Proposal For Final Project
P L A Y D A T A

Project Description

This project will consist of a tangible interface and a monitor displaying a visualization of the data that is being recorded by hidden sensors in the interface. The tangible interface will consist of modeling clay or play-doh. These sensors embedded in the material will send the recorded data wirelessly to a projector in another room and display a visualization of the received data.

Think of a context and an environment where you would like to intervene. Where will you present your project?
Who is it made for?

The project is intended to be presented in a corporate 'creative' space, for example a Google or Microsoft-owned makerspace, or a business technology incubator or accelerator. Any space that encourages predatory data collecting in the name of user 'creativity' would be a good candidate location for this project. The appropriation of the word 'creativity' by tech companies has become ubiquitous in recent years. Words like 'creativity' and 'self-expression' have been used as marketing terms by these companies in order to seduce users into generating unique free content for the companies' platforms, as well as handing over personal user data.

The entrance or lobby of one of these companies would be the ideal place to present this work. Alternatively a makerspace or studio that is af filiated with one of these trendy social media or 'creative - content' oriented companies (of which there are many) would be suitable as well.

The piece itself is intended for anyone. There is no age or knowledge barrier to being able to play with the interface. There is also no prescribed way to interact with the interface either, therefore even not physically engaging with the interface is a way itself of participating in the project. The playful modelling clay or play-doh interface is intuitive and easy to use and therefore is designed to be used by anyone who feels compelled to touch it (or not touch it, as it were).

Think about the kind of relationship you wish to foster between your users and the artifact or installation.
How can you use your project to destabilize the users and make them reflect on themselves,
their environment and society?

The interface will be made with tactile material which is reminiscent of material used for sculpting and molding. I am considering using either modelling clay or play-doh for this project because these materials have certain emotional and cultural associations for many users.

Clay and play-doh are materials people commonly play with when they are children. Most users will intuitively know that these materials are made for sculpting and molding shapes and figures.

The interface will look as if it is devoid of electronic components, thereby fostering a sense of trust between the user and the interface. The user will have no reason to suspect that they are being recorded and therefore can play with the material without inhibition.

However sensors will be hidden in a container inside of the ball of clay or play-doh. Therefore the user will interact with the interface while being unaware of the recording activity that is taking place within. The user will be able to express themselves creatively without the pressure of feeling that their movements are being 'watched' by any device.

While the user is interacting and sculpting with the ball of clay, the sensors within the clay will be transmitting the recorded data to a computer in an adjacent room which will be continuously projecting a visualization of the received data. The data visualization will show dramatic changes in movement and noise based on how the user is moving and kneading the material.

The project is intended to destabilize its users by breaking the sense of trust they initially had with the material. The physical properties of the material were inviting to the user, and were known to the user as being a tool for offline and personal creative expression. However by later seeing the data visualization in the next room, the user's concept of what constitutes personal and private creativity will be challenged.

The hidden embedded electronics will make the users unaware that their creative outlet is being tracked and recorded. This mimics much of the way online games and social media work. There is a corporate theme of encouraging their users to be "creative" and to create works of "self-expression" without being transparent about how the content will be used by the company. By hiding aspect of the companies business model from the users, the users are able to create without constraint or self-awareness because the fact that their data is being recorded is out of sight and out of mind.

Think about the notion of empowerment. Is your artifact really helping or challenging its users in any way or is it just another psychological prosthesis?

The artifact is not intended to simply instill a sense of surprise or discomfort. It is intended to instill a healthy sense of skepticism about how the idea of personal creativity can be used to manipulate users into giving up free labor and personal data if said user is creating content with a business's materials. The project is intended to heighten awareness about personal data and the ease with which is can be surreptitiously transferred and repurposed.

Think about something meaningful. What are you trying to tell us with your project?

This project is an experiment in materiality and how materials have certain properties which shape the way users will interact with them, regardless of the material's intended use. The Play-Doh/ modelling clay is elicits sentiments of child-like, unbridled, creative play. Similar sentiments are echoed in the marketing campaigns of certain social media companies as well as other major data-collecting businesses.

In this day and age many technology business models rely on free user generated "creative"-content, as well as the selling personal user data. This project foresees a dystopian future where even seemingly personal moments of creativity are not safe from corporate surveillance and reuse. In this project the user's play is being repurposed into abrasive visuals, their creative outlet is being recontextualized into a visual that the user did not consent to.

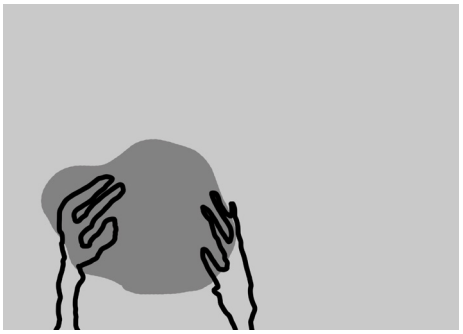

Fig 1 - User begins interacting with ball of clay.

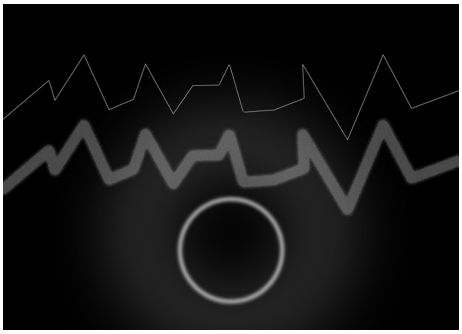

Fig 2 - Monitor in adjacent room is standing by.

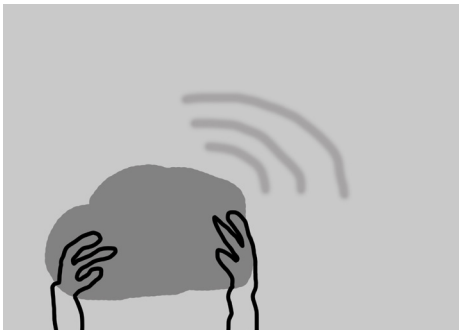

Fig 3 - As user shapes with clay, data from the sensors in the clay is being transmitted.

Fig 4 - The photon particle transmits to a router nearby, which will transmit data to the monitor.

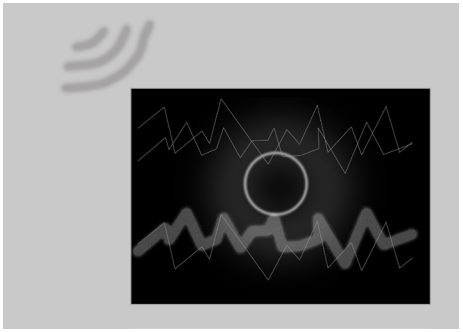

Fig 5 - The computer/monitor receives the data and the visuals distort based on the data.

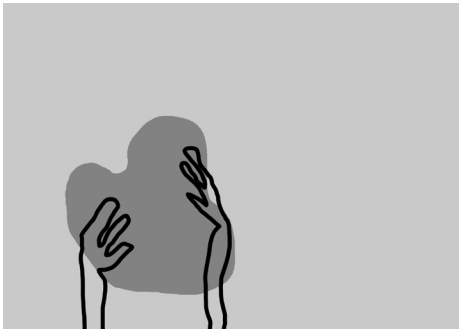

Fig 6 - The user continues to play, push, sculpt, and mold with the interface unaware.

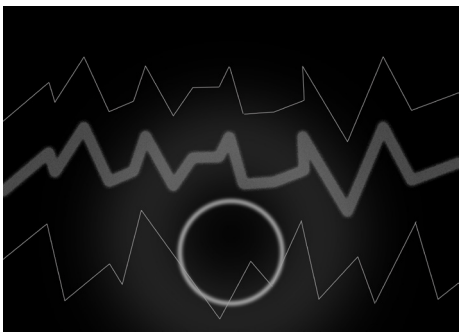

Fig 7 - Only if the user enters the room with the monitor will they become aware of their data contributions.

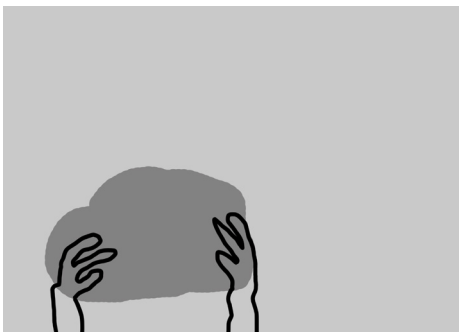

Fig 8 - The next user will begin to interact with the interface, created new distorted visuals for the previous user to witness.

A Non-Technical Evaluation Sensors

The sensors that would be embedded within the interface would be ones that are able to determine tilt and movement. A magnetometer, which is able to detect true north by detecting the earth's magnetic field, would be useful in order to understand how the interface is being rotated by the user. Alternatively, a tilt sensor could provide much of the same function. Another sensor included within the interface would be a pressure sensor, one that would detect how much force is being placed on the play-doh material.

These sensors would be attached to a Particle Photon. The use of the Photon is important in this project, because the absence of wires obscures the fact that the user is being recorded. This lack of conspicuous electronics is what establishes a sense of trust between the user and the interface. It allows the user to be less self-aware and more liberated in their creative process.

The Particle Photon will send the data via UDP to TouchDesigner, or a similar visual programming software. The data will then influence the shape of certain visualization structures. These structures will illustrate the way the user's playfullness has been recorded and reused and visually distorted.

Similar Projects

Illuminating Clay
https://tangible.media.mit.edu/project/illuminating-clay/

The Illuminating Clay project from the Tangible Media group in the MIT Media Lab is a project that uses clay as the interface in a projection mapping installation. Users can mold the clay to create various three-dimensional landscapes. The shape of the clay is recorded by a laser scanner which then creates a new visual projection based on the shape of the clay. The projection is then mapped onto the clay interface, so that the clay becomes both the interface and the monitor. The project is intended to be used for landscape design or as a tool for geologists. The project has a rather practical purpose, but I really find the new experiemental use of clay as an interface inspiring.

Play-Doh as Interface
http://brendandawes.com/projects/playdoh

This project by artist and designer Brendan Dawes is an exploration of an analog material to control digital media. In the project statement Dawes describes that he is drawn to the innate playfullness of Play-doh and modelling clay and wanted to bring that element of play into our interactions with digital objects. For Dawes, the element of playfulness is what causes users to form a more emotional bond with objects. In this project/experiment, Dawes controls the speed of a video playback by the size of the modelling clay. I am intrigued by this artists' thoughts on playfulness, materiality, and emotional connections. I agree with much of the sentiment expressed in the artist statement and would like to explore and these specific concepts (playfulness and emotional connection) in my project as well.

Sandscape
https://tangible.media.mit.edu/project/sandscape/

The Sandscape project is another piece from the Tangible Media group at the MIT Media Lab. It is similar to the Illuminating Clay project in the sense that both are used to create interactive representational models of landscapes. I appreciated that both of these projects made use of materials that are familiar aspects of childhood play. I dislike that both of these projects are equally utilitarian. However, the interactive interface component for each piece is imbued with an inherent notion of play. The interface is intuitive for most users due to the materials being used. Since the consequences of user actions are displayed back onto the interface it is also easy for the user to play and create with the project, and that is what is so remarkably well done with this work.

Difference

I hope to use different aspects of the aforementioned art pieces in my project. Primarily, I would like to use a material such as clay or Play-doh which already has certain sociocultural connotations embedded within it. Having the appropriate material allows users to intuitively understand how to interact with an artwork, and that is something I have learned from researching these projects. As much as I liked the Tangible Media group projects, my project will intentionally have the monitor separate from the interface. The reasoning for this separation is because I would like to create a jarring and disjointed experience for the user. The user's creativity should not be disturbed or influenced by the knowledge of the consequences of their interactions. The creation portion of the project will remain separate from the data-viewing aspect of the project.

Sources

https://tangible.media.mit.edu/project/illuminating-clay/

http://brendandawes.com/projects/playdoh/

https://tangible.media.mit.edu/project/sandscape/