

Auricula Suum

In this sonic intervention, a single participant wears a binaural headphone-microphone headset, which, in conjunction with a max/msp patch, affords an altered experience of the sonic environment. The binaural microphones record sound according to the particularities of the wearer's pinna and the patch processes the incoming signal before sending it back to the headphones. The patch periodically cycles between three modes of signal processing: the first swaps the stereo field, causing participants to hear sounds captured in their left ear in their right ear and vice-versa. The second mode of processing applies a gradually changing time delay to the incoming signal, causing the wearer to hear sound events after—and if they move, or if the sound source moves—in different locations to where they originally occurred. The third mode of processing combines the first two. This document describes how to prepare, setup and run this intervention.

Equipment

- 1 pair of Roland CS10EM binaural microphone / headphones
- 2 mono, or one stereo wireless belt pack transmitter(s)
- 2 mono, or one stereo wireless belt pack receiver(s)
- Corresponding transmitter and receiver base stations for wireless belt packs
- Soundcard able to interface with transmitter, receiver, and laptop
- Laptop which runs the attached Max-MSP patch
- Max/msp patch (accompanies this score)
- Bags or cases in which to place transmitters and receiver

Preparing the Intervention

The experience of this intervention is defined by the environment in which it is realised. Consider the following three key variables when preparing it: the acoustic properties of the space(s), the quantity and types of sounds existing in those spaces, and the framing of the participant's interaction with the piece. Set up the intervention in different settings and experience it yourself before you settle on a realisation to open up to others:

Set up the intervention in different spaces, large empty churches, outdoor urban locations, art galleries, the home environment, familiar environments, unfamiliar environments, anechoic chambers, connected spaces, single spaces, small spaces, large spaces.

Consider the types of sounds occurring in the acoustic environment in which the intervention is placed: are they many? Are there few? Are they locatable? Are they noisy? Are they musical? Are they to be made by the listener, or are they external? Is the intervention in public? Is it in private? Are the sounds individually perceptible or are they ubiquitous?

Consider the interaction between listener and sonic environment(s): is the listener to be seated, or stationed in one location? If they can move, how far can the listener move around the space(s)? Is the listener led around or are they autonomous?

Setup

After having decided on a setting for the intervention, designate a surface in the space where the equipment will be set up. Make the connections as per the setup diagram overleaf. Test the intervention with the Max/MSP patch. Follow the instructions within the patch to operate it. Be sure to check the range of the transmission and reception of the signal in relation to the space in which you anticipate listeners moving. Put the senders / receivers into bags or cases so that they can be carried easily by the listener. Set the levels on the headphones as high as possible without the system feeding back (the headphone volume should be high and the microphone volume, c.2/3). If the realisation of the intervention is outside, use mufflers to avoid the microphones clipping.

Before each intervention:

Inform each listener if and where they may move, and that they are free to stop the piece by taking off the headset and giving it back at any time. Give no further instructions or information.

Setup Diagram



Sound Card

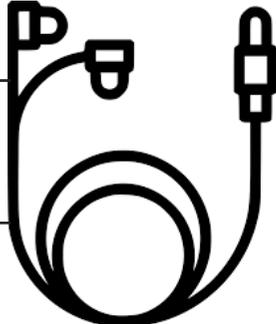
Radio Reciever Station

Radio Transmitter Station

Radio Reciever Pack (1x stereo or 2x mono)

Radio Transmitter Pack (1x stereo or 2x mono)

Sennheiser 10em
binaural headphone /
microphones



Auricula Alium

In this sonic intervention, four participants wear binaural headphone-microphone headsets, which, in conjunction with a max/msp patch, allow each individual to hear through the ears of others. The binaural microphones record sound according to the particularities of each wearer's pinna. The max/msp patch takes the four pairs of input signals, each corresponding to an individual participant, and re-routes these to the headphones of others. This document describes how to prepare, setup, and run this intervention.

Space

The space should be of a suitable size to accommodate four people and allow some movement. It should be as resonant as possible; ideally its interior will consist of bare, smooth, walls floor and ceiling, made of brick, concrete, stone, or similar. Ideally, the space will have minimal visual stimuli. There should not be too much environmental sound. Suitable spaces might include a 'white-cube' gallery space, an empty 'black-box' theatre space, a chapel, a church, a gymnasium, a concert hall with removable seats, a church, a dance studio, or a warehouse space.

Equipment

4 pairs of Roland CS10EM binaural microphone / headphones
8 mono, or 4 stereo wireless belt pack transmitters
4 stereo wireless belt pack receivers
Transmitter and receiver base stations for wireless belt packs
Cabling
Soundcard able to interface with transmitters, receivers, and laptop
Laptop which runs the attached Max-MSP patch
Max/msp patch (accompanies this score)

Setting up

Inside or outside the selected space, designate a surface where the equipment will be set up. Make the connections as per the setup diagram overleaf. Test the intervention with the patch, following the instructions within it to operate it. Be sure to check the range of the transmission and reception of the signal in relation to the space in which the intervention will take place. Put the senders and receivers into bags or cases so that they can be carried easily by the listeners. Set the levels on the headphones as high as possible without the system feeding back (the headphone volume should be high and the microphone volume, c.2/3). Test the gain for each headset before giving them to the participants.

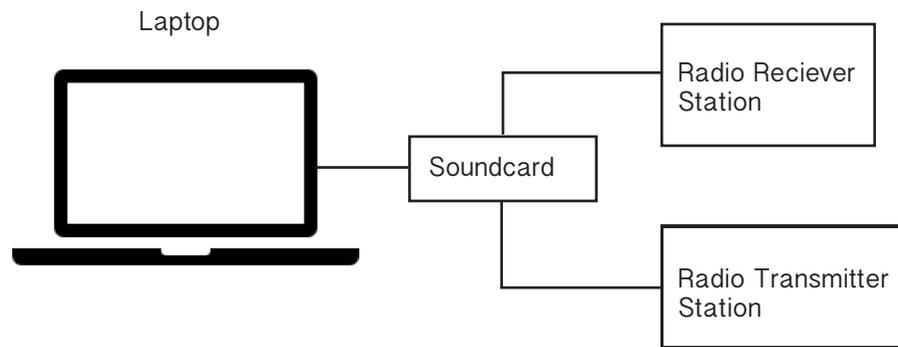
Listeners

Listeners may be members of the public or invited participants. The intervention requires groups of four listeners at a time. Listeners should be informed that the intervention lasts for 15 minutes. They should also be informed that they may only make non-verbal sounds.

Give no further instructions or information.

Alex De Little, 2018

Setup Diagram



Sennheiser 10em
binaural headphone /
microphones

