

Spatial memory, embodied thinking,  
computer vision projection application  
Exploring cognition and interaction in a  
spatial and physicalised computer  
environment.

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# Acknowledgements

Thanks to my family, Florent, Chudleigh dwellers, Jamie ...

# Abstract

This project...

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## Chapter 1

# Introduction

## Chapter 2

# Background

The motivation for this project stems in part from a feeling of frustration in how working on computers can often be a constricted affair and a pondering over how we might expand the *keyboard-mouse-monitor* model to improve the utility of computers regarding our own perceptive abilities. How might a spatial and more *haptic* environment for interaction create an improved space for thinking with computers as well as our physical health.

## 2.1 Definitions

1. Computing
2. keyboard-mouse-monitor model (kmm model) (?)

## 2.2 Original ideas with exocortexes; Externalised memory and organisational systems

1. Org mode and nataniev ecosystem

## 2.3 Dynamicland

One of my original points of reference was *Dynamicland*, a research project in Oakland, USA. The aim of the project is to implement a new more powerful and accessible model of computing.

In Oakland, we built the first full-scale realization of the vision, inviting thousands of people into our space to collaborate. Together, these artists, scientists, teachers, students, programmers, and non-programmers created hundreds of projects that would have been impossible anywhere else. – Dynamicland.org

*Dynamicland* is a communal computer where the building is the computer (a transition back in scale to the days of the first computers ENIAC). Programs are embodied in the room on pieces of colour-coded paper. The programs are recognised via the codes and their code, stored in a database is then run. It can also *read* code using OCR but generally the code is there symbolically.

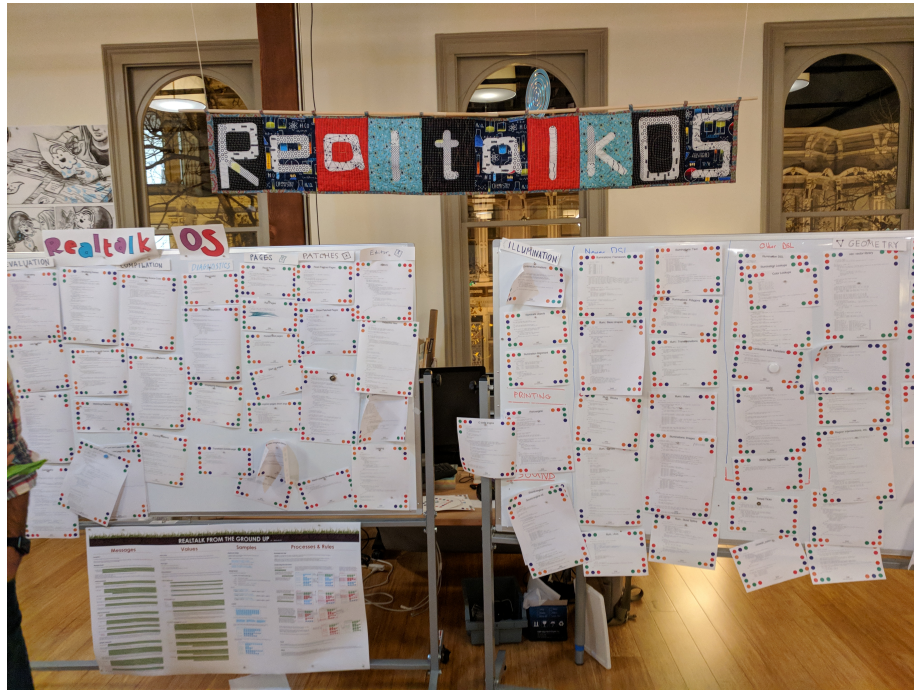


Figure 2.1: RealtalkOS, the operating system of Dynamicland

## 1. Dynamiclands opensource model

2.4 Paper programs - open source

2.5 Sage digital research

2.6 Design of everyday things?

2.7 Nielsen: augmenting ltm and using ai to augment human-i

2.8 mental and physical health implications of contemporary computing ? Are they really quite minor?

2.9 Computational creativity?

1. Open source
2. alex mclean thesis
- 3.



## Chapter 3

# Specification and context

## Chapter 4

# Project in depth

## Chapter 5

# Creative process

## Chapter 6

# Debugging and problem solving

## Chapter 7

# Evaluation and Conclusions

# Bibliography

## Chapter 8

# Appendix