

Roomtone

Project Description

Roomtone is an interactive sound installation exploring the relationship between sound, time, and physical space. It was directly inspired by Alvan Lucier's *I am Sitting in a Room*, Steve Reich's *Pendulum Music*, and leans heavily on the "Light and Space" movement pioneered by artists such as Robert Irwin and James Turrell.

The piece is comprised of 4 loudspeakers, a microphone, and software. The speakers, positioned in the corners of the space, are driven by the microphone placed in the centre. Because of the co-location of these elements a feedback loop is created. The software driving the installation, written in Max/MSP, mediates this feedback to create a relationship between the microphone, speakers, room, and any active sound elements.

The result is a system in which any sound made within the space is captured, repeated, and layered. And, each time the sound is repeated, it is filtered by the room. Over time, the space fills with more and more sound, moving towards some fundamental pitches reinforced by the filtering of the room. Eventually, once a maximum amplitude is reached, the piece returns to silence, reconfigures some parameters, and restarts. With each iteration the piece will move towards the same roomtone but the sonic journey to this space will be unique. The result of this process is a soundscape which encompasses the whole space, uniquely generated with layered sounds created by anyone who participates in the space.

While this piece specifically focuses on sound, the visual elements of the piece are important. The speakers and microphone are not hidden from the viewer. Audio cables are routed as neatly as possible to ensure the viewer is not distracted.

The piece is an exploration of minimal interactivity. Specifically, the creation of a system which responds to user input *but* does not have a pre-coded one-to-one relationship between action/reaction. To put it another way, this piece responds to sonic input but is not programmed with a predefined set of responses. Every sound in the space enters and modifies, creating a new experience with every iteration.

This work exists at the intersection of the ephemeral and the tangible: hardware and software, ideas/feelings and people. At this intersection is a space where people can explore new relationships between themselves, technology and, others. And, most importantly, in this space people can play.

Configuration

Because of the effect of the location—the room—on the piece, this is a site specific installation. Several parameters are set by the artist to ensure the piece functions as expected. The nature of the piece makes the specific hardware (speakers, microphone, computer, and sound card) relatively unimportant given proper configuration.

While an onsite visit is ideal, the code has been configured to have the necessary parameters easily adjustable with little technical knowledge.

Assuming the easily stolen items (computer and soundcard) are placed in an inaccessible area, the piece can be easily protected with a single person holding watch over the gallery. Generally the speakers are too heavy and the microphone too high up to steal.

Previous Installs

- [Pretty Good Not Bad \(PGNB\) Festival](#) - 05/17/18 to 05/20/18 - Victoria, BC
- [Open Space Arts Society Listening Room](#) - 04/10/15 to 05/28/15 - Victoria, BC

Documentation

Videos can be found [here](#)