Resonant Topographies: Listening-led Movement

for Tora Hed and Hannah Buckley

Personnel
This piece requires a technician, two dancers, and an audience.

Introduction
When resonant frequencies of an enclosed space are constantly and steadily emitted within it, trains of sound waves propagate outward from the source, spreading through the space. Different parts of this train of waves meet with surfaces and reflect off them, folding back in on the space and interfering with one another to either reinforce or cancel each other out. What results is a static sound geography: a resonant topography.

In this piece, a sociality of listening forms around the perception of resonant topographies. Dancers and audience explore these landscapes through movement and listening. In the first section the dancers have their eyes closed, maintaining focus on their individual perceptions of the space. In the second, the dancers open their eyes and place their focus on each other: individual processes of listening become negotiations which are expressed through shared patterns of movement.
In the final section, the audience are free to join the dancers in exploring the space.

This document describes how to set up and perform the piece.

Equipment
Paired loudspeaker and subwoofer capable of stimulating the fundamental frequencies of the chosen space.
Cabling
Power supply
Laptop
Measurement and Performance Max/MSP Patches (provided)
Acoustic measurement microphone
Sound card (able to power both speakers and take a microphone input)
Mixer

Space
In order for strong resonances to be detected and standing waves to be established, the space should be as reflective as possible. Ideally its interior will be bare, made of brick, concrete, stone, or similar. In order to allow free movement, the space should be more or less completely empty, with no obstacles. Suitable spaces might include a ‘white-cube’ gallery space, an empty ‘black-box’ theatre space, a chapel, a gymnasium, a concert hall with removable seats, a church, a dance studio, or a warehouse space.

1 Setup and preparation (to be undertaken by technician)
Set up equipment in the middle of the space. Cover any cables which run along the ground.

Use the acoustic measurement patch provided to take number of impulse responses. Move the microphone to a different location in the space for each impulse response. Upload three of these impulses into the performance patch and create chords as per instructions inside the patch.

2 Rehearsal
The dancers and techncian should rehearse the first two sections in order to get a feel for the cues and transitions. The performance score is overleaf. In order to maintain a degree of spontenaity during the performance, do not over-rehearse.

Alex De Little, 2018

3 Performance

Some time before the performance, audience scores should be distributed among the audience members. The technician begins the piece by slowly fading in the sound. The technician is responsible for keeping timings. Fades may be automated. Dancers take their cues from changing topographies.

Dancers

As you hear the sound fade in, enter the performance space:

1

Explore the topography with your eyes closed. Place your awareness completely on the sonic situation in the space, how it is perceived aurally and how it acts on the body. Be aware of how the sound changes with movement, and begin to let the sound lead movement. Start with simple, small movements, allowing them to grow in complexity and scope in a way that feels organic. Explore the space.

0’

When you hear the topology change, open your eyes:

2

Now divide your awareness between the topography and the other dancer. Enter a negotiation with them, a dialogue. Through movement, try to understand their experience of the topology and show them yours. Create dialogues, mimicry, diverge, converge. But always move in terms of listening. Be led by the sound to move as a pair.

10’

When the topology changes, the audience will begin moving in the space:

3

Now divide your awareness between the topography, the other dancer, and the moving audience. Be open to eye contact with members of the audience. Be aware of the variety of ways in which people are moving. Be open to dialogues of movement with audience members, but don’t force these. Maintain your own exploration of the topography, always expanding your repertoire of movement. At the same time, maintain your dialogues with the other dancer. The awareness whilst always remaining firmly grounded in the topography, shifts between self, audience and partner.

20’

when you begin to hear the sound fade out, leave the space

30’

Fade in chord 1

Crossfade chord 1 with chord 2

Crossfade chord 2 with chord 3

Fade the sound out completely

Technician

(audience start moving in the space)