



INSIDE OUTSIDE

OUR MOTIVATION IN THIS PROJECT WAS TO CREATE A PERFORMANCE ART PIECE INSPIRED BY THE FEELINGS OF BEING BOTH INSIDE AND OUTSIDE A SPACE AND THE SOUND OF WATER.

Our goal was to inspire creative movements in SMALLab, without explicitly instructing participants to move in a certain manner. By using video feedback, attaching the ball to the user's head, surrounding the space in curtains, and using running water sounds as audio feedback we hoped that the participant would be inspired to move in unique ways. Additionally, we hoped that by mapping audio playback speed to user velocity, the participant would move fast in the "outside" portion of the space, and "slow" in the inside portion of the space.

The implementation of our project required two video clips, one of ocean waves crashing on rocks, and the other of a moving lamp shade. The videos were edited to take up only half the screen, with the other half black, and also edited for smooth loop playback. All group members then collected water related sound clips, and we decided on four clips (two inside and two outside water sounds) to include in our interaction. When the user was located in the "inside" part of the space they saw the inside (lamp shade) video, and heard either the sound of water pouring from a bottle in one corner, or a draining sink in the other corner. While located in the "outside" portion of the space the user saw the ocean video, and heard waves crashing into rocks or a rain storm.

There was also a middle section between the "inside" and "outside" spaces where there was no audio or visual feedback, allowing for user reflection and rest. The implementation in MAX required the editing of some of the existing render engines to include a "sigmoid" mapping function to approximate a step function so a sound or video was either on or off as a function of one of the sensing variables, not smoothly varying. New attributes and calculations were also included to localize each of our four sounds in the four different corners of the space, and also to implement our desired inside/outside audio playback speed/user velocity mapping.

Our contribution was a novel way to use SMALLab, by providing a new level of privacy, and encouraging people to move in unique ways. We also implemented a "reflection space" in the middle of SMALLab, hopefully providing the user the ability to think about their interaction.

One thing we noticed from the user interactions with our project was that it appeared that the user did not distinguish that there were four sounds located at each corner of SMALLab. Since there were only two video clips, it appeared that some users also thought there were

only two sound clips. Additionally, by including video clips, the user initially thought that their movement of the sensor controlled the video clip playback, also leading to more creative movements. Accurately implementing our desired inside/outside audio playback speed/sensor velocity mapping proved difficult to tune correctly.

F4

*Maria - video and sound clip collection/editing, curtains, hat, and gloves
Patrick - audio clip editing, inside/outside idea, documentation, curtains setup
Stjepan - resident MAX/MSP software expert, implementation
Gordon - sound clip editing, project implementation/coding, documentation*

