

Qiaochu Kris Li, Jialu Julia Zhang
Occupy Earth, MFADT
Melaine Crean, Tyler Henry
Dec 12th, 2017

Dystopian Reality

ABSTRACT

This project discusses the issues that we face today as we become increasingly aware of our relationship with the resources we consume. We are portraying a speculative disrupted world under the guise of an ideal appearance. Using back-lit projection and see-through two way mirrors, we are creating an installation that simulates the ability to look beyond the appearance of a utopian world. This project examines mass-produced daily objects and the hidden aftermath of their consumption, and employs their imagery as portals that unknowingly connects us with the other version of the reality. Combined with a narrative that is closely related to our daily rituals, we hope to shine light on the issues of the over-consumption and disposal of resources from a unique perspective.

CONCEPT

We are creating a speculative narrative in which humans live in a dystopian world as a result of constant over consumption of non-renewable resources. Humans began to simulate a utopia by “patching over” pieces of reality that are dissatisfying. In both figurative and literal ways, we are using man-made objects as the lens through which we observe the dystopian reality from this world of pretense.

RESEARCH

We are specifically interested in seeing a comparison between the organized and disorganized states of one place. As a reference, journalist photography often depicts these before and after states of a place that is affected by natural disasters. We began our search of these before and after scenes by looking at cities which suffered an earthquake.



As we proceed with our prototyping, we are inspired by feedback that encourages us to think about not only these disastrous situations, but scenes that are embedded within our daily rituals that allows us to connect emotionally. There are three main areas of investigation,

focusing on the manufacturing and the disposal of mass-produced objects: digital devices and e-waste, non-recyclable plastics, and microfiber from usage of washing machines. We found the commonality among these objects to be that they are all closely linked to our daily rituals, and yet we are mostly unaware of the consequences of consuming these products. For example, Agbogbloshie in West Africa is becoming an e-waste dump and burning ground for devices from developed countries (Minter, Smithsonian Magazine. “The Burning Truth Behind an E-Waste Dump in Africa”).

AUDIENCE NARRATIVE

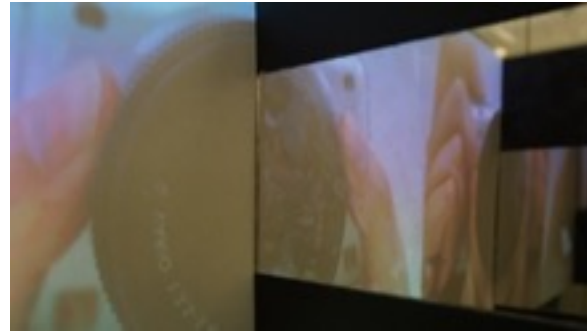
This installation is designed to exist in a gallery setting. The audience’s first impression of the installation will come from the large scale video display of a scene of shared human daily rituals, such as coffee stirring and laundry machine tumbling. As audiences approach the display, they will discover mirrors on both sides next to the video display. If they come within close proximity of the mirrors and start to examine the mirrors, they will trigger the ultrasonic sensors and the imagery will start to dim and brighten accordingly, creating a visual overlay of two different types of visuals. Through the dark circular forms such as camera lenses, coffee cups and a tumbling washing machine, the audiences will notice another layer of imagery underneath these seemingly relaxing scenes. As the brightness behind the mirrors increase, the visuals will begin to overlay and fuse together, metaphorically linking the consumer products and their unseen aftermaths. As the audiences move away from the mirrors, the image overlay will dim and the main display will return to its original state.

TECHNICAL PRODUCTION

Our technical production focuses on achieving two main objectives. Firstly, how can we create a clear, visually prominent video display that does not get interrupted as people approach it? Secondly, how can we dynamically control the content of that display?

In order to do so, we chose to construct a space that allows for back-lit projection with the use of vellum, and used MadMapper to make sure that the imagery is perfectly mapped onto the surface. To allow for dynamic content, we have connected our video display to an ultrasonic sensor. We then mapped the distance between the audience and the display to the brightness of the videos. This creates an effect of a stronger contrast between the videos in front of and behind the mirrors.

We made several other technical experiments along the way and decided that an ultrasonic sensor paired with backlit projection is the most appropriate for our needs. These experiments include: using LED light strips to illuminate the space behind the mirrors and use Arduino to control the brightness via PWM output; and using a servo motor to control a physical shutter that dims the LED strips. These models are less ideal than back-lit projection because they do not allow for dynamic video content and the dimming effect is unstable.



PROTOTYPING AND TESTING

In our first attempt to visualize this disconnect, or connection, between the two worlds, we chose to act out a scene. In this scene, the character's perception is altered and she only sees the good and is completely unaware of the disrupted nature of the world. We did this prototype with simply moving furnitures in a classroom to create two scenarios—one chaotic and one organized. We then post-edit the scenes together to create the narrative that only when the person looks into the room, then it becomes organized. Some feedback we got from this prototype is that it is very clear and speaks to the concept of disguise, however it does not raise questions about climate change or the use of natural resources.



Our second prototype focused on testing the technical capacity of a see-through two way mirror, as well as incorporating imagery of the natural world. We used an interactive small scale installation to test the visual effect of the mirrors and the interaction this effect inspires. We were able to create an overlay image effect that appropriately conveys our concept of the two juxtaposed worlds - one of a healthy forest and one of a disrupted nature. In this prototype we are using LED strips to light up the space behind the mirrors, and manually adjusting the



brightness of these LEDs. We have learnt that audiences enjoy a smoother transition between the light and dark states, because they allow for a subtle overlay effect that connects the two worlds.

In the third iteration of our technical prototypes, we started to use an ultrasonic sensor to detect the distance between the user and the mirror. When people approach the two-way mirrors, the LED strip light in the boxes will light up and the hidden images will show up. Because of the nature of the LED strip light we're using, it is unable to provide a dimming effect. Therefore we decided to create a back-lit vellum surface to serve as our screen. Using processing to control the brightness of the videos, we were able to more seamlessly blend the videos and create an overlay effect.

