Reflected Reality



Background Research

The team conducted extensive research into the nature of human selfishness for the creation of Reflected Reality. Misunderstood Artists gained an understanding that selfish behaviour is provoked through social pressure and cognition time. We incorporated this into our project by deciding upon a context of use where the user would often be on their own in a reflective state. This would provoke one to question their own behaviour with the goal of making a positive change.

Human Psychology



Plato

The ancient Greek philosopher Plato, suggests that we only act in a collaborative manner to avoid the social repercussions of our actions. The team incorporated this theory to test whether one would always act selfishly when there was no one judging their actions.



Evolutionary

Suggests that acting selfish is a defensive response to ensure self-preservation, helping to increase the species chances of survival. We applied this to a modern context, where justification for one's actions can be based on social standing or comfort level.



Prisoner Dilemma

When measuring the time of response, the participants that were forced to act fast, were more likely to act in a collaborative manner and those that had time to consider, acted selfishly. We wanted the user to have time to consider their actions as this would lead to a self-reflective experience.

Design Inspiration



Outdoor Advertising

Interactive advertising displays were considered highly appropriate due to their disruptive and influential nature. We were particularly influenced by adverts that incorporated the surroundings to create a false reality, believe they had the most profound effect on the audience.



Awareness Campaigns

Provided details on interacting within a digital environment. We learned that limiting the experience to a single user would provide a deeper level of self-reflection and provide an opportunity for one to question their morality.

User Experience

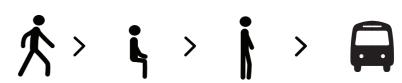
A bus stop is quite stressful in nature and leads to one acting in a selfish way even if its abnormal behaviour. We provides a combative, thought provoking installation by putting the user in the middle of an experience where they are being selfish. The user will reflect that a trivial action can have unintended consequences. It provokes the user into consider meaningless situations in their life that they exhibit selfish behaviour, highlighting an actions unseen repercussions.

1. Completely Ignores



The user takes a seat at the bus stop and notice the less fortunate person on the screen. After a while, they see the person gesture, however the user ignores the requests and continues to sit. Just before the bus arrives, the user spots the person falling over and hurting themselves. On the bus journey, the user challenges their actions and begins to become more self-aware.

2. Stands Immediately



The user takes a seat at the bus stop and notice the less fortunate person on the screen. They see that he is struggling to stand, so they provide the seat. The user notices the person thanking them, and feels like they have done a good deed. On the bus trip, they think of the other aspects of their life where they could act more selflessly.

3. Stands but Reconsiders



The user takes a seat at the bus stop and notice the less fortunate person on the screen. Being considerate, the user stands to give up thier seat. They feel like they have done the right thing as the person takes a seat. After some time however, they sit back down as they get bored of standing. Just after they sit, they witness the person fall to the ground. On the bus trip, the user becomes disappointed in themselves.

Design Process

Research

All-encompassing investigation into the conceptual context of use to better understand the user base and their motivations. Incorporated primary and secondary data to develop and maintain user requirements. The key areas were:

Technological

Kinect Eye Tracking OpenCV

Conceptual

Psychological
Public awareness
Individual reflection

Analysis

Compared and contrasted the researched items to determine the most appropriate solution, extensively discussing the alternatives. Examined each sub component, critically determining what Misunderstood Artists could incorporate. Different components had different justifying factors, such as:

Bench

Price Safety Stability

Sensors

Intrusiveness
Integration ability
Availability

Display

Mounting options
Size
Stability

Supporting material

Stealth Copy Aesthetic

Design

Determined possible solutions communally, to determine functionality and aesthetic. Extensively used brainstorming to expand upon an initial design, with storyboards being used to discover the most critical components. These techniques, as well as detailed sketching, helped to find essential items and reduced unnecessary effort. Specifically, body storming was highly appropriate, helping to visualise what the person or silhouette would be doing on the screen prior to the build.

Prototype

The team embraced low fidelity prototyping methods throughout the development of the project. Paper prototyping was extremely beneficial within the initial iterative cycles. The scaled designs provided a reference to create interactions that were natural. Subsequent cycles included high fidelity, interactive prototypes. They provided specifics on the interaction mode, feasibility and general usability. The key prototypes were:

1. Acted shadow wall 2. Kinect feasibility 3. Placeholder Unity

Testing

At the end of each design cycle, the team conducted rigorous testing to refine the project and to expand upon requirements. Internally, the team had designated testing sessions to discuss the strength and weaknesses of the current prototype. Externally, user testing provided an outsiders perspective of thev current design, with extra emphases on useability rather than feasibility. The expert review technique was highly beneficial, helping to pivot the project away from a disruptive Kinect-based interaction, to a passive sensor based concept.





Missunderstood Artists



Doparr	0119111	Boomanon	,	
	-	-		
Wednesday 30/05				
5:30pm	First van load	SLQ	5:50pm	
6:00pm	Auditorium	Bump In	7:26pm	
8:00pm	Event	Briefing	9:50pm	
10:00pm	Leave	The Edge	10:00pm	

Destination

Arrive

Timetable Information

Depart Origin

Please be advised that the times shown are approximate. Always come less than 5 minutes prior to the scheduled departure.

Thursday 31/05				
8:00am	Continue	Prep	11:15am	
11:30am	Break	Pizza	12:00pm	
12:00pm	Marking	Begins	5:00pm	
5:00pm	Evening	Exhibit	8:00pm	
11:00pm	Leave	The Edge	11:00pm	

Pre-plan your trip at **transmink.com.au** or call **13 12 30**

.

Reflected Reality



TEAM







Tina Yao - Project Manager Ensured tasks were promptly finished and team members were up to date. Focus on Unity logic to ensure user input had immediate feedback.



Glenn Duguid - Lead Designer Design and construction of all physical components and promotional material. Organised materials and coded prototypes.

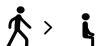


Emily Mayne - UX and VisualsDesigned the backdrop for the scene. Created visual elements of supporting material



Stuart Neilson - CreativeEdited the cuts and produced the script for the actors and the Kickstarter video.

Reflected Reality is designed to reveal the innate selfishness within each of us. Social provocation is utilized as a vehicle to confront individual selfishness in the face of other members of society that need resources more than ourselves. Making people aware of the underbelly of human selfishness that permeates our society, and realise that a minor selfish act can have a major impact on the lives of others.









The system uses weight sensors and eye tracking to passively interact with the user. Once a user sits on the bus stop bench, the traditional advertising display seamlessly changes into moving media, with a less fortunate person appearing on the screen. This person in in greater need of the seat the user currently occupies. The system understands when the user looks at the screen, adding extra ques for the user to selflessly provide their seat to another.

Reflected Reality's future aim is to spread public awareness of the social resources that we all share as a society. Often when we as members of society decide to use a resource, we may be taking that resource away from others who may need that resource more.

The project is intended to be implemented within public bus stops around Brisbane. These modules will be utilized to gather data on the altruistic potential of the Brisbane population when given a selfish dilemma. The widespread implementation will have a profoundly positive effect on the city, making a more considerate population.

