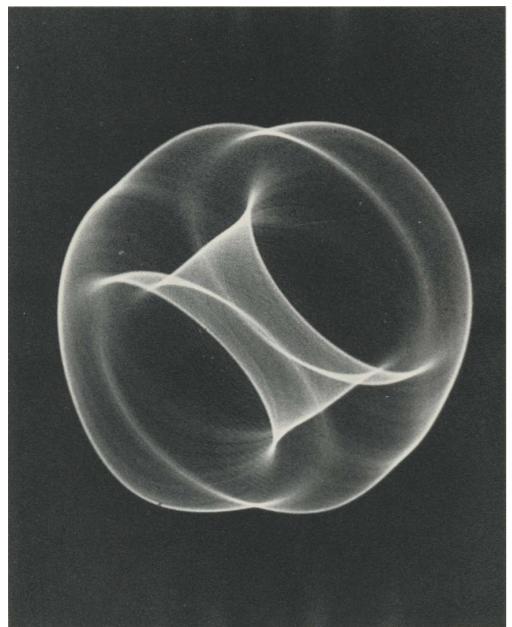


DESIGN DOMAIN

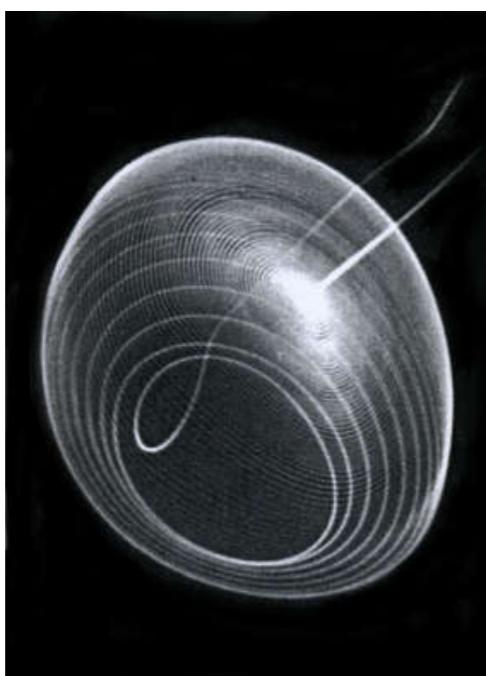
FORM

INSPIRATION



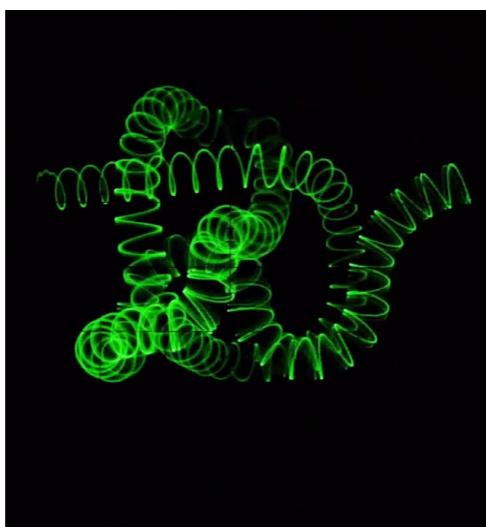
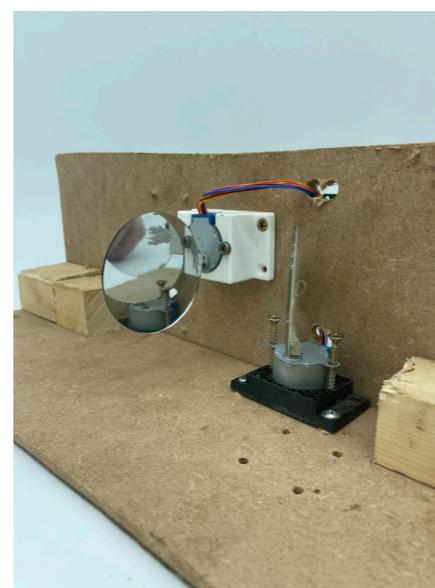
Jerobeam Fenderson 2016
Oscilloscope Music

Ben F. Laposky 1952
Oscillon No. 40
Oscillon No. 27

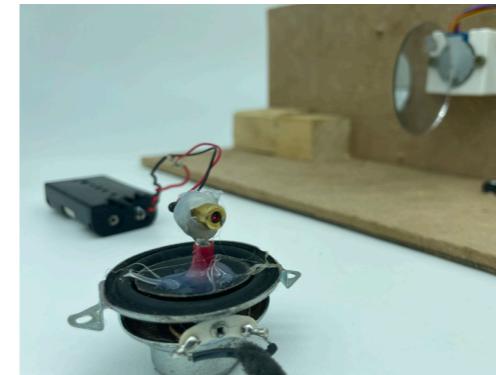


I was very interested in the works by Laposky and Fenderson, however I struggled with the format and the restrictions of the pieces from the inherent scale of an oscilloscopes display. But the contrast of the simplicity of the output in comparison to the process behind the work is what drew me into the style.

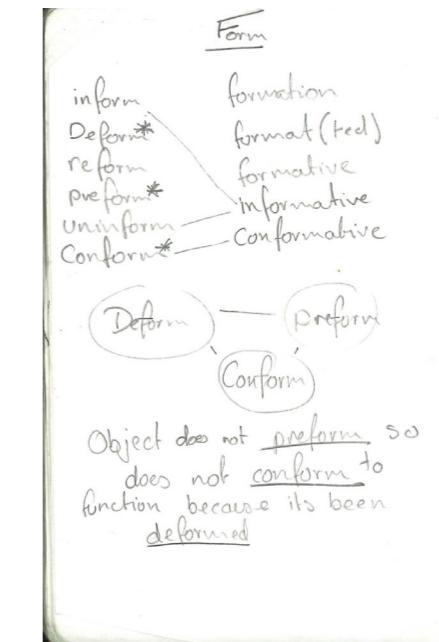
DIY GALVOMETER



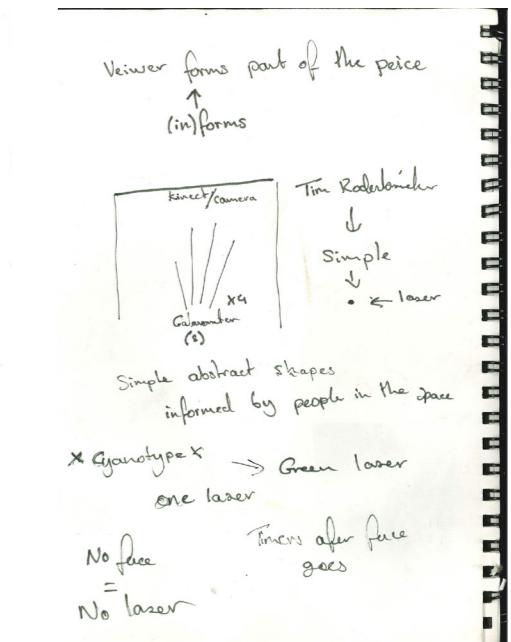
EXPLORATION



LASER MOUNTED TO SPEAKER



SKETCHBOOK EXPLORATION OF FORM AND TUTORIAL IDEAS



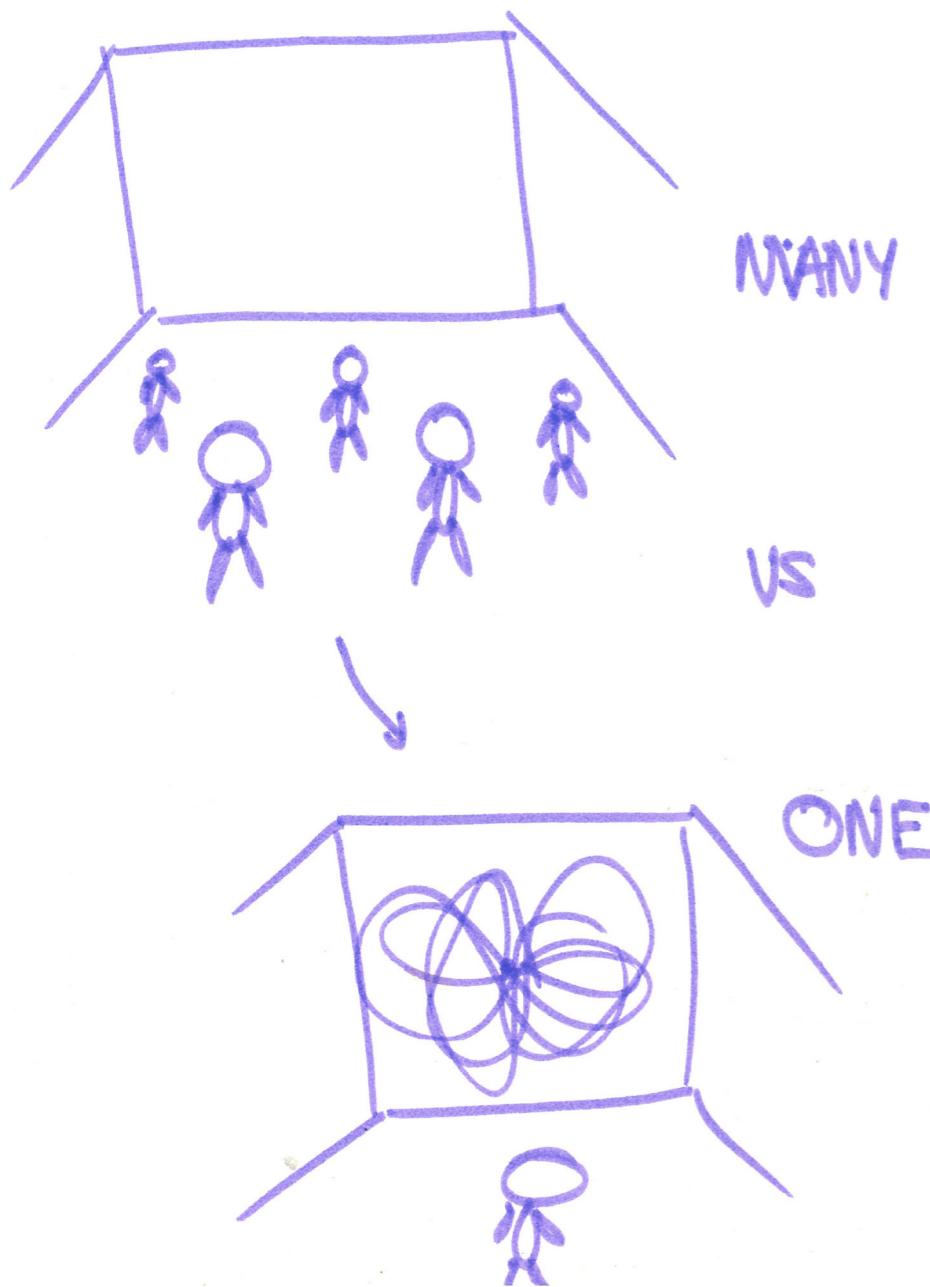
Form, the shape, size, colour... every aspect of a "things" physical existence seems to be controlled by the drive for profit. Everything is competing for attention, attempting to stand out in a wasteland of loud, large hyperactive media. We the consumer are apparently the cause as our attention span reduces, and our time becomes more and more scarce. But is that true? As more and more people are turning away from social media, constant scrolling and endless notifications, you must ask: Do we really influence the idea that more is more or has "big media" got stuck in its own feedback loop? My work will aim to have the viewer "Inform" what they see, what media they consume. Instead of work that's sound reactive, or data driven etc. the viewer, the consumer as it were, will inform what they see with simplicity at its core, contradictory to our current consumption where we seem to be served "what we need to see".

To make this possible and whilst considering the idea of simple outcomes with complex processes behind them, I have created a Galvo meter prototype. This is a mechanism that uses two independently controlled motors to rotate two mirrors that are able to control the X and Y position of a laser point when its directed into the mirrors. The prototype is able to create shapes with the laser pointed provided that its able to move the point fast enough that eyes see the point as a continuous line.

DESIGN DOMAIN

FORM

CONTINUATION



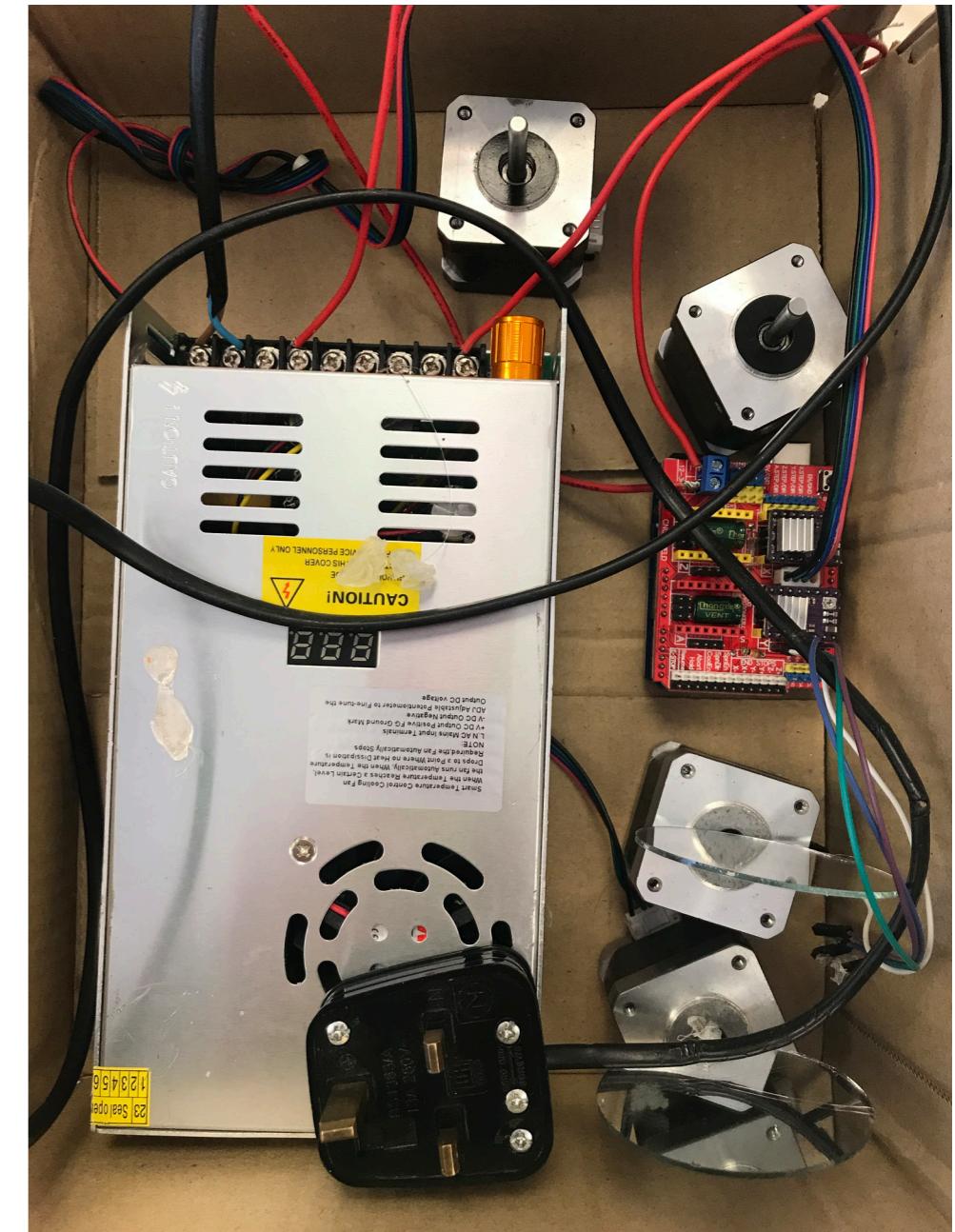
I picture the piece being setup currently in the "Projection room" within the Garage space in the Barnes building. The "Galvo" will direct the laser to the back wall of the space, and the viewer(s) will walk into the space to be facing this wall.

Here you can see a quick sketch that shows how the piece will work or at least the very basic principle behind the idea. The work will not exist if no one is looking at it, however it will also not exist if more than one person is looking at it. It is not till one singular viewer is present that the work will exist, an "image" will be created. A unique shape will be created on the wall, different every time its seen by each individual.



For the space onto which the work will be produced I won't just be having a blank wall, it will be instead a luminous blank wall. I will be using luminescent paint to create more texture to the work. This should mean that the work has a "glowing" effect, and its shape will become semi-permanent to the wall as its traces slowly fade away.

I have had experiment with Cyanotype however these proved to be ineffective with the laser and the darkness for the space as well as the fact that I was not using a UV laser.



Here you can see some of the component parts I will be using for the second iteration of the prototype that will hopefully become -with development- the final piece.

The galvo will be controlled with a Arduino Uno + CNC shield combo using step stick drivers and a 24V power supply. I will be using this to drive two Nema 17 Steppers - high power, high precision, high speed steppers that will be allow me to make much more complex outcomes then the previous 28byj – 48 motors.