

GENE 499/ INTEG 375/ FINE 392

Mini Project - disOBEY

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Artist Statement

Drawing inspiration from an Orwellian future, or surveillance state, there are actions when individuals do not conform to the dominant narrative, structure or ideology. This work asks viewers to consider conformity from two angles: on an individual level—we forgo our own moral makeup and subscribe to the dominant way of thinking, acting, being in order to feel valued and a contributing member of society, and on a social level—by not subscribing to the dominant structures and influences around us, we experience isolation and feel ostracized.

Using text as a found object and pulling aesthetic references from neon signs, a static filled television screen, and warning labels, this work is participant based—the puzzle responds when the piece is inserted. The puzzle acts as a stand in for society; the pieces are individual but fit together to construct the whole. Working to convey how society reacts to an individual's attempt to conform, part of the text appears, and the colour of the lights change when the piece is inserted to indicate a shift in mood. The removable piece is a stand in for the individual, or group of people that do not quite fit with the dominant ways of being.

Materials used include: 18x24 hardboard that was laser cut, el wire (blue, yellow, orange), electromagnet, wires, Arduino, transistors, resistors, aluminum foil, power supply, USB cable, wood glue, text

Concept Development

In the brainstorming phase of the project we started independently and came together with ideas on sticky notes. From there, we arranged them by related concepts, objects or approaches. Together we were drawn to the use of a puzzle to illustrate conformity. Deciding on the use of a removable puzzle piece that changed--or caused a reaction in--the work is the main idea we went with. As a team, we talked about the imagery on the puzzle and how it could be utilized to communicate conformity/rejection/isolation to viewers. One idea included having a school of fish swimming one way and the fish on the piece swimming the opposite way. Moving away from visual illustration and into using text as found object, we were particularly drawn to how the meaning of a single word could be easily manipulated to mean something completely different.

How It Works

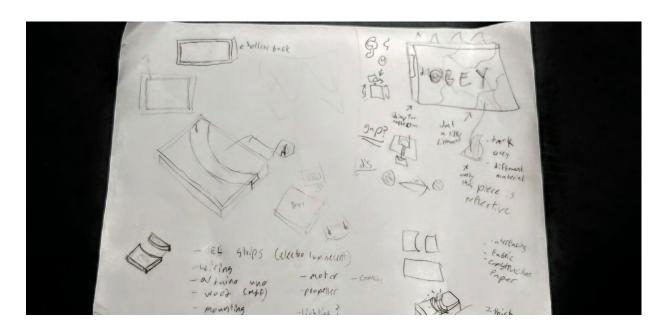
The display works by inviting the user to pick up the missing puzzle piece from the floor mat and insert the piece into the display, so as to complete the puzzle. Once the puzzle piece is inserted into the display, a switch is activated and following steps occur simultaneously -

- EL wires on the words "dis" and "obey" have a strobe effect (5 seconds).
- The puzzle piece is held by a magnet, after which it is kicked out of the piece (5 seconds).
- The display returns to its original state, with only the EL wire on the letters "obey" turned on.

Process

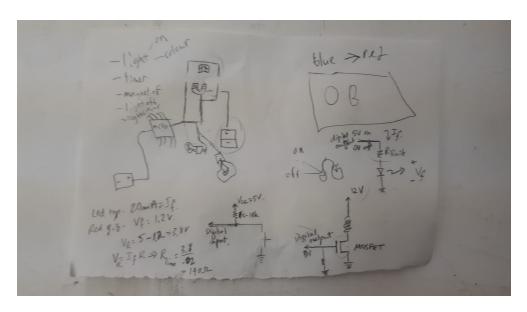
The prototyping for our piece was done through numerous iterations. Firstly, the concept of the piece was discussed and flushed out over a number of studio sessions. The entire team was aligned on the concept of highlighting conformity that exists within modern day society. We ended up choosing the word "Obey" as our found object. This inspiration stemmed from the clothing brand *OBEY* which is a popular fashion brand among teens and young adults. The word obey was an ironic play on the popularity of the brand among the aforementioned audience, given that it is sold in mostly high-end retail stores but resembles conformity that exists within the younger generation today.

Then, a proof of concept for the display was simulated through low-fidelity prototypes (paper). We had many design considerations to represent the puzzle piece on the ground. Initially, we had considered making the puzzle piece move once it had detected a person nearby (using proximity sensors) to draw attention on it. We even considered have a light on the ground, shining on the piece, and changing colours once it sensed a person was nearby to draw attention on the piece. However, for simplicity sake from a technical perspective, we decided to simply place a floor mat on the ground to resemble a more "homey" feel and allow the interactor to make a decision on whether to pick up the puzzle piece off the ground or not.

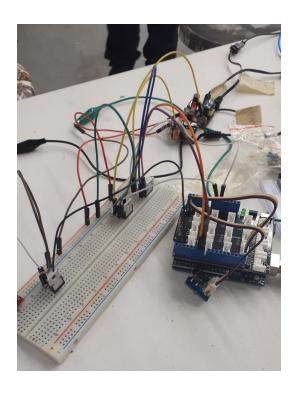


Low-fidelity prototypes of the display

Once the concept and display were sketched, we prototyped the circuitry required by using an Arduino and several components (i.e - button, LED lights). The circuitry required several tweaks in order for all of the components of the piece to fall into place together. For example, we stripped the inner components from the battery packs of the EL wires and used it to connect it to to the jumper wires from the arduino. We then soldered the jumper wires to these components to create a more robust electrical connection. We create a button using jumper wires for our actual piece to activate the piece to change states (i.e - run the code).



Low-fidelity prototypes of the circuits for the electromagnet

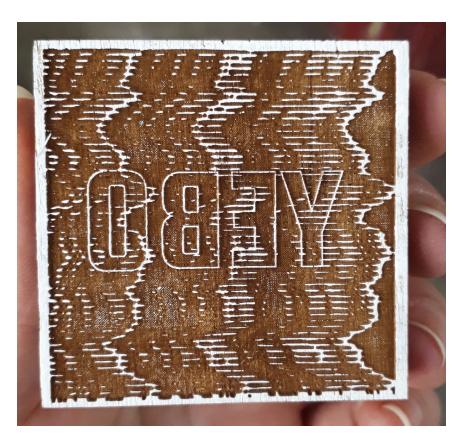


Prototyping the electrical circuitry using Arduino and breadboard

In terms of problem-solving, we had an issue placing the EL wires over top of the letters aesthetically. We initially were planning on using wood nails to hold the wires in place, but we soon realized that our piece was becoming aesthetically compromised. We then decided to glue the laser-cut letters on the backboard, and glue the EL wires on top of the letters. Furthermore, we ran into an issue with the power supply at the most critical moment, right before the installation of our piece was due. We had an issue with our power supply not supplying the requisite current required for our piece to function optimally. This created several issues with the lighting and the magnet turning on/off. Professor Gorbet was extremely helpful in helping us troubleshoot our issues just before crits. However, we do have to replace the power supply after reading week to ensure the display is running properly.

Testing & Building

On the design side, we did a prototype test of how the static design would look when laser cut and how well painting the high parts of the design would work (below). Rolling the high parts worked extremely well, even on such a small and intricate design however, this same method did not work on the fullsize design because the high parts were farther apart and not as deep. We ended up painting it by hand with brushes.



Test laser cut of the design with white paint (above), EL wires on board (right)

When determining how we would attach the EL wires to the board in order to give the feeling of a neon sign, we initially thought about attaching them to the laser-cut letters directly from behind to create an outline. After being unable to find a way to execute this in an aesthetically pleasing way, we opted to have a back board. The board served as the curtain between the tech components and the front of the work that viewers would see. Professor Andison worked directly with us to troubleshoot *how* the wires would be attached to the board. Her suggestion to shape them around the negative letters leftover from the laser cutting and super glue them instead of using nails, provided a much cleaner design suggestive of



neon signs. To the right is a photo of the middle board once the EL wires had been glued down.

Installation & Exhibition Requirements

The finished work is 20 x 26 inches and requires two outlets for power. It is hung at 57" from the floor to the center of the work, to ensure that viewers interact with it approximately face on, and at a height where they can easily reach the work in order to insert the puzzle piece that falls out onto the floor. The work on the wall is also accompanied by a small rug which is of the type found at kitchen sinks, household entrances and under foot stools. The rug provides cushioning for the puzzle piece that is rejected from the work, draws attention to the fallen piece and invited viewers to stand directly in front of the work.

Conservation & Maintenance

The most critical element from a maintenance standpoint, is the power supply. As previously discussed. We need to ensure that we have a power supply that supplies three Watts and provides enough current for the lights and the magnets to function properly. Furthermore, we need to ensure that the puzzle piece on the ground is visible enough for someone to notice it on the ground and understand that it belongs to the display.

Alterations to Consider

In hindsight, our group discussed many topics in our design that we could have altered. Some of these include -

- Consider making the laser-cut lines of the puzzle pieces on the display more visible (use a sharpie, or some type of paint).
- Using a more reliable power supply!
- Painting the outside of the box black to have a stronger reference to a television screen
- Making the removable puzzle piece easier to see on the ground
 - One of our peers also suggested making it a bright colour in order to differentiate it further from the rest of the puzzle

References & Inspiration

As a team, we were all particularly taken with Arthur Ganson's "Machine with Wishbone" due to the simplistic action and powerful message or reaction it evoked for viewers. We also drew inspiration from Professor Andison's work "Good Grief, Bad Grief" for the neon light effect showcased by the EL wires.