

# Steam Chair 11





Original Chair by Bae Sehwa

# Chair Construction

## Steps:

- Drew a series of curves to get the general shape of the chair, sized and scaled as needed. Lofted curves (I did this for both top and bottom “shells”) **FIGS. 1 AND 2**
- Extracted isocurves from each surface in both U and V directions after rebuilding the surface with the divisions I thought were correct (Note: In previous iterations, I divided the surface as well) **FIG. 3**
- Extruded and Offset the curves to create the “slats” of the chair for both top and bottom layers **FIG. 4**

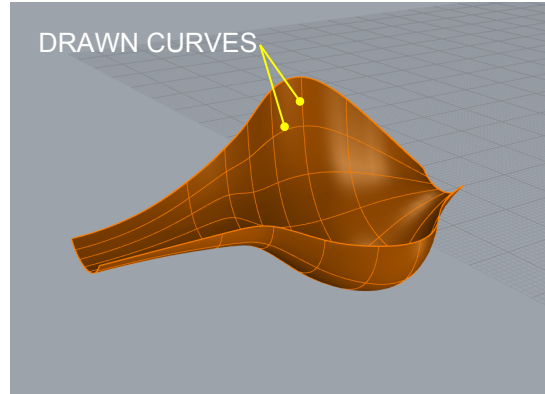


FIG. 1

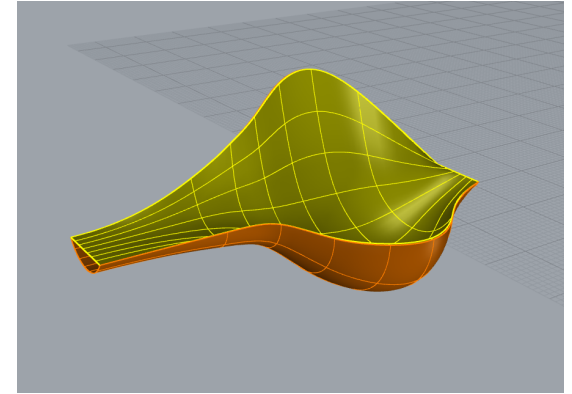


FIG. 2

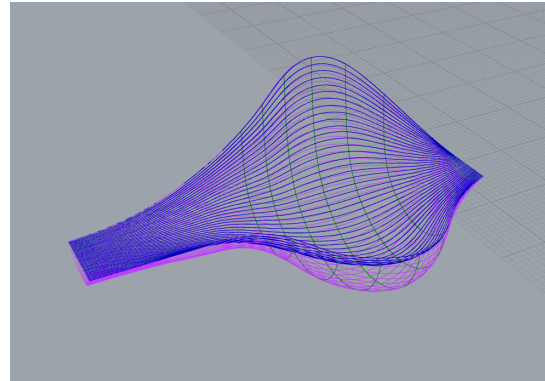


FIG. 3

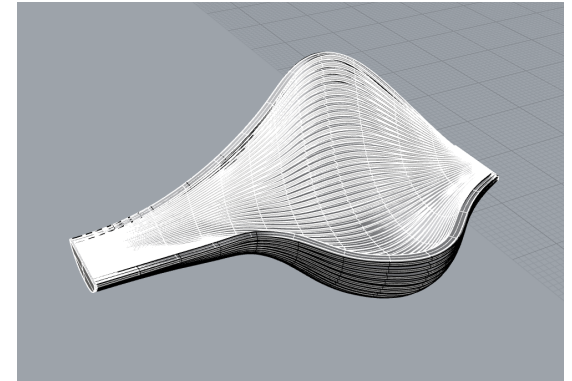


FIG. 4

# Chair Construction

## Steps:

- Extruded and Offset the supports between the shells and trimmed them off of the slats for the upper and lower shells **FIG. 1**
- Extruded isocurves, lofted them and Offset/Extruded the base and created the legs from lofted circles which were mirrored and adjusted to the base and trimmed off the base **FIG. 2**
- Drew a curve and extruded it to cap the ends **FIG. 3**
- **FINAL MODEL FIG. 4**

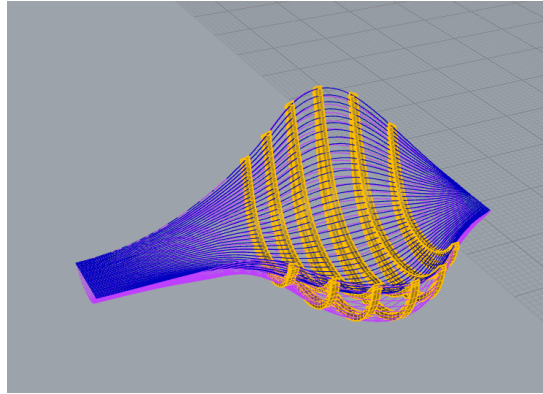


FIG. 1

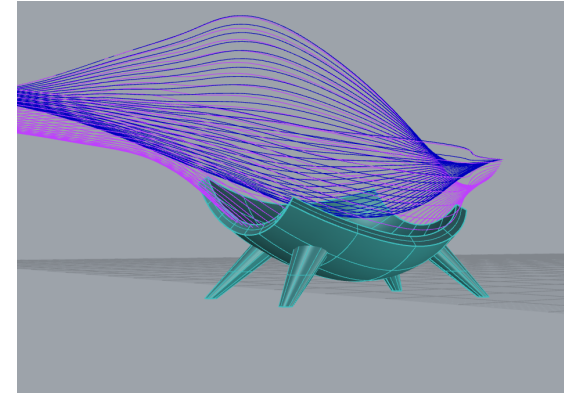


FIG. 2

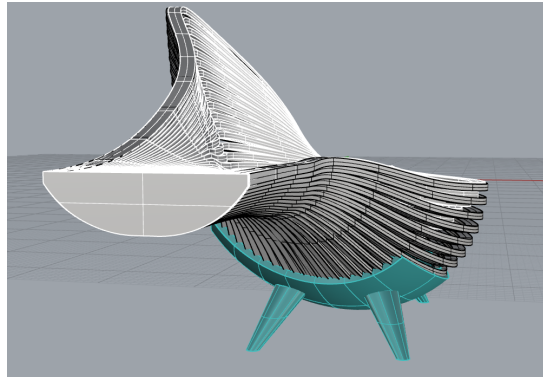


FIG. 3

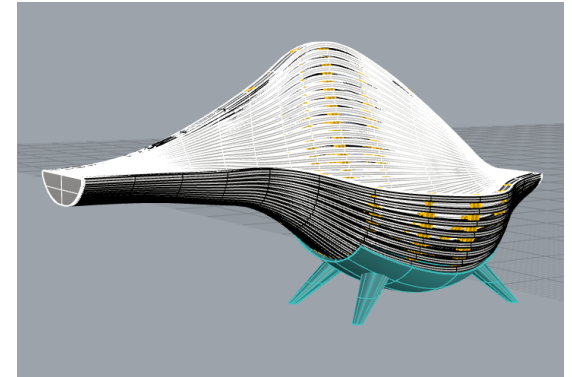


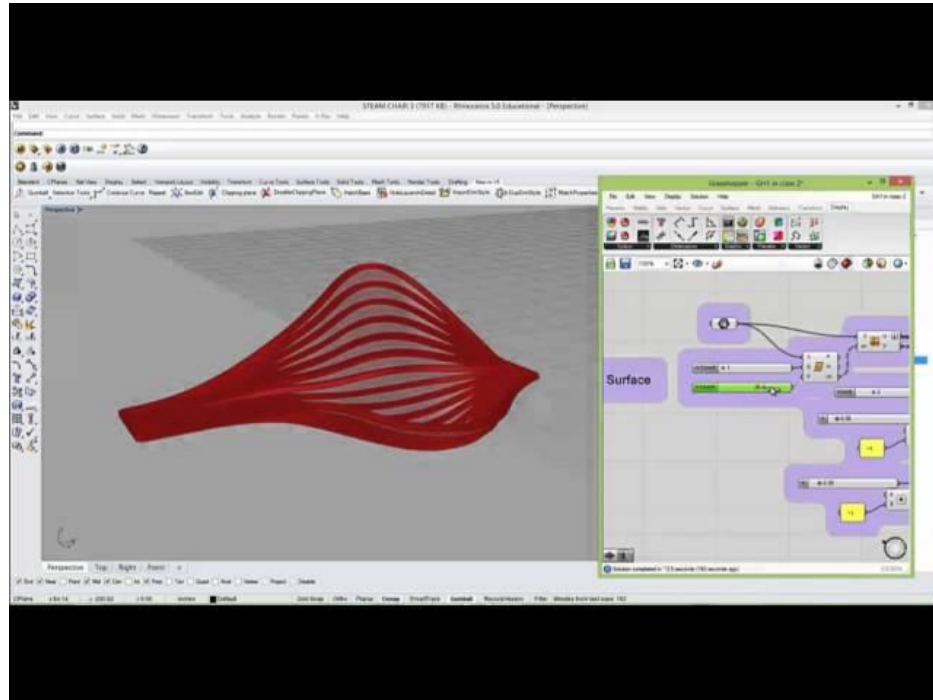
FIG. 4



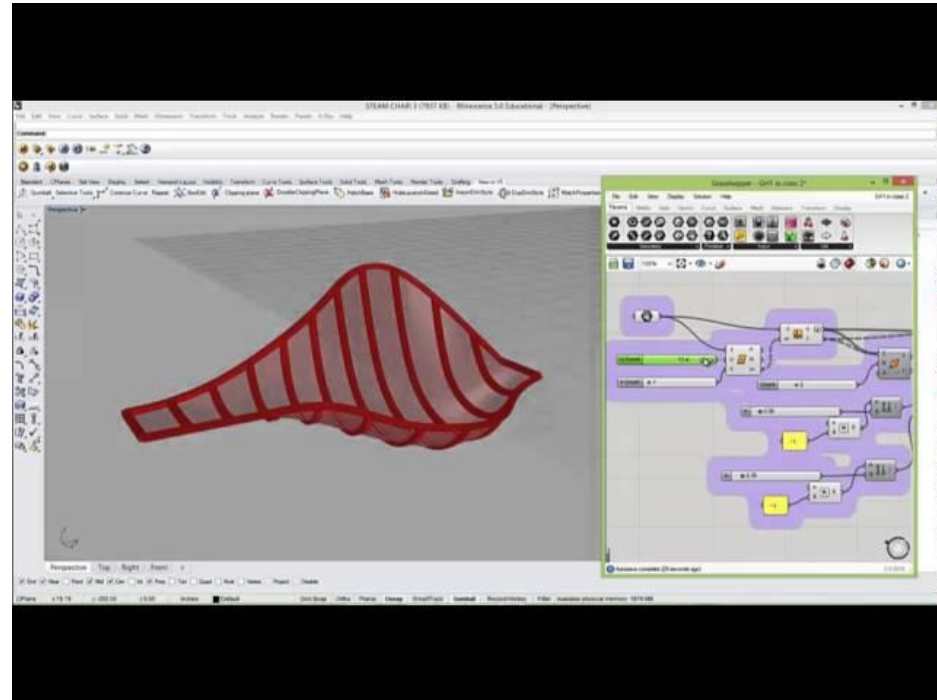


Final Renderings

# Design Driver 1: Changing the number of slats in U and V direction

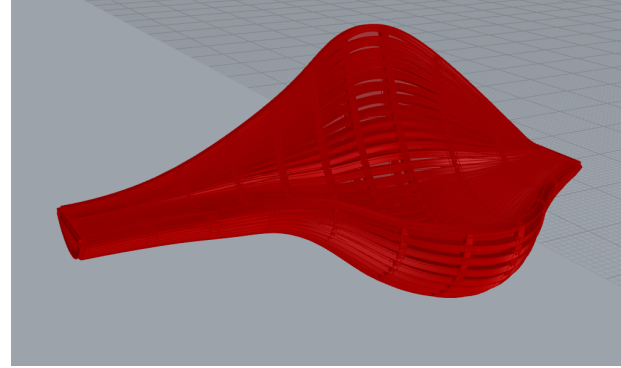
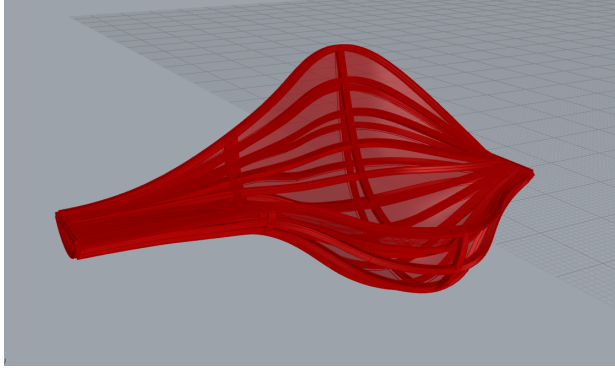


V Count



U Count

## Design Driver 1: Applied to Upper and Lower surfaces

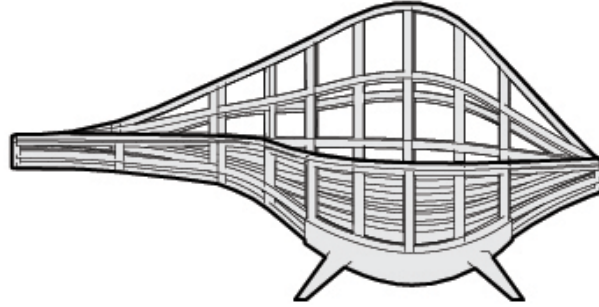
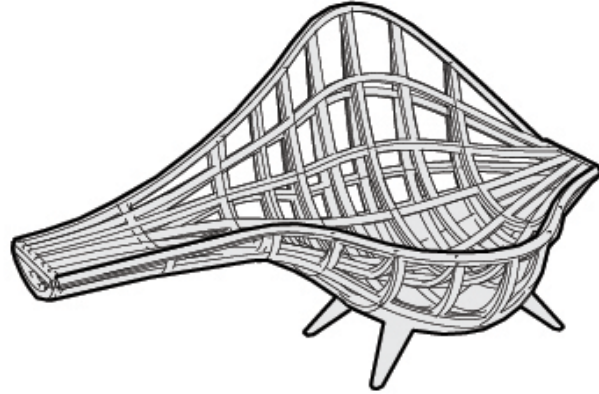
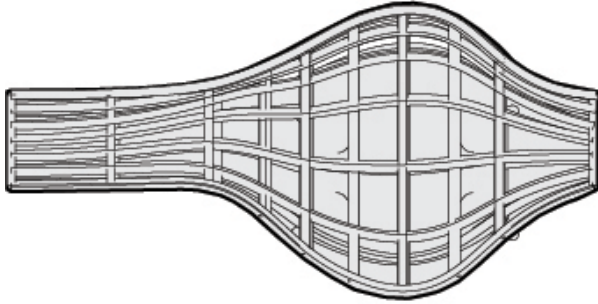


Less



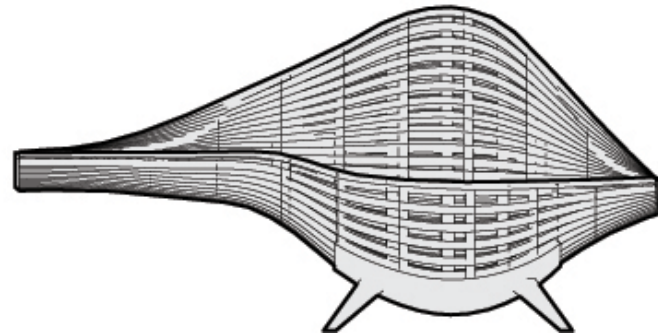
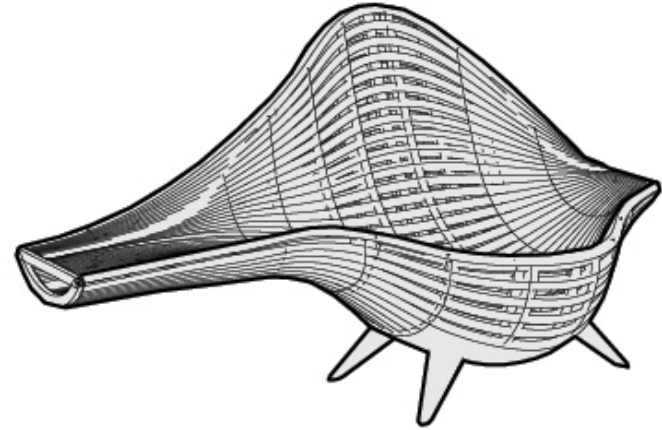
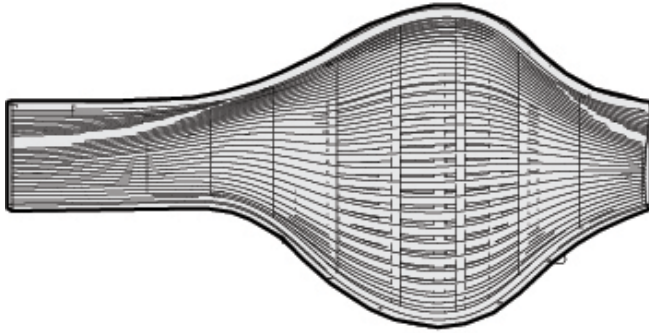
More

## Design Driver 1: Drawings- Less Slats

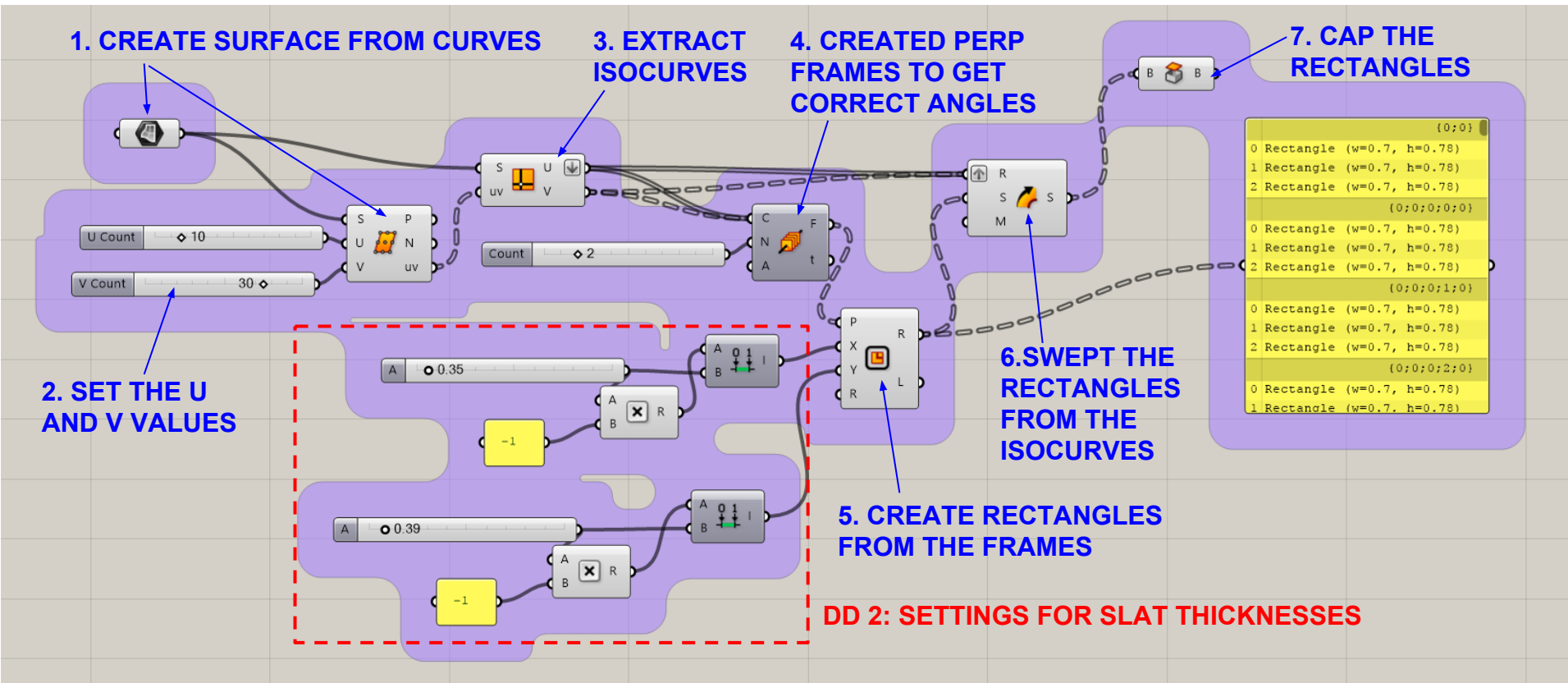




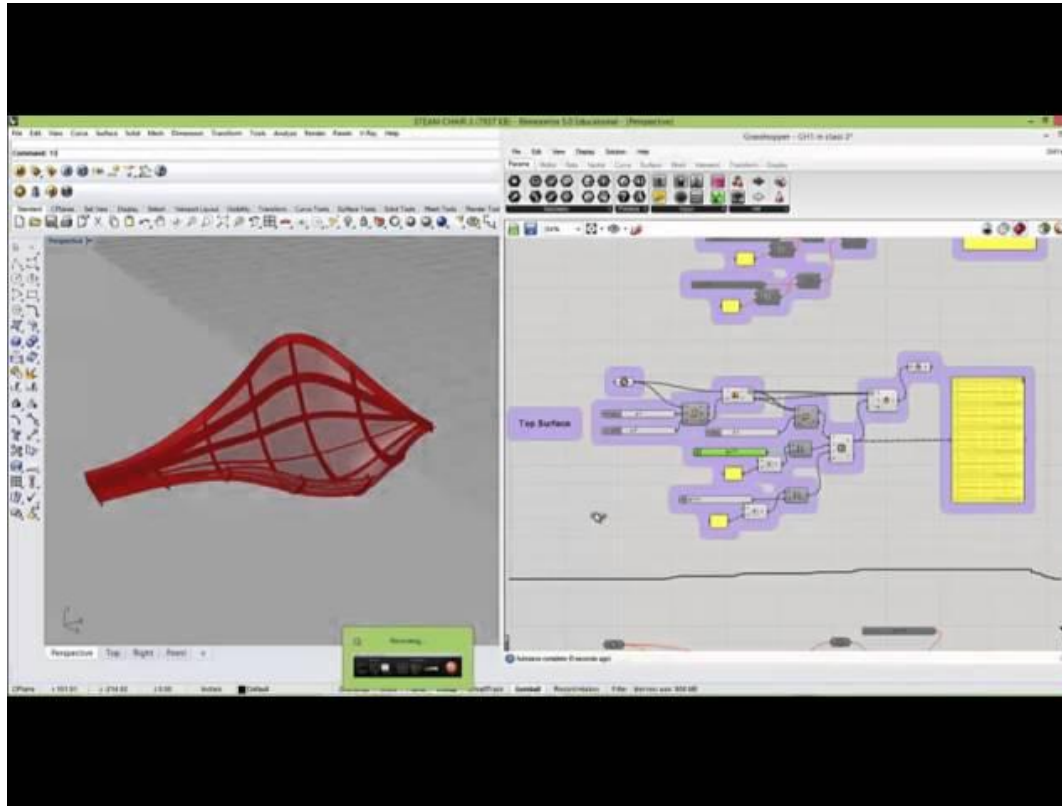
## Design Driver 1: Drawings- More Slats



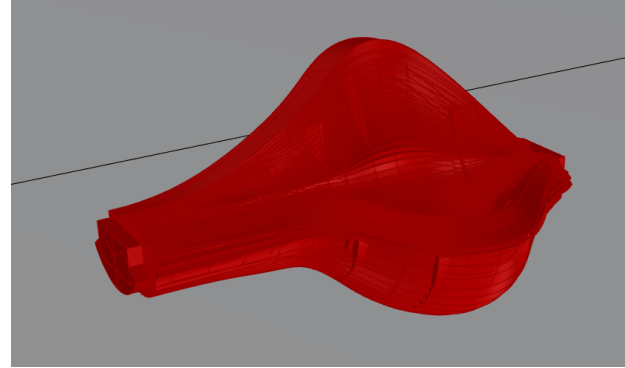
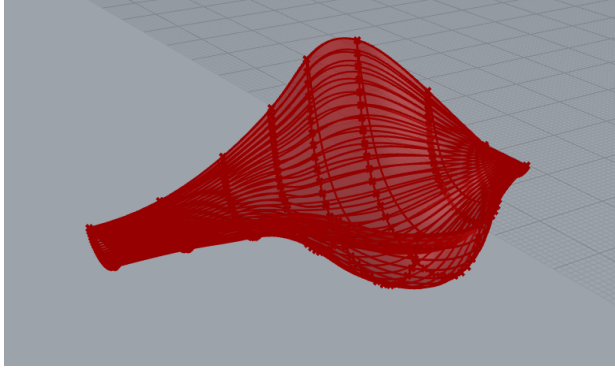
# Design Driver 1: Grasshopper



## Design Driver 2: Changing the Thickness of Slats



## Design Driver 2: Applied to Upper and Lower surfaces



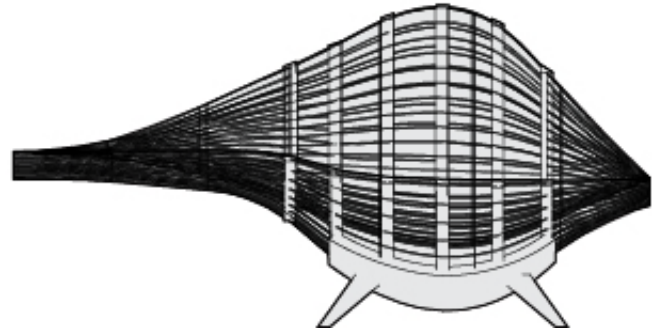
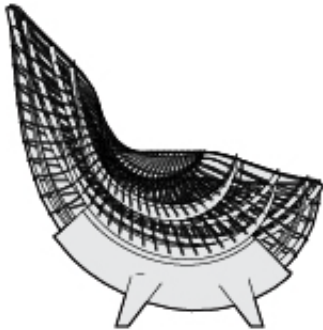
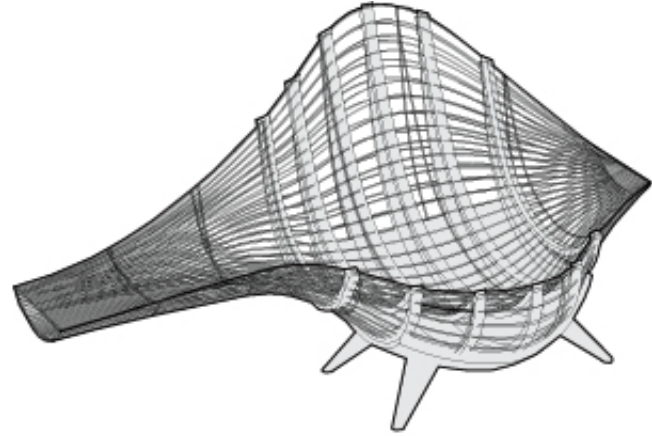
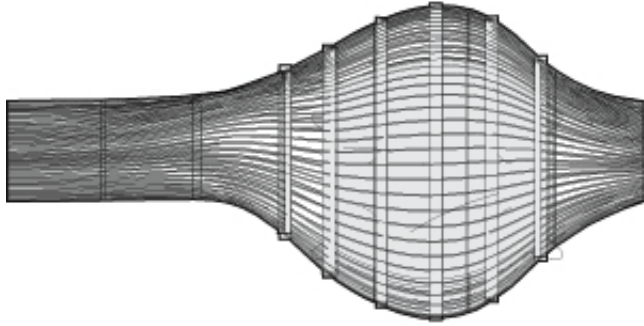
Thin



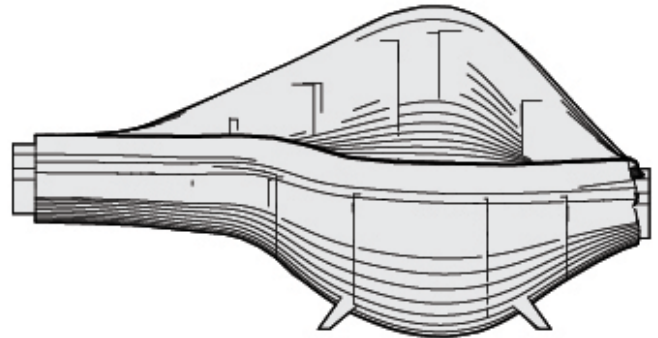
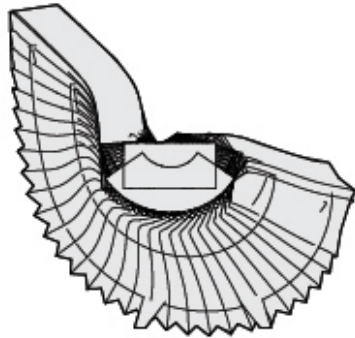
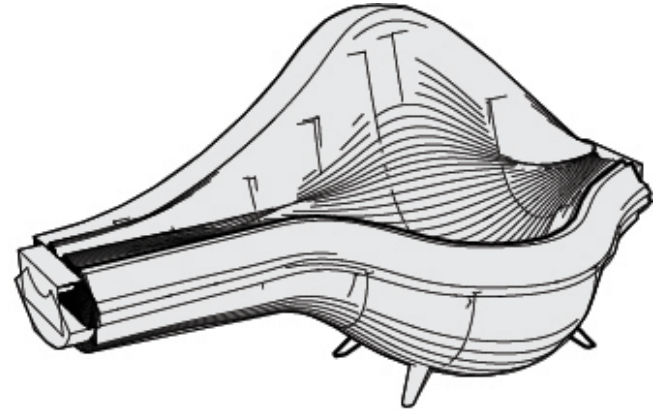
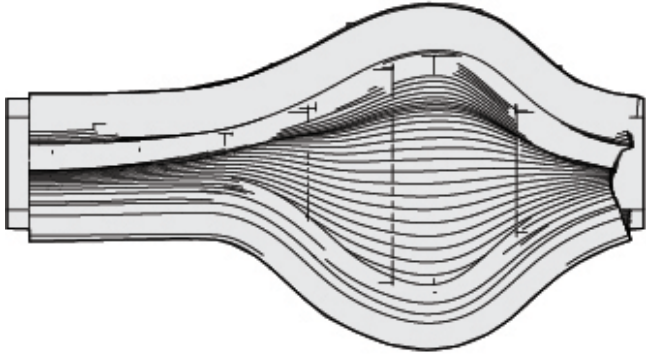
Thick



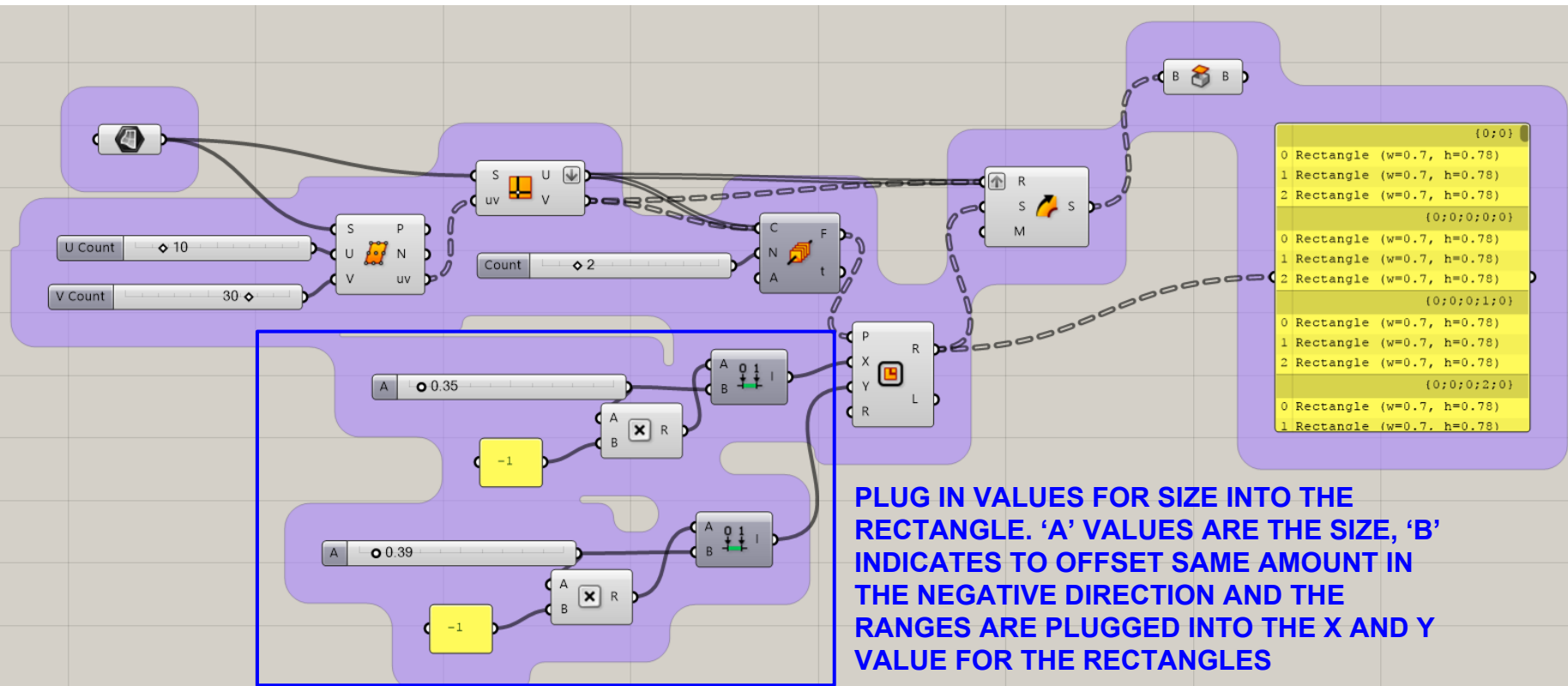
## Design Driver 2: Drawings- Thin Slats



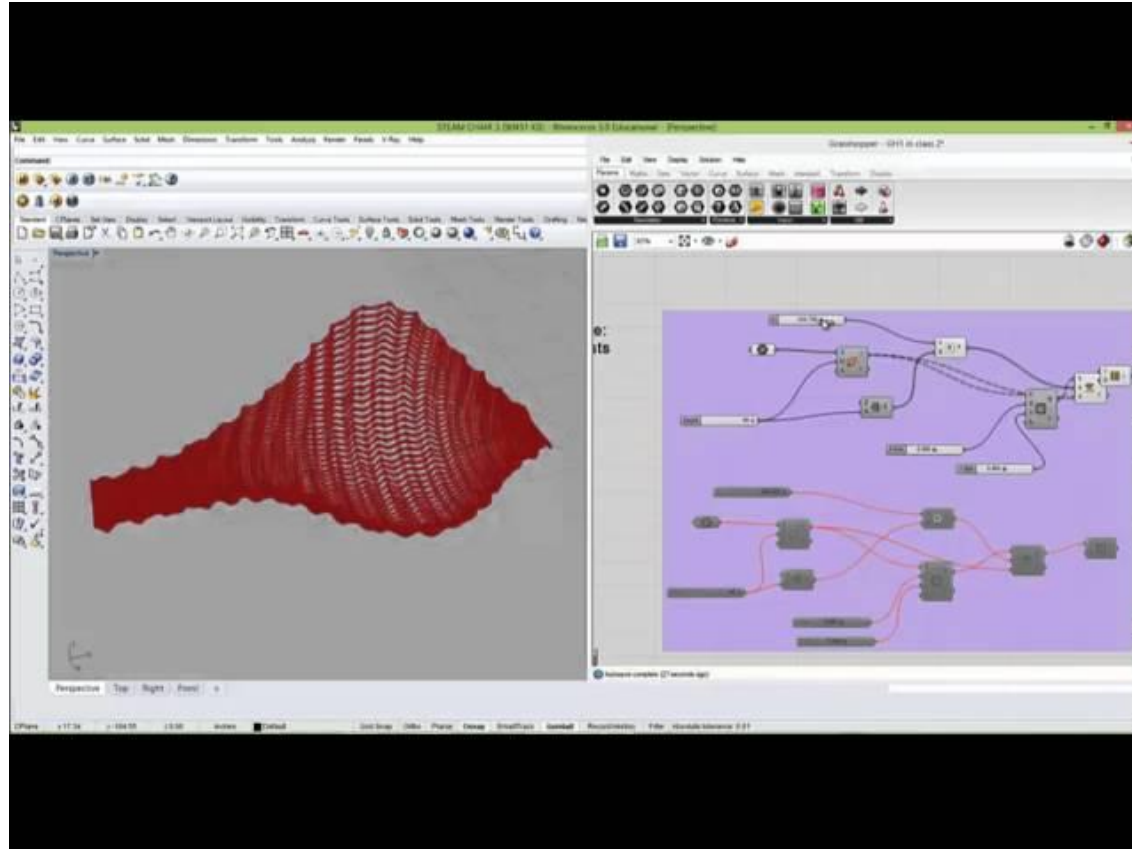
## Design Driver 2: Drawings- Thick Slats



## Design Driver 2: Grasshopper

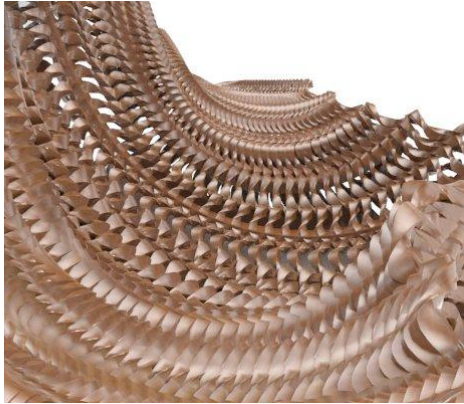
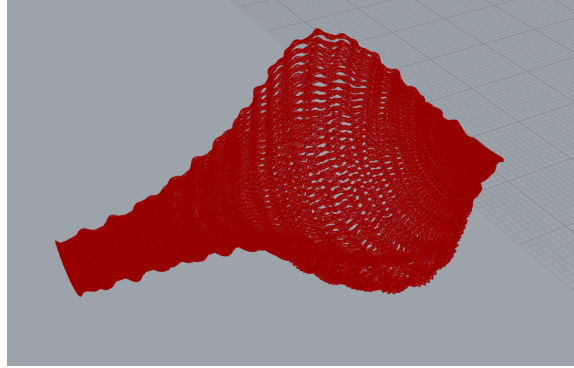


## Design Driver 3: Twisting the Slats

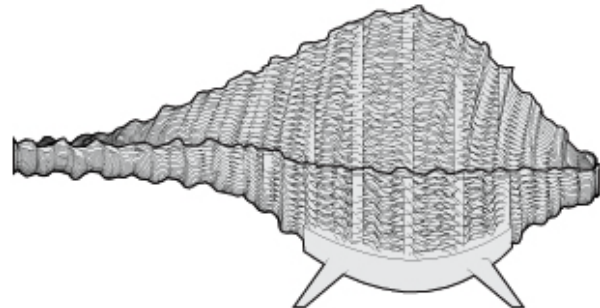
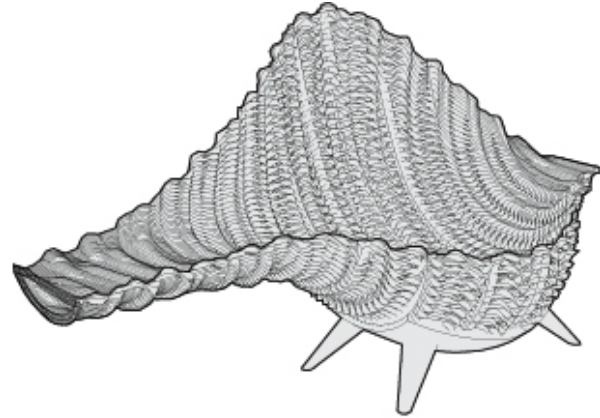
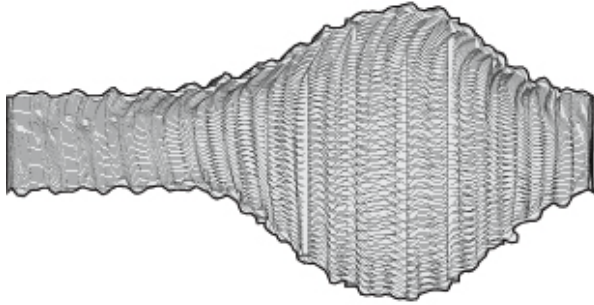




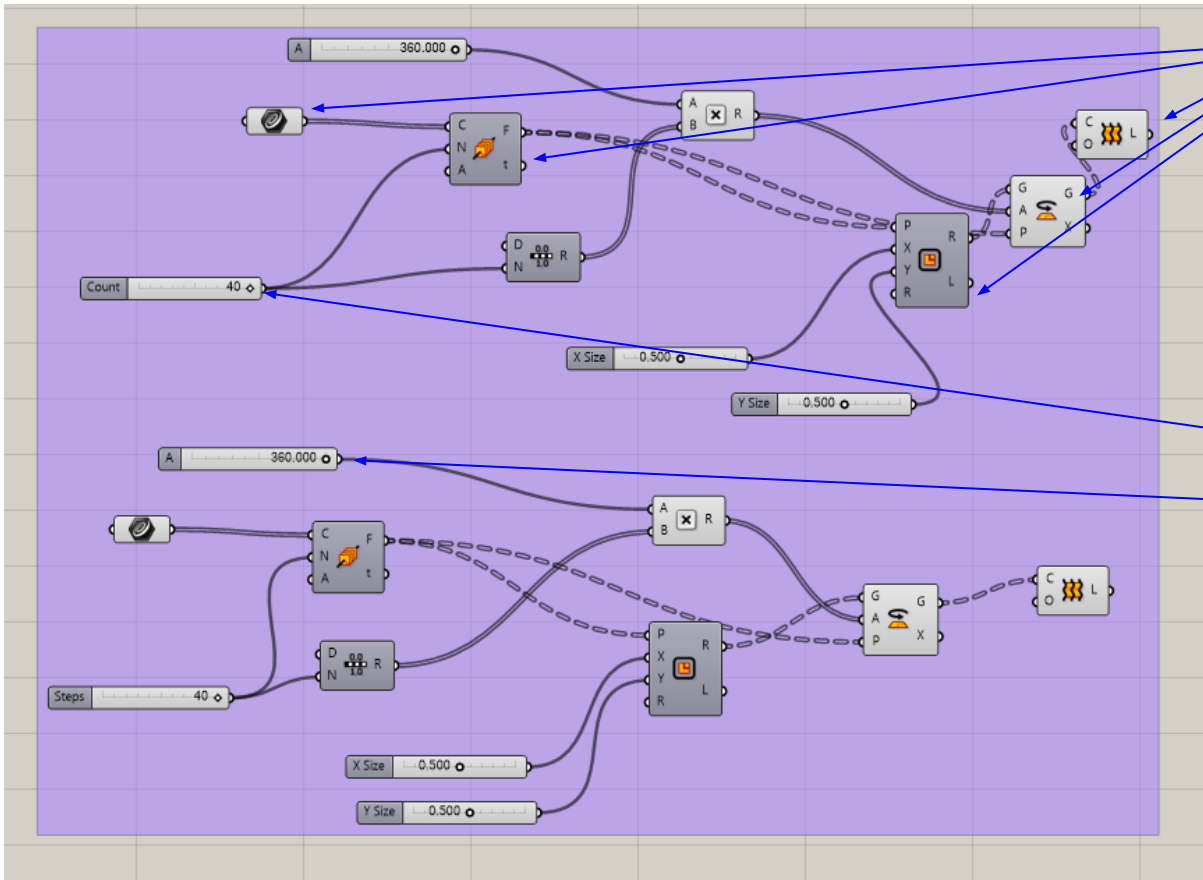
### Design Driver 3: Applied to Upper and Lower surfaces



### Design Driver 3: Drawings- Twisted Slats



## Design Driver 3: Grasshopper



# 1.CURVES TO PERP FRAMES TO RECTANGLES, LOFTING AND ROTATING THE LOFT

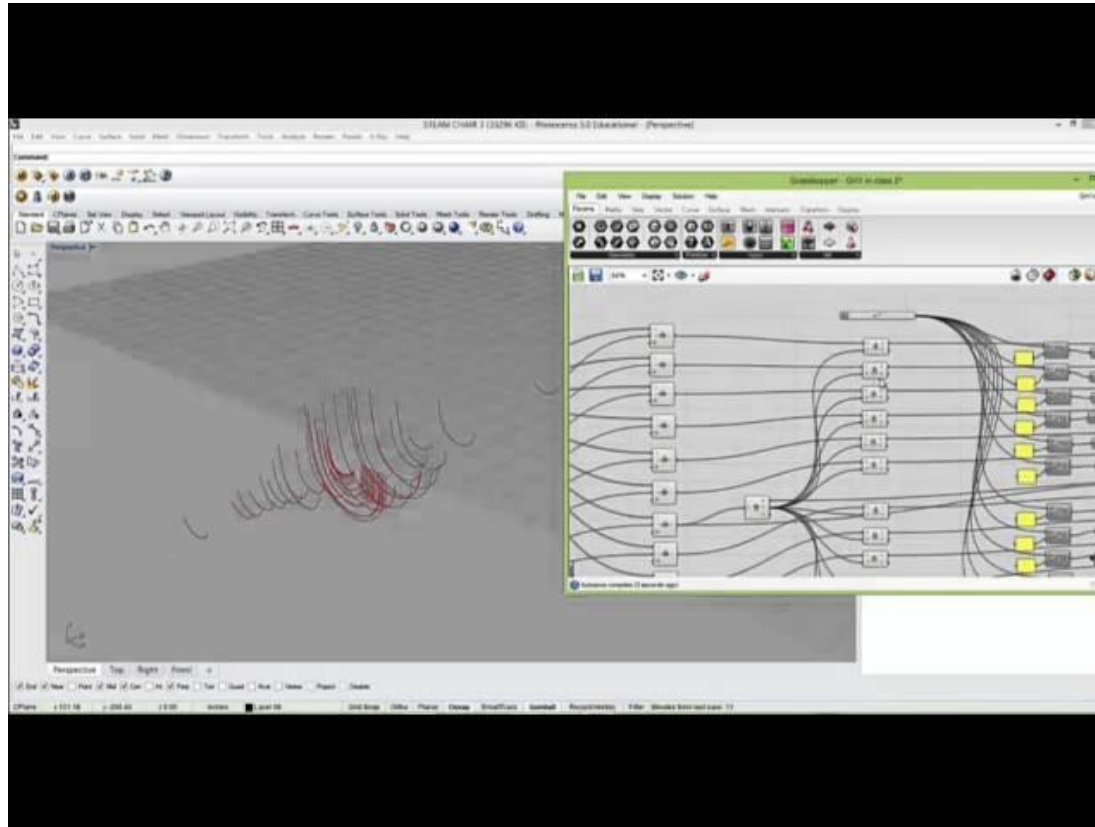
## 2.SETTING UP THE LOFT WITH A RANGE TO AFFECT THE COUNT OF FRAMES AND ROTATION

## NUMBER OF FRAMES

## —ROTATION

(TOP FOR TOP SURFACE,  
BOTTOM FOR BOTTOM  
SURFACE)

## Design Driver 4: Stretching the Chair--**FAIL**





# Design Driver 4: Grasshopper

