

Jonathan Harvey
Speakings
2008

Lucerne & Pleyel Septembre 2012
2013



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

Table of Contents

Table of Contents	2
Work related information	3
Performance details	3
Detailed staff	3
Realisation	3
Useful links on Brahms	3
Version related information	4
Documentalist	4
Realisation	4
Other version(s)	4
Electronic equipment list	5
Computer Music Equipment	5
Audio Equipment	5
Files	6
Instructions	7
by Gilbert.Nouno@ircam.fr	7
WARNING	7
Software Installation	7
Midi Configuration	7
Ipad Configuration	7
Hardware Audio Configuration	8
Loudspeaker configuration and mixing desk routing	9
Program note	10

Work related information

Performance details

- Aug. 19, 2008, Royaume-Uni, Londres, Royal Albert Hall, Proms de la BBC

Publisher : Faber Music

Detailed staff

- 3 flutes, 3 oboes, 3 clarinets, 2 bassoons, 4 horns, 3 trumpets, 3 trombones, tuba, 4 percussionists, harp, piano, celesta, electronic/MIDI keyboard/synthesizer, 14 violins, 12 second violins, 10 violas, 8 cellos, 6 double basses

Realisation

- Arshia Cont
- Gilbert Nouno

Useful links on Brahms

- [Speakings](#) for orchestra and electronics (2008), 25mn
- [Jonathan Harvey](#)

Version related information

Performance date: Sept. 9, 2012

Documentation date: Jan. 7, 2013

Version state: valid, validation date : May 3, 2018, update : May 6, 2021, 3:09 p.m.

Documentalist

Gilbert Nouno (Gilbert.Nouno@ircam.fr)

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

Realisation

- Gilbert Nouno (Computer Music Designer)

Version length: 25 mn

Default work length: 25 mn

Other version(s)

- [Jonathan Harvey - Speakings - MANCA-Nice-2013 \(Nov. 29, 2013\)](#)
- [Jonathan Harvey - Speakings - Wroklaw 2013 \(Jan. 7, 2013\)](#)
- [Jonathan Harvey - Speakings - edinburgh-2011 \(Aug. 15, 2011\)](#)
- [Jonathan Harvey - Speakings - 2011_geneve \(March 22, 2011\)](#)
- [Jonathan Harvey - Speakings - max-4juillet-2010 \(July 14, 2010\)](#)

Electronic equipment list

Computer Music Equipment

- 2 MacBook Pro - *Apple Laptops* (Apple)
- 1 iPad - *Tablets* (Apple)
needs the Lemur software for ipad
- 2 Max 5 - *Max* (Cycling74)
Last Max5 version 5.18
- 2 Fireface 800 - *Sound Board* (RME)
- 1 KX 88 - *MIDI Keyboard* (Yamaha)
- 2 BCF 2000 - *MIDI Mixer* (Behringer)
- 1 Footswitch / Sustain Pedal - *Footswitch / Sustain Pedal*
- 2 Midi interface - *MIDI Interfaces*
- 1 MIDI booster - *Booster*

Audio Equipment

- 8 Loudspeaker - *Loudspeakers*
- 2 subwoofer - *Subwoofers*
- 1 DM2000 - *Digital Mixers* (Yamaha)
3 Adat card (MY16AT), 2 Analog out MY8DA96 ,1 Analog In MY8DA96

Files

File	Type	Author(s)	Comment
DM2000-WARSAW.pdf	Document	Sylvain Cadars	setup audio DM2000
Speakings2012b-Pleyel.dmg	Performance patch	Gilbert Nouno	
Speakings patch instructions.doc	Performance documentation	Gilbert Nouno	doc word
Speakings patch instructions.pdf	Performance documentation	Gilbert Nouno	pdf
Stage setup Speakings.pdf	Document	Sylvain Cadars	stage setup for instruments
Tech Rider - Generic for Speakings.pdf	Document	Jérémie Henrot	technical rider

Instructions

by Gilbert.Nouno@ircam.fr

WARNING

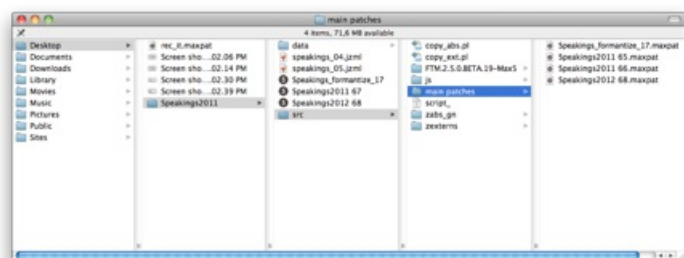
Speakings requires at least two people : a very experimented Computer Music Designer to take care of the electronic music of the piece and a Sound Engineer.

Software Installation

Copy the *Speakings.dmg* files and unpack it, you should have the following files.

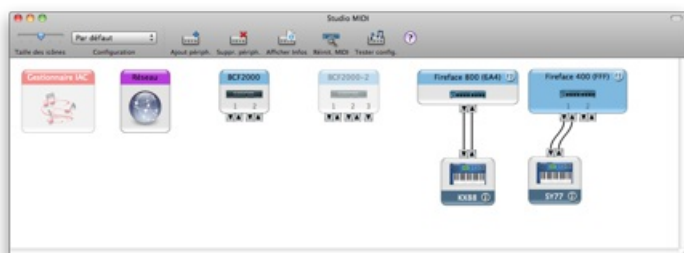


Copy the folder *Desktop* in your computer, and put it in the file preferences of Max5.



Midi Configuration

As the following to configure the KX88 midi keyboard :



Ipad Configuration

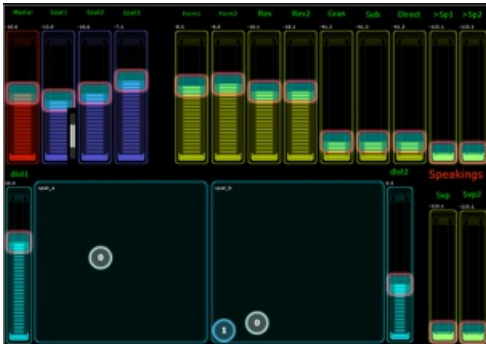
Speakings is controlled with an ipad with the lemur application (<http://liine.net/en/products/lemur/>). Make an addhoc wifi communication with the ipad and the mac, matching the mac IP address in the ipad IP setup. The ipad must send its data on the port 8000. Edit the beginning of file *speaking_reset.asco* so as to set the right IP address of the ipad :

```
print set_lemur_IP

JZM_otudp host 192.168.20.1

JZM.osc.gate 1
```

load the *speakings_05.jzml* patch on the ipad. It will be used to control the levels of the electronic in the piece.

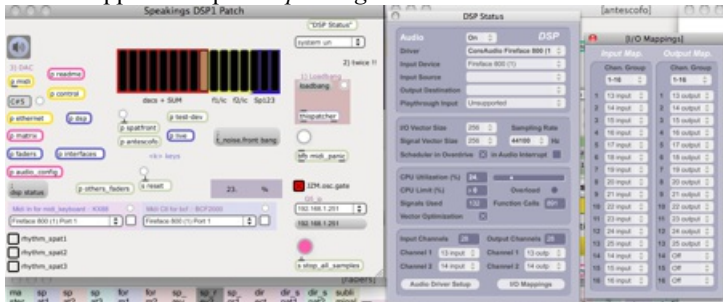


Hardware Audio Configuration

Speakings needs one audio interface RME fireface FW800.

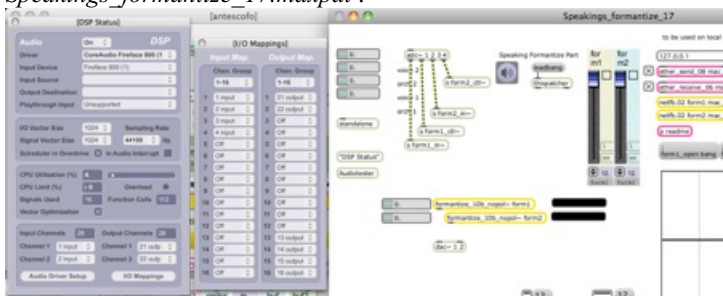
Loading the Max5 patches

Speakings consists in two Max5 patches. You need to run either the two application patches (easier and faster to load) or two different instances of Max5, for this purpose, duplicate your Max5 application to make another one, they will share the same preferences. Run the application patch *Speakings2012 68* or the first instance of Max5 loaded with the patch *Speakings2012 68.maxpat* :



in the DSP status subpatch set the audio interface and its I/O mapping as shown with the screen snapshots above and below, for channel 1 to 32. Turn the DAC on (the loudspeaker icon)

Run the application patch *Speakings_formantize_17* or the second instance of Max5 loaded with the patch *Speakings_formantize_17.maxpat* :



in the DSP status subpatch set the audio interface and its I/O mapping as shown in the above and below pictures, for channel 1 to 32. Turn the DAC on.

As you can see, logical output 17,18,19,20 of the main patch are set to physical output 1,2,3,4 of the audio card, logical input 1,2,3,4 of the formantize patch are set on physical input 1,2,3,4. To do this you need to loop the physical output 1-4 back to the physical input 1-4. On the FW800 RME card with the Fireface Mixer software control-click the output name, it turns to red meaning the output are sent back to the input.



The logical 1-2 output of the formantize patch are sent to the 21-22 physical output, which needs to be processed with the external mixing desk with a good compressor, and sent back to the 27-28 physical input corresponding to the logical input 17-18 of the main application.

Using the patch


Open the *Antescofo* subpatch in *Speakings2012 68*



In the left menu load the *speaking_reset.asco* electronic score, this would reset the whole patch. To rehearse or play the piece load with the same menu the first movement electronic score of the piece. Follow the conductor score for the midi keyboards sequences to play, they are doing the full triggering for each event and sounds.

Loudspeaker configuration and mixing desk routing

Please see the other attached pdf documents for audio setup and stage settings.

© IRCAM 

This documentation is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

Program note

Il s'agit du troisième volet de ma trilogie relative à la purification bouddhiste du corps, de l'esprit et de la parole. Langage et musique sont très proches et en même temps éloignés. Dans *Speakings*, j'ai voulu réunir la musique orchestrale et la parole humaine. C'est comme si l'orchestre apprenait à parler, comme un bébé avec sa maman, comme le premier homme, ou comme entendre une langue très expressive que l'on ne comprend pas. Les rythmes et les intonations émotionnelles de la parole sont formés par la sémantique, mais par dessus tout, ils sont formés par des sentiments – à cet égard, ils se rapprochent du chant. Dans la mythologie bouddhiste d'Inde, il y a une notion de langage originel et pur, prenant la forme de mantras – moitié chant, moitié parole. On dit que le « OM-AH-HUM » est le berceau de tout langage. Le discours orchestral, lui-même touché par les structures du langage, est formé de façon « électroacoustique » par des « bribes de paroles » provenant d'enregistrements pris au hasard.

Les formes spectrales des voyelles et des consonnes vacillent dans des rythmes rapides et colorés du langage à travers les textures orchestrales. Un « vocodeur de la forme spectrale » tire avantage des complexités fascinantes du langage : telle est l'idée principale de cette œuvre. Le premier mouvement est comme une incarnation, une descente dans la vie humaine. Le deuxième s'intéresse aux jacasseries frénétiques de la vie humaine dans toutes ses expressions de domination, d'assertion, de peur, d'amour, etc. Il développe *Sprechgesang*, œuvre pour hautbois et ensemble, composée précédemment. Il se transforme jusqu'à devenir « mantra » et célèbre ainsi le langage rituel. Le mantra est orchestré et traité par un « vocodeur de la forme spectrale ». Le troisième est, comme le premier, plus court. Ici le langage est plus calme ; il se conjugue à une musique harmonieuse, un hymne proche du chant grégorien. Il y a souvent une seule ligne monodique qui se réverbère dans un grand espace acoustique. Il y a une petite division de ligne contre ligne, ou la musique contre l'auditeur, lorsque la réverbération élimine le sens de la séparation entre l'auditeur et l'objet musical. Le paradis du Temple de l'écoute est imaginé. Les mouvements sont joués en continu.

Jonathan Harvey.

Version documentation creation date: Jan. 11, 2013, 11:10 a.m., update date: May 6, 2021, 3:09 p.m.