

To Make is to Grasp: From Sketch to 3D

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Module:

To Make is to Grasp: From Sketch to 3D

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content

Assignment

1 sketching

2 modelling

3 Illustrator

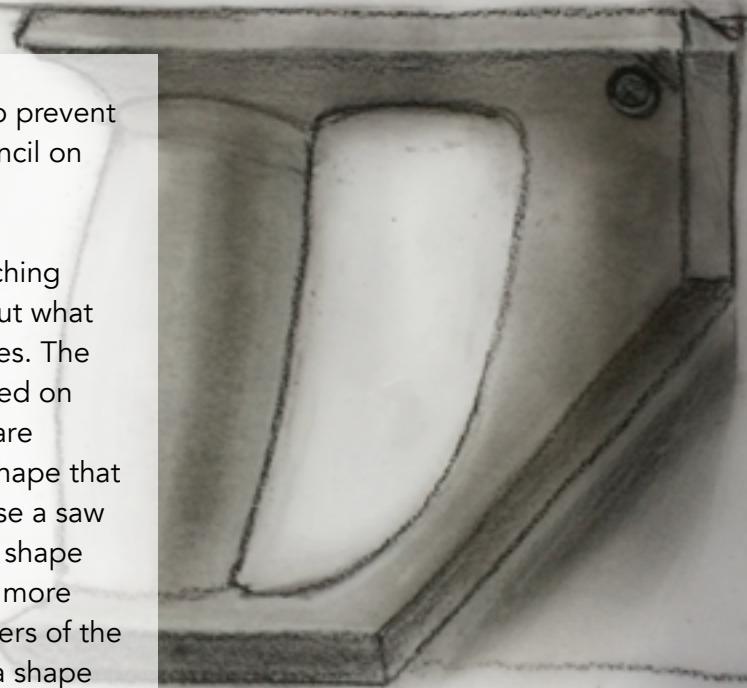
4 Photoshop

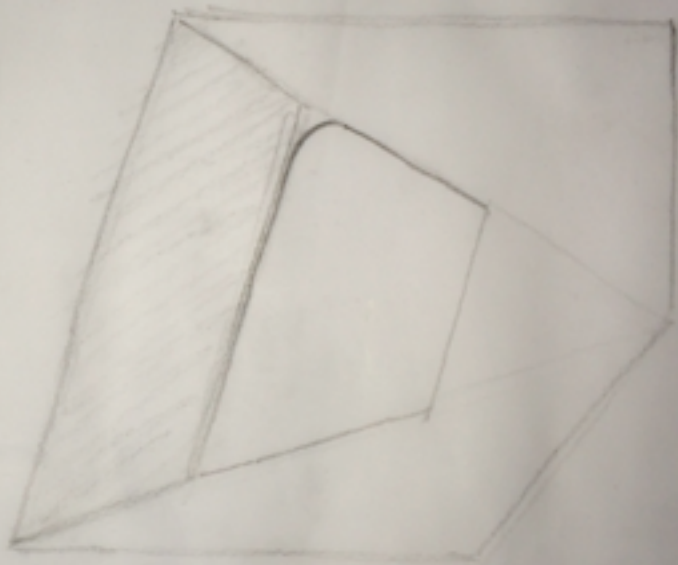
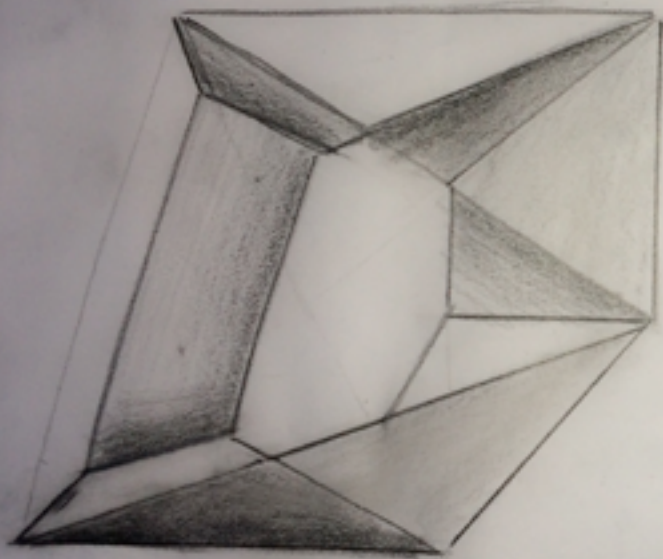
5 printer

1 sketching process

Sketching with different materials is good to prevent numbness. I was always told to use blue pencil on white paper.

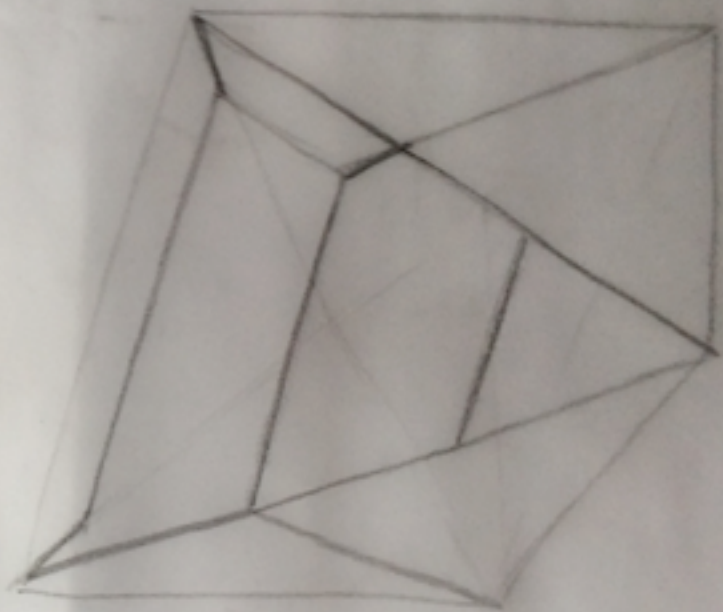
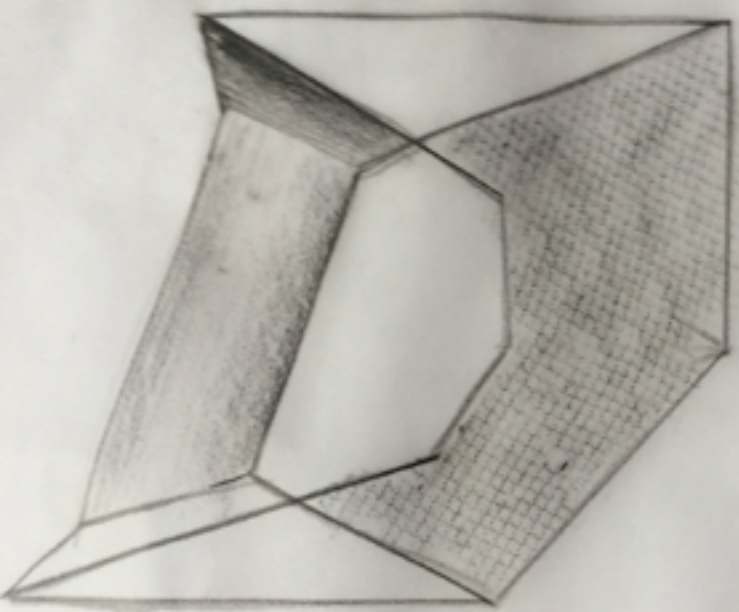
During the first class we practiced our sketching skills. The use of pastel made me think about what a shape would look like with light and shades. The result of the work in the first class is displayed on this page. On the right page, form studies are displayed. The objective was to think of a shape that fits yourself. I wanted it to be tough, because a saw is an object that has to do tough work. The shape is therefore built up with sharp lines. To give more balance to the shape I tried to use the corners of the shape as vanishing points. This resulted in a shape with many facets. A little over the top.





1 sketching result

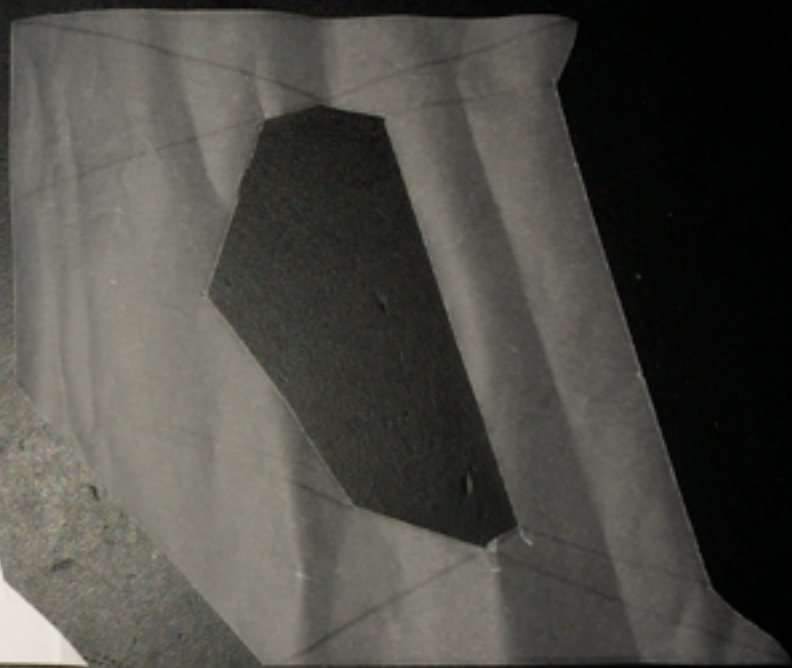
Over the top. That is why the most important lines are maintained, but some facets are merged into a big one with a surface structure. For more depth there should be more shading. It is a little flat. This design is the starting point for the modeling assignment.



2 modelling process

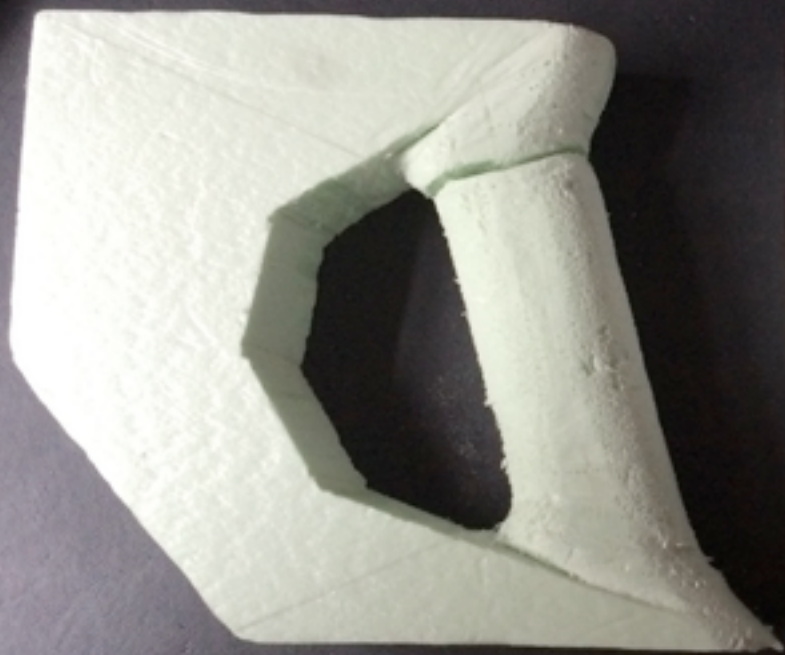
The next step is to go from sketch to 3D. Shaping the form from polystyrene foam. Although the sketches were enlarged, the shape was too small for a hand to hold. This immediately reminded me of the importance of materializing the flat designs. Making the shape even bigger is not an option. It would only make the design very clunky. Back to the drawing board!

The vanishing points are now placed outside of the corners which makes for more space inside the frame of the saw handle.



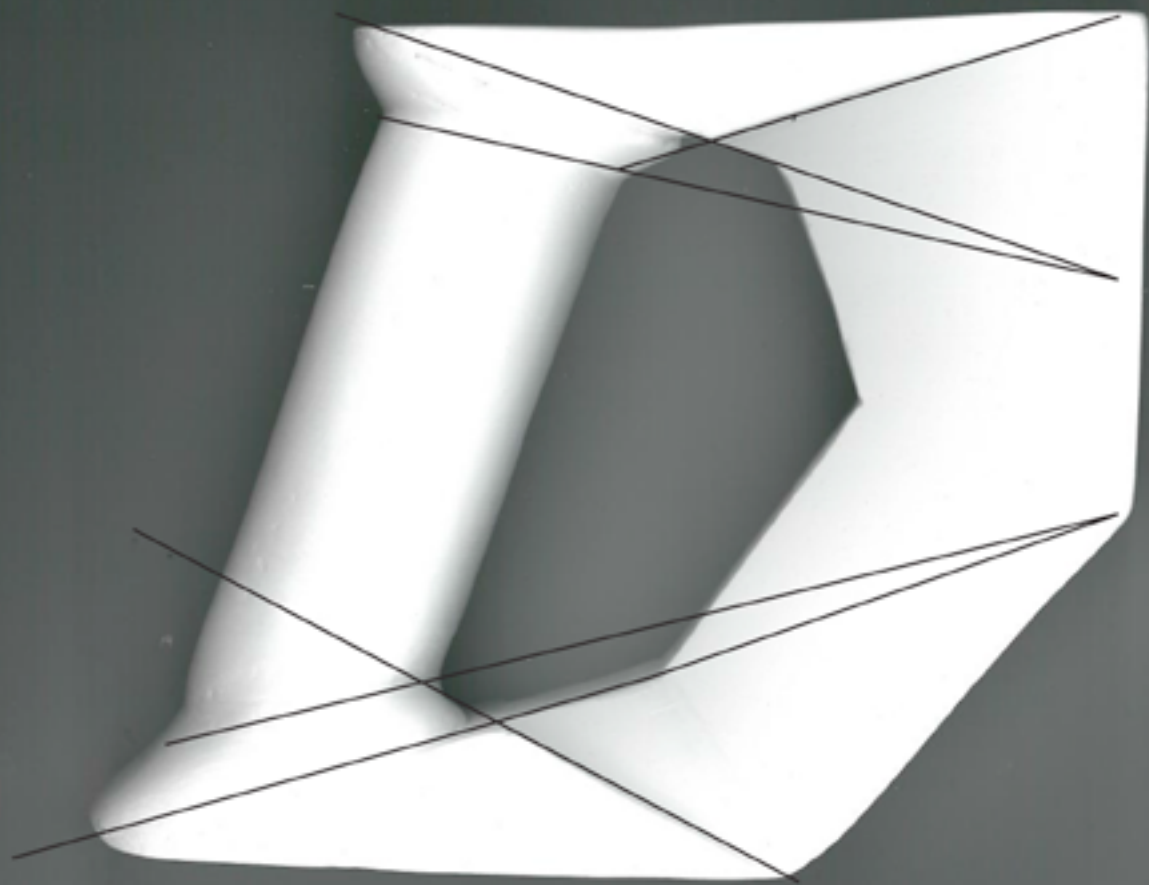
2 modelling result

The result is a better balanced distribution of flesh and space, within the same footprint.



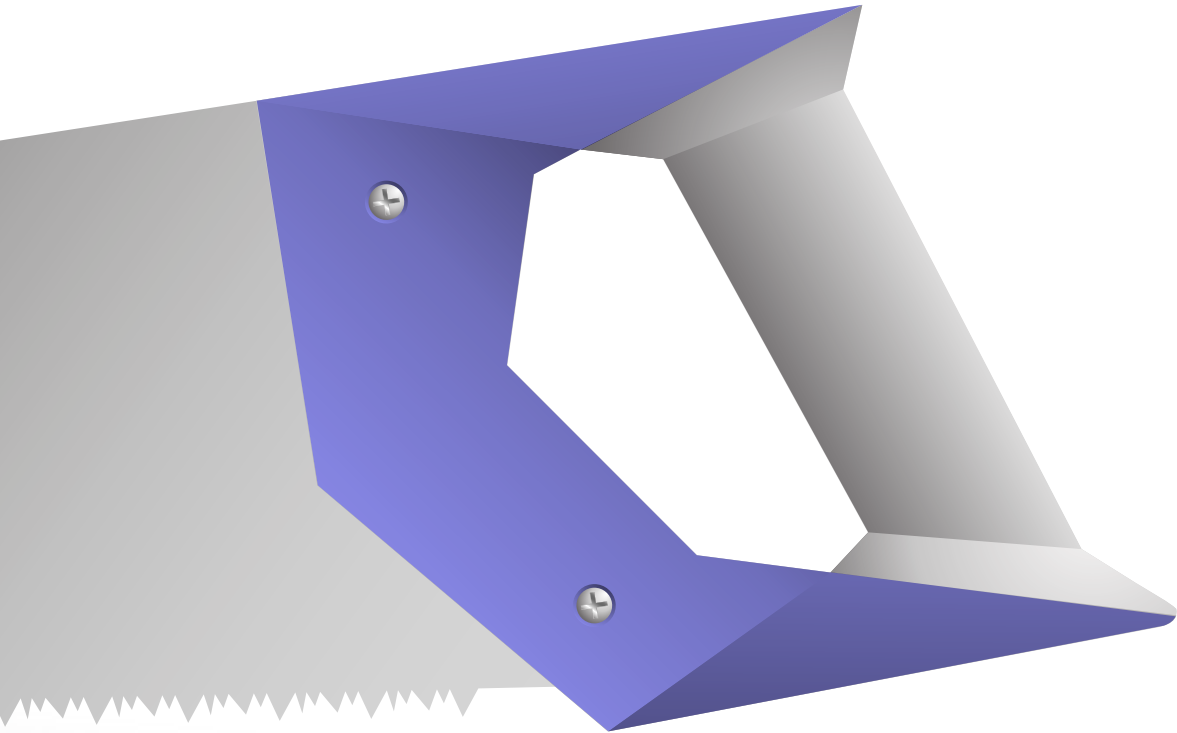
3 Illustrator process

A photocopy of the model reveals the highlights and shadows. The shape is traced with lines in Illustrator. The lines make the basis for the facets.



3 Illustrator result

Every facet is filled with a gradient. The color is a multiplying layer. The image is very sharp. I like the sharp style, but it is not a very open for imagination. It looks very definitive one hand, but also unfinished. The shadow does help in my opinion to create some depth.



4 Photoshop process

The objective is to make a render of a mp3-player. I picked an image of an mp3-player and tried to mimic its appearance. It is surprising how little steps it takes to make a convincing mp3-player. Before this elective, I would make a CAD-model and run it through a rendering program. Very time-consuming and less control over the outcome.



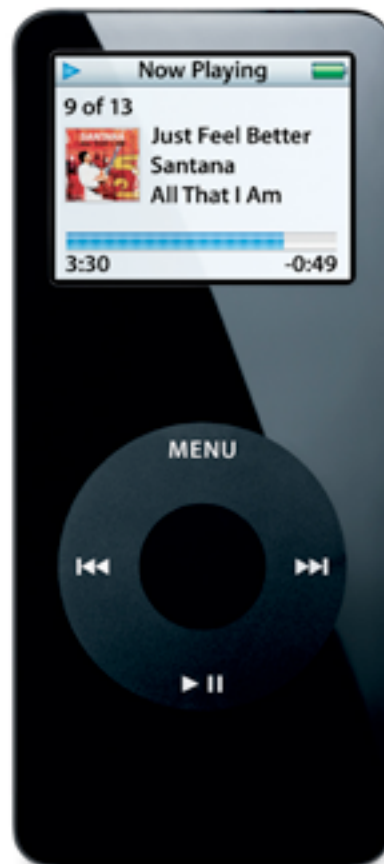


4 Photoshop result

The most difficult part was the progress bar on the display. It is missing the shine of the original. The gray and blue parts are separate overlaying layers. They are created with custom gradients. The click wheel is missing some texture and the overall image is missing the blueish colour.



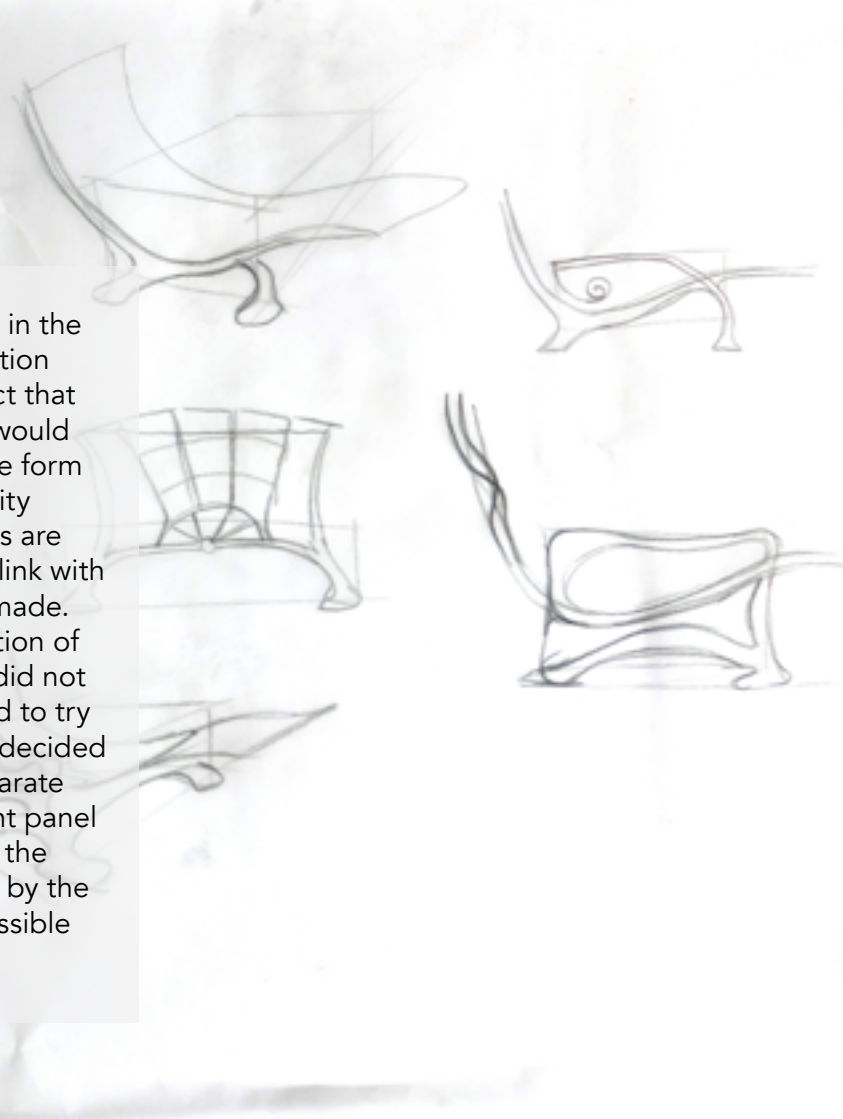
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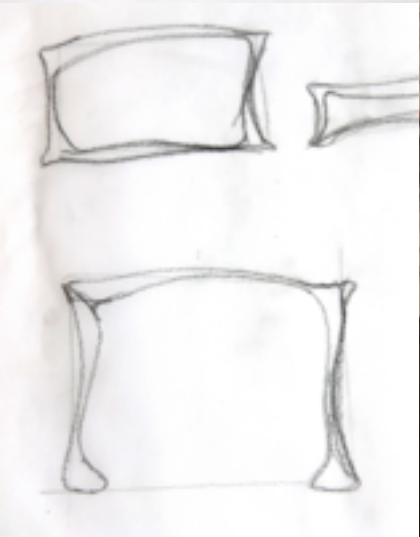


original

5 printer process

The objective is to make an all-in-one printer in the style of, in my case, Victor Horta. The motivation for choosing Victor Horta comes from the fact that the style is very far from my own. I normally would never think of a shape that gets even near the form language of Victor Horta's work. The continuity of the lines and the lightness of the structures are admirable, but how to design a printer? The link with curving shapes and curling paper was soon made. The spiderweb-like structure is an interpretation of the steel and glass roofings, but the shapes did not look very well on paper. That is why I decided to try and sculpt shapes out of foam before I even decided on a general shape. The sculpting of the separate side panels went well. The making of the front panel was more difficult, because it has to connect the two side panels. The shape is partly decided by the fluent continuous connection. This is only possible by making the 3D object.



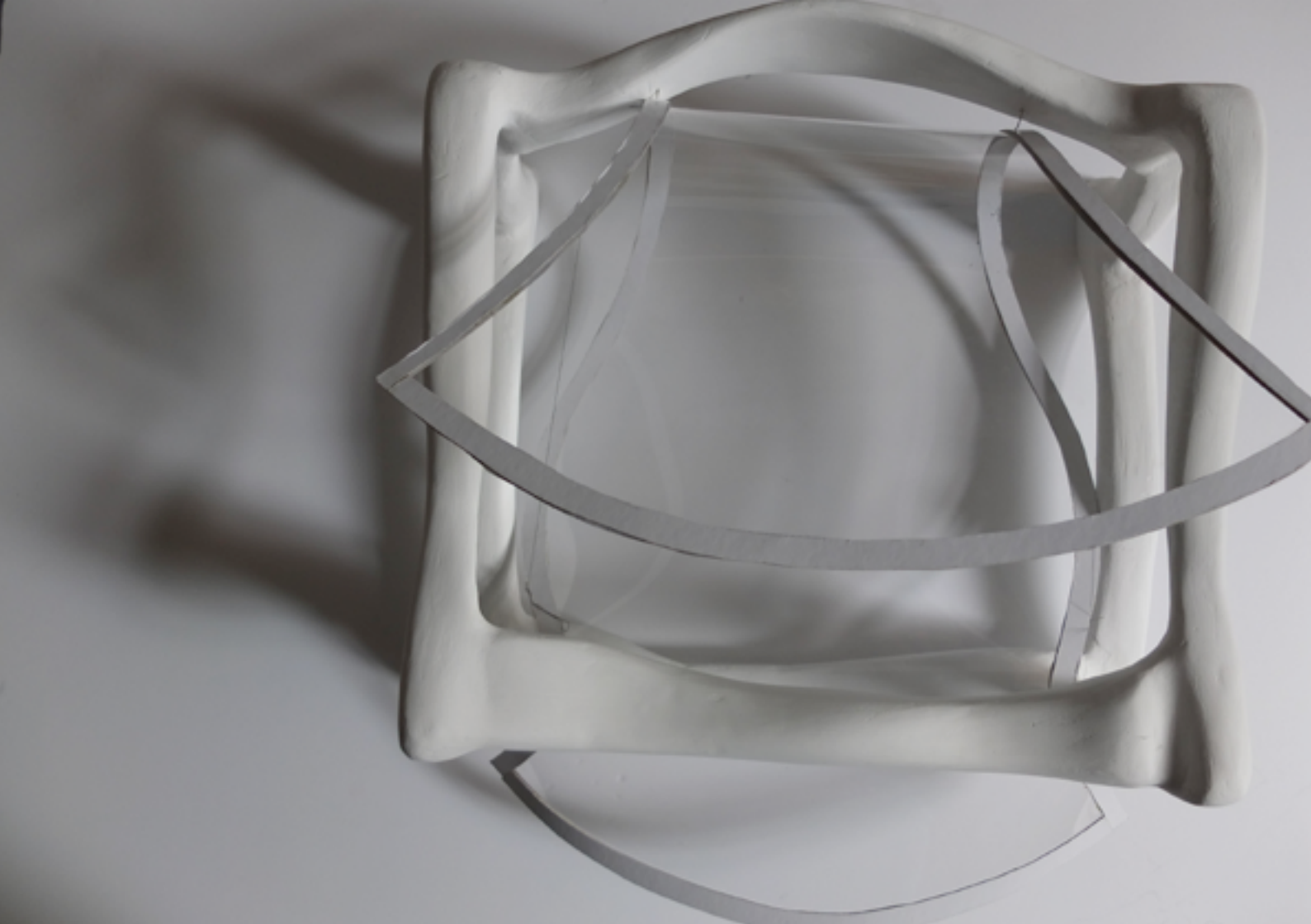






5 printer result

I am content with the result, but I would take a different approach next time. The panels are sculpted from flat pieces of foam. This means that the side shapes are flat in one direction. In the front and back shape I created more displacement perpendicular to the direction of the plane. This is a more complex process, but creates a more dynamic shape. The next Victor Horta all-in-one printer will need these non-flat side shapes and better continuity from panel to panel, so it becomes more of a whole.



reflection To Make is to Grasp: From Sketch to 3D

The level of this module is high. Most of the students delivered great work, which motivates everyone to work really hard. The working atmosphere was very good. Students are willing to support each other. The value of going from sketch to 3D and back is clear to me. I experienced two times that I had to change my design thanks to the 3D making process. The best class in my opinion was the foam modeling. It is clear to me that you should always search for the right tricks to reach your goal. There is not one best method. I gained this insight thanks to the demonstration of practical methods used during the classes.



