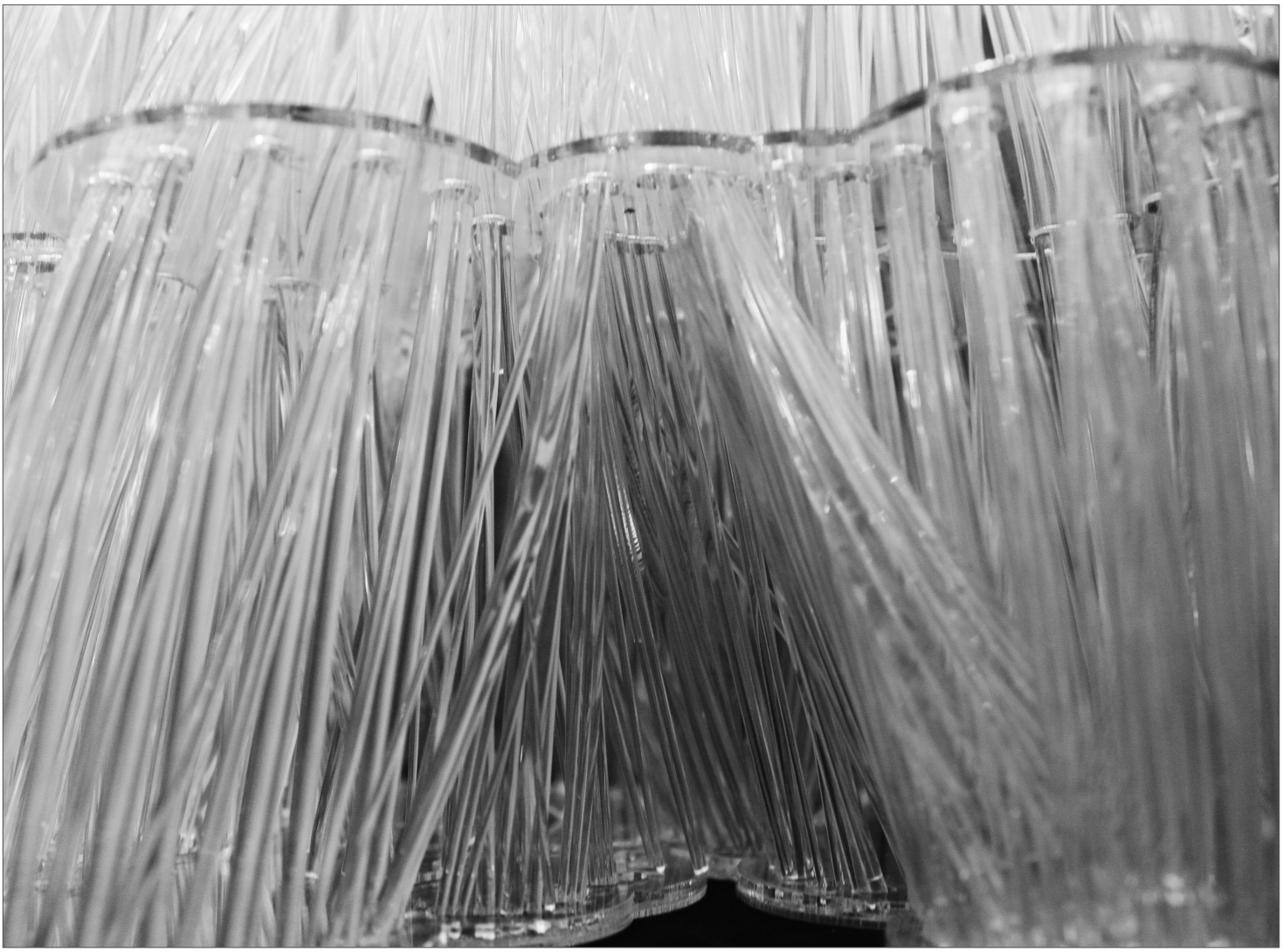
Marianna Gonzalez | **Branching Out**

“Imagine you are walking through a forest. All around you are trees of different species, age, size and height. It looks pretty random, right? Wrong.” (www.phys.org)

The truth is, the architecture of branches has very specific rules that we can use to link the size, age, and shape of one single tree to all the trees in one forrest. Regardless of branches - and trees in general - being unique, they can be generated by very simple set of rules. This is the premise I began with in Project One.



Much like I did in Project Two, I first took four consecutive drawings and turned them into what would be the first, second, third, and fourth level. Using a set of rules and Processing, I was able to create a multitude of drawings quickly and turn them into plans.

The rule set - as can be seen by the diagrams - was as follows:

First, remove all the lines created in Processing, keeping only the circles.

Second, go through the drawing removing all circles that did not create the outline of the drawing. If any circles overlapped, they stayed (rather than keeping only circles that created the outlines).

I should note that for the fourth level, I did what I had done in Project Two; rather than create a level top, I took apart the plan - that is, I separated the plan into the circles which make it up - and then arranged the heights according to their width. The smaller circles can be found at the bottom and the larger circles, at the top, which brings me to another point.

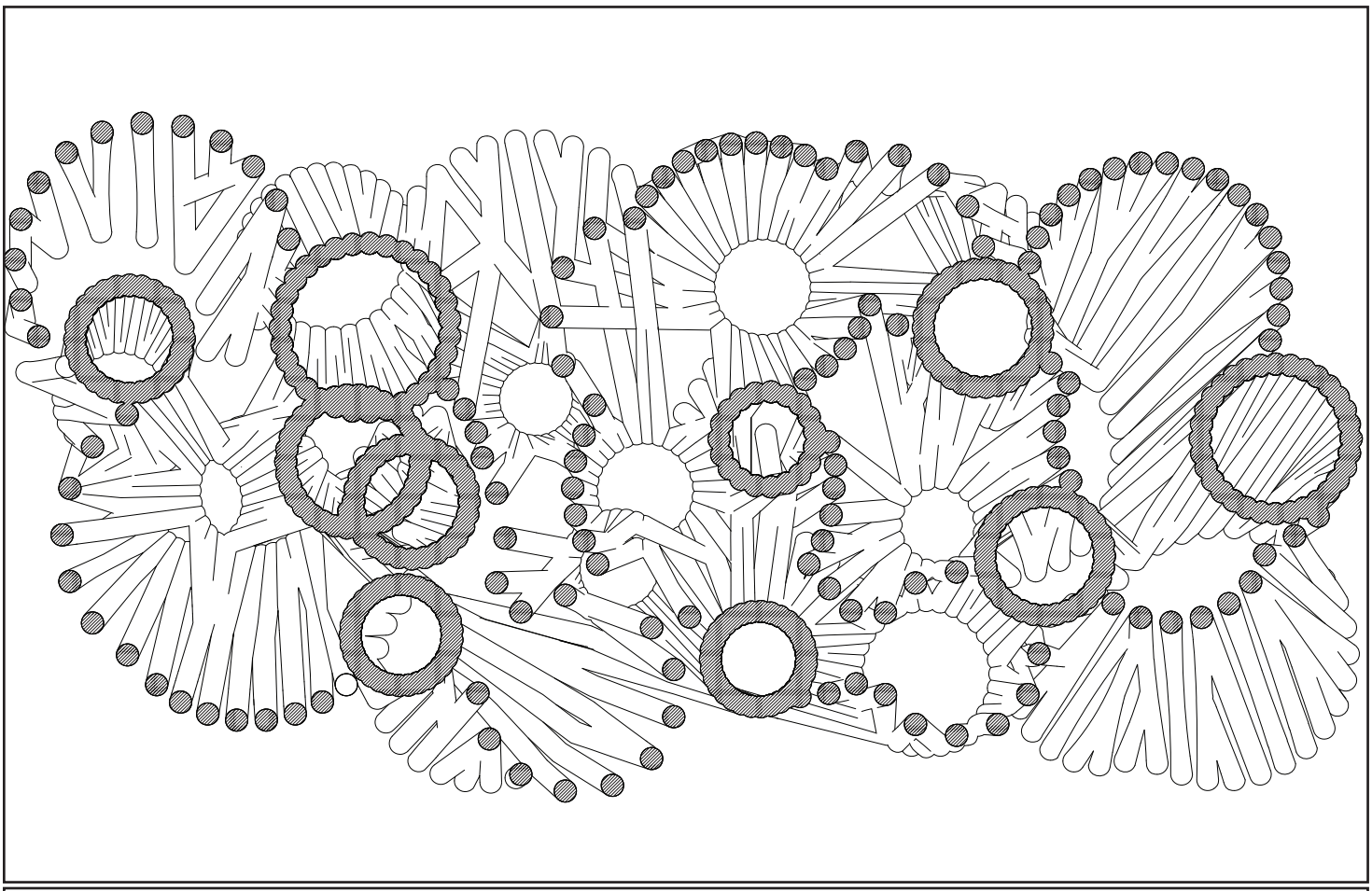
I knew that having so many points would make it difficult to reproduce this exaclty. I never considered reproducing this by lasercutting and creating a mold. Although I might have been able to create a mold, I was interested in creating this out of a somewhat transparent material and I was worried about using any kind of rubber/foam/etc that would be then left with the blackness of the burnt chipboard.

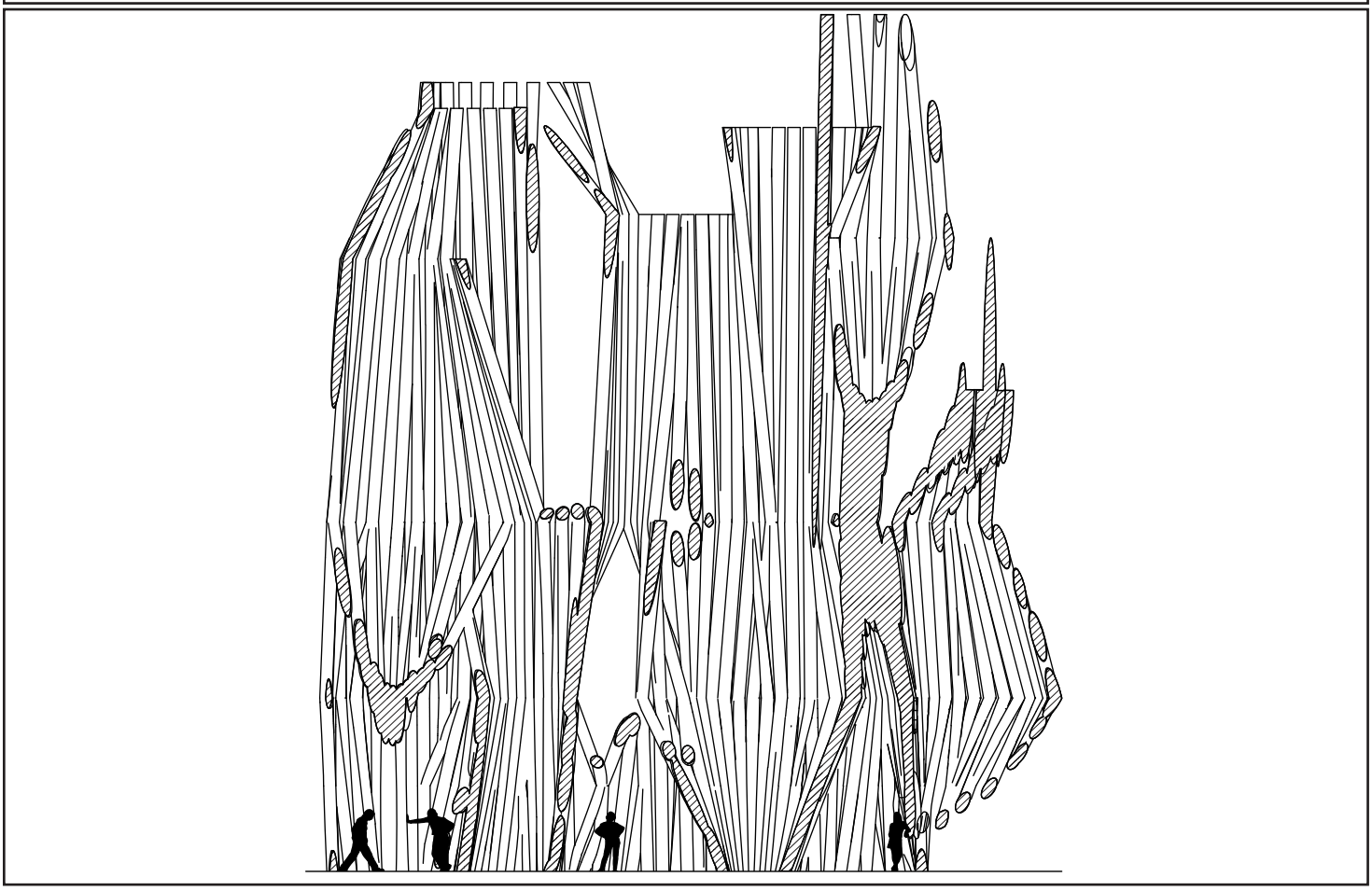
I was most fearful of the fact that creating my model exactly as I had created it digitally was not exactly feasible, and that because of that I would not be able to successfully create something that looked like the digital model. If you look at the plans and the sections, there are some differences - a lot, actually - but I think what is important is that the idea of visibility, transparency, and density can be easily read in the final model.

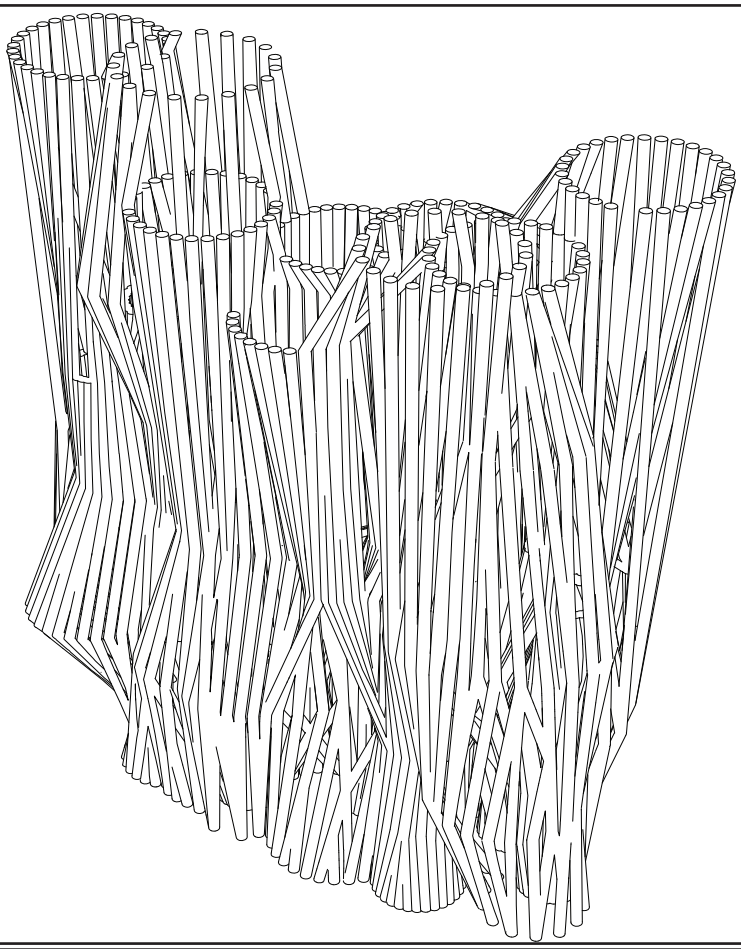
After testing out different ways to create this, I found that plexyglass and plexyglass rods would be the best choice.

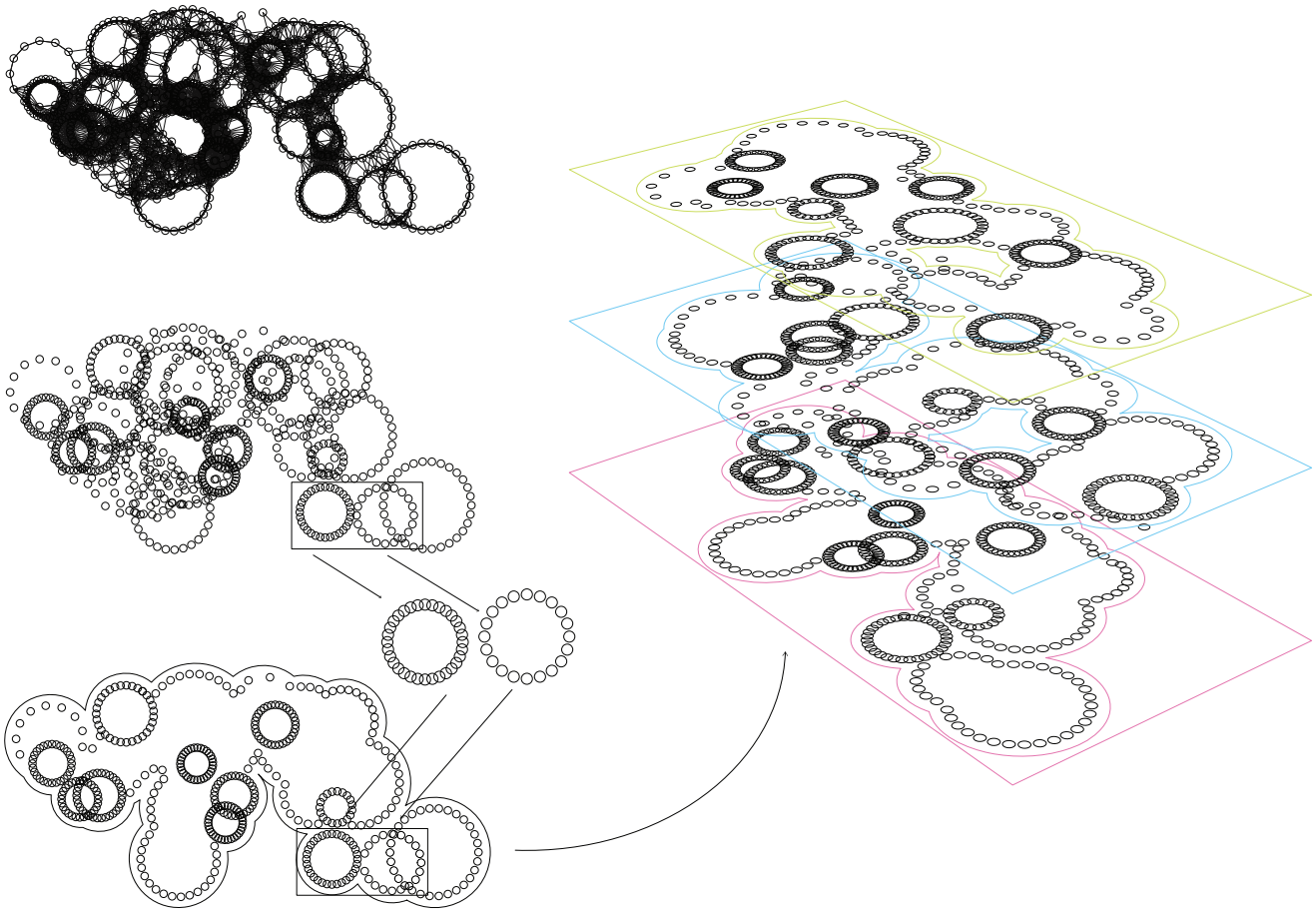
One reason I was interested in using semi transparent material was because of my program, the narrative of this habitable, livable space.

In using semi transparent material, I was able to explore how density creates spaces that varied from being completely transparent to translucent, to completely opaque. In this way, my space seemed to best fit and mock the space of a gym - more specifically, a gym made up of glass windows one can typically find on the streets of LA. I was interested in creating a space that would house an activity that people seem just as happy doing as they are watching other people do it. It seemed as though this narritive fit the body obsession a city like Los Angeles has. *I will admit I was never fully convinced of this narrative and neither were my jurors. One of the jurors said this was this was a piece of architecture that was just architecture - that sometimes that was okay, and that in my case it was*









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