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# Pictorial Basic Formgiving Skills

**Josefine Funnekotter**

Eindhoven University of Technology  
Den Dolech 2  
5600MB Eindhoven, NL  
j.o.funnekotter@student.tue.nl

**Abstract**

In this pictorial, I will show my process throughout the course "Basic Formgiving Skills", that I followed in my Bachelor Industrial Design at the TU/e. I will show the assignments I did, the feedback I got on my work and I will reflect on it.

**Authors Keywords**

Form giving; form integration;  
form families; sketching

**Introduction**

The course is built up in several assignments, which will be shown in chronological order. They all have a certain function in my process, which I will cover in my reflections.

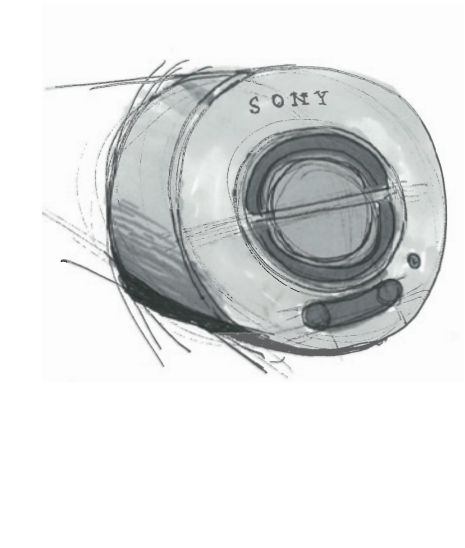
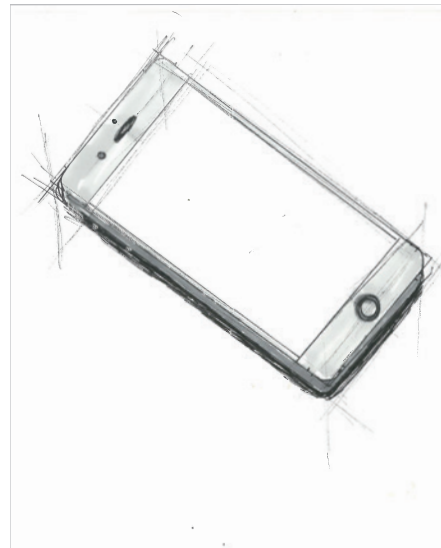


### Assignment one Form abstraction

In the first assignment, we sketched three items in or around our home environment. The goal was to go from a very abstract form, in which you show the basic shapes of the object, to a detailed sketch.

The sketches underneath my chosen objects, are the most detailed ones. I chose these three objects, because I could see different kind of basic shapes in them. Especially the key and the speaker were a challenge, in my opinion. They both have a lot of details and I thought that was not easy to recreate.

In class, I presented scans, instead of my real drawings. Fortunately, I had my sketching book there, as well. I got the feedback that scans do not show as much of your process as the drawings themselves. I also realised how important it is to present your work nicely. The sketches that were selected as best in class, were usually presented in an organised, neat way.



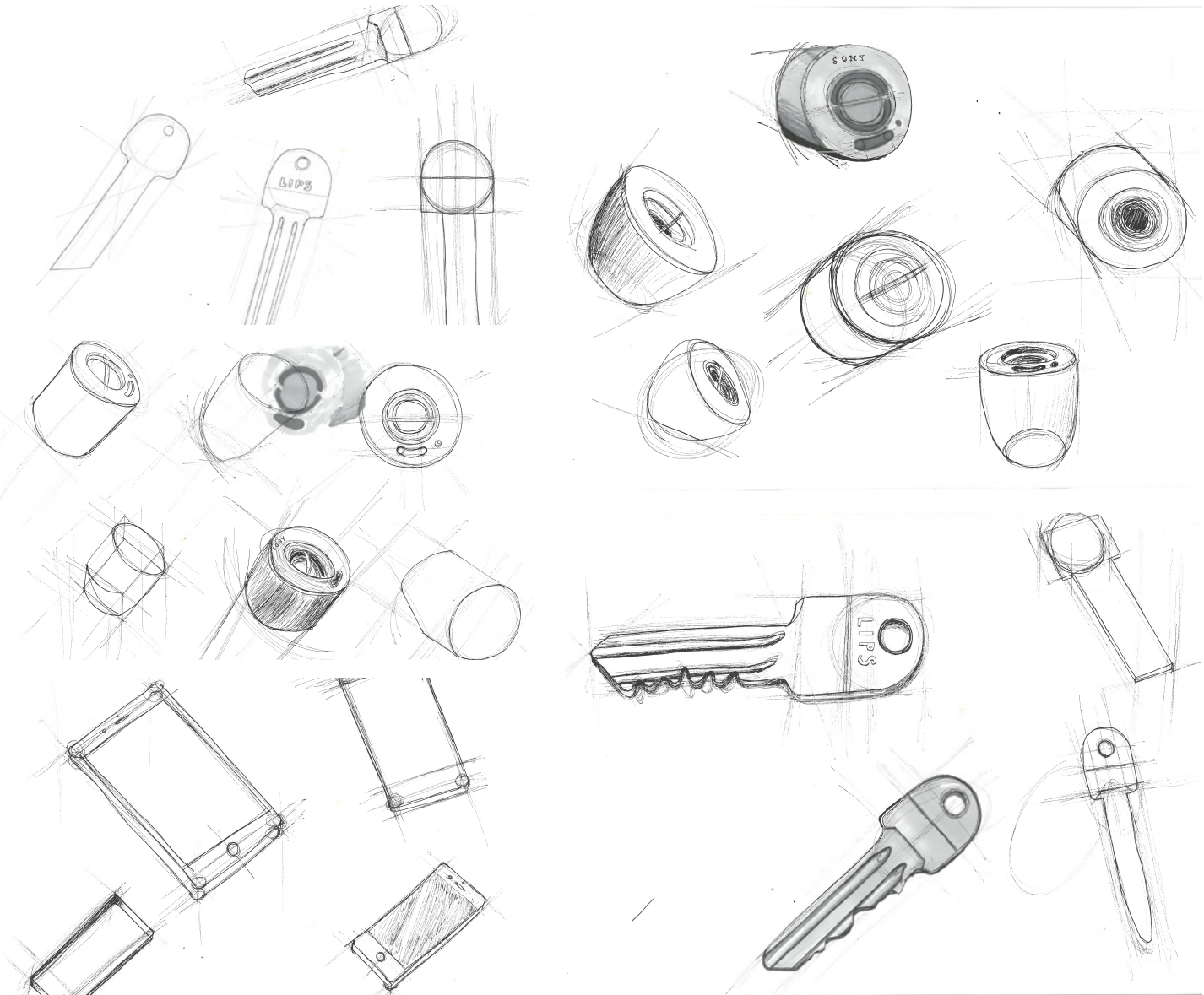
In the photos on the right, you can see the progress from basic forms, to more detailed drawings.

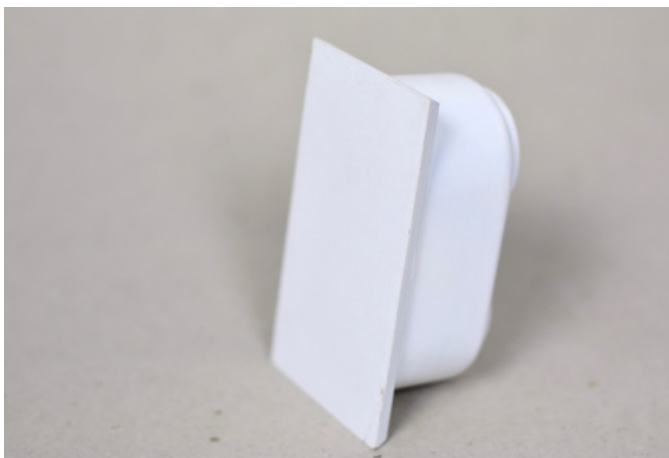
For the key, I drew circles, combined with a rectangular form. I added some lines and shadows, to make it more realistic. The next step, was adding the details of the key, that make it unique.

In the phone, I mostly saw a rectangle, or a thin box. The edges were rounded, so I drew circles to make it easier to create that. As I went on to more realistic sketches, I added some details, like the button and the front camera. I had most difficulties with making the screen look 'shiny'.

The speaker is a cone, that is cut off on two sides, but with a rounded back. I liked drawing this one the most, because I thought the shapes were clear, but also challenging. The most difficult thing for me, was creating the depth on the inside of the speaker.

In my 'final' drawings, I used some grey markers. It was a way to practise my shading skills and to learn how to work with these markers. You can see from one of the scans, that I did not realise the ink would leave a mark on the other side of the page. That was a good learning point, too.





### **Assignment two Product copy**

In the second assignment, we needed to make an exact copy of a certain wall socket. The focus was exactness and finish.

I started off by measuring all the compartments of the socket, and then bought materials. I made my socket out of MDF, used putty to make it more smooth and then spray painted it.

I was happy that my socket ended up in the top five. This was probably due to the finish, which was quite good. The feedback that I got, was that the measurements were not correct, especially from the rings. I also put the metal parts the other way around and the colour is slightly too white.

I experienced how important it is to think of the way you are building up your product. I had difficulties adjusting the inside of the cylinders, because I already glued it on top of the base. It also taught me to be patient and precise, because you easily make mistakes, when you are in a rush. This seems obvious, but it was very helpful to actually experience it.



### Assignment three Material study

The third assignment was meant to go explore different materials. It was instructive to make the same shape out of different materials. In this way, we got to understand how to manipulate them.

The wood I chose, is called wenge. I thought the dark colour was beautiful and I liked the tiger-like 'print'. The second block is made out of candle wax, which I melted, and dripped into a mall that I made out of gypsum. After that, I adjusted it. The stone material is soap stone. I think the three of them match well, colour-wise.

Wood was definitely the easiest to adjust, because it is firm, yet quite forgiving.

Candle wax did not work out the way I wanted to, and because of the colour differences, it looks less neat and correct than it actually is. Unfortunately, I lost a lot of time by dropping my first soap stone. It takes quite some time to work with this, because I did it all by hand. The pink soap stone looks very soft, and that makes it hard to get the sharp edges look sharp.



The feedback I received on my blocks, was more or less the same as what I thought of it. Although I liked that fact that I went for something as unusual as dripped candle wax, it did not work as well as I hoped. The positive side was, that everybody was interested in it and thought it was an exotic kind of stone.

On the wooden block, I got quite some positive reactions. There were some small flaws in the shape, but it was the best out of three.

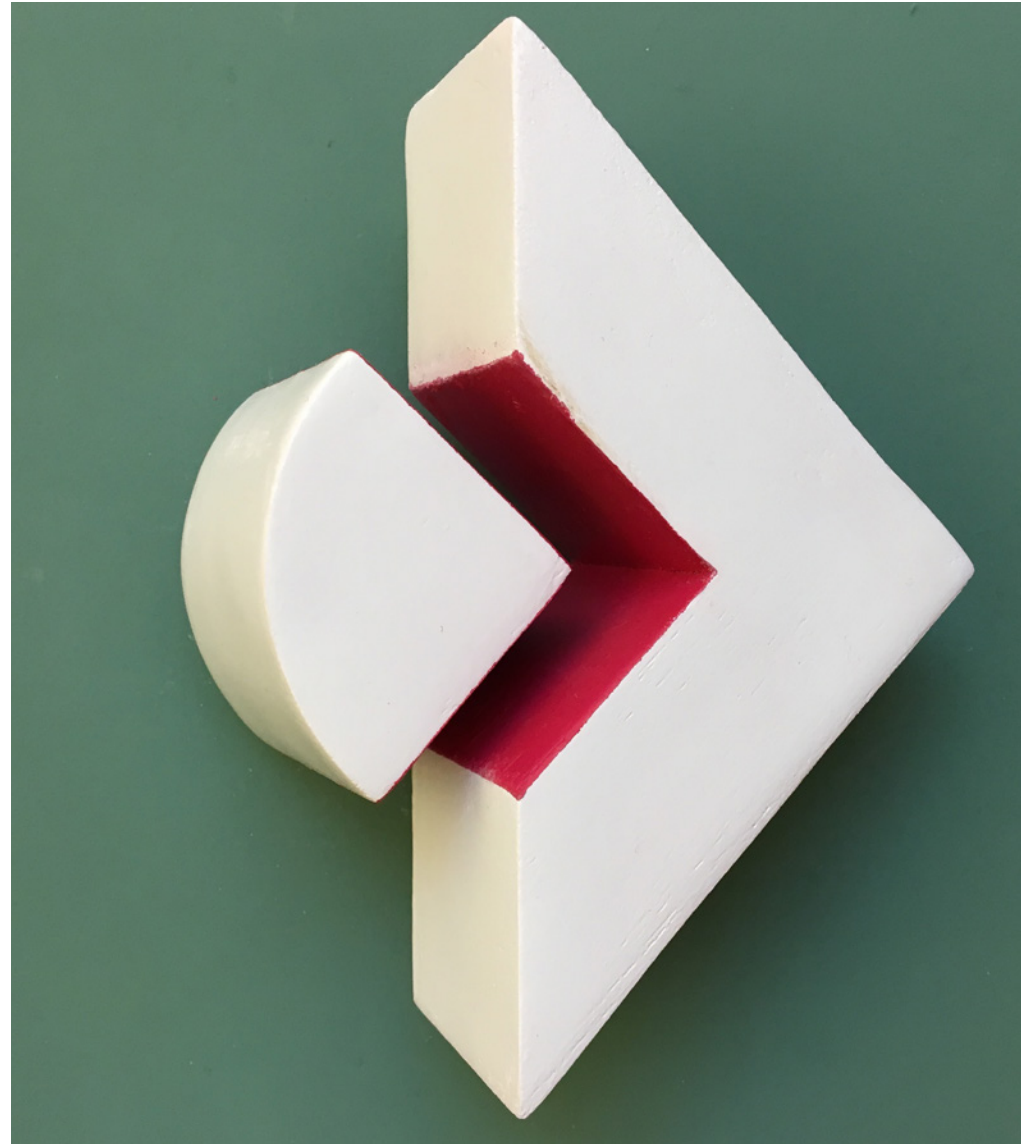
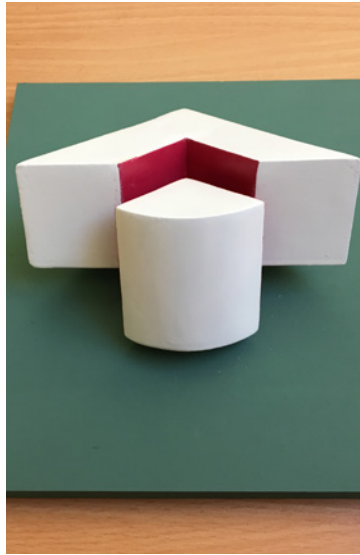
The soap stone looked a bit too soft, so it was hard to distinguish the shape well.

I would have liked to make more little blocks, but I could not find the time anymore, after dropping my soap stone. Especially more kinds of wood would have been nice to explore. Though, I was happy with my choice of wood.

#### Assignment four Form integration

To learn how different shapes can be connected, we combined an angular shape and a rounded shape. We were to explore how you can make two basic shapes look like they belong together.

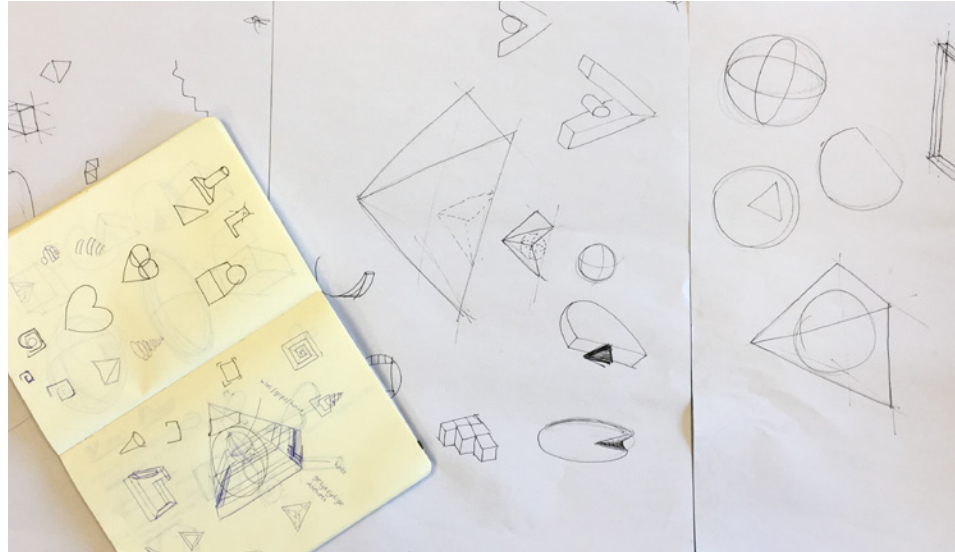
I already knew that I wanted to make something clear and clean. I looked for inspiration in *Design* (Bürdek, B. E., 2005) and found the Scandinavian styles the most interesting. The contemporary Scandinavian style is also what I like. It is organic and simple, yet stylish. I mostly liked the Dr. No Armchair and Dr. Na Table, by Philippe Starck, Kartell (Bürdek, B. E., 2005, p.142). It looks soft and clean and I am a fan of pastel colours.



After looking for some inspiration, I started making sketches. At first, I wanted to make a sphere that was integrated in a pyramid. The pyramid would be in sort of a spiral form. It would be really difficult, and that is the feedback I got as well. It was suggested to make a spiral, that would go from cylindrical to a pyramid form. Still, it would be quite difficult, yet a nice challenge.

My other idea, was to integrate a quarter cylinder in a block/cube. I made a foam version of this, actually by accident. It is in the back in the bottom photo.

I went for the second idea, because I liked it as much and I thought it was more achievable for me. Because it was so simple, I realised I had to make sure it had a nice finish and that I maybe should play with heights, or add something to it. I decided to tilt it, as if the cylinder would 'slide' out of the block. In addition I wanted to make it look like the cylinder was cut out of the block, by painting the 'cutting parts' in a different colour than the rest of the object.

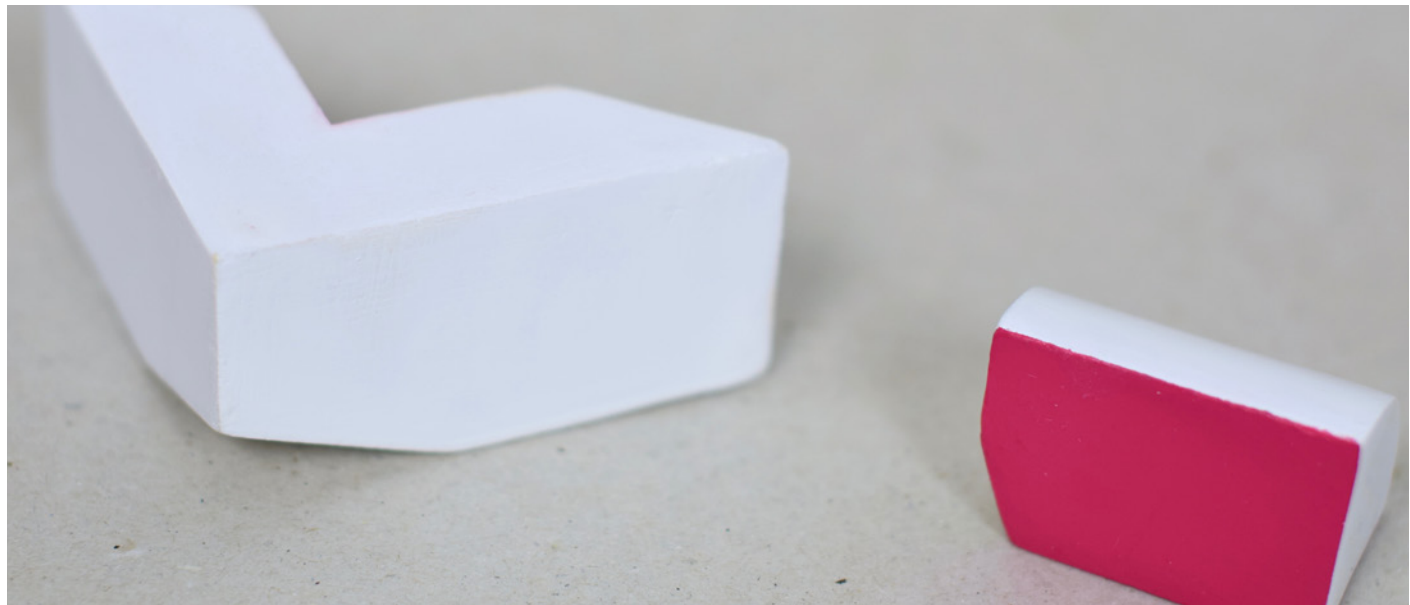
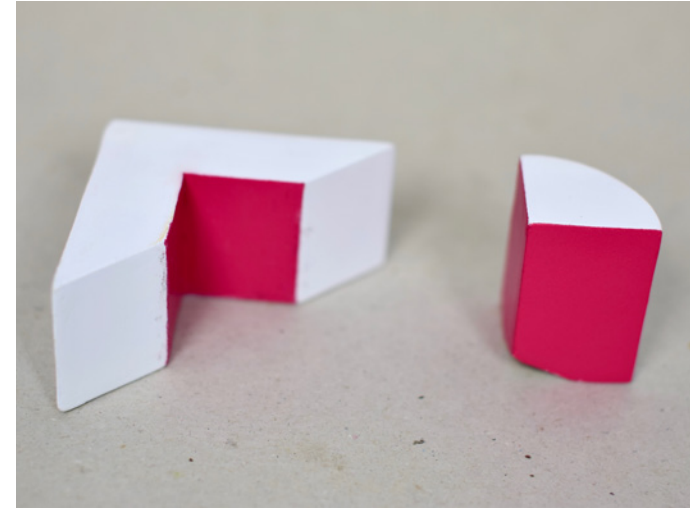
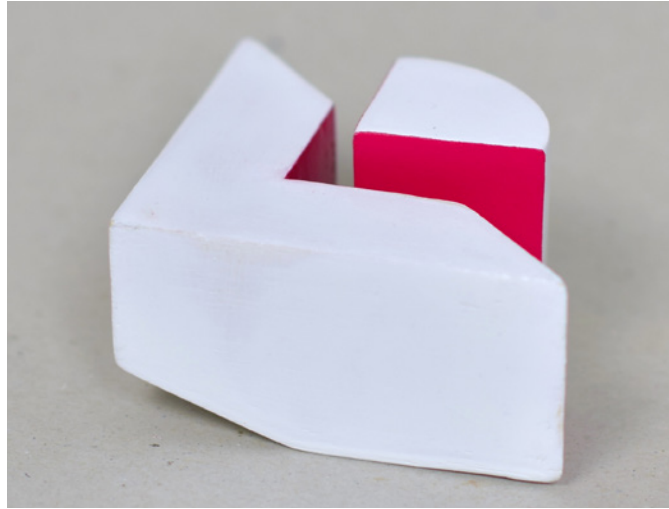




In the photos on the right, you can see the objects. The blocks are made out of wood and they are spray painted.

In the lecture, I presented my form integration as in the first photos; tilted, on a green platform. There was some discussion about that in the feedback session. My conceptual clarity was a point of discussion as well, because my forms are not integrated in the sense that they do not touch. Though, I think it is quite clear which shapes I used and that they belong together. It looks like they used to be one piece, because of the colour difference.

I am happy with the finish, because the pink spray paint was quite tricky to work with. I was afraid it would drip, but fortunately, that did not happen. This assignment turned out the way I wanted, which I am glad for.



### Assignment five Form family

In the last assignment, I combined all the previous assignments. I learned how to construct certain shapes, by knowing how these can be built up and practising to sketch. Then, I learned about exactness and detailing, by making a copy of the wall socket. The blocks challenged me to work with a variety of materials and the form integration taught me how you can combine forms.

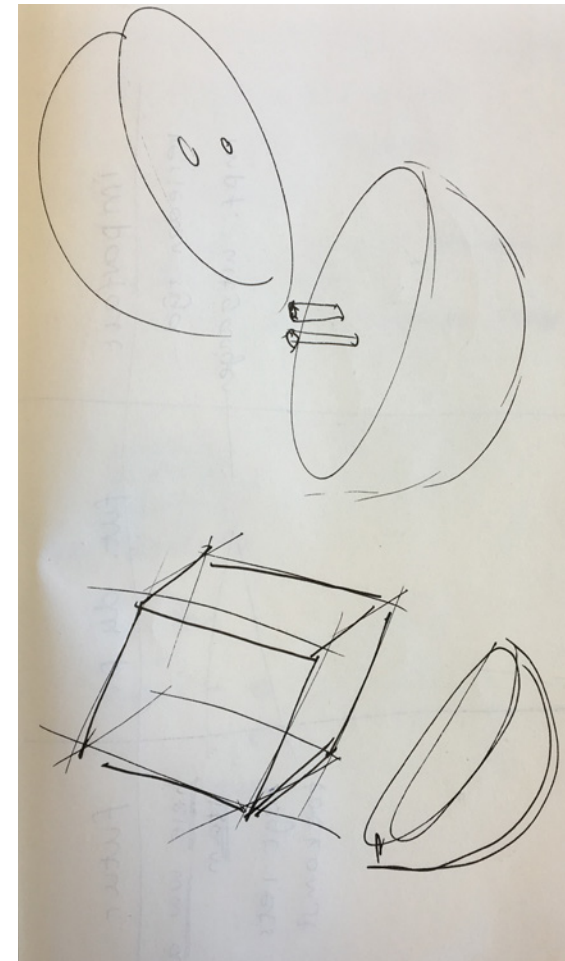
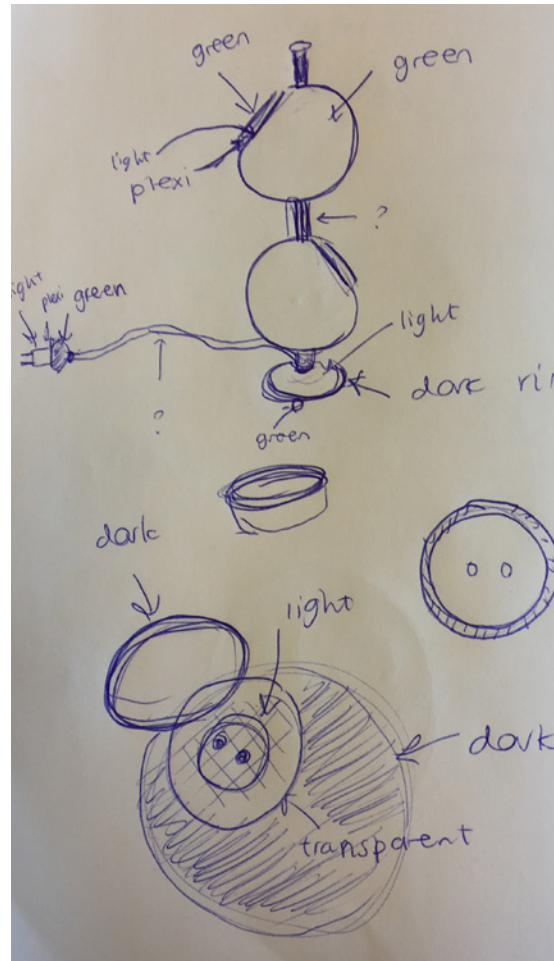
With all of this practice and knowledge, we were to build an extension cord, including a plug and a switch.



For this assignment, I could not really find inspiration at first. I really did not know what I wanted to make or what kind of materials I would use.

Then, I thought of spheres and I knew I wanted to do something with those. I made some drawings of half spheres, but I got the advice to use another way of adjusting them. Half spheres could be a bit boring. I decided to work with spheres with a smaller cut.

Unfortunately, I became ill, shortly after the first feedback session, until and also after the final presentation. This caused a lot of time management issues for me, and I ended up just having two days to make my extension chord.

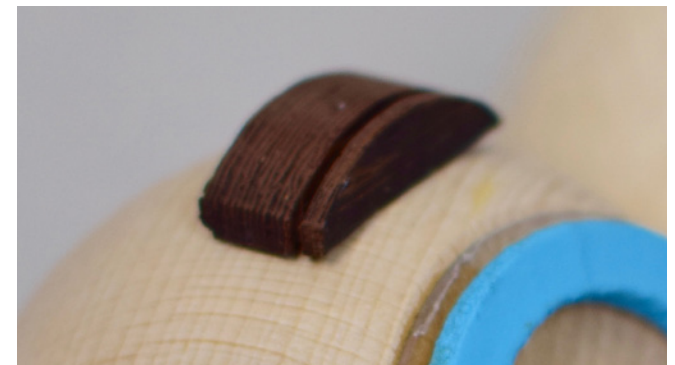
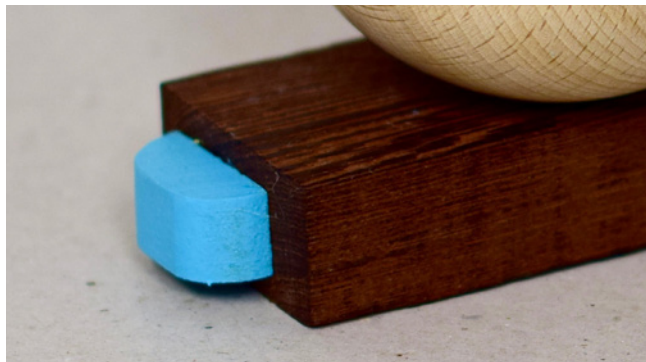
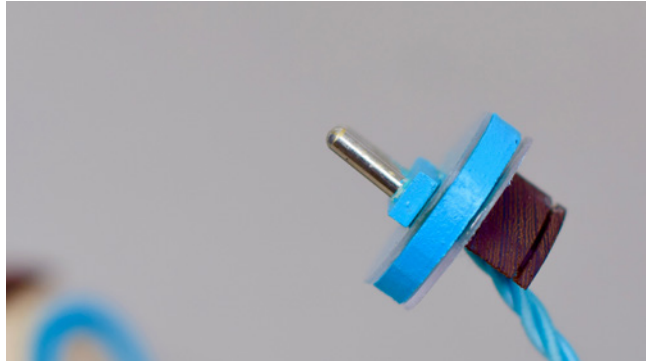


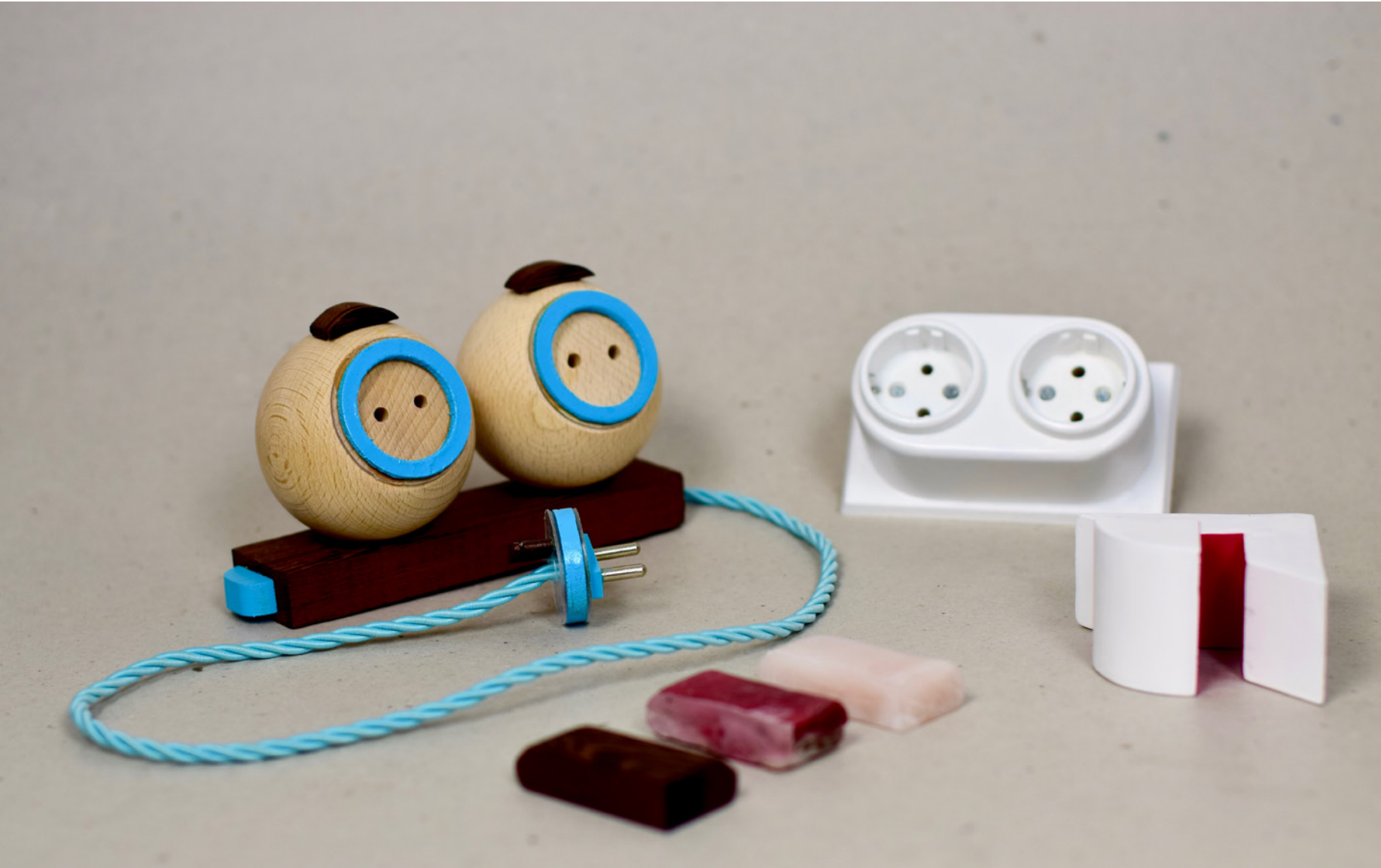
Because I did not have the time to work out a clear plan, I made most decisions while making and just tried out what worked and what did not. It is a pity that I could not receive feedback on my final extension chord, but I tried to take the feedback that I heard in the lecture with me.

The base is made out of wenge, which I also used in the material study assignment. The details on the plug and on top of the spheres are wenge, as well.

The big spheres are also made out of wood. The core of the plug, the switch and the rings on the spheres, are all made out of MDF, which I spray painted in a bright blue colour. I wanted my wire to be the same colour as these blue parts and I thought they provided a nice contrast to the two types of woods. Between the rings and the spheres, and on the outside of the plug, I used vivak.

I can see that my finish is not as good as I would wish to. I would have wanted to putty the MDF parts better, or maybe use another, better looking material. Some glue is visible, too. But I am happy with my concept and the colours. I also think it is a clear form family.







### Acknowledgements

I would like to thank the teachers Joep Frens and Bart Hengeveld, for their weekly instructions and feedback. In addition, I want to express my gratitude to my fellow students, who frequently gave me advice and feedback on my work.

### References

1. Bürdek, B. E. (2005). Design: History, theory and practice of product design. Boston, MA: Birkhauser Publishers for Architecture.

### Personal reflection

I have to admit that I was a bit scared, before taking this course. I was afraid that I would not be able to do well. I think that that is the most important learning point for me; I am capable of making nice designs, with a rather good finish.

Apart from this very personal learning point, I learned a lot of practical issues. Like I mentioned in the product copy assignment, I found out the importance of knowing the construction of what you are building. The order in which you make something, makes a big difference in how difficult you make it for yourself. I also got to work with machines, putty, spray paint and various materials, more than ever. I know what works for stone, what works for wood, how to create a rounded edge, or a sharp angle. I just know better how to manipulate materials, and what kind of effect you create with them.

Building objects was the main thing in this assignment, but I also improved in presenting my work. I know now that I always have to put my name on or next to it and what works to make your design look even better. This knowledge, I mostly gained in class, because I was much inspired by some fellow students. That goes for their work as well, as some made impressive objects, every week.

From the book (Bürdek, B. E., 2005), I mostly learned how designs are built up and how you can look at design from different angles. I also thought the different countries were interesting to see, and it is remarkable that I always tend to go back to Scandinavian design. I did not apply a lot of the things I read to my designs, because I liked to be creative and come up with my own ideas completely.

I am happy with how I went from not really knowing what I was doing, in the "Learning how to look" assignment in class, to this set of designs I made and that I am proud of. I know a lot can be improved still; I want to work with more kinds of materials and I want to finish my work better. These things, I can take with me, in future projects.