details

- June 17, 2021, France, Gennevilliers, T2G, Festival ManiFeste

### Detailed staff

- other percussion [Daf] , violin, viola, cello

### Realisation

- Étienne Démoulin

### Useful links on Brahms

- [Frammenti di memoria abolita](#) for daf, violin, viola, cello and electronics (2021), 15mn
- [Rachel Beja](#)

## Version related information

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First performance

Performance date: June 17, 2021

Documentation date: Sept. 9, 2021

Version state: valid, validation date : Oct. 13, 2021, update : Oct. 13, 2021, 4 p.m.

### Documentalist

Etienne Demoulin (Etienne.Demoulin@ircam.fr)

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### Realisation

- Etienne Démoulin (Computer Music Designer)

Version length: 15 mn

Default work length: 15 mn about

### Upgrade Motivation

first version

### No other version available

## Electronic equipment list

### Computer Music Equipment

- 1 MacBook Pro - *Apple Laptops* (Apple)
- 1 iPad - *Tablets* (Apple)
- 1 Wifi router - *Wifi Access Point*
- 1 RJ 45 Cable - *Cable*
- 1 Max 8 - *Max* (Cycling74)
- 1 Sound Board - *Sound Board*
- 1 MIDI Mixer - *MIDI Mixer*  
with pedale input and 8 faders (Asparion/BCF2000)
- 1 Footswitch / Sustain Pedal - *Footswitch / Sustain Pedal*

### Musical Instruments

- 1 Captation device - *Captation*  
The electronic object is a piece of wood (50cmx25cmx5cm) with a RIOT (from ISMM team) and two FSR sensors inside

**Files**

<b>File</b>	<b>Type</b>	<b>Author(s)</b>	<b>Comment</b>
<a href="#">All in one - Patch and score</a>	All-in-one	Etienne Démoulin	

## Instructions

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### 1. Audio setup

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*Frammenti di memoria abolita* is a piece for violin, viola, cello, Daf and electronic object. The electronic part of this piece is performed by the electronic object.

#### 1Bis. Details for the electronic object

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The electronic object is a piece of wood (50cmx25cmx5cm) with a RIOT (from ISMM team) and two FSR sensors inside. The communication between the RIOT and the computer with Max is done via WLAN. IRCAM team host the electronic object.

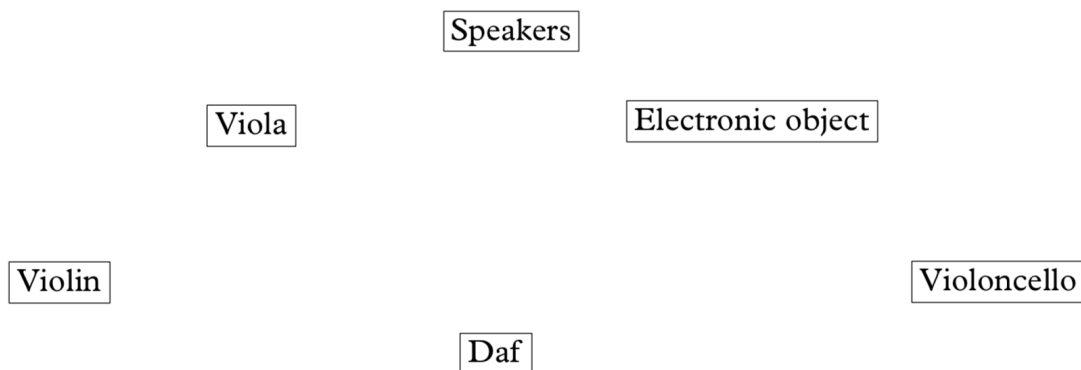
The electronic object triggers audio files from the computer with Max.

### 2. Loudspeaker setup

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Two adapted loudspeakers have to be positioned on stage, behind the electronic object.

#### Position on stage



Public

### 3. Ethernet setup

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The actual WLAN configuration for the electronic object is  
WLAN name : manifeste2021 / WLAN password ircam-manifeste  
RIOT transmission IP is done to 192.168.0.40  
Please set up your computer IP address according to this configuration.

## 4. Software installation

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Max 8.1.11 was used for the concert.  
The patch has been played in this config : 44.1kHz, IO 128, VS 128, Overdrive ON

- Copy the *\_BEJA\_FRAMMENTI* folder into your desktop
- Open Max, add the whole *\_BEJA\_FRAMMENTI* folder into Files Preferences
- Check IO status and Audio Interface
- Launch the main patch *\_MAIN\_frammenti.maxpat*
- In [p riotbitalino 0 8888] check the input of datas.

## 5. Events

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There are 24 events, who recall the matrix and trigger sounds.  
Events can be triggered by the computer music designer, with a space bar shortcut, or by the electronic object player with a midi pedal.

## 5. Patch presentation

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[p sensor] is scaling of riot values.  
[p MATRIX] is a routing from scaled riot values to understandable values for sound file player  
[p DSP] is the main host place for sound file players  
[p MASTER] is a level definition table for each sound file  
[p MIRA] is the wireless interface for the electronic player to manage events.

## 6. Score for the computer music designer

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You have to fade out the “re” sound on bar 97.  
Please also adjust the dynamic on the following sounds according to venue and player :

- re (sound C on score)
- Air (sound I on score)
- Climax (sound H on score)
- Ring 2 (sound B2 on score)
- Chords (sound D on score)

All level adjustments are made from the main patch, with MIDI configuration.

In the score folder you will find :  
the Electronics annotated score with cues and gestures.  
The Full score.

## 6. Initialization routine

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Be sure to start from 0 and pass each preset sequentially.  
See [p MIRA] for details.

## 7. System calibration and tests

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Sensors :  
Check that no slider stays freezed when moving the slider  
Check the battery :  $\geq 3.9$  charged,  $< 3.5$  empty




Pedal :  
Check if the midi pedal is working

## 8. Performance notes

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Please be careful to have a good sonic fusion between electronic and instruments on stage.  
This can be managed by : adding reverb, balancing the level of the loudspeaker on stage, etc.

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## Program note

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L'énergie intense du matériau se transmute du daf aux cordes et jusqu'à l'électronique, les reliant tous en un cycle d'énergie unique, en une entité unique. Le daf est un instrument à percussion traditionnel perse, fréquemment associé à des expériences spirituelles et de transe. Son timbre est hautement versatile et contient différentes couches sonores : d'une part, des sons profonds et résonants, aux riches harmoniques, et, de l'autre, des tintements qui y semblent éparpillés, formant des timbres métalliques et granulaires. Le daf constitue l'impétus de cette pièce, et de lui découle le matériau développé et étendu par les cordes et l'électronique, le faisant accéder à d'autres dimensions. Cela se traduit autant par le recours à un matériau aux caractéristiques similaires, que par la production de contrastes susceptibles de mettre en avant chacune de ces caractéristiques. La nature profonde et primitive du daf donne lieu à des moments de rituel associés à des souvenirs ancestraux substantifs de la nature humaine.

C'est à partir de ces réflexions que les matériaux des cordes et de l'électronique ont été élaborés, sur la base de trois archétypes sonores : les sons d'*air*, les *tak* (des sons relativement secs et aigus) et les *dum* (un son profond, largement résonnant). Autour de ces trois archétypes sonores, des variations sont produites, qui créent la forme de la pièce.

Rachel Beja, note de programme du concert ManiFeste du 17 juin 2021 au T2G.

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