Paris Myers
Sculpture 391/491
Professor Michael Boonstra
Winter Term, 2019

Final Documentation and Writing

Part One: Artist Statement

Caution (*Cosh-Tanh*) is a mathematical self portrait consisting of metal, acrylic, and nuts and bolts. In lieu of a traditional human form, thin steel embodies a modified hyperbolic curve, where $x=2cosh(s)$, $y = s - 2tanh(s)$, and s is +/- 2. The cranium is the artist's head, first analogy graphed as level curves, then laser cut in clear acrylic. The second piece, *Data Self Portrait*, combines welding and coding to bring transient, digital information into permanent existence. This piece is an accurate "data-snapshot" from the artist's personal Instagram, as of March 10th, 10:15 am, 2019. Direct, virtual queues such as likes, follows, and views, are fluid—one can unlike or unfollow at any time. How does user interface change when the abstract becomes tangible? Both *Caution* (*Cosh-Tanh*) and *Data Self Portrait* combine historically male-dominated fields, coding, welding, and mathematics, to depict the 21st century female.

Part Two: Process and Reflection

While developing *Caution* (*Cosh-Tanh)*, I noticed that a slight, perpendicular force applied to the sculpture's body would produce a pendulum motion—the sculpture would begin to oscillate. Through a series of informal, widely varied experiments, I found that a writing utensil, when vertically attached to the oscillating structure, would draw consistent trigonometric waves (cos(x) and sin(x))*.* Thus proving that the object was in simple harmonic motion—a concept I was currently learning about in my physics course. Through this sculpture, I discovered the materiality of metal via physical principles of motion. For my second piece, *Data Self Portrait*, I used MATLAB to develop a simple code to clearly graph a "data snapshot" of my personal Instagram. The code is two one dimensional arrays, x (where x=1 is the oldest Instagram post and x=39 the newest) and y (number of likes), and the built in function, *plot (x,y, 'r-o')*. Each coordinate is a dot within the overall, connected trend. Each weld is a data point, and the rebar scale is 1 virtual inch to one physical foot. Like welding, I started learning MATLAB programming this term—it was incredibly empowering to combine the two fields. Prior, I had no idea how accessible either knowledge base was. More importantly, I realized one does not have to be "the expert" at a technique (an enculturated myth) in order to seriously experiment, learn, and create with and from it.

MATLAB Code and Graph for *Data Self Portrait*:

```
%Premable
%Paris Myers Instagram Graph of data table
%for Number of Likes v.s. Post Number
%as of March 10th, 2019.

% Create X and Y arrays
% where X=1 is the oldest Instagram post and X=39 is the most recent
```

```
%and Y is the number of likes by the followers.

x = [1:39];
y = [242,193,127,86,272,216,183,212,288,278,129,206,338,146,255,319,72,139,188,263,190,187,84,216,70,220,146,221,85,298,169,257,293,315,73,56,276,52,329];

%Graph the arrays so that each coordinate is represented by a dot
%but the overall trend is still clear.

%make the plot
plot (x,y, 'r-o')

title('Paris Instagram Data as of March 10, 2019')
xlabel ('Post Number [Where x=1 Represents the First Post]')
ylabel ('Number of Likes')
```
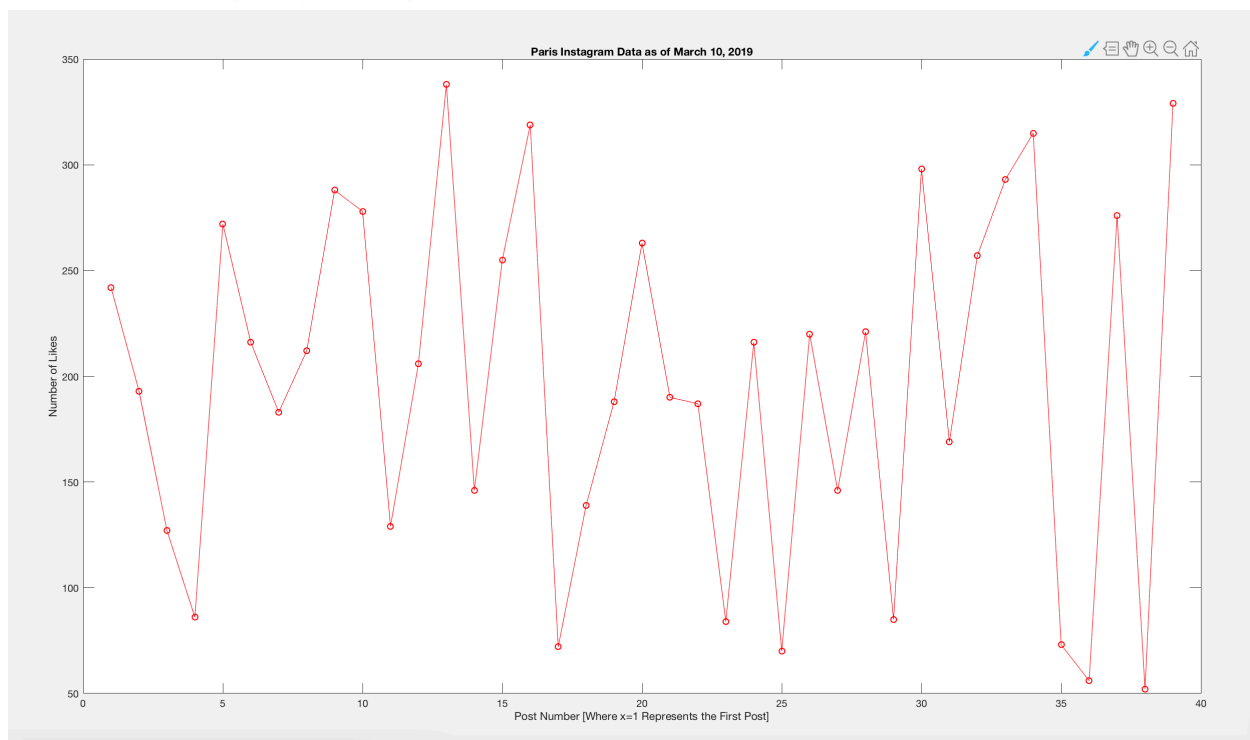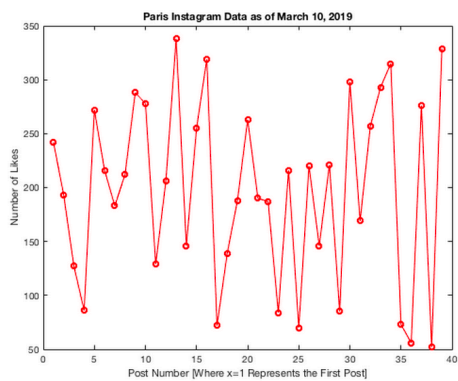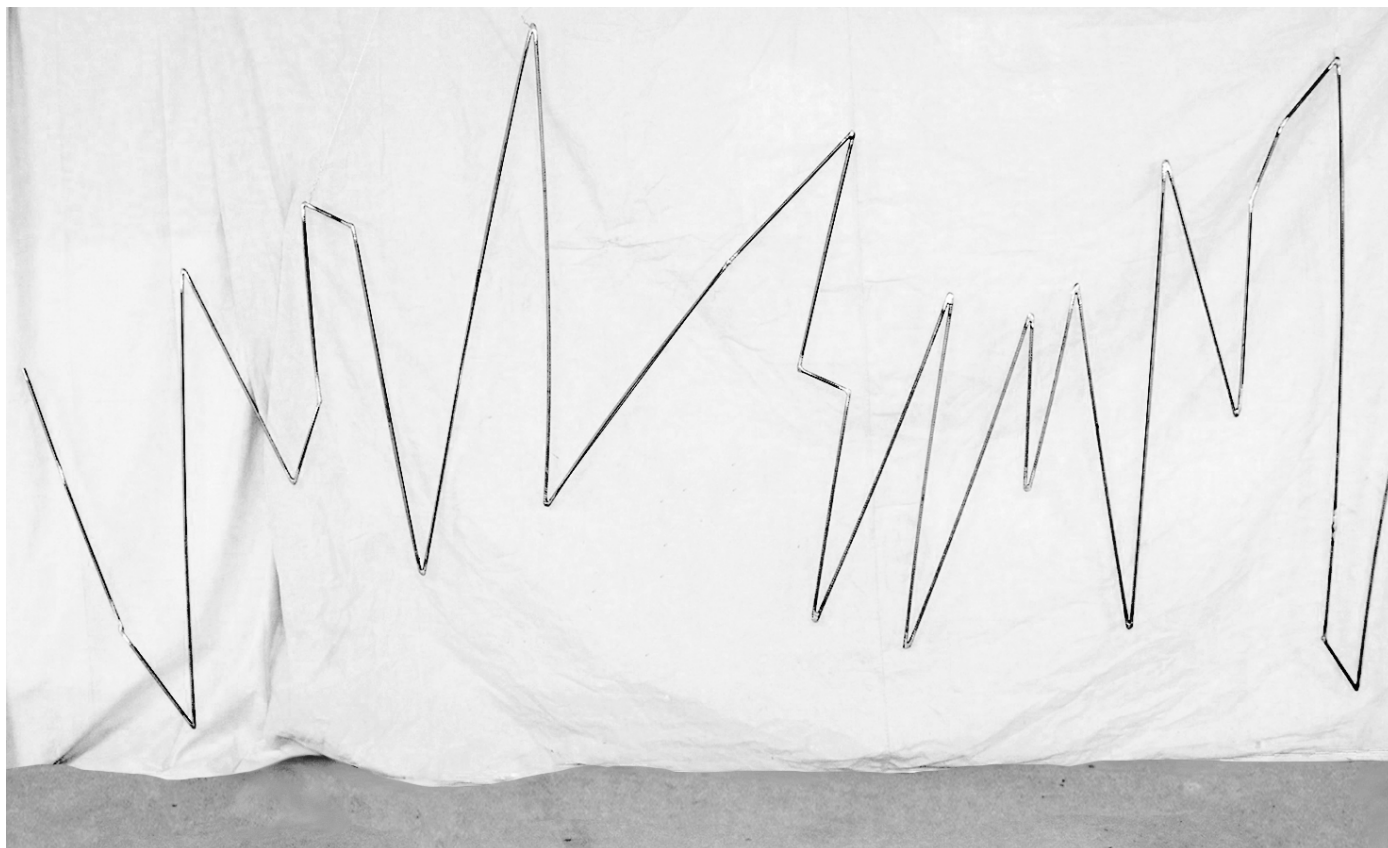
Part 3: Photographs

Data Self Portrait, 2019
Rebar and Wire

Caution (*Cosh-Tanh*), 2019
Acrylic, Steel, Nuts and Bolts

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