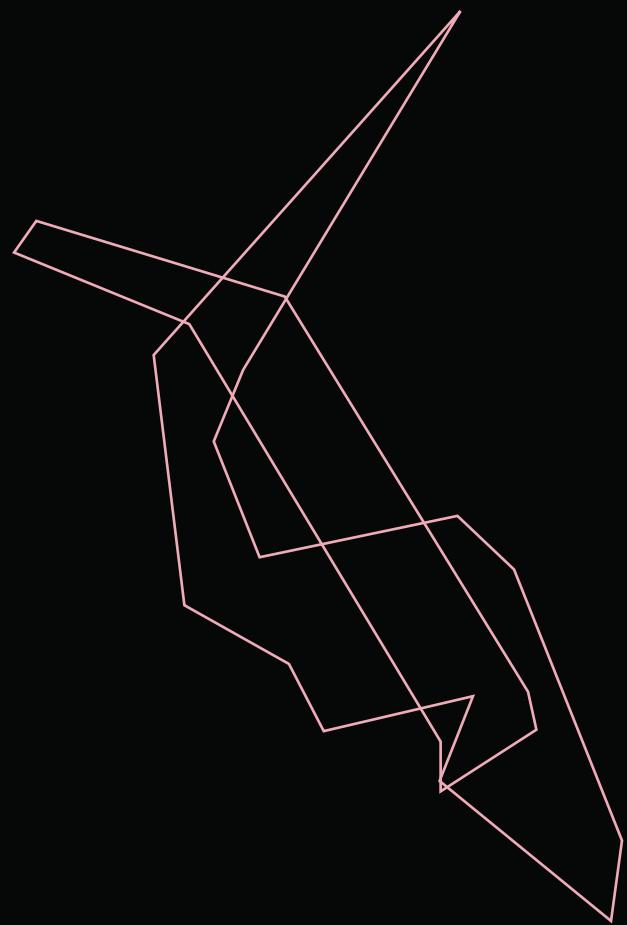


PLANAR CONSTRUCTION

3D MODELING

Dominant
Subdominant
Subordinate

PROJECT 3



VIENA LEE

24 September 2016

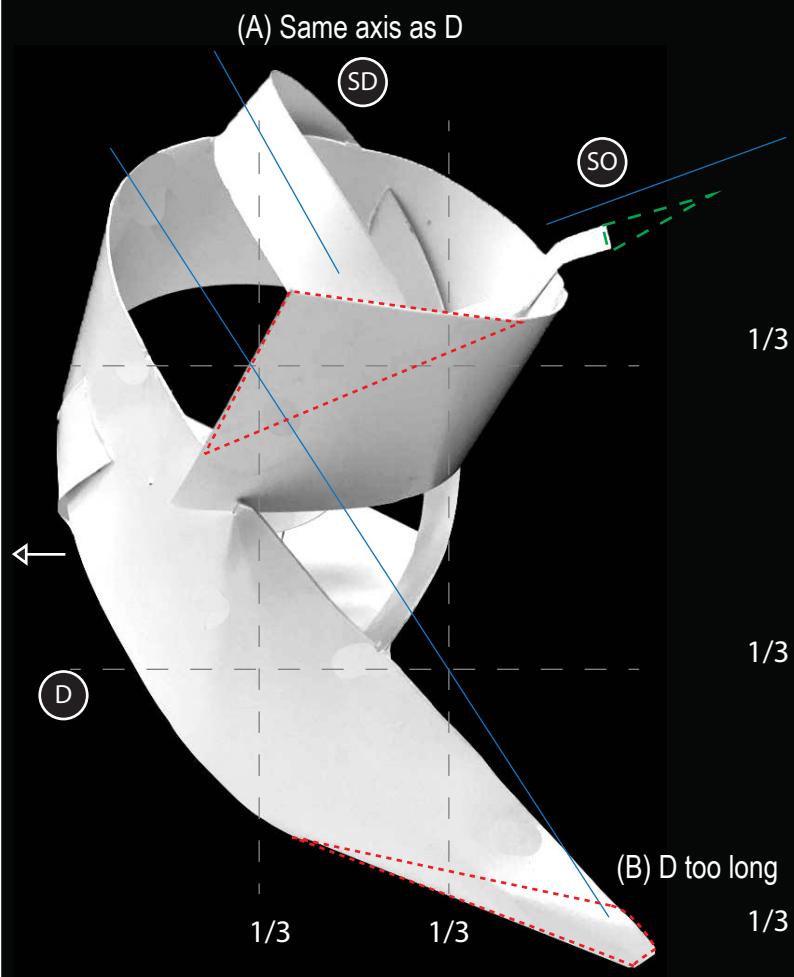
THE DANCER



The Dancer has a Dominant which axis spans upwards, hence making it a vertical model. Using piercing and wedging, the subdominant weaves around the other two stripes. Thus allowing a variation of voids when viewed from the top. Tapering would definately make the model more interesting. Application wise, The Dancer can potentially be made into an intricate pair of earrings.

THE DANCER

VIEW 1



1/3

1/3

1/3

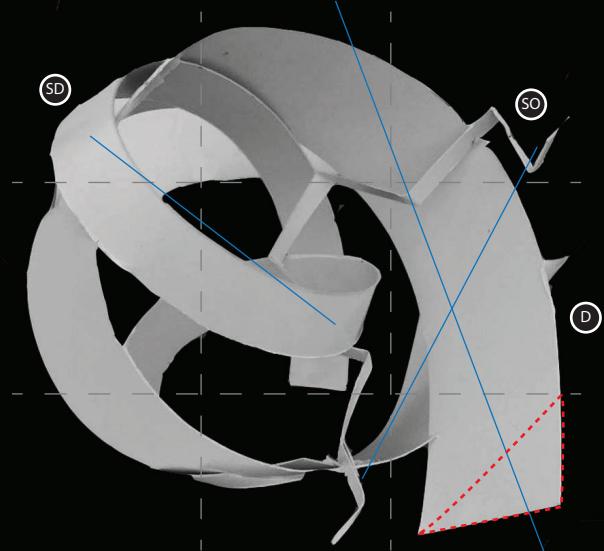
IMPROVEMENTS

- Taper of the end of D
- Cut (B) as too much empty space below
- Increasing the voids in the SD to make it the model more interesting
- Change the axis of (A) as it is currently the same as the D
- Increase the length of the SO

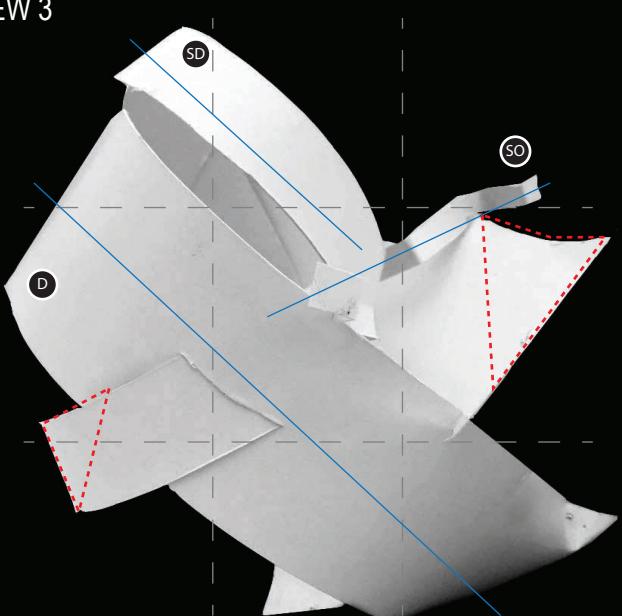
[Red dashed box] - Subtract

[Green dashed box] - Add

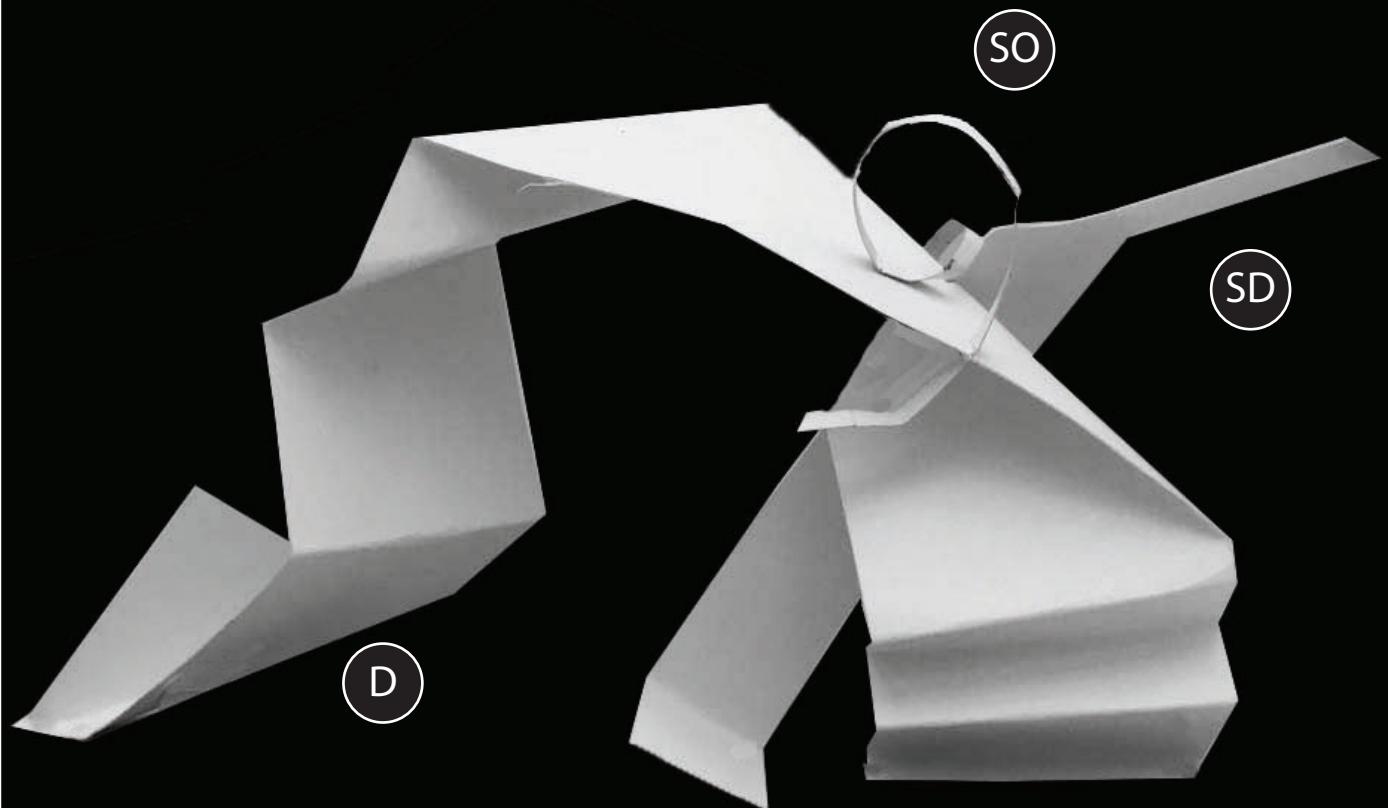
VIEW 2



VIEW 3



STAIRWAY TO HEAVEN



Stairway To Heaven folds the Dominant and Subdominant, which was mainly inspired by origami. The Subdominant that cuts through the dominant creates a void at the 2/3 mark of the model. To make the Subordinate stand out , it is twirled to create a different form compared to the geometric creases of the Dominant and Subdominant. It can be furthur improved by shifting the parts to the 1/3 points. This model can be applied to making it as a bridge for public use.

STAIRWAY TO HEAVEN

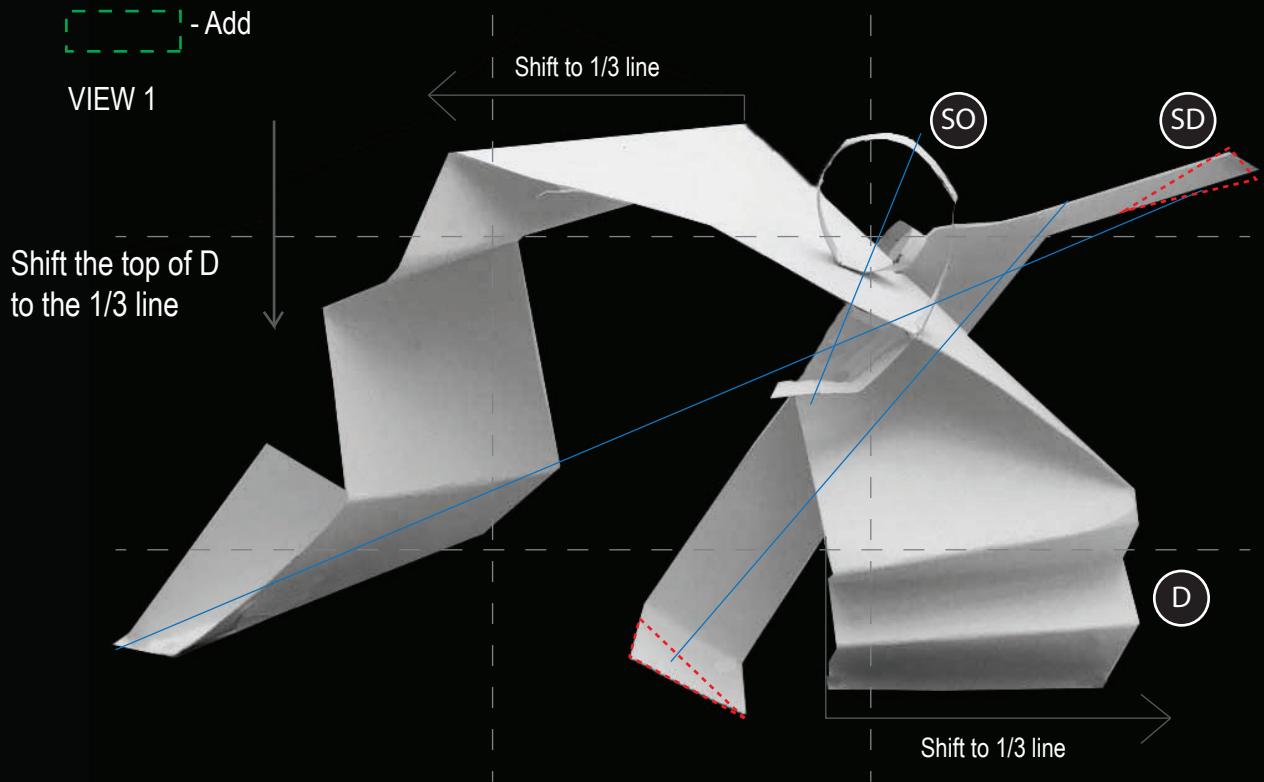
IMPROVEMENTS

- Shift various parts of D to the 1/3 point
- Shift the highest part of D to the 1/3 point
- Taper off the ends of SD

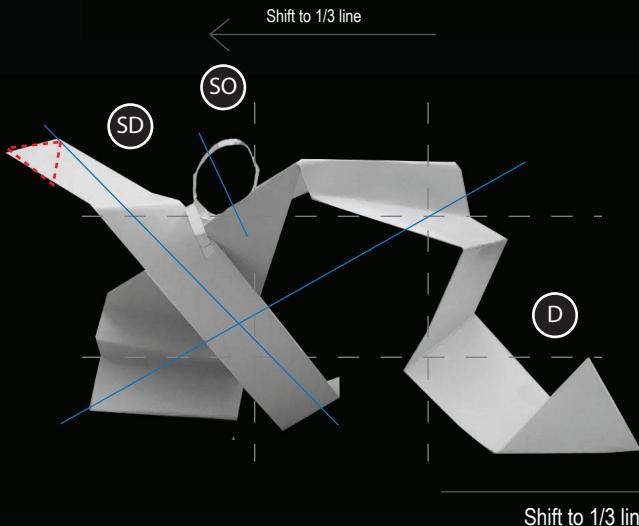
 - Subtract

 - Add

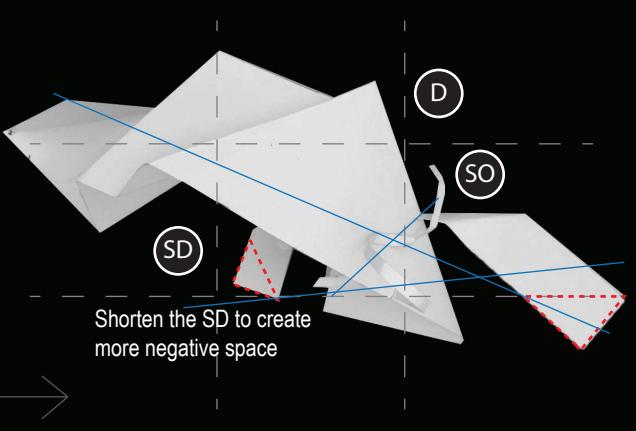
VIEW 1



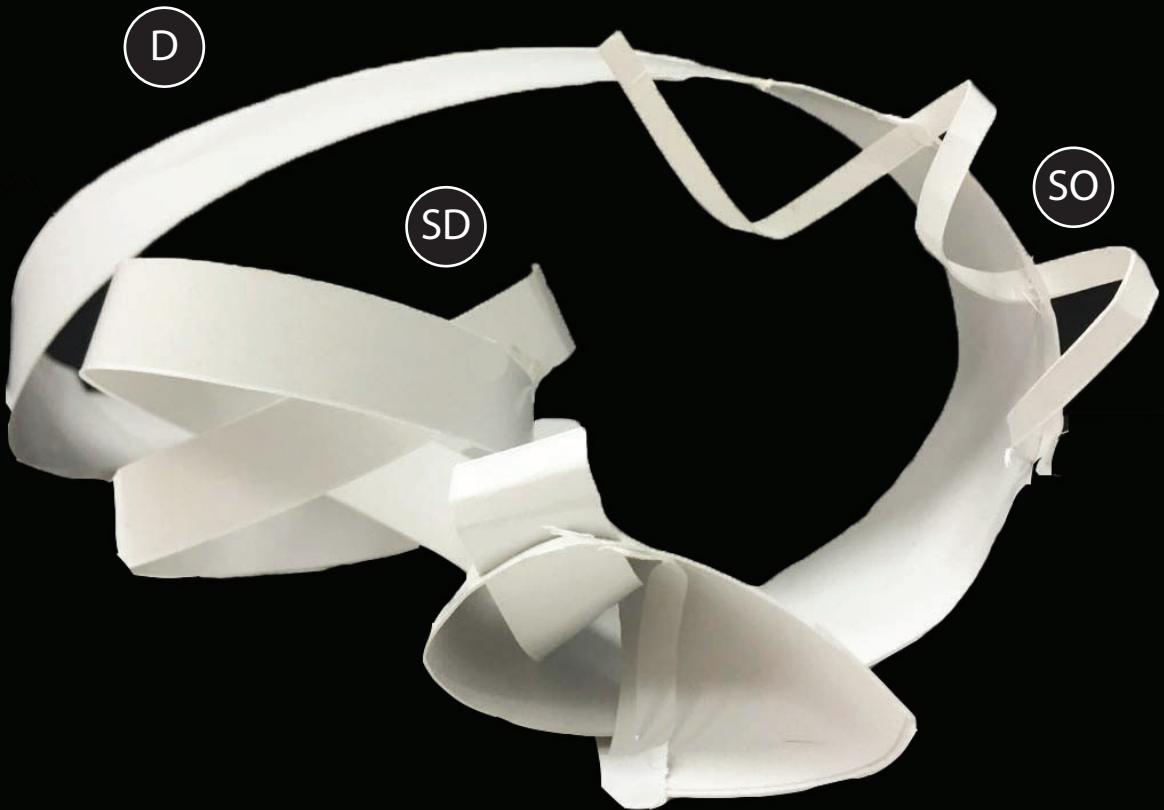
VIEW 2



VIEW 3



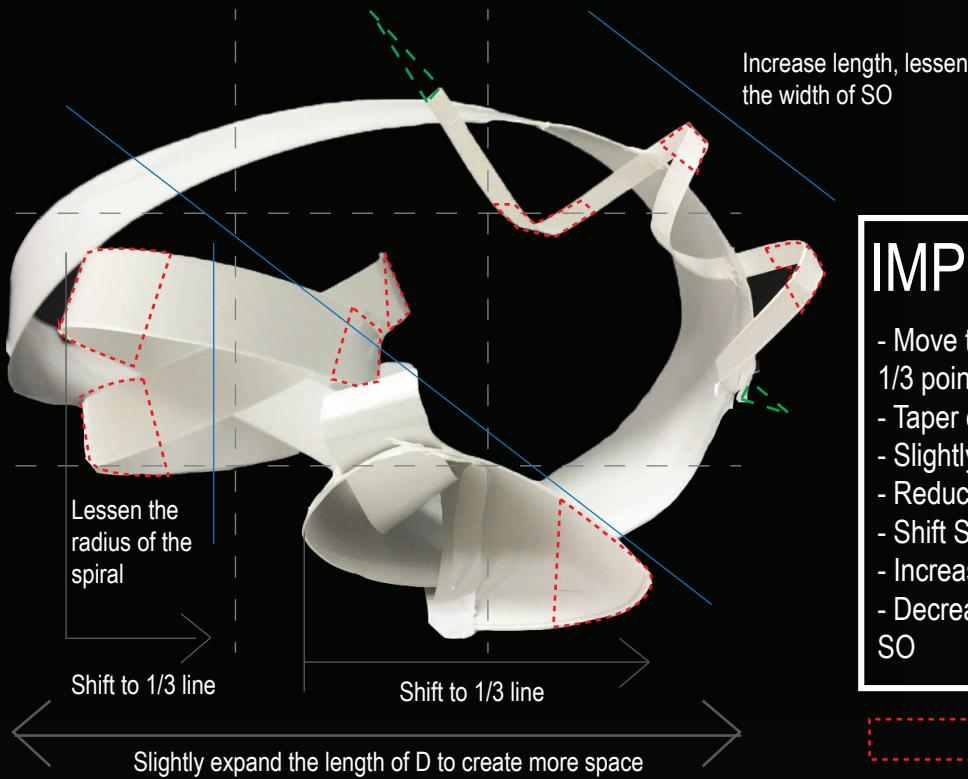
THE TUBE TO NOWHERE



The SO that sticks out of the D creates a dynamic line of axis since it is differently angled. Therefore this model is able to look different from various viewpoints. However the issue is that the radius for the different shapes are too large, causing the model to be inproportioned and crowded. The intricate bottom makes it too bottom heavy, thus the SD in this model needs to be greatly reduced in order to create more viods. The planes need to be shifted to various 1/3 points. Application wise, this looks like it can be a very fun water playground with a variety of wet slides.

THE TUBE TO NOWHERE

VIEW 1

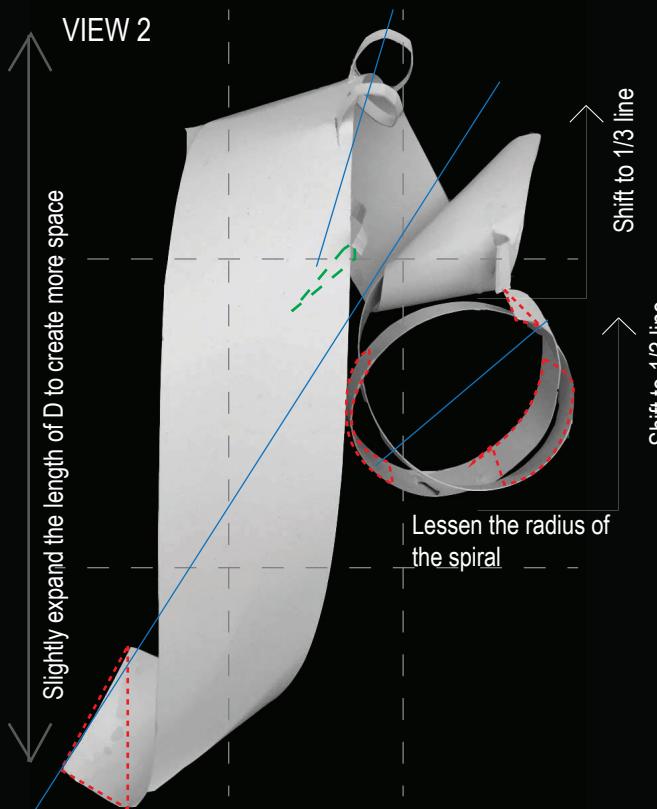


IMPROVEMENTS

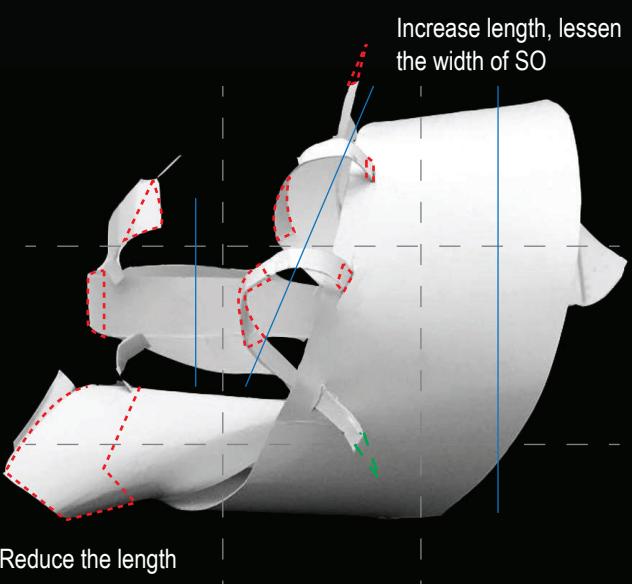
- Move the parts of D and SD to the 1/3 points
- Taper of the end of D
- Slightly expand the length of D
- Reduce the radii of SD
- Shift SD closer to the 1/3 point
- Increase the length of SO
- Decrease the radii of the spiral in SO

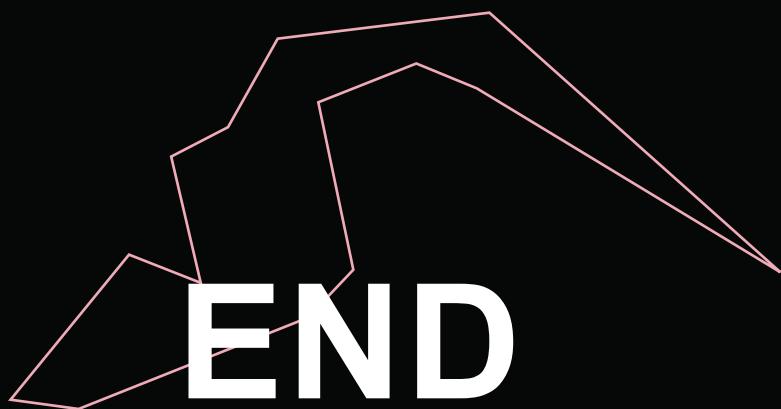
[Red dashed box] - Subtract
[Green dashed box] - Add

VIEW 2



VIEW 3





Initially, I was not able to identify what was a good planar construction vs a not so nice planar construction. However, at the end of the exercise I began to understand how to manipulate and see the voids, negative spaces, and the different treatments of the paper (folding, spiralling). At the beginning I prefer more intricate models, therefore with these sketch models are also more complicated. But after gaining more insights from the lessons, it hit me that simplicity can really make a huge difference to a model, and there is so many different ways to play with planar construction.

This somehow was a larger learning jump for me, but these really stretched me to think out of the box and go further with proportion and balance!