Sivan Eldar
Heave
2018
Premiere_Cleaned
2019

ircam
Centre
Pompidou

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

Table of Contents

Work related information

Performance details

- Sept. 9, 2018, <p>France, Asnière sur Oise, Fondation Royaumont, Potager-Jardin, dans le cadre du Festival Royaumont 2018</p>

Publisher : Durand

Detailed staff

- ensemble of vocal soloists(soprano [], mezzo-soprano [], countertenor [], tenor [], 2 bass voice)

Realisation

- Augustin Muller

Useful links on Brahms

- *Heave* **for six voices and electronics (2018), 14mn**
- **Sivan Eldar**

Version related information

First performance
Performance date: Sept. 9, 2018
Documentation date: Jan. 17, 2019
Version state: valid, validation date : May 5, 2020, update : June 1, 2021, 12:38 p.m.

Documentalist

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

Realisation

- Augustin Muller (Computer Music Designer)
- Martin Antiphon (Sound engineer)

Version length: 15 mn
Default work length: 14 mn 30 s

Upgrade Motivation

Clean version of Heave patches

Comment

This version was rendered in Royaumont's Carré Magique garden, in an extended version, with 27 points of diffusion placed on the ground.

Other version(s)

- Sivan Eldar - Heave - Creation (Sept. 11, 2018)

Electronic equipment list

Computer Music Equipment

- 1 Retina - *Apple Laptops* (Apple)
  running High Sierra 10.13.6 - 2,8 GHz - 16Go -Max 7.3.5
- 2 Max 7 - *Max* (Cycling74)
  in 64-bit mode

Audio Equipment

- 6 Microphone - *Microphone*
  wireless microphones for the singers -6 DPA 4066 with wireless system were used at the premiere
- 27 Loudspeaker - *Loudspeakers*
  27 speakers on the ground. Positions as reported in spat.
- 2 subwoofer - *Subwoofers*

Files

File	Type	Author(s)	Comment
Heave_Patch&Sounds	All-in-one		

Once your preferred midi interface and/or mira device are connected and configured.

- Launch the _Heave*player.maxpat* in one instance

- Launch the _Heave_RT*patch.maxpat* in the other

Patches Config - Main Audio Checklist

- Check Audio configuration in both instance

  - IO size & VS will update automatically in each instance

  - 48000 kHz is mandatory with these sound files ! !

- In Heave_player [score] patcher, check that the score folder is the correct one and that the menu is filled.

- Press INIT in the player patch & check that the connexion with RT patch is done (should be initialized)

- Check Mira or midi interface connexion

- Audio ON in both instances

- you're ready

System calibration and tests

- Start by setting the tape part

  - First you have to redraw your speaker configuration in the spat oper.

  - Presets can be updated by the interface [spat_ctl] or directly in the file Data/Spat_Data/Heave_spat_27.txt

  - Configuration of the sources should not be changed, but scaling offset is possible

  - Panning type can be adapted to have the best result in the space (tradeoff between precision and enveloppement. try not to use too much reverberation (only for blending and fusion)

  - Compression of the tape part can be set too by interface or directly in the preset file

  - Check the adc input coming from the choir (modlayer)

- Real Time:

  - copy the speaker configuration from the tape preset (in the file (HeaveRT_spat_27.txt)
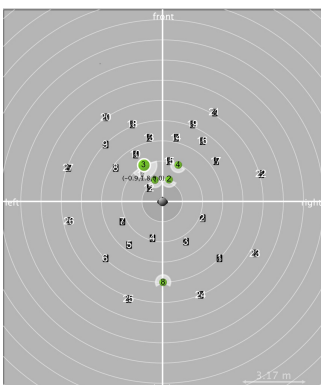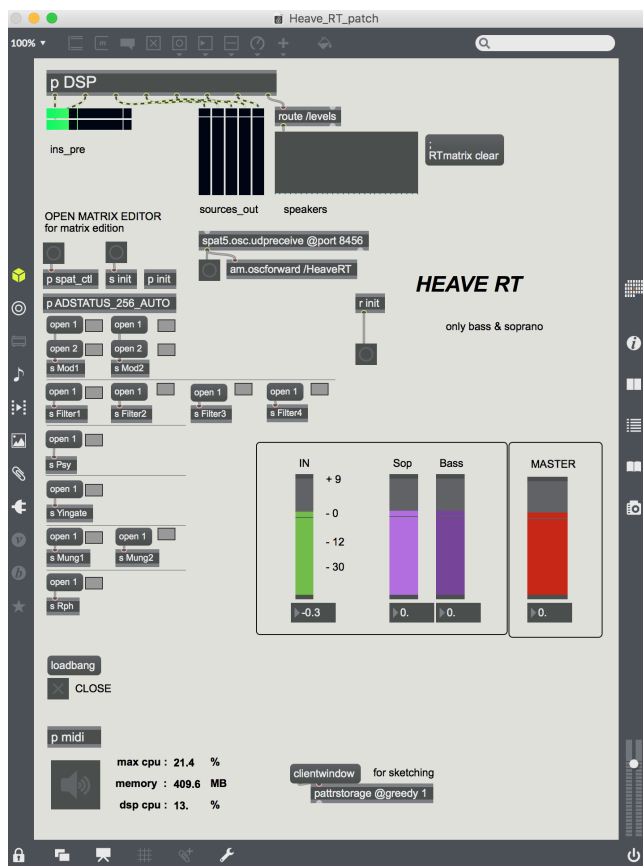

Patch presentation

Heave patches have different functions :

- Heave player :
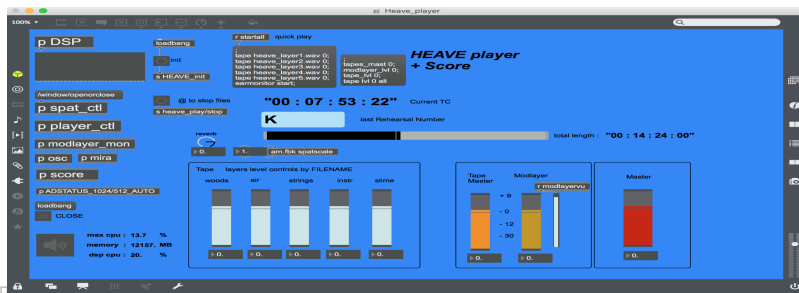
-
  - play the tape

-
  - global electronic score & ctls

-
  - "modlayer" effect linked to the choir intervention

- Heave_RT :

-
 - processing & spatialization of Bass and Soprano

Synchronization : Cues are triggered by the computer music designer as written in the score.

The keyboard controls are the following :

- Right Arrow : nextlabel to antescofo (ie trigs next cue)

- Left Arrow : previouslabel to antescofo (no trig)

- @ : stop soundfiles

Mira / Midi

an ipad running Mira was used for controlling the balance and trigging events in the garden.
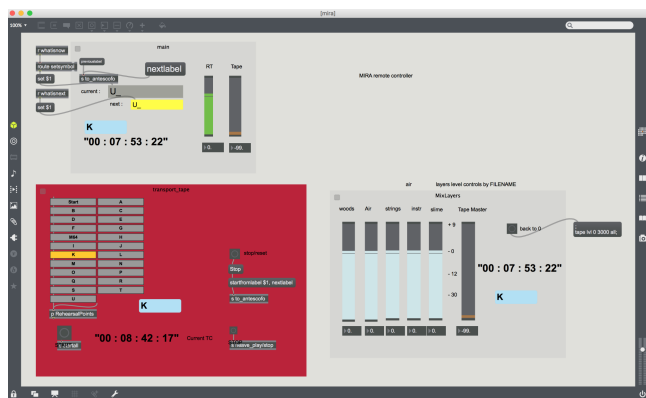
Performance notes

Report to the score provided

General :

- Heave tape features mainly two types of textures : harmonic and "airy" sounds (like in the beginning of the tape) and earthly/slimy sounds (central part).

Both textures should fill the space of diffusion but with more focus on the enveloppement and collective feeling for the harmonic part , and more focus on the concrete, circulating and proximity character of the slimy part (hence the change in spat parameters about scaling and reverb) The tape part has to be quite present and overwhelming at some points ("breaking up" around B). The low register (subs) is important in the central part and should we well present.

- The modlayer effect on the choir should blend well with the tape and give a feeling of organicity of the whole electronic texture.

- The voices should be amplified in the zones where the singers are (depending on the staging).

- The processing in the RT patch **must not be too loud** It's purpose is to extend, blend and blur the voices at some moments to mix with the electronics but the acoustic, natural voice must always be in the foreground.

- The whistle of the soprano at H should hardly be amplified but mostly emerge in the reverberation effect

- Try not to play too loud : mix levels have to be adjusted live in order to never loose the voices whilst maintaining detail on the electronic part