

# Contemplace

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## ABSTRACT

Contemplace is a spatial personality that redesigns itself dynamically according to its conversations with its visitors. Sometimes welcoming, sometimes shy, and sometimes hostile, Contemplace's mood is apparent through a display of projected graphics, spatial sound, and physical motion. Contemplace is an environment in which inhabitation becomes a two-way dialogue.

## Keywords

Interactive space, spatial installation, graphic and aural display, motion tracking, Processing, Flosc

## 1. INTRODUCTION

Contemplace is an exploration of possible interactions between people and the spaces they inhabit. Typically, built spaces are passive shells that rely on their inhabitants to provide them with character. What would our spaces be like if they could receive their visitors like a human host?

Contemplace addresses two major questions: What kinds of interactions are most meaningful in the context of a conversation between a space and its visitors? And what will the physical form of this space be, and how will the form manifest itself over time?

## 2. INSTALLATION

The space of the installation is defined by one horizontal (wall) screen and one vertical (ceiling) screen. Based on visitor motion and presence, Contemplace moves between closed ('introverted') and open ('extroverted') states. Contemplace displays its current mood with projected graphics and spatial sound. The projection falls on the wall screen in the open state, and visitors can interact directly with the graphics through a shadow-tracking system. The projection falls on the ceiling screen in the closed state, and interaction is more about presence and location than gesture. Four-channel sound works with the projected graphics to heighten the sense of space.

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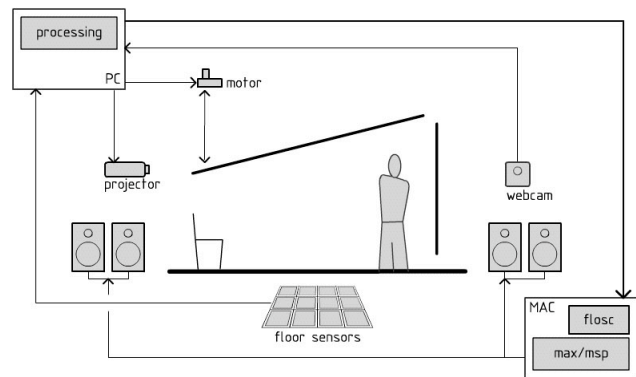


Figure 1. Installation Diagram

## 3. VISITOR EXPERIENCE

Visitor experience varies with the state of the installation. When 'extroverted', the installation is full of energy. In this state, visitors will be drawn to the wall screen, where they can interact directly with the projected graphics and spatial sound with physical gestures and motion through the space. When 'introverted', the installation space is physically smaller and more intimate; visitors will be less active in the space, and may sit on the floor or benches to observe the graphics above and the sounds around them.

## 4. TECHNOLOGY

Contemplace's visual displays and overall structure are built with processing, a java-based programming platform. Contemplace's sounds are generated by Max/MSP, a graphical programming environment for manipulating sound. Processing and Max/MSP communicate via Flosc, a java server designed by Ben Chun to allow communication between OSC/XML-compatible programs over IP.

## 5. ACKNOWLEDGMENTS

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## 6. REFERENCES

- [1] *Contemplace* full documentation.  
<http://www.transmote.com/projects/contemplace/>