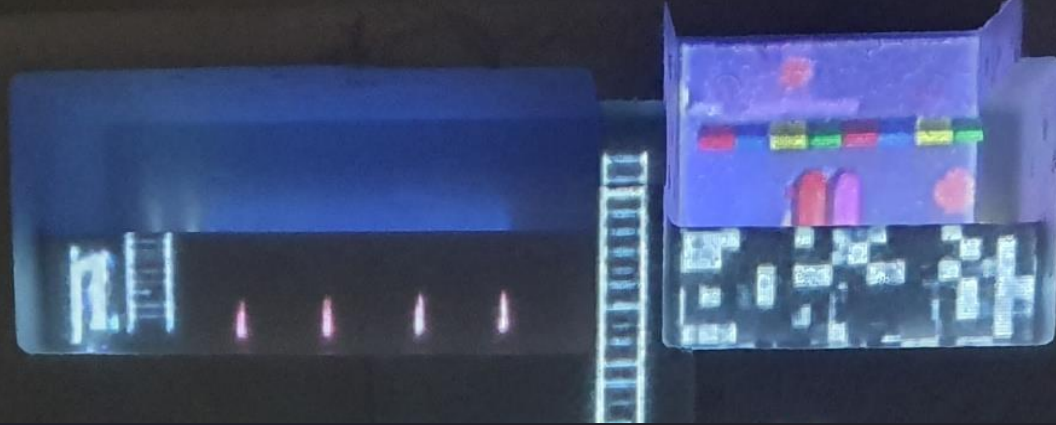




STYROLAND

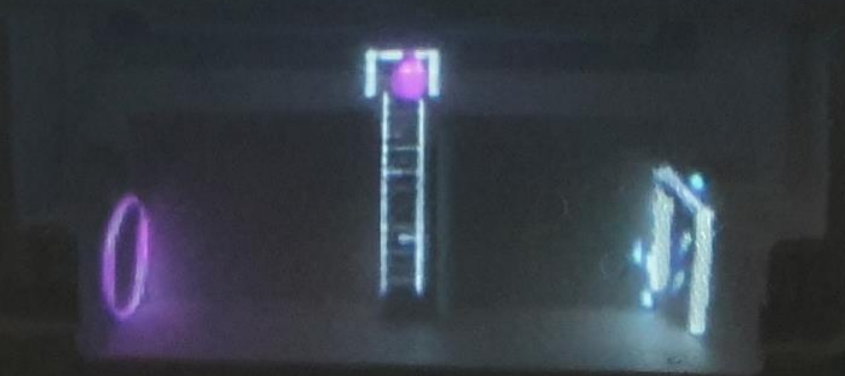
A Projection-mapped Platformer Game on Polystyrene Foam

RMIT MAGI: STUDIO 2 PRESENTATION BY CARLO TOLENTINO



How can found objects inform level design through projection-mapping?

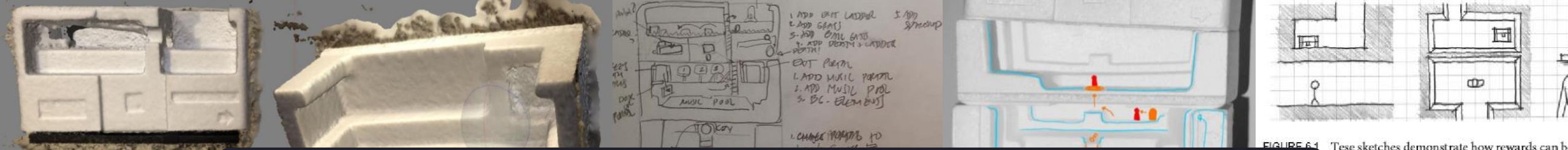
Styroland is a projection-mapped platformer game on found physical objects, specifically polystyrene foam. The project aims to explore the potential of interactive projection-mapping, mixed reality and how found and/or existing objects may inform level design.





MOTIVATIONS

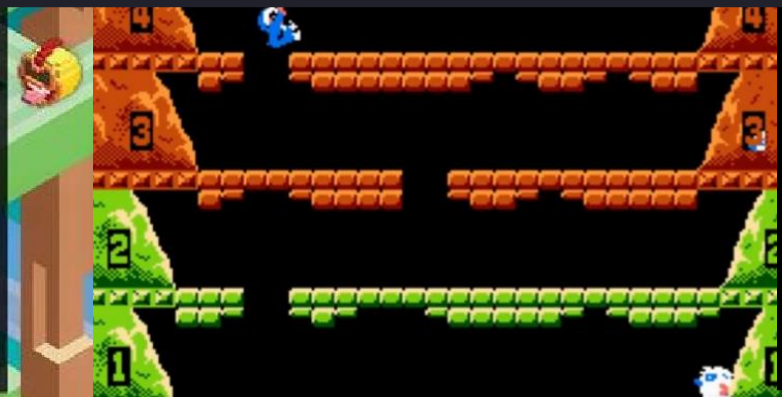
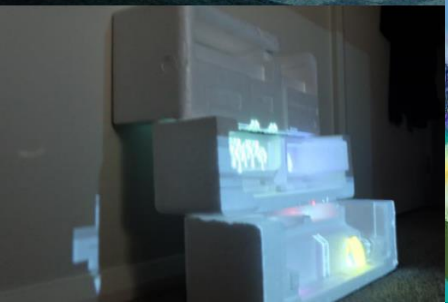
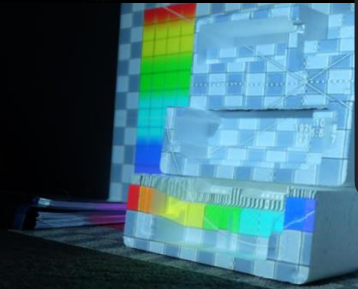
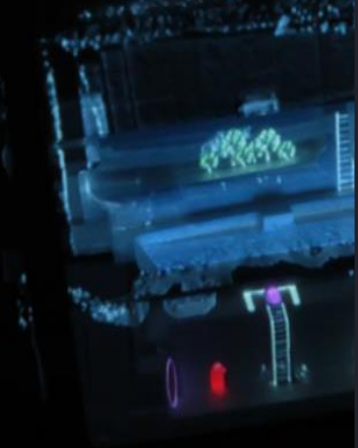
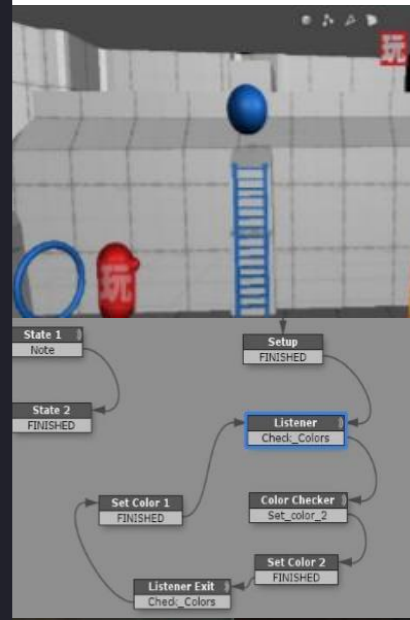
- Because I want to **develop a process** wherein a platformer game is developed for projection-mapping. Through this process, I will explore **the relationship between light-projection and physical objects or space** and how the latter informs level design, game mechanics and environmental interactivity.
- From my research, I found that there are barely any interactive projection-mapping works that integrates Unity and a platformer game experience. **There is a gap.**
- **Physical objects as guidelines and lending constraints to a game's level design and mechanics** is what this project aspires for as a point of distinction from other interactive projection-mapped installation works of similar nature.
- An **extension from my Studio 1 project**, and to develop my technical skills in Unity, game development, and interactive projection mapping. Also **a precursor to my Studio 3 project.**



RELATED PRACTICES & THEORIES

- Projection-mapping
- Interactive Installation Art
- Game and Level Design
- Retro Arcade Games
- Spatial Interaction and Reward Spaces
- Found Objects & Creative Recycling
- Photogrammetry

FIGURE 6.1 These sketches demonstrate how rewards can be placed in different orientations. By making a reward visible with a specific camera orientation, and by securing the path to that reward, the player is enticed to explore the space. (Source: from An Architectural Approach to Level Design)





SIGNIFICANCE

- In order to help my community of practice understand and recognize the potential of projection-mapping and expand how people experience and perceive physical objects or space through gameplay and level design.
- To contribute to the gap and lack of projection-mapped platformer games. Similar to arcade boxes, Styroland aspires to be a reminder of value in smaller scaled, personal interactive projection experiences.
- Styroland is fully intended to be part of the end-of-year MAGI expo 2019, and aims to have future iterations of its concept exhibited in various projection/games/new-media festivals.
- The project might also gain significance through recycling as gameplay levels, converting recyclable found objects into gameplay focused interactive installations.
- May outwardly suggest the use of smaller found objects in unique and creative game and level design processes.

