

Michael Jarrell  
*Rhizomes*  
1993  
Macintel version  
2009



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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

- May 17, 1993, Paris, Centre Georges-Pompidou

Publisher : Lemoine

### Detailed staff

- 2 pianos, 2 percussionists

### Realisation

- Thomas Hummel
- Zack Settel

### Useful links on Brahms

- [Rhizomes Assonance VIIb](#), for two pianos, two percussionists and electroacoustic device (1993), 15mn
- [Michael Jarrell](#)

## Version related information

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Documentation date: Nov. 5, 2009

Version state: valid, validation date : May 2, 2018, update : May 6, 2021, 3:10 p.m.

### Documentalist

Serge Lemouton (Serge.Lemouton@ircam.fr)

You noticed a mistake in this documentation or you were really happy to use it? Send us feedback!

### Realisation

- Serge Lemouton (Computer Music Designer)

Version length: 15 mn

Default work length: 15 mn

### Upgrade Motivation

version for MacIntel

### Comment

This version is a port of Rhizomes Macintosh version. This patch has not been validated, because it has never been played in concert. In case of any doubt, refer to the previous version (2004).

### Other version(s)

- [Michael Jarrell - Rhizomes - portage 2020 \(April 9, 2020\)](#)
- [Michael Jarrell - Rhizomes - Rhizomes\\_2013 \(Dec. 4, 2013\)](#)
- [Michael Jarrell - Rhizomes - transfert\\_mustica\\_ftp \(April 14, 2010\)](#)
- [Michael Jarrell - Rhizomes - Macintosh version \(June 3, 2004\)](#)
- [Michael Jarrell - Rhizomes - Premiere \(May 17, 1993\)](#)

## Electronic equipment list

### Computer Music Equipment

- 1 MacBook Pro - *Apple Laptops* (Apple)  
2,4 GHz Intel Processor - Mac OS10.4 or 10.5
- 1 Max/MSP - *Max* (Cycling74)  
version 4.6.3 or 5.0.8
- 1 Sound Board - *Sound Board*  
4 ins - 4 outs
- 6 Footswitch / Sustain Pedal - *Footswitch / Sustain Pedal*  
one for each piano and two for each percussionist
- 1 MIDI Piano Interface KS1 - *MIDI Converter* (Gulbransen)  
for piano 1 (coté cour)
- 1 AtomicPro - *MIDI Converter* (Ircam)  
to convert the switch pedal to midi controllers
- 1 Midi interface - *MIDI Interfaces*  
midi interface

### Audio Equipment

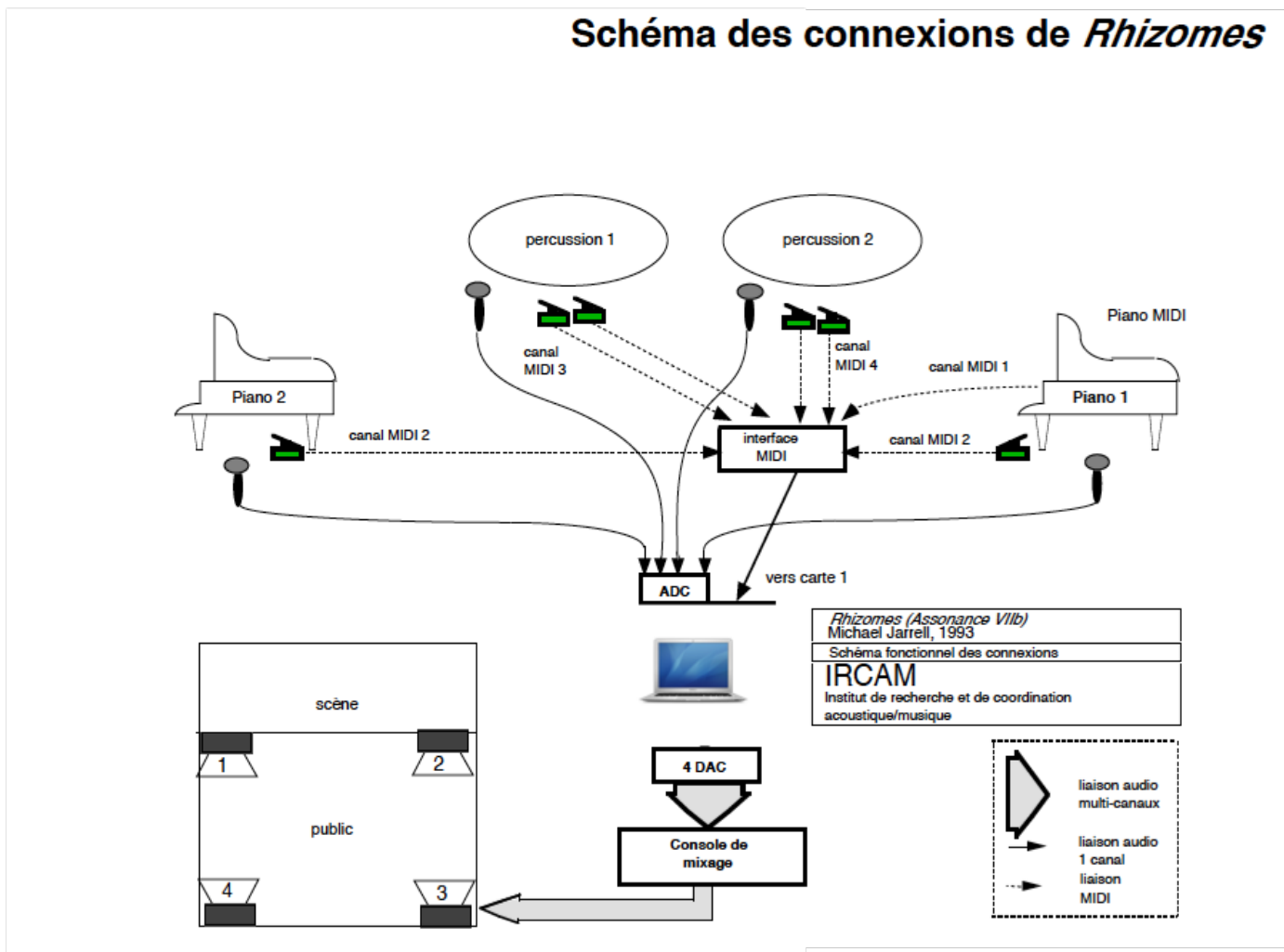
- 4 contact microphone - *Contact Microphones* (Accusound)  
2 for each piano
- 4 Loudspeaker - *Loudspeakers*

**Files**

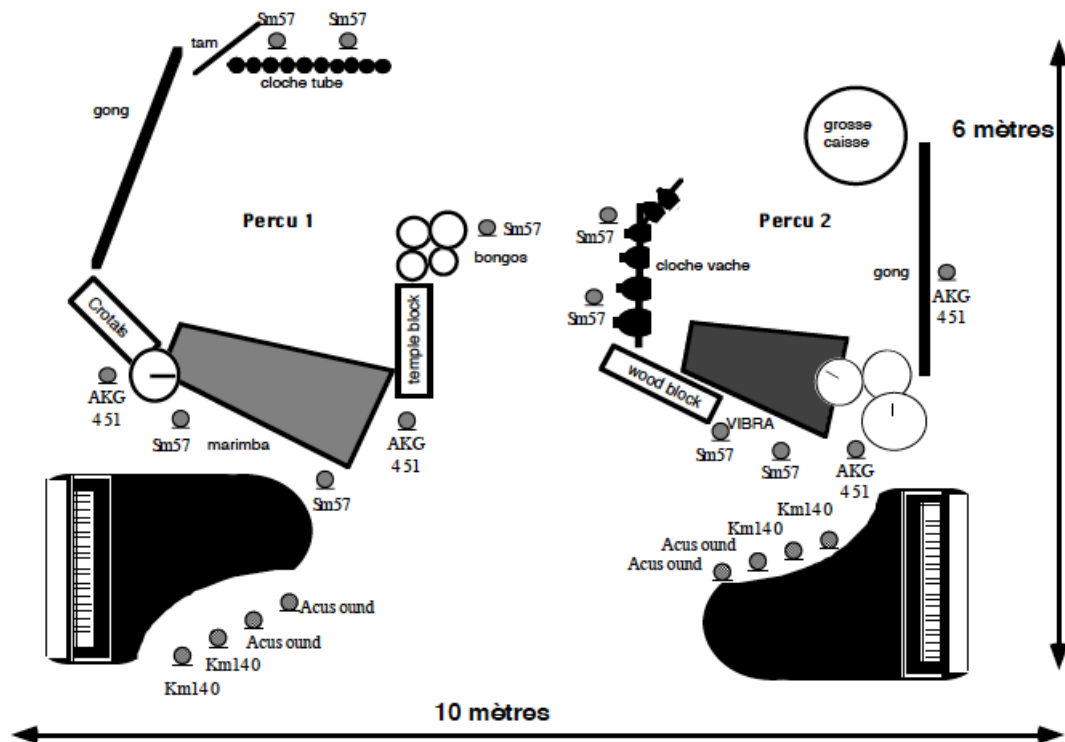
<b>File</b>	<b>Type</b>	<b>Author(s)</b>	<b>Comment</b>
<a href="#">original Ircam documentation</a>	Document	Marc Battier	doc for the original ISPW-based version (now obsolete)
<a href="#">recordings</a>	Simulation files	Serge Lemouton	Separate recordings of the instruments for testing the patch. Not necessary for performance.
<a href="#">max patch</a>	Patch	Serge Lemouton	max patches, libraries and sounds

# Instructions

## Audio, Loudspeaker and Midi setup



## Stage setup



## Software installation

Copy the Rhizomes2009 folder on your hard disk.

Start MaxMsp version 4.5 or version 5.

Set the Max File Preferences to the folders :

- Rlib
- Rsounds

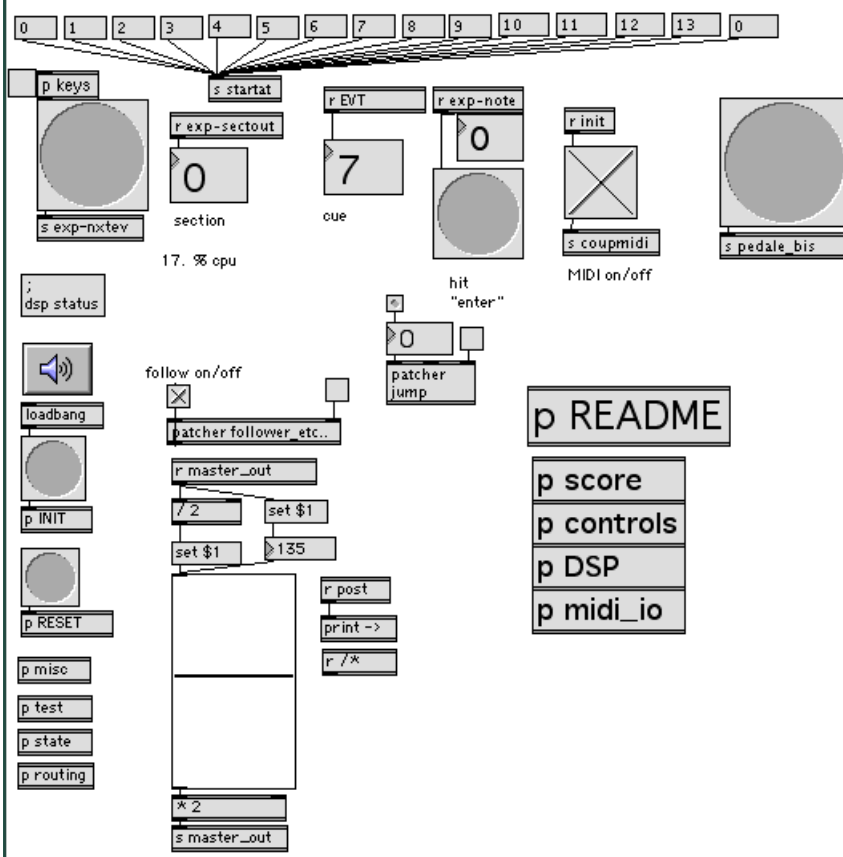
Check the DSP Status :

- Max Scheduler in Overdrive ON
- Scheduler in Audio Interrupt ON
- io vs 512
- vectorsize 64

## Patch presentation



# M.JARRELL Rhizomes



## Midi setup and tests

To check the midi devices, open the midi\_io patcher.

The Piano 1 should be on midi channel 1

- piano 1 footswitch : controller n.64, channel 1
- piano 2 footswitch : controller n.65, channel 1
- perc1 footswitches : both on controller n.64, channel 3
- perc2 footswitches : both on controller n.64, channel 4

These assignments can be adjusted in the midi\_io patcher

## Audio Tests

Check that the sounds from the instruments arrives on the correct max audio inputs :

1. piano1 : adc1
2. piano2 : adc2
3. perc1 : adc3
4. perc2 : adc4

## Simulation

Before the first rehearsal with the musicians, it is possible to test the patch with a multi-track recording of the piece.

For this, download the soundfiles and open the Simulation patch.

## Performance Notes

The Macintosh audio outputs are sent to a good quality reverberation (with a reverberation time of about 3 sec), the output of this reverberation unit send to all the speakers.

## To play the piece


Open the RHIZOMES-TR04.pat patch with MaxMsp version 4.

(or RHIZOMES-TR05.pat with MaxMsp 5)

Switch the DSP on.

Select the section 1 : you are ready, the musicians can start playing !

During the performance of Rhizomes, you should carefully follow the musical score and monitor the event sequencing. It can be necessary to resynchronize the score following system (in case of too many consecutive wrong notes from the musicians, for instance)

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## Program note

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« *Rhizome*, écrit Michael Jarrell, est un terme de botanique. C'est l'appellation d'une tige souterraine qui s'allonge en poussant soit des rameaux, soit des feuilles à l'une de ses extrémités, tandis qu'elle se détruit par l'autre. Comme l'étymologie l'indique, il s'agit d'une racine. »

*Trei II* pour soprano et cinq instruments (1982-1983) et *Assonance VII* pour un percussionniste (1992) peuvent être considérées comme les deux « racines souterraines » de *Rhizomes*. Ces deux œuvres explorent certaines possibilités de la superposition de périodes ou de *tempi* différents — possibilités que *Rhizomes* intègre à des « cycles de développements » continus : la simple répétition d'une note peut donner naissance à des figurations rapides, à des trémolos, à des trilles, à un son tenu, selon les embranchements que le compositeur emprunte, selon les « chemins » qu'il suit au sein des arborescences qui constituent une manière de « grammaire générative » pour la pièce.

Cette continuité mouvante se retrouve dans le travail du timbre : ainsi, la préparation de l'un des deux pianos pourra créer un « pont » vers la sonorité du *wood-block*. Et de fait tout le projet de *Rhizomes* pourrait être considéré comme un nouveau regard porté sur cette interrogation qui était au cœur de *Trei II* : comment intégrer la percussion, cet « élément perturbateur », au sein de l'univers tempéré ?

Peter Szendy.

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