Let's talk about
Project documentation

Lisa Merk & Viola Vallon

Let's talk about

Content

Abstract

As design students who are about to graduate, we asked ourselves what it means to enter the professional life as a designer. We wanted to investigate how a young designer is able to make a living within the design profession. Additionally, we explored how we can include Northern European industrial manufacturing into our research and design process to learn more about mass production and its potentials for the design process as well as the results. So far we have not used production possibilities as a starting point.

On a theoretical level we explored these questions by conducting 18 interviews with designers, design studios and design brands. These interviews gave us many insights on their practice, experiences, their ways into the professional lives and the importance of the producing industry for their daily work.

Furthermore, as a transition into our practical work, we collaborated with industrial manufacturers, to benefit from their knowledge and production technologies. We were able to use some of their materials and production tools as a base to develop a furniture collection. By starting the creative process with given materials, new doors for creative concepts opened up. Not only our prototypes gained in quality by using production processes that we could have never realized ourselves, we could also assured that all our furniture pieces have the potential to be produced in series.

From the interview material we gathered and the insights and knowledge our interviewees provided us with, we were able to compile a list that encompasses the essence of important tools for all designers. For design students who are about to graduate or just graduated, as well as for someone who considers studying design, this investigation can be used as an inspiration. By providing knowledge, about which strengths and skills are needed for the design practice and how these should be developed early on, we want to help people to set a focus early on. The furniture collection that results out of this elaboration can potentially be licensed by furniture brands and bring us closer to starting our own business.

Let's talk about

Theoretical part

Foreword

Some people see design as vocation. What makes the design profession so exciting for us, is, that it is very diverse. Our passion for craftsmanship and technology can be applied in equal parts and will lead to versatile projects. We will enjoy working as designers, but also demand that the profession, especially when employed, relieves us from financial pressure. We see design as our profession with which we want to be able to enter the market and find a job. With the question of how to make a living as a young designer, we came across many questions that we would like to follow up on within this thesis project. We will address questions on ways on how to enter the market, ways of working as a designer, the potentials of mass production and the production process. We found some answers and guidelines along the way that we will address later on. We are sure that the raised questions are interesting for more people. The outcome of this thesis will allow readers to engage with these questions on a deeper level. We plan to publish the content on an online blog and the documentation will be available in the library at Lund University / IKDC.

Word explanation

We would like to define a few words that will be repeatedly used within this thesis. When writing about the "successful designer", we do not talk about designers who gained a pop-star status like the Bouroullec brothers or Patricia Urquiola. We talk about ordinary people who make a living with design. The amount that one needs for each individual's livelihood should not be determined at this point. What matters is, that the everyday life including rent, food and the expenses to run a business are covered. The word „successful" simply describes the ability to live a normal life, neither in poverty nor in excess wealth. What exactly that means can be defined or even calculated by each self.

If we talk about a "young designer" or a "young professional" we describe a person that studied product or industrial design (or equivalent) and is not yet fully fledged on the market. The graduation might be five years past, but what matters is that transition from being educated in design into earning money with the design profession has not yet taken place or is still in the very beginning.

If we write about "the industry" we specifically talk about the producing industry. More precisely this includes manufacturers and material suppliers. Whereas furniture brands, that produce by themselves and sell their products, in our definition don't belong to this category. We rather call them "brands" or "furniture producers".

Other than that, we want to clarify that many of the questions we raise might be similar in other professions, especially if it comes to topics of how to enter the professional life or how to make sure to earn enough money to sustain oneself. However, since we both come from a design education, we focus on the design industry. Within this thesis we will solely talk about it from a designers perspective.

Where we started off

It was in the middle of the 3rd semester of our master education when we started to talk about potential topics of our thesis project. Both of us have graduated from different bachelor level design programmes before we started the master at the School of Industrial Design in Lund. Also, we come from different regions of Germany. One of us is from the far south, the other from the North. We both have different perspectives on topics and aesthetics and have each set an individual focus during our former education. It was clear from the beginning that we are quite different. We think different, we create different and we have different approaches to design. Since we have already done a project together in the 2nd semester of our master education we have learned, that the "being different" actually gives a great quality to our work. Our first project got better from working together, because we were able to understand the others mind-set and then find a middle ground or a completely new direction.

At the point where we had our first conversation about a potential thesis topic, both of us got stuck with the question of what the design education has taught us. Reflecting on our bachelor education, as well as the first master semesters, we noticed, that in many projects the focus was set on local manufacturing. The overall topic might have been a different one, but it was often asked to think healthy, local and on small scale. It felt like there is a growing void between young designers and the production industry. Using local sources and trading regional is very popular at the time. Of course local production with regionally sourced materials, produced in a small batch production, doesn't harm the planet as much as a large-scale production somewhere in Asia might do. But we asked ourselves whether there is not an approach mediating these quite oppositional perspectives. The other thing we discussed was that we both know many former study peers from different universities who already tried to enter the market. Many of our friends had to do endless and unpaid internships to then not be hired into a permanent position afterwards. For many design graduates, one internship followed the next until they might be "lucky" enough to find a position somewhere. The term "generation internship" applies here. Also, today a lot of contracts are temporary. Many of our

friends started to work in design unrelated fields or if they work in design, they can hardly afford their livelihood and often have side jobs. Both of these topics were equally interesting to us. We thought that we could combine both topics to ask questions about design that addresses a new generation of designers who are about to enter the market. These two topics are:
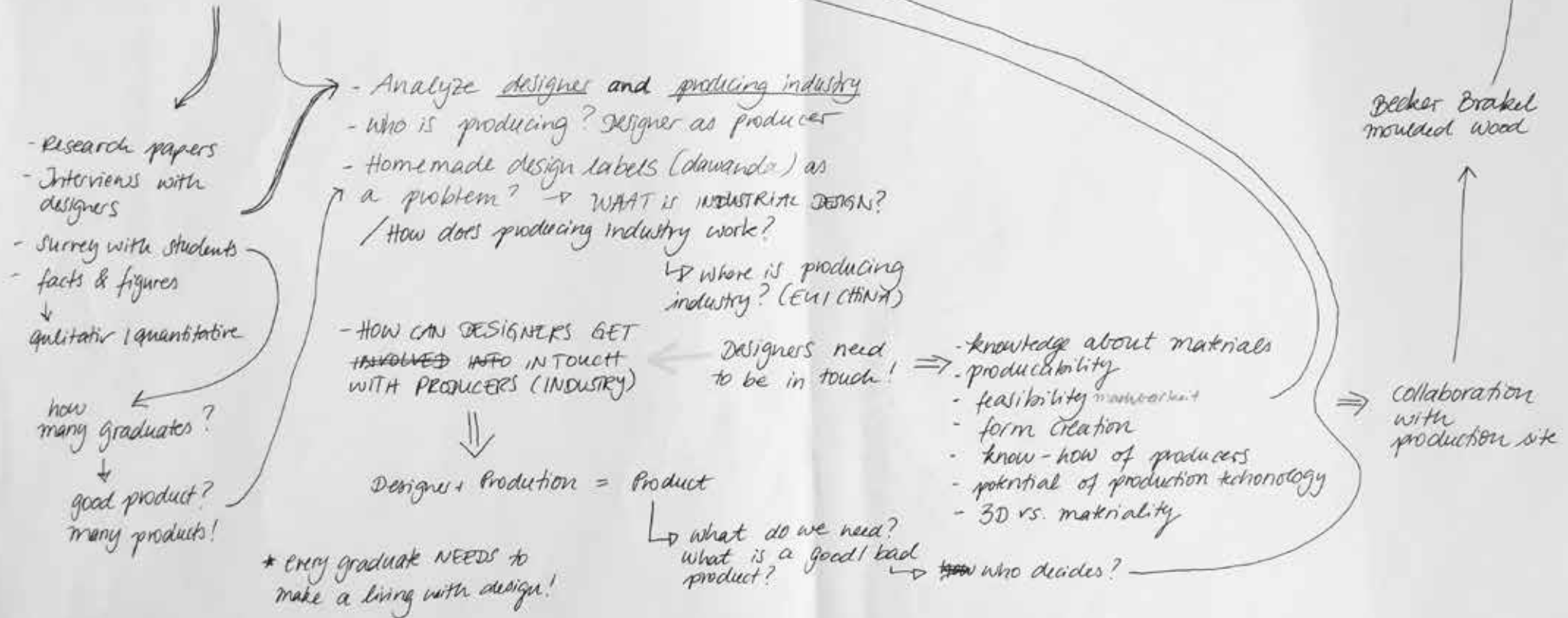
1. How can a designer after graduation be able to make a living?
2. How can we work within an industrial manufacturing set up within northern Europe to learn more about mass production and its potentials for the design process?

THEORETICAL PART
+ PRACTICAL

STARTING POINT:

- no connection to producing industry
- What defines us as industrial designer?
- EU VS CHINA (GLOBALIZATION)
  - ↳ possibilities to produce as young designer
- HOW TO ENTER DESIGN INDUSTRY / WHAT TO DO AFTER GRADUATION

- Market analysis → OUT design project
- product concepts

→ further producer for additional materials

Becker Brakel moulded wood

- Research papers
- Interviews with designers
- Survey with students
- facts & figures
  ↓
  qualitativ / quantitativ

how many graduates?
↓
good product?
many products!

- Analyze designer and producing industry
- Who is producing? designer as producer
- Homemade design labels (dawanda) as a problem? → WHAT IS INDUSTRIAL DESIGN? / How does producing industry work?
  ↳ where is producing industry? (EU / CHINA)

- HOW CAN DESIGNERS GET ~~INVOLVED INTO~~ IN TOUCH WITH PRODUCERS (INDUSTRY)
⇓

Designer + Production = Product
↳ what do we need? What is a good / bad product?

* every graduate NEEDS to make a living with design!

Designers need to be in touch! ⇒
- knowledge about materials
- producability
- feasibility manufactur
- form creation
- know-how of producers
- potential of production technology
- 3D vs. materiality

↳ ~~ye~~ who decides?

⇒ Collaboration with production site

Proposal
Initial proposal

As industrial design master students, we want to research the growing void between designers and the production industry. Doing so, we will take a closer look at the development of producing industries and production methods in northern Europe over the last century, to find out how young designers can (re)engage with the industry. This research aims to demonstrate how industry can provide a valuable and inspiring surrounding for designers.

Design as we know it today gained its importance in the mid century. It happened at a time where designers started to invent their own production processes and created new qualities in furniture design. After the two world wars the production processes and industrial sites in Europe went through a big change. In the last 70 years production industries have seen golden years as well as regression. Designers have created many items that went through large scale, local production industries. Today we are in the midst of globalization, which makes our world and also product design incredibly international. One price we pay to live with globalization is that almost all kinds of industrial production moved to China. Cheaper material- and production costs, affordable container transportation and low salaries make it possible and financially worthwhile to produce on the other side of our planet.

However, we can still find some "lonely fighters" in the industrial landscape of northern Europe. Some examples of industrial fields are metal workshops, wood manufactures, and companies that work with plywood, plastic processing, glass blowing, or textile industries. Of course, to produce in local factories is much more expensive than production in China. Producing a few prototypes is usually more costly than having a large number of items in production.

For us as design students it has been difficult to get in touch with the "real" industry. Throughout the studies the focus during lectures about production processes, assembly and sustainability was often set on local production and small manufacture lines. It is appropriate for the design industry to use regional production with local materials in a limited quantity that provides an infinite lifespan. Certainly, it is a good approach to be aware of the resources and the handling of materials. During design education it is important to focus on best-case scenarios, however, we should not lose track on how the actual working environment of an industrial designer functions and which possibilities they offer.

There are many young designers who do not know how to reach the industry and where to start working after their design education. Thus, many of them start to create their own small businesses within which they produce small-scale design lines that are locally produced or even homemade. One can find many designers on portals like Etsy or Dawanda. Designed objects like cast concrete objects or knitwear are likely to be found here. This kind of "domestic design" is a way for many designers to stay actively creative. Does this level of design satisfy the market for necessary products?

Referring back to design education, it is unlikely for a young designer to get support or advice from bigger producing enterprises when building a prototype. During our studies we cooperated with local producers such as the carpenter who works next door. We see the advantages and the meaning in producing small scale, however, we want to discover the industrial landscape of northern Europe to find out where a young designer can find access and connections to production industries.

Within this investigation we want to gain a greater insight into the shrinking industry of produced product design. Gaining a clear and more complete understanding of the relationship of design and the industry might allow us to discover unknown possibilities and understand the advantages that industrial production can offer.

We aim to find a way to open up the industrial production for young designers and make production processes more accessible.

Finally, we want to find an industrial manufacturer to team up with. To create a connection between designers and these still existing companies will allow us to discover what benefits

and opportunities arise from a collaboration. Instead of seeing local workshops as the opponent of industry, we want to point out the advantages of industrial manufacturing and benefit from them.

As a practical outcome of this research, we hope to develop a collection that is inspired by tools that our industrial partner offers. We want to turn the design process upside down by using off-shelf components, radii and angles that our partner company provides, as a starting point of our design creation. With these components we will create a furniture line that tries to push the limits of variety.

The methods we will use for the theoretical elaboration are mainly related to literature. We will be visiting different large-scale productions sites to get an understanding of the possibilities for collaborations. Furthermore we plan to include interviews with employees of industry sites as well as with established designers to get another assessment of the accessibility to the industry. Getting in touch with small design companies that are successful in the field of product design, might allow us to work on a case study. Moreover, we plan to collaborate with a company that firstly, helps us to understand the difficulties of the entry point for young designers and secondly, helps us to produce and/or equips us with components for our final prototypes.

This is how we understand design:

Our design is created out of the purpose and curiosity to discover production methods. What drives us, is the exploration of how to design for the market including the different possibilities of production. We aim to create furniture that is well developed and manufactured and that has a potential to be mass-produced in medium scale. All products within this line should be coherent with our understanding of using design as a tool to add a value and function. We also see design as a tool to find answers to the former addressed questions. Some of the answers will be visible in the products that we produce in collaboration with industrial manufacturers.

Essays
lets talk about ___

The potential of industrial production
Small scale vs. large scale

To produce a well-executed, marketable product, a designer needs good collaborations with companies. The design profession relies on producers or workshops that can share their expertise in areas where a designer usually has little knowledge. It is very difficult for a designer, to make oneself independent from producers if one actually wants to create good products for the market. Eventhough we studied design for some semsters now, we think that there is a potential in industrial production that we have not yet experienced. We imagine that a designer and a producer should always be in touch and exchange ideas on possible solutions to achieve better results.

Design is often used where it is decorative and not where it is necessary. Many design graduates are far away from seeing the design practice as a tool, which can be used to change political and social systems. Since it seems to be difficult for many graduates to find a suitable job, many start their own small-scale businesses. Platforms like Etsy or Dawanda animate people to produce homemade items and encourage designers to sell their products in the online shop of the platform. It is not only the platforms that we want to criticize. The given structures lead to the result that our market does not allow young designers find their spot. Platforms like Dawanda offer a way out. Drastically expressed, this detour ruins the design market even more. Who chooses this path shoots ones elves in the foot. Securities that one gets in a "real" self-employment or an employment will be omitted. That means that no social security contributions are made and the users do not pay any (state) pension contributions. In addition, the design profession loses value by being equated with everyman's craft. A differentiation, which products sell, is not made as long as they are self-made.

Design determines, to a considerable extent, which recourses can be used, how much energy we consume and how we pollute the environment. All these smaller sub-points need to be seen in the global context as well as in the everyday design practice of a designer. Especially when it comes to industrial production the numbers are very important. The more responsible a producing company works, the smaller the pollution will be. Tonkinwise looks at it from a more futuristic perspective and writes that "designers develop Design Futures to convince others to help realize those futures." He continues, "A designer who does not have a clear sense of the wider future they are trying to design by introducing a new product into the world is not only unconvincing but irresponsible."[1] We argue that as good as small-scale local production in cooperation with regional crafts-people is, it seems to be an unrealistic solution for the future of design. Crafted goods can only be produced in small numbers and the time and effort that is put into each object will dictate the selling price. The value of these products is often so high that someone with a regular income has difficulties to afford such crafted object. We are sure that there are a lot of projects that proof that one can make a living with these small production projects and that they actually change something for a region. We are all in to secure craftsmanship and smaller businesses, however, we think that after a design education in Industrial design one should be able to design for an industrial production. Local manufacturing and homemade goods seem to be a trend of our time. We are very unsure if this is a marketable concept. The design world, especially the furniture design world and the capitalist system works hand in hand. If you want to produce designs to sell them to clients, you will have to deal with that.

It is unlikely that one, right after graduation, will design an object that enters the market. The chances of getting a product licenced are relatively low since there is a high number of products that are being sent to companies on a daily base. Let's assume that we get a design out that sells well, a production in Asia still does not feel right for us. We do have the approach to produce locally – we have learned all about the advantages for years. In the right context local production makes total sense. However, we don't believe that it is the small-scale production that will help the mass of design graduates to find jobs, work and make a living. That was why we wanted to see if we can find regional produces who are able to produce in a larger scale.

At this point we would like to elaborate the differences of the production sizes:
When we talk about small-scale production, we are talking about small craft companies that produce single pieces or smaller quantities on demand. The carpenter next door is often a good solution to get a prototype produced. However, higher numbers of purchases can usually not be handled by such a company.

When we talk about large-scale or mass production, we are talking about big companies that mass-produce products. Here we talk, above all, about the heavy industry that is often located in Asia. These companies usually start their machines only when the number of units increases in an appropriate amount.

The middle ground that we would like to address refers to local medium-sized industrial companies that can mass-produce but also process smaller quantities. The advantage that we are seeing from this, is, that medium size companies can produce higher numbers and thus making their production financially worthwhile. The ability to produce serially and communicate personally and directly from person to person is a great advantage.

↑ [1] *Cameron Tonkinwise, Just Design, last modified February 14, 2018, https://medium.com/@camerontw/just-design-b1f97cb3996f*

→ [2] *Bruno Latour, A Cautious Prometheus? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk) (Keynote lecture for the Networks of Design meeting of the Design History Society Falmouth, Cornwall, 3rd September 2008)*

Make a living

As many examples in our surrounding have shown, to make a living in the field of design seems to be somewhat complicated. It is clear to us that there are many degree programmes where graduates have no clue what kind of job they might get after their graduation. However, as already mentioned, all questions that we ask within this thesis relate to the field and education of design. How can we contribute positively to create a good future for product and industrial designers?

What Latour emphasizes about the self-understanding of our time is that a being in our century »…takes for granted that there will always be air, space, water, heat, for the development of his or her global view.«[2] This attitude indeed needs to be questioned. Especially in our capitalist society and overpopulated world one cannot assume that everyone has automatically the right to have access to sufficient air, space, water or heat. To be able to develop the global view that Latour talks about and to contribute to our world and society, one has to be able to be part of social structures. To purely work creatively, find solutions that work well in a bigger context, one cannot and should not have to worry about financial security. This necessity does not seek to propose new norms, disciplines of design or to change the design education, although we might question some of these points. We don´t aim to change the education or restructure the market; we only want to raise the question of how a young designer can find his or her spot in the field of product design or industrial design. We want to find answers, possibilities or even guidelines on how future generations of design graduates and young designers, who did not yet manage to enter the market, can find a socially secure future; no matter in which field a design graduate wants to work in. So, where is the future and what is the future about?

We can´t give a definite answer to that question but we asked many people how they entered their life as a designer after finishing university. A collection of 18 interviews will help us to get an overview of possible ways. In all interviews exciting topics popped up that we find particularly worth mentioning. From these points we have created a "GOOD ADVISE IS FOR FREE" list on which we have broken down the most crucial points.

Evil mass production?

Mass production stinks! Mass production pollutes the environment! Mass production ruins the market! Why are we talking so bad about mass production? Is mass production really that bad or is our feeling only an out-dated idea about the industry? And if it's that bad, why do so many companies still mass-produce? We took a closer look at Central and Northern European mass production and can already tell, to anticipate the most exciting news, that mass production is actually not that bad for the environment and the employees.

Mass production was initially invented to be able to provide a mass of people with affordable products. This thought in itself is a quite good one. 100 years ago the mass production was invented by the car industry because more and more people wanted to have access to transportation. Today we can hardly imagine how to build a car without a standardized assembly line.[3] If we think about the industrial market 100 years ago, not only fewer products were needed to be produced, also the number of the population was much smaller. The difference of the world population 70 years ago is frightening. Back than there have been 2,53 billions[4] of people, while today there are around three times as many human beings living on earth. To produce all kinds of industrially made items for 7,72 billion people became a new challenge. Admittedly, due to today's industrial production conditions, there is better medical care. Perhaps mass production is a deciding factor that has led to the overpopulation of earth. Of course, if we talk about product design, and later in this thesis about furniture design, the number of people for whom furniture design is relevant, is shrinking considerably. In many regions of the world people cannot afford furniture or other luxury goods. Therefore the numbers mentioned above are not representative for this. Nevertheless, they give us a feeling for how fast the production industry had to change over the last 100 years.

Another significant shift within the producing industry was, that the focus changed from producing affordable goods for everyone towards a moneymaking motivated business-model. More precisely, nowadays-produced goods underlie cheap, fast and low quality productions. To lower the costs even more, many manufacturers have moved to Asia. Various medias are regularly reporting on the inhumane working conditions and exploitation in Asian production facilities. Production in Asia can only be offered so cheaply because the working force is not paid accordingly. Employees are working under excessive pressure for disproportionate hours. They are often exposed to abuse and sexual harassment. These are just a few of the things that happen on a daily basis in Asian factories.[5]

Even if changing economy ensures that production facilities are slowly relocated to Europe, so far, most of the producing industries have been relocated to Asia.[6] The goal of this kind of mass production is often set on mass consumption and increasing the profit of the seller. However, this is not how serial production necessarily has to look like. Serial production does not always equal poorly produced and low quality products. Also, it is not right to say that all products that are produced in Asia are of low quality. In Europe we still have a variety of producing Industry that set its focus on craftsmanship and quality goods. As Simon Legald from NORMANN COPENHAGEN told us, it is quite common for bigger companies to have somebody employed who is responsible for quality check-ups when working with manufacturers, as well as in european and asian production sites.

Industrial design and production go hand in hand. This is as obvious as Konstantin Grcic belonging to the German design scene. In an interview with Stefan Diez he talked about techniques of mass production today. Grcic sees mass production as an utopian idea of industrial design. Meaning, making good design accessible to everyone and implementing good design according to pragmatic parameters. With globalization, many companies discovered China as an attractive location to produce specific product components.[7] Asian production has been growing and many European companies have moved to join the competitive advantages like cheap labour and production possibilities.

In Europe the industry has a big lobby. Large production sites have always been employers for hundreds of people and thus have helped whole regions or cities. Industrial producers don't only try to get a better standing in society, they actually work on being clean, healthy

and sustainable. Also governments are much more aware of toxic emissions and regulations for producers. With the Paris agreement all nations came together to agree to make ambitious efforts and fight against climate change.[8] The Paris agreement is only one example where governments, amongst other things, try to regulate toxic emissions and pollutants of companies. New technologies allow companies to actually work much cleaner, regulate their toxic emissions and do better for the environment. This alone puts their image into a better position. However, they seem to have to do even more for the environment and their image. In several countries in Europe we find concepts and events where companies actually allow people to catch a glimpse and get insights into their active production, to show them that everything they are doing is not harmful and to share how they work. An example is the "Industrie Natten" in Malmö or "Die Lange Nacht der Industrie" in Germany. "Die Lange Nacht der Industrie" is an event concept that is touring through Germany since 2007. During twelve evenings a year companies open the doors of up to 90 industrial producers in different areas of Germany. Some of the benefits for the producing companies are: "Image maintenance, employer branding, employee loyalty and motivation, public perception of the company and media presence".[9]

"Designers working in the industry have a bad image. They have become the black sheep of the design family"[10] said Konstantin Grcic in the above quoted interview. The fact that our design education did not teach us much about industrial producers gives this statement all the more weight. Is it that school became greener and politically left or why has the focus changed since Gricic was educated?

3 Zeit, last modified February 26.4.2018, https://www.zeit.de/auto/2013-04/ford-fliessband-massenproduktion

4 United Nations, last modified February 26.4.2018, https://esa.un.org/unpd/wpp/Download/Standard/Population/

5 Oxfam, last modified February 10.5.2018, https://www.oxfam.de/system/files/20060524_abseitsarbeitnehmerrechte_736kb.pdf

6 Business Insider, last modified February 8.5.2018, http://www.businessinsider.com/r-euro-zone-companies-come-home-as-asian-costs-rise-2014-12?r=US&IR=T&IR=T

7 Petra Hesse, Sandra Hofmeister, Full House: Design by Stefan Diez (London: Koenig Books Ltd, 2017)

8 United Nations, last modified: 2.5.2018, https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement (02.05)

9 Lange Nacht der Industrie, last modified: 3.5.2018, https://www.langenachtderindustrie.de/regionen/

10 Petra Hesse, Sandra Hofmeister, Full House: Design by Stefan Diez (London: Koenig Books Ltd, 2017), P. 21

Globalization

As most things globalization has two faces. For product design, above all, the international production possibilities became interesting. There are many companies that have relocated their productions to Asia to save costs. As a result, over the past two decades, more and more industrial companies in Europe have closed down. Their prices were too high and they could not withstand the Asian competition. Production processes have been under constant change and adaptation since international trade agreements and multinational production facilities produce products for most countries of the world. Brands strive to produce their products as cheaply as possible so that the profit margin turns out to be as rewarding as possible. Money plays a big role in any business - also in the subject of design. Even if this is often not taught in design education, design is part of the business sector and part of our capitalist society.

Within this elaboration we would like to look at what kind of industry still exists in Central and Northern Europe. How can we use this producing industry and how can designers ensure that local production will be preserved. We see a clear advantage in regional production. Not only in terms of possible preservation of the producing industry but also in terms of the quality of the produced goods.

High number of design graduates

Until today, Scandinavian design and handcrafts are well known and internationally recognized. It is no coincidence that design education in Northern Europe has become quite popular over the past 20 years. In times of globalization, the Bachelor and Master system makes it easy for students to participate and graduate at universities worldwide. This brings out two critical topics: Globalization and High numbers of graduates in relatively new courses like design.

Many young people tried to get into design schools all over Europe. The BA/MA system changed the whole way of the design education. Countries promised schools more money if they would take more students in. The bigger the programmes got, the more graduates they educate every year. Today we have around 13.000 design graduates only in Germany each year. The number in Europe is much higher. All these young people want to enter the job market.

There has been a movement within design to open up to new topics. Design thinking as well as other procedures make the design process much more tangible for people who don´t have a design background. It allows them to understand how a design process works.

Even tough we have the impression that, depending on the country and the environment designers still don´t have a good stand in society. Design is often seen as art and not as the solution giving, functional tool how we understand it. However, companies are much more open to hire people with the mind-set of a designer. Even big consultancy companies like McKinsey have departments called "Experience design" where they work in the realm of design thinking. High numbers of graduates are no myth. However we think that if we continue to work on the general understanding of what design actually can do for our society, the market will open up for all kinds of design graduates.

»I know this is a meeting on the history of design, but what would be the use of studying design history, if not for the purposes of providing a scheme for its future?«

← *[11] Information given by Andreas Hopf (Kumulus Network)*

[12] Bruno Latour, A Cautious Prometheus? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk) (Keynote lecture for the Networks of Design meeting of the Design History Society Falmouth, Cornwall, 3rd September 2008)

The valuation of the design profession

Design education

Probably most of our fellow students know the question "What are you tinkering on?" As one can imagine, this question is often addressed by a non-designer rather than by somebody who has a design background. Each day everyone is surrounded by design. Still, the general sensitivity of what design is used for in our surrounding is not yet obvious for each individual. People have different professions and different backgrounds and are thus sensitive for several topics that arise on a daily base. In fact, outside of design circles, design is often not seen as a serious profession. People see how we draw, how we build models or how we brainstorm and say: "That is fun! That is easy!" The issue that we see, is that the valuation of design work and the creative process to find valuable solutions are often not seen by non-designers. Design plays an important role in many fields. It is not only something that considers objects, it creates services, experiences and determines how things work, or don't work. As Paola Antonelli, Curator of Design, Museum of Modern Art, states in "The Industrial Design Reader: "Design is one of the most powerful fields of study of our time." Designers bear a lot of responsibility, which shouldn't be underestimated neither by the designer nor the society. Rather it should be validated according to its influence on our everyday life, our society, our politics and our planet. We think, that the fact how difficult it can be to get an adequate payment for the design work, says a lot about how this work is valued as Monteiro puts it: "You are not doing design, you are selling design, which is a valuable service."[13] We believe that over the next few years, it will become a more important task for designers to convey the profession and the meaning behind it to non-designer and to do good marketing for the design profession.

Professor Bruce Archer wrote in "The nature of research into design and design education", that: "If Technology is "knowing-how", then Design is "envisaging-what".[14] Depending on the country, the school and the program, when studying design, has different ways how this profession is taught. Design can be defined in many ways. Some see it as "envisaging-what", others see it as a practical tool. There are so many different ways to conceptualize the education of a future designer. If one searches possible study programmes within the field of design he or she will find various names for either of them. If a young person wants to get an overview of design educations, it could be difficult to get an idea of where these education systems set their focus on. Maybe one wouldn't notice such a big difference between studying product design and industrial design. But it might differ a lot if you study furniture design or design management. What the title of furniture design already says, the education is centred around the actual design of a product. In all likelihood the building of furniture is included in that field of studying. When studying design management, it could mean that one never has to actually "do design". The second important point is, that these various programmes are split into bachelor and master level. Looking onto our own experiences of graduating from classic design bachelor programmes called "Produktgestaltung" and "Produktdesign" (both mean product design), we were left with the all-round knowledge of being a designer. We were educated specific knowledge, technical skills and professional competence. Knowledge was taught on a theoretical as well as on a practical level. This included, for example, that we learned how to prototype on various levels. We learned to build a product in CAD, to make technical drawings, to build a physical prototype, either by hand in the schools workshops or with the help of rapid prototyping. We both came out of our bachelor education as generalists, rather than specialists. However, we both had already set our foci, had different strength and also weaker points. This might apply to many who started a classical design education. After a Bachelor education, just like after all other educations, the question "What do I want to do next?" follows automatically. This question needs to be answered by

↑
[13] Mike Monteiro, Design is a job (New York: A Book Apart, 2012), P. 32

→
[14] Professor Bruce Archer, THE NATURE OF RESEARCH INTO DESIGN AND DESIGN EDUCATION

each person individually. One option is to continue his or her academic career. A master opens the possibility to deepen the knowledge within the field of design or to set a focus on management or economics.

Without evaluating how reasonable it is that many schools focus on the education of generalists rather then specialists, we can say, that for us studying "classic design" was good. We got a broad spectrum of knowledge and know-how and were able to test our possibilities within the widespread field of design to eventually set our focus.

During our Master we were than able to define areas where we lacked knowledge to fill those gaps, not at least with this thesis project. Certainly it needs to be stated, that some young people might be unable to cope with such a generalized education and get lost with facing all the possibilities. Moreover, even for someone who knows which field of design he or she wants to approach, the possible sectors to work in seem overwhelming if you are not a clarified specialist.

How literature can help / literature recommendations

"Design is a job" is the title of a book written by Mike Monteiro. It provides the reader with useful insights into issues that he had focused on while running his own business. Even though the title formulates it in an objective manner, it is a highly relevant topic that concerns university graduates all over Europe. Monteiros book deals as a guideline that wants to help young professionals to skip some of the mistakes and faux pas he went through himself. On 137 pages he gives a very well summarized overview on problems one might address. He wants to give assistance and tips such as "selling your ideas directly to clients is extremely important to get first-hand feedback" or that "research is a fundamental part of design".[15] Another book that is elaborating on the reality of creating your own practice is "Don't Get a Job Make a Job: How to make it as a creative graduate" by Gemma Barton. The book tells a true story: "Too often a design or architecture degree is seen as a means to an end (a job in an established practice). But imagine for one moment that there are no employers, no firms to send your résumé to, no interviews to be had—what would you do? How would you forge your own path after graduation?"[16]

Other books, that were helpful for us to answer some of our research questions are:

- Collection of essays written by important individuals analysing the development of industrial design within the past twenty years: Carma Gorman: „The Industrial Design Reader"
- Collection of stories and voices from known designers of our time, who give insights and discuss current topics: Hanna Nova Beatrice: "Behind the Scenes: Stories from the Design Industry"
- Guideline for designers in Germany to calculate their remuneration and formulate licensing contracts: AGD, Allianz deutscher Designer e.V.: "AGD Vergütungstarifvertrag Design (AGD/SDSt)"

- Collection of short chapters about topics that industrial designers have to deal with like patent applications or manufacturing processes: "The Industrial Design Reference + Specification Book" by Daniel Cuffaro
- A guideline through different sustainable manufacturing processes with sustainable materials: "Sustainable Materials, Processes and Production" by Rob Thompson
- A large collection of production processes from traditional crafts to new technologies and their potentials: "Manufacturing Processes For design professionals" by Rob Thompson
- A Series of Interviews with all kinds of successful designers from design studios all over the world. It allows a glimps into what companies want to see in a designers portfolio: "Breaking in" by Amina Horozic
- A report about the online platform Kickstarter: "It Will Be Exhilarating" by Studio Neat

↑ [13] *Mike Monteiro, Design is a job (New York: A Book Apart, 2012), P. 12 and 9*

[14] *Don't Get a Job Make a Job: How to make it as a creative graduate", Gemma Barton*

The role of design: In the past

"For over 200 years, the products of mechanized industrial production have shaped our material culture, influenced world economies and affected the quality of our environment and daily lives."[17]

The development of design from classic industrial design towards a discipline with indispensable importance started off with the Industrial Revolution in the late 18th century. Before that, when "design" as a term was not yet describing a profession, objects where already shaped under consideration of aesthetical appearance. Crafted products were developed and manufactured by one individual.

Industrial design arose at a time when the Industrial Revolution took place, when mechanical production processes redeemed manual production methods. This transition caused the separation of the design of a product from its manufacturing. Charlotte and Peter Fiell state, that at this time, "design had no intellectual, theoretical or philosophical foundation" and was created by "specialists from the technical, materials and production spheres.[18] Finally, in the 20th century, Industrial design became an acknowledged discipline. That was the beginning of implementing design theory into manufacturing. Over time classic industrial design has taken over an important role for the producing industry. Whether we talk about heavy industrial products (like medical equipment or automotive items) or consumer goods, without design, industrial production would no longer be imaginable today. Furthermore, the focus of design is no longer set solely on products that are made for serial production. The importance of design did not only stay in the production sector but also spread out onto other fields.

↑ [17] *Charlotte Fiell, Peter Fiell, Industrial Design A-Z (Cologne: Taschen GmbH, 2003), P.6 ibid, P.6*   [18] *ibid, P.6*

The role of design: Present time

Many decades later, the role of design is not limited to objects anymore. Its importance grew onto a broad spectrum of application areas. Whether it is supply of services, consulting, user experience or communication, design is applied in a variety of fields. This gives the design profession an undeniable meaningfulness for our society, politics and our everyday life. Accordingly, the profession is not further limited to "Industrial Design". There are numerous job definitions where a designer comes into play: UX Designer, Interface Designer, Experience Designer, Service Designer, Web Designer, Interdisciplinary Designer, Design Consultant, Graphic Designer, and many others.
As a matter of fact, these various application areas show how important and universal design is and that working as a designer can mean many different things.
Furthermore, in todays globalized world, where resources are limited and sustainability, whether in politics, social, economical or ecological terms, is more important than ever, the purpose of design has shifted from "designing a product to earn money" to "design a service around a product". More precisely this means, that products are designed in a way that urge longevity, instead of wear-out. What is important, and what also pays off financially is the service that is offered around a product. In this way resources are used consciously and the mainstream consumer society will still be satisfied. One could argue that design nowadays goes hand in hand with superficial aestheticism. From a marketing perspective, design is often reduced to an aesthetic promise, which allows a product or service to generate an appreciation. Many well-known archetypical forms are cited, since the consumer already knows them. One could say that design is always geared to the market and the consumer. Designers deal with a big task if they want to push a product onto the market. Cameron Tonkinwise reinforces this statement with a section of his essay Just Design:

"While designers make, they cannot make alone, especially at the mass production scale that is particular to design. Designers must convince many others, through many channels, of the value of making the futures they have generated — funders, suppliers, logisticians, craftspeople, marketers, users. Design is a process of persuading, alliance building, contracting, managing."[19]

The introduction of mass production brought the need for the development of prototypes. Thus, the design process has been redesigned - not only function and materiality but also production facilities had to be clarified in advance. As Latour writes:
"Design is never a process that begins from scratch: to design is always to redesign. There is always something that exists first as a given, as an issue, as a problem. Design is a task that follows to make that something more lively, more commercial, more usable, more user's friendly, more acceptable, more sustainable, and so on, depending on the various constraints to which the project has to answer."
That means that the work of a designer is based on ideas, creative processes and prototyping. However without workshops or craft ship partners a prototype can hardly be produced.

↑ [19] *Cameron Tonkinwise, Just Design, last modified February 14, 2018, https://medium.com/@camerontw/just-design-b1f97cb3996f*

[20] *Bruno Latour, A Cautious Prometheus? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk) (Keynote lecture for the Networks of Design meeting of the Design History Society Falmouth, Cornwall, 3rd September 2008)*

Social media vs. the question of good design

The product design and furniture market is much more fragmented than it used to be. The market shift of the last centuries has led to good opportunities for addressing more target groups as well as contemporary lifestyles.[21] Also, new marketing tools that promote designed objects are opening up in a world of social media. Influencers are being hired by companies to become a vivid advertising figure for brands. The influencer-marketing hub describes an influencer as "an individual who has the power to affect purchase decisions of others because of his or her authority, knowledge, position or relationship with his or her audience."[22] Consumers are bombarded with different offers - each is dumping the next. The globalization makes it even harder to decide which product is the obviously better one. Influencers on social media platforms like instagram make it even harder to validate the quality of a product. In the foreword to "The Spam Book" by Sadie Plant we find the following: »Long after Nietzsche, the question of whether things are good or evil, positive or negative, normal or strange remains on the tip of the collective tongue.«[23] This underlines the question: How can we, as designer, implement a different point of view onto products and the long-term behaviour with them?

↑ *[21] Sandra Hofmeister, Diez Office: Full House (Cologne/New York: Koenig Books, 2017), P. 20*

[22] Influencer Marketing Hub, last modified February 14, 2018, https://influencermarketinghub. com/what-is-an-influencer/

[23] "Sadie Plant," last modified February 14, 2018, http:// www.sadieplant.com/home/ publications/spam.

The fear of graduates

At the very beginning of our thesis project, we did an online survey to get a more general feeling for the questions we worked on. We asked different questions on which one could answer text-based or basic yes/no questions. 26 design students on a Bachelor and Master level from design schools in Sweden, Denmark and Germany participated. One that showed, that 54 % of the respondents did not believe that they would be able to find a job in the field of design after graduation. This high percentage is representing the fear of a whole generation of design students. Paradoxically, it is a generation that grew up in times in which everything seemed to be possible to achieve. During their childhood, the digital world was just invented and global commerce became a commonplace. In this time not only the landscape for trading changed but also the values of the modern world. These values are driven by efficiency, economic prosperity, functionality and rationalization. These measures not only renew and define what kind of products would work on the market; they also influence clients and especially young people on a daily base.

The fear of graduates is real. Walking through a room of students who are about to graduate soon, will let you sense that this young generation has a fear that after graduating not everything will be fine. Studying and developing your skills for years does not seem to be enough for many jobs. Job descriptions sound like wish lists of a five year old at Christmas. Santa Claus is expected to bring hundreds of gifts, and the candidate for a job should have at least three years of working experience. An extraordinary creative ability must be proven by means of a portfolio. One should have excellent skills in all kinds of software like the various 3D modelling programs that exist on the market. Creative Project Management skills will be required. Exceptional analytical and quantitative problem-solving skills are wanted. The candidate should at least be fluent in both spoken and written English, Swedish, German or depending on the Country any other second or third language. One must have an international mind-set, should be willing to travel for the job, be good at working independently and in teams, should be friendly with colleagues and superiors, must be able to communicate; the list could go on for ever. Of course, companies just

want to hire the crème de la crème of the graduates. To be fair, an average design graduate cannot provide three years of work experience, knowledge in all kinds of computer programs (they usually lean one CAD program), or even more than one foreign language or project management skills. We do understand that many graduates get frustrated reading these job postings.

Do you think it will be easy to find a job in the field of design that suits you?

Yes

No

28%

72%
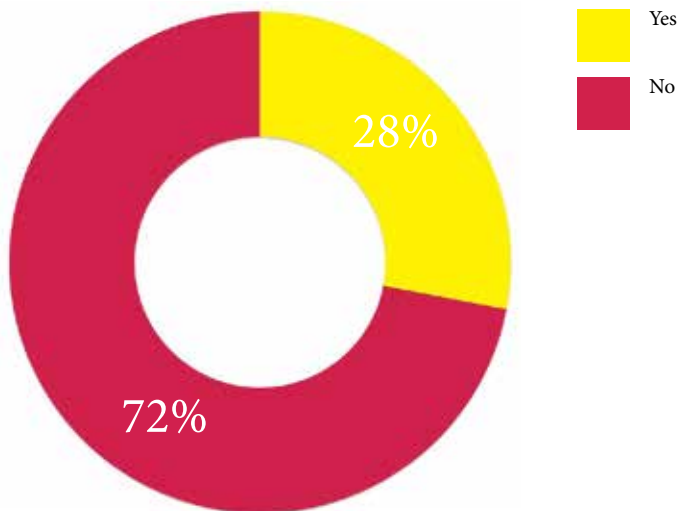
Where or how do you imagine working after your graduation?

Employed at design firm

Self-employed

In other field

4%

12%

84%
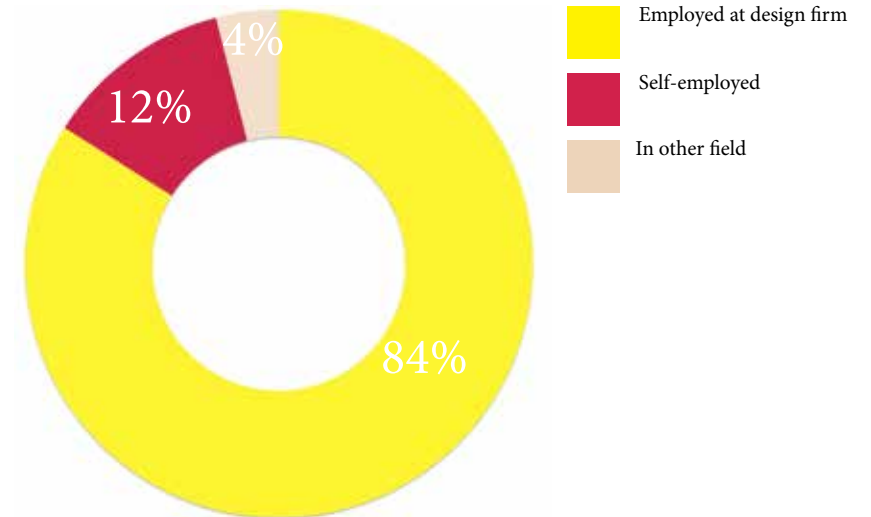
Have you ever been working with bigger production sites to get a prototype produced?

Yes

No

46%

54%
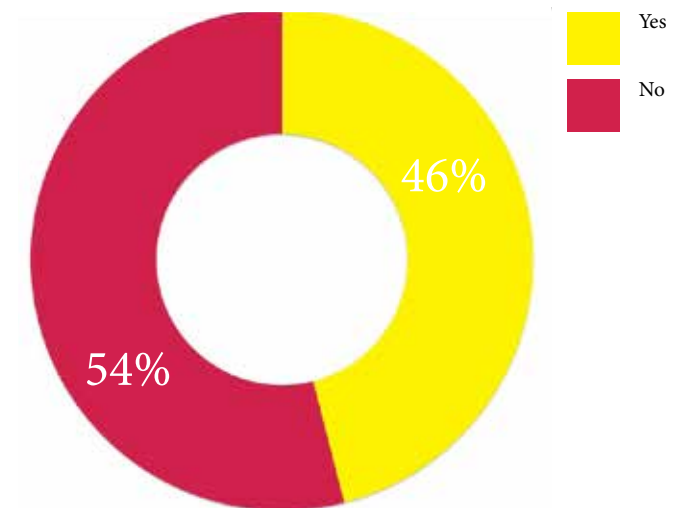
Expectations of our generation
Millennials

"I want to find a job that is fun."; "I don't want to work overtime."; "I want to be well-paid."; "I am afraid to not find a job I like."; "I don´t want anybody to tell me how I should work." These are just a few comments we heard when talking to other graduates regularly.

The behaviour of millennials became a phenomenon of our time and design graduates today are mostly millennials. The "Generation Y", which is, in a historical timeline spoken, quite new, grew up with digitalization, internet and smartphones. The "Millennial Generation" includes people who were born between 1980 and 2001.[24] People of this generation have a heightened sense of entitlement, partly because of the way schools and parents have yielded to them.[25] They were cared for intensively because parents and teachers were afraid they might injure their "self-esteem." In terms of the concept, the results are "trophy kids", who have quite arrogant notions about their abilities. They often feel superior to others, and harbour "outlandish expectations as far as what they expect when they go to work."[26] Millennials have generally spoken a very optimistic mind-set. In their mind-set, the world is open and there are opportunities everywhere. Frankly, it seems like Millennials live in a world of opposites. On the one hand they think they are the best, but still don't get the jobs, as positions on the labour market are limited. The design scene is difficult to enter and a designer, no matter how good or hard working he or she is, will have to be conscious about their attitude, their abilities, possibilities, their collaborators and on a larger scale the social environment. Without putting other people in the spotlight, no designer will ever fulfil the tasks of a design job. Many millennials do not see their future in the field of design even though they have a high sense of entitlement like it is ascribed to millennials. What is it that makes it so difficult to just go out there and earn money – just as one would do after an economics or law degree?

[24] *Live Science, last modified: 12.5.2018, https://www. livescience.com/38061-millennials-generation-y.html*

[25] *Arthur Asa Berger, Objects of Affection, Semiotics and Consumer Culture (New York: PALGRAVE MACMILLAN, 2010), P. 42*

[26] *ibid, P.42*

Different design directions

Work possibilities for someone with a design degree exist principally in a wide range of options. The design profession today is much broader then it used to be. The know-how that a designer has to offer comprises many areas. Design tasks like ideation, concept creation, sketching or realization of designs are just a small part. From taking photos to production to marketing, a designer has to cover all these areas and much more. This enlarges the possibilities of a designer on the job market but limits him or her at the same time.

An industrial designer could work for classical design firms, for technical or metical companies, for a NGO, a consultant firm or even enter the political sector. The following words Bruno Latour wrote in A Cautious Prometheus? A Few Steps Toward a Philosophy of Design additionally highlights the enlarged field of design: »Design has been extended from the details of daily objects to cities, landscapes, nations, cultures, bodies, genes, and to nature itself – which is in great need of being re-designed.«[27] Many schools focus on educating generalists instead of specialists. Both are urgently needed in the design scene. Depending on the design school and the different fields they teach, other foci e.g. sustainability, engineering or social awareness are set. Design today is a much wider field than it used to be. Graduates of all fields will have to make decisions at many points of their life when becoming a designer. Deciding weather or not to continue education on a master level, whether or not working for a big company, whether or not working as a freelancer, whether or not leaving the field of design will be up for decision once the degree is accomplished. There are different ways to escape unemployment. Let us assume that the funding one is getting while being a student, weather it comes from one's parents, the state or other sources, eventually a young person has to sustain one selve on their own. There are several different main paths to take:

1.   One could get employed at a design firm
2.   One could start working as a freelancer and build up his or her own studio
3.   One could stay in the university context, start a PhD or a teaching assistance job
4.   One could find a job in a completely different area than design

All ways have their advantages and disadvantages and each way might be good or bad. It all depends on what kind of professional goals one has.

Be employed at a design firm:
If a designer starts working for someone's firm, they will mostly work on client projects. Specific results, objects or topics will be asked for and the designer will have to deliver suitable results. Free and creative work might be pushed into the background. The employee will get paid in regular intervals, so that he or she will be able to finance his or her livelihood. Usually, taking the secure version of a permanent employment means working at least 40 hours a week and weekends during which they are not able to develop new, own ideas, concepts or products. During leisure time they will have to run errands, take care of the household, socialize and recover for the following working week – just as every other employee as well. In this system, the designer will be able to pay the bills but not follow up on their own project.

Be a freelance designer with an own studio:
The freelancer in comparison to the employed designer does not have any security. His or her work depends on customer orders, client projects or loans to keep up the high costs of paying rent for a private home as well as an office/workshop space and additional living expanses. Working hours will most probably be much higher than the ones of the employed designer. As a freelance designer one has to generate their own ideas and designs and one might have to or want to produce the designs to sell them on to clients. Taking high quality photographs and being good in commercialization and selling of ones own products will be needed as well. Selling his or her ideas to a company might mean to earn royalties, usually 3-5 % of the selling price before taxes. Depending on the item, price and the number of sold objects they might be able to gain a constant salary. This is one way to earn money. However, someone who just started off with royalty-based projects will have to be patient until the first payment arrives. The producing company might need one to two years to get the production running and to actually bring the product onto the market. This could mean that, besides these licensing contracts, a freelance designer needs to get additional payment from other projects to keep the office afloat. Royalty payments seem like an somewhat out-dated system. It was popular at a time when less products where on the market. Back then there weren't many competitors that would sell a comparable product. A design studio could also think about producing and selling their products on a bigger scale. At first sight this might not sound too difficult. But to be a designer and a producer on a decent scale, one needs to rent a bigger storage hall and produce the self-designed objects on their own. In order to be able to do so, they will need a workshop and an online shop or shops that offer their designs. Producing and selling one's own products will take up so much time that

there will not be much time left to create new designs and to continue to satisfy the demands of the market. Only a freelancer who works hard will eventually earn enough money to be able to pay someone who can help out with e.g. accounting or marketing.

Stay at university for a PhD or to teach:
People that stay in the university context without getting to know the design work on a corporate or freelance level, will miss an important part of being in the design world. If they do not gain experience with, for example, production or customer acquisition, they missed a large part of the design profession, which might be helpful for the context of teaching at a university. As already mentioned, the hard part, to deal with the real world, only starts after graduating. Doing a PhD is for sure very interesting since you earned three years to do deeper research however, a PhD keeps you away from the working market and all the experiences you can make there – you basically stay in school and continue your academic career. Depending on the position, one will earn a fixed salary and thus have a regular income month per month. Teaching at university level might be a good option as a part-time job next to opening your own studio.

Leave the design scene:
The last option is to leave the design scene. The time of studying design may not have been bad, yet this young person gave up early and is potentially inferior to the whole system, or just lost the pleasure of doing design. Working in the field of design often involves a certain amount of risk. Who does not bring endurance, patience and a healthy amount of self-confidence, will probably get a bit nervous once in a while. But why does it have to be that way? Why do designers have to worry about their job or salary at various points in their lives? Is it really true that risk and perseverance is one of the skills a designer has to bring in? Everybody should feel safe in his or her profession. Of course you have to work hard and push the limit sometimes. The saying "no risk no fun" is quite suitable in this context. However, uncertainty that lasts for months, is not a good state for the creative mind.

↑ [27] *Bruno Latour, A Cautious Prometheus? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk) (Keynote lecture for the Networks of Design meeting of the Design History Society Falmouth, Cornwall, 3rd September 2008)*

Talking to designers / interview series
Different ways, different experiences

Skills

Because there are so many ways a designer could follow and because each designer has his or her own experiences, we decided to interview designers and employers of design studios to see what we can learn from their experiences and mistakes and ask for advice regarding what a future generation of design graduates have to know before finishing school in their opinion. We interviewed 17 people and design studios. The full interviews can be read in the appendix. Additionally to the interviews we created some graphics that visualize the variety of directions and pathways one can take.

Our interview guideline:
1. Introduction
  a. What are we doing / What is our project about
2. Who are you
  a. Background
  b. How did you get there?
  c. How do you work on a daily base?
  d. What are your tasks?
  e. What are you business goals?
3. Your work life
  a. Ways of working with manufacturers and brands
  b. Projects
  c. Clients / Network / Acquisition
  d. Financing / Side jobs
4. Perception of the design industry
  a. Skillset of a designer
  b. How do you split tasks
  c. Talents
  d. Who is helping you
5. What is your advice for a younger generation of designers?

Designing is about skills. Those skills might be partly found in the character as well as in talent. However as a designer one has to study to build up a skill-set that measures up with the requirements of the design profession. The design job is a profession and vocation at the same time. Since a designers' abilities will always play a major role when it comes to entering the design market, we want to bring the skill-set of a designer into discussion by sharing the following thought by Latour: "A mad attention to the details has always been attached to the very definition of design skills. And 'skill' is actually a term that is also attached to design, in the same way that design is associated with the words 'art' and 'craft'. In addition to modesty, there is a sense of skilfulness, craftsmanship and an obsessive attention to detail that make up a key connotation of design."[28]

↑ *[28] Bruno Latour, A Cautious Prometheus? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk) (Keynote lecture for the Networks of Design meeting of the Design History Society Falmouth, Cornwall, 3rd September 2008)*

PATHWAYS OF THE DESIGN PROFESSION
Possible directions

SCHOOL

APPRENTICSHIP

INTERNSHIP

EDUCATION

BA LEVEL DESIGN

MA LEVEL DESIGN / MANAGEMENT

MENTOR

COOPERATION PROJECT (eg. DEGREE PROJ.)

AWARDS

SCOLARSHIP

STAY IN UNIVERSITY CONTEXT
- START TEACHING
- PHD

EMPLOYMENT

studio vs. Company

EMPLOYED DESIGNER
- TRAINEE
- JUNIOR DESIGNER
- SENIOR DESIGNER

PROJECT MANAGER
NO ACTUAL DESIGN WORK

DESIGN CONSULTANT

alone vs. with friends

SELF EMPLOYED

FREELANCER

DESIGN CONSULTANCY

DESIGNER PRODUCER

CONTRACT WORK

RICH BACKGROUND

SIDE JOB

LOAN

LEAVE DESIGN
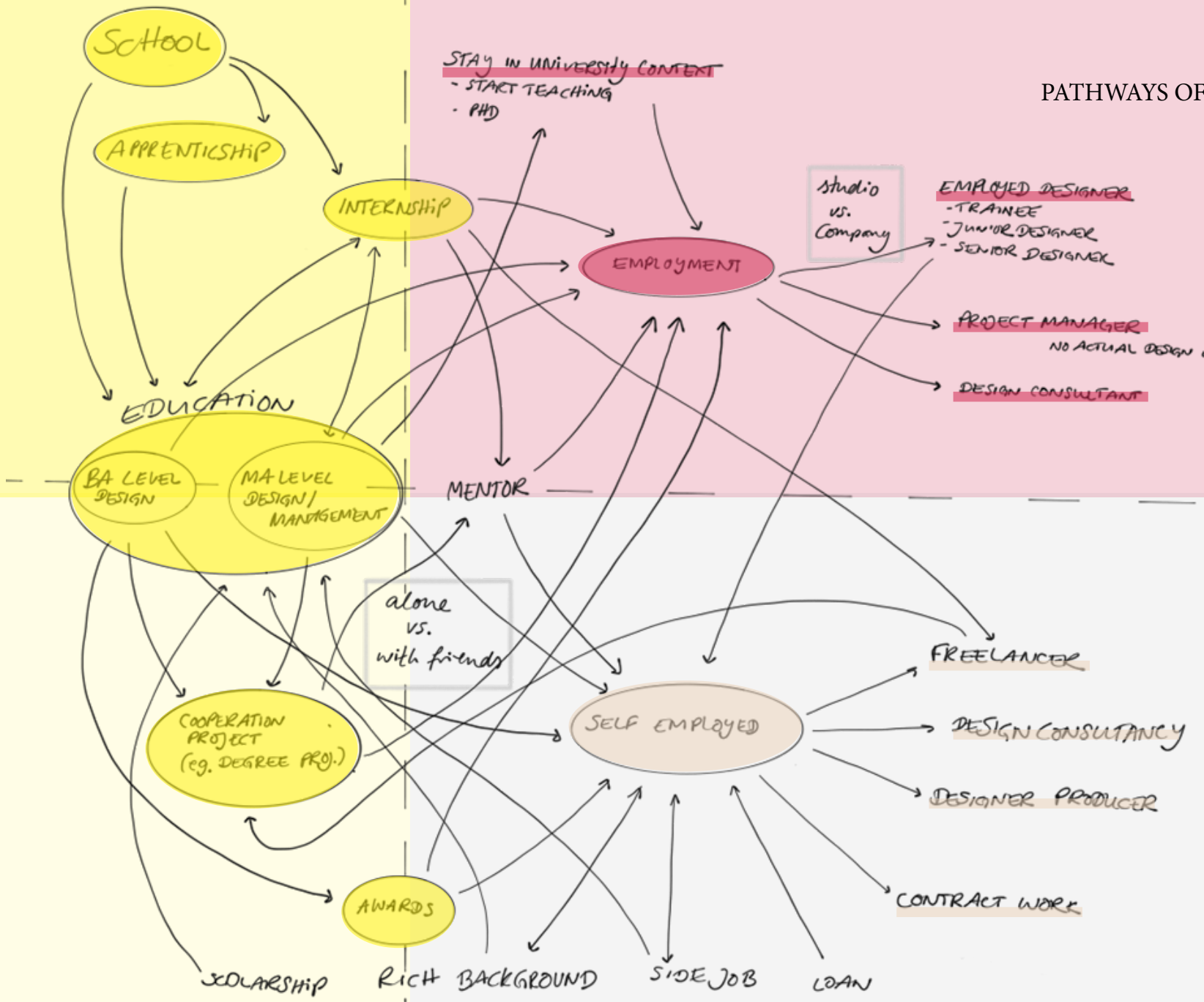
School is not the only place to learn

When both of us entered design school a few years ago, in 2011 and 2012, the everyday work life as a designer was still quite far away. Student jobs and internships helped us to earn some money along the way and gave us some insights into the working world of the design profession. Back then responsibility played a secondary role when it came to finalizing projects. At the companies we worked at, was always somebody who took care of the final result since we were "just students" hired by design firms. Now, some years and quite a number of projects later, both of us can say that the final step, to produce a prototype or to find a producer, a brand, wholesaler or retailer who would take our design into their collection, is something we lack of in the design process. We already made the experience that a company was interested in one of our designs and already sent us a contract for the collaboration. In the end that contract was cancelled again because the production costs for metal parts had increased. This left us with a feeling that tells us we cannot trust brands. Trust is an important point when it comes to setting foot on professional territories. Of course, trust doesn't just happen but if you never start to believe that your product will eventually make it on the market you can already give up. Depending on how your freelance work is structured, the final step of selling, respectively producing could be the most important one when it comes to make a living with design. One could argue that this is one of the things one can learn at a design studio once being in a job, rather than at a design school. But how to gain this experience when finding a job in the field is so not as easy?

Producing a product that goes through the whole process starting with research, ideation, and prototyping will eventually find its way onto the market. However, what design schools will always have difficulties with is, to teach where the difficulties are. That is mainly because the difficulties differ from each project and producer. How one develops a project will be different for each project and everything related to the realization depends on too many smaller things. Design education focuses much more on the basic design education, form and shape language, ideation and the creation process itself. School wants to educate and encourage creative minds that are able to elaborate designed objects or solutions in a wider context. Each student brings in other strengths and might have other goals in his or her head than the ones of his or her peers. Design education gives students enough freedom to explore different directions as long as they are students. Here is an advice: If you are a student, use the sheltered surrounding of the school to a) do design projects you cannot realize that easy anymore once you have a job, b) push boundaries! You can direct the way your education goes!

Being lucky!

Being successful at what you are doing is less determined by the amount of luck you are blessed with, more by the amount of work you put into something (if we exclude overriding topics such as race, class or gender). What we learned during our education and what we also heard from other designers we interviewed is, that to achieve something with your work as a designer often means that you have to sacrifice something else. Regarding the network you want to build, this might mean that you show yourself and go out to approach and talk to people. At this point you do not know whether this person might become your client, your work partner or someone who recommends you to someone else. To get financial project support like grants, scholarships or prize money of an award, you will have to define work as your priority. Writing applications might be time intensive, but if it means that you will be able to continue working on your projects - it will pay off. Mointeiro puts it that way: "As always the key to everything, (…), is confidence"[26] and endurance!

↑ [29] *Mike Monteiro, Design is a job (New York: A Book Apart, 2012), P. 21*

Design community in Malmö

Malmö, located in the far south of Sweden, is a place where people and cultures from all around the world come together. Malmö has inhabitants coming from 170 different countries as well as a tendency to grow. Malmö attracts people from different contexts since the city contains a rich cultural life.[30] Talking to various designers who are based in Malmö provided us with interesting insights into the community of designers and creatives of the city. We talked to designers, who started as freelance designers right after graduation, as well as to designers who have been self-employed for many years. We spoke to designers who have a Swedish background and have lived in Malmö for a long time, as well as to designers who moved to Sweden from abroad. No matter what their background or their way into the design industry was, in some way they are all connected. It seems like the creative community in Malmö is progressive when it comes to sharing knowledge. They support each other and work on collaborative projects. Some well-known initiatives like SPOK or Den Nya Karta, that not only intend to bring together designers, but also for example manufacturers and designers, where invented by designers in Malmö. "Den Nya Kartan" (The New Map) is an initiative that started in 2015 and where 24 designers and 24 manufacturers from the Swedish region Skåne were teamed up to reveal the possibilities of local collaborations. Furthermore the initiative motivated the collaborators to test a new economical model, where designers and manufacturers share costs and profit equally.[31]

Another initiative that has its origins in Malmö is "SPOK". The online platform "SPOK" (samtida produktion och konsumtion; contemporary production and consumption) that gathers and spreads knowledge about manufacturing possibilities, from handcrafts to industrial production, that are situated in the region of Skåne. The aim is to showcase local production development and, on the long run, to promote local consumption.[32] These are only two examples of initiatives that took place in Malmö.

We only talked to some of the designers who are based in Malmö - nevertheless it became clear that they benefit from each other. Certainly, some are more actively involved within the

Reflection: What we have learned from the interviews

initiatives than others. However, we never got the feeling that there is a competitive pressure among designers.

Concluding, it can be said, that the design community in Malmö is very progressive. Their active and enthusiastic way of collaborating with each other was very impressive for us. We wish that their positive mind-sets around collaborations would be more present in other places and cities where many designers practice their work.

After having talked to so many designers who deal with the design world everyday, we realized that the experience of the everyday working life will enrichen your knowledge. While studying a part of the profession is not activated/ present in your way of working. The job will teach you things you cannot learn in school. When we started the thesis, neither of us had experiences in conducting interviews. To be honest, both of us were quite scared to just send emails out to designers, design studios and brands and ask for an interview with them. It was surprising to us that a very high percentage of the designers we reached out to actually read our proposal and were very positive regarding our request of interviewing them. Some were very interested in the topic themselves and therefore were even happier to talk to us. We even noticed that the questions we asked helped some of the design studios (especially the younger ones) to reflect on their own work. It was great for us to see that being a student and daring to ask questions actually had an impact on how people think about their work. It almost felt as if we were giving something back to them.

We noticed that the perception of the producing industry is very different in Sweden, Denmark and Germany which we had not anticipated. As we are both coming from Germany, we grew up with the knowledge that the industrial landscape needs to be protected and that the so-called "Mittelstänidsche Industrie" (directly translates to: Medium-sized industry) could be a good starting point to get in touch with the industry.

The 18 interviews allowed us to re-think our own idea of the working life and to reframe over and over, how we could imagine to work and to live as designers. Each interview opened more perspectives for us and truly widened our horizon. In the end it wasn't hard, scary or frustrating at all to take time to sit down with other designers. We actually had difficulties to stop interviewing. It was a lot of fun! Two important things we personally took away from the interviews was that: firstly we broadened our personal network in an easy way which was not our initial intention and secondly that we can relax – everything will come together – it only takes time!

↑ *30 Malmö, last modified 08.05.18, https://malmo.se/Nice-to-know-about-Malmo/The-story-of-Malmo.html*

31 Den Nya Kartan, last modified 8.5.2018, http://www.dennyakartan.se/

32 SPOK, last modified 8.5.2018, http://s-p-o-k.se/

GOOD ADVICE IS FOR FREE

"GOOD ADVICE IS FOR FREE" is a collection of short advices that each and every designer should take in. The list can be used as a guideline, as inspiration or just as a reason to think about topics like self-motivation, skills a designer might need, facts a designer should consider and more. No matter where in your professional career as a designer one is - we are sure that there is something in this list that will be important.

This collection of advices was formulated after interviewing 18 designers from different fields and countries. We asked them about their experiences, the good and the bad, and about tips they would give design graduates. We think that this is very valuable information for everyone who is studying design, about to study design or even already working as a designer. Therefore we want to share this with you! We hope that these advices are helpful for you – in one way or the other.

Be part of networks

Connect with people

Dare to share your work

Prioritize your work

Define your goals

Safe up some money

Do internships – learn from others

Exchange information's with other designers - sharing is caring

Keep your eyes open for inspiration

Exhibit your work

Be efficient

Find a side job

Talk about new projects

Get out there – start to work

Don't restrickt yourself to materials, tools, or so

Keep going

Make it work

Organize your time

Set yourself goals

Get help if needed

Find someone who is good in selling

Stay curious

Stay true to yourself

Stay flexible

Be kind

Talk! Talk! Talk

Believe in what you work on

Build modells in scale 1:1

Ask for feedback

Get in touch

Use rapid prototyping

Visit fairs

Find collaboraters

Accept sacrifices

Apply for grants

Believe in yourself

Dare

Make use of your connections

Write about your work to train your writing skills

You don't have to know everything

Try new things

Relax – everything will come together if you keep working on it

Becoming
entrepreneurs

Entrepreneurship
Lunds Nyföretagarcentrum

In different countries and communities support is offered for people who want to start their own business. We were curious to find out more about a start-up consultation. How do they help young people who are about to become self-employed and what kind of advices do they give? In Lund there is a service that you can book for free. The institute is called "Lunds Nyföretagarcentrum" (Lund's New Business Center) and you can make an appointment online. We were assigned to Gabriel Ohlsson and went to his office only a few weeks later to ask him all kinds of questions regarding how to do a start up.

It was March 14th when we first went to "Lunds Nyföretagarcentrum". Since it was not our real plan to open a studio or to work as freelancers, we went there without any specific idea on how Gabriel could practically help us. What we wanted to know was how he would advice young people who had questions about becoming an entrepreneur. After giving him an intro into our work we decided together with Gabriel that it probably would be easiest to just pretend to open a design studio so that we could actually go through the process that he would usually go through with others. He first asked us a few questions:

• What are you going to sell?
• Who is the costumer?
• What are they prepared to pay?
• How do you find the costumers?

We talked about how to open a business in the field of design that would allow us to earn money and what we would have to do in order to prepare for opening our start-up and actually start our professional career like that. He asked us what services we could offer to clients. Together we worked out a structure of a company based on the following three columns:

1. We would design, produce and sell products and furniture
   a. Define: what kind of products and furniture

2. We sell designs to design firms and get paid in royalties / author design
   a. Which companies could potentially license our designs?

3. External design for companies / we design for a company. We sell our competence in form of consultancy and other design services. This could include graphic design, photography, curating or exhibition design.
   a. Which companies could we potentially do consultant work for?

Since Gabriel usually not advises design businesses he asked us questions to understand our field. His questions allowed us to see what somebody might not understand about our mind-set as designers. To us the approach of our design company seems to be very clear. Talking to someone who is not part of the design scene allowed us to understand that it is crucial to define everything what we are doing in a way that everybody understands it. If we would, for example, ask a bank to give us a loan, they should clearly understand our business idea, what we are working on and why we think it is important to get support for it. Of course, banks are, above all, mainly interested in numbers in form of a budget that is imbedded into a business plan. However, real euphoria and trust in one's own company will definitely help additionally to get a loan.

During our conversation Gabriel incorporated many good questions. We tried to answer many of them subsequently. About some of them we had not talked before, like for example: "Which value does the costumer get?", "What do you expect from your customers?" or "What are your competitive strengths?". To talk to Gabriel was very helpful and we decided to follow the process of his consultancy even after this first meeting. He gave us some tasks to work on before we would meet him a second time. He prepared us with a file where we could calculate the needed capital as a first step towards a business plan.

For the next meeting we prepared a description of our business (see on page 71), a budget plan (all with red numbers) and found answers to many of the questions. We split the answers depending on whether the products would be produced in-house for the private market or produced by a brand for the contract market:

Designer as producer for private market:

What are you going to sell?
Design solutions and objects for the domestic space:
• Furniture
• Lightning
• Tableware
• Accessories

Who is you final customer?
• People who like to surround themselves with high quality and long lasting objects. Customers who enjoy a good atmosphere at home and are willing to invest into their domestic space. Our customers are willing to pay for quality, regional materials and craftsmanship. They are most likely 30+ and have a steady income.
• People who like to purchase high quality items that still are mass produced, thus affordable for the target group. Our objects are not exclusively on-demand pieces but would come in a limited edition of a few hundred pieces.

What are they prepared to pay?
• Medium to high price sector
• Objects cover a price range from medium priced to higher priced items. We will offer lower priced objects such as accessories like cushions, mirrors or drinking glasses as well as higher-priced furniture pieces. We want to give the consumer the opportunity to buy our brand by offering them different price levels. (E.g. the daybed comes with or without cushions. The cushions can be bought individually, the price for the daybed including cushions would be cheaper than buying both individually). That way, each customer can purchase items of our brand depending on his or her budget.

How do we find the customers? / How do we get in touch
• Social media
• Fairs (B2C fairs)
• Shops / Showrooms
• Online shop
• Advertisement

Design produced by a brand for contract market:

Who is the contractor?
• High-end furniture producers

Which brands do we want to work for?
Brands that approach the western market (focus on German and Scandinavian market), e.g.:
• Skagerat
• Flötotto
• Ligne Rosé
• Authentics
• Bolia
• Schoenbuch
• Manufactum
• Magazin
• Normann Copenhagen
• Northern Lighting
• Northern
• Woud
• Vitra
• …

How do we find the brands?
• Social Media
• Fairs (B2B)
• Network manufacturers
• Online research
• School connections

In retrospect we are very grateful for the support that "Lunds Nyföretagarcentrum" offered us. It was a very good way to see what we are doing from a different perspective and to understand the potential as well as the difficulties that come along with running one's own business.
What we have taken out of the consultancy for this project is, that the more active you are on the market, the more likely it will be that you will earn money. For royalty-based agreements this means that the more products you licensed at companies, the more money you will earn. It makes sense to place different products at different price ranges and with different

brands because they all work differently. Some brands might be smaller and can only sell a few hundred pieces, other brands sell big numbers but take your design off the market after two years. Another brand might sell our design cheap but it stays in the shops for many years. Since royalties only start to pay after two to three years, once the product is fully developed and produced, you should make sure that you continue to place products on the market to stay commercially liquid.

This is why we decided to use the material we got from Becker Brakel in such a way that we would create a product collection. Our goal is to be targeted on different styles, different markets and price ranges to address different brands and consumer groups. Our furniture collection should include products for the private sector, high-priced and low-priced, as well as products for the contract market that can be used in Hotels and Restaurants. We don't aim at developing a consistent line of furniture pieces, since we want to place them with different brands. However, the fact that all design concepts are based on moulded wood and that we as designers have certain handwritings, will ensure a consistency in the design. The details and formal language might reveal, that all designs are done by us, but won't obstruct the possibility of embedding the products into the targeted brands portfolio.

Our company
Discription

We are a design company that is mainly focused on furniture and lighting as well as tableware and home accessories. What drives our work is the curiosity for human needs and their interaction with objects and materials. We challenge ourselves by questioning habits and set society structures to be able to give each of our projects a relevant note. Taking in production processes and material research is a matter of course. Each project persists the test of time and provides the user with a mindful design object.

We trust in the potential of medium-scale European production and the value of local craftsmanship. As a result of that we collaborate with European manufacturers that guarantee good quality, fair production circumstances and durability of our products. It is our goal to inspire people to make conscious purchase decisions by setting value on longevity rather than trend.

Conclusion of the theoretical part
Transition to practice

We started the theoretical part early on in the process of the project. Our thoughts and considerations allowed us to get in touch with many people and to start various conversations and discussions around the topics that we elaborated above like millennials, mass production in Asia or the design education. What we had to realize in the course of the project was that on many of the considerations we could only touch upon briefly. Unfortunately, it was not possible to deepen all of our thoughts. Also finding answers to all questions seemed impossible in the context of this work. Many of the above mentioned topics influenced our interviews and whom we reached out to as well as our practical design outcome.

Design is always directly related to the present time and society and with that the present economic situation, culture, technologies and the political landscape that were implicated into the conception and realization. Change is constant – not only in the landscape of design. It is almost certain that the issues we are dealing with today will change in the future. At the moment though, the topics we addressed are relevant and are moving many people who work in the design scene. In particular, the interviews showed us that the addressed issues are up to date. During the interviews it turned out that some of the interviewees got back to us because the questions within our proposal were touching them. The variety of conversations enabled us to get in touch with many designers and to gain different perspectives on the work environment of design. For us the theoretical project was enriching and it was a logical conclusion to incorporate some of the answers in forms of our design. The cooperation with industrial partners is reflected in the designs in a way that one can see their background in a serial production. Each item shows the properties of the used materials.

The over-all output that we have taken from our experience at "Lunds Nyföretagarcentrum" was that we decided to use the material we got from "Becker Brakel" in such a way that we will create a whole collection of products. This collection of furniture could possibly be licenced by furniture brands as a first step into starting our own business. The licence agreement would allow us to enter the market and sustain ourselves financially, which is not easy for a young designer.

Our goal became to design items in different styles for different markets and price ranges. Like this we want to address different brands and consumer groups. Our furniture collection should include products for the private sector, high-priced and low-priced, as well as products for the contract market that could be used in Hotels and Restaurants. We don't aim to develop a consistent line of furniture pieces, since we want to place them with different brands. However, the fact, that all design concepts are based on moulded wood and that we as designers have certain handwritings, will ensure a consistency in the design. The details and formal language might reveal, that all designs are done by us, but won't obstruct the possibility of embedding the products into the targeted brand's portfolios. Our design process was heavily influenced by our theoretical framework. Now we want to show you the practical output.

Let's talk about
Practice - our project

Design brief

We wanted to find out how a young designer can make a living by collaborating with an industrial manufacturer. For this purpose, we collaborated with various industrial producers to design an industrially manufactured furniture series that has the potential to be produced in series. The prototypes should not only benefit in terms of quality of a design based on industrial production, but also make use of production techniques that could not be realized on a self-made level.

Our goal

Our goal is to create a furniture line in collaboration with industrial producers. By collaborating with manufacturers, we not only wanted to benefit from their expertise and know-how, but also from implementing their production processes into our design process. On the one hand this means, that we use material that the companies already produce in serial production with all tools already existing. On the other hand we want to make sure that our design concepts are realizable in serial production. This required that we got an insight into the companies' production techniques and processes.

Not only the base material of our designs should be industrially produced, also details and joints should not require customized production. This mainly serves the purpose of collaborating with middle-sizes manufacturers to understand European serial production.

Our theoretical elaboration and findings dictate to design all furniture pieces in different styles, for different markets and price ranges, to be able to place them with different brands and consumer groups. This means that we don't aim to develop a consistent line of furniture pieces. However, the facts that all design concepts are based on moulded wood and the fact that we, as designers have certain handwritings, will ensure a consistency in the design.

Our final design concepts will be realized as prototypes in a 1:1 scale that showcase the accurate material, function as well as the assembly.

Method

Since we want to assure that all furniture pieces are realizable in serial production, we decided to turn the common design process up side down. Usually one would design e.g. a chair with a specific material in mind. When it comes to prototyping one would have to pay for tooling costs to assure that the end result suits the created design. Since we want to find a way for designers who just enter the market with a restricted budget, this is one possibility to produce high-quality prototypes.

That means that we have to create objects that can be produced with already existing tools. Deductive to this realisation, we determined the method to base our designs on shapes and material that is already produced by our collaboration partners. We see a challenge in this method, rather than a restriction.

Timetable

Theoretical Work:

1.12.2017 - 31.12.2017
Theory research start

1.1.2018 - 15.03.2018
Reading and writing

Practical Work:

1.1.2018 - 4.2.2018
Practical analyses (first sketch models)

5.2.2018 - 25.2.2018
Practical synthesis (first prototypes)

26.2.2018 - 1.4.2018
Practical realisation (prototypes)

2.4.2018 - 11.5.2018
Realisation of final prototypes

7.5.2018 - 22.05.2018
Exhibition preparation

25.5.2018 - 30.05.2018
Final presentations

1.6.2018 - 3.6.2018
Degree exhibition

Collaborations

For our project, we wanted to initiate cooperation's with medium-sized manufacturers in Europe. We were hoping that we could get an insight into the companies and thus develop an understanding of what we needed to consider for a serial production. We already initiated our main cooperation with Becker Brakel in November 2017 in order to give the company the opportunity to decide whether they wanted to collaborate with us. For us, the cooperation is in no way a matter of the fact that the companies manufacture specifically for us. Much more we would like to use the existing materials to create our design out of them.

Becker Brakel
Moulded wood

BECKER BRAKEL

Becker Brakel is a worldwide leading moulded wood manufacturer. Situated in the western part of Germany, within the region of the worlds largest beech forest. For over 75 years Becker Brakel develops and manufactures shaped wood components. They fabricate big scale productions for companies and designers worldwide. From the veneer production, over the pressing of the wood and the processing by hand or with the help of CNC machines, up to the finishing of the parts, Becker Brakel realizes the whole process of manufacturing wood with approximately 300 members of staff on a production site of over 19 000 sqm.[33]

Next to their global customers, Becker Brakel as a company also has a focus on their connection to young and up-and-coming designers as well as design students. They have not only invented an international design competition to promote young designers, but they also compiled their knowledge in their "Moulded Wood compendium" to pass it on. Moreover they are engaged in collaborations with Universities and individual student projects.

In the very beginning of our thesis we already knew, that we wanted to collaborate with an industrial production that produces on a big scale and is located within Northern Europe. That brought Becker Brakel into our focus. The CEO Dr. Ralf Becker, who has resigned from his position in January 2018, as well as Dipl.-Ing. Joachim Schelper who is the Head of Development were very welcoming and invited us to their production site in Brakel. We got the chance to get to know the company and their running production. We got an insight into the different steps of the moulded wood production. Moreover, they were open to cooperate with us and to support us with know-how as well as moulded wood parts. By this, Becker Brakel has become our main collaboration partner.

The moulded wood manufacturer agreed to support us with material that is produced in small series for our prototypes. We were able to choose from their broad inventory of pressing tools. After first experiments with shaped wood samples that we received from the company, we chose parts we could work with and formulated a list of contemptible tools. It

was up to Becker Brakel with which material they would be willing to supply us – our goal was to create products with whatever materials they would support us with.

The knowledge we gained from Becker Brakel as well as the moulded wood pieces they sponsored us, are very formative for our design concepts. They determine the shape and construction of our objects. The high-quality shaped wood gives our designs exclusivity that simple wooden panels could not have created.
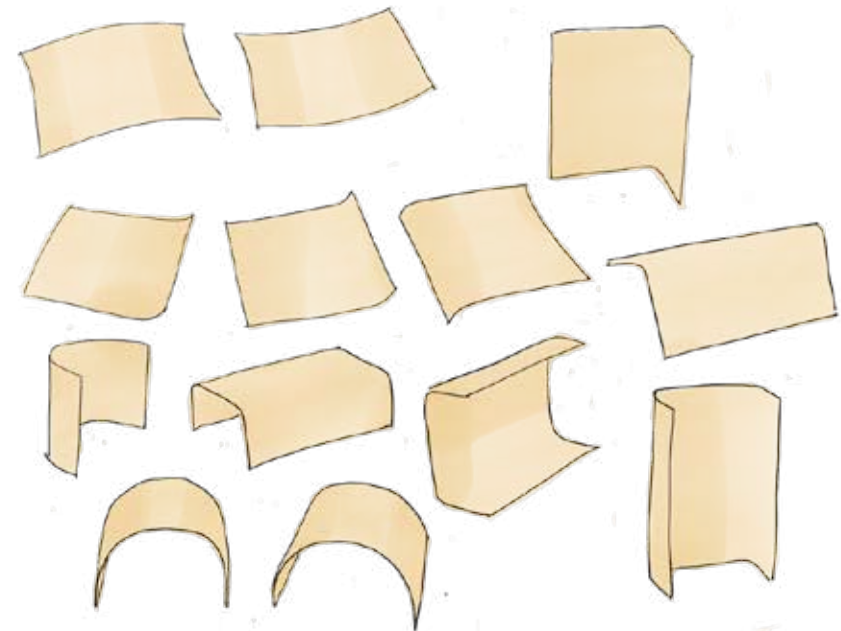
↑ [33] *„Der Becker: The moulded wood compendium", 3rd issue (Minden: Bruns Druckwelt GmbH & Co. KG, 2014), P. 7*

Vilax
Upholstery supply

Kvadrat
Fabric supply

Vilax is a family-owned company that produces upholstered furniture and beds. The Swedish manufacturer sticks close to its traditional crafting and produces exclusively in their factory in Staffanstrop, Sweden. We choose to ask Vilax for collaboration since they work locally but not on small-scale level. They create their furniture based on orders from interior designers and architects. Additionally, Vilax has their own collection of beds, sofas and chairs. With a team of about 15 people they realize carpentry and composition of the upholstery. They are sewing the fabric covers, assemble the furniture and even manufacture their own beds springs with a unique technique.[34] Vilax effectively combines passionate craftsmanship with serial production.

While we were searching for an industrial manufacturer of upholstery we came across Vilax via their online presence at SPOK (s-p-o-k.se). Since they offered exactly what we were looking for, we sent them an Email with our request. After getting in touch with their sales manager Tony Nyström, we agreed on a meeting with Veronica Persson, their in-house seamstress for upholstery, to visit their production site and discuss our designs. We have been very lucky that they were willing to support us. It was not only that they have given us great insights into their work-process, they also showed us how to produce upholstery foam and covers in an industrial production. Finally, they have equipped us with material and produced parts of our upholstery for two of our prototypes.

Kvadrat is a company that produces textile. The company was founded in 1968. Eversince then the Danish company designs and produces innovative textiles and textile-related products.[34] The Headquarter of Kvadrat is located in Ebeltoft /Denmark and has producing factories in Manchester/England, Innvik/Norway and the Netherlands. The internationally renowned company's clients are private consumers, architects and designers. Their products are developed in-house as well as in collaborations with external designers.

After proposing our thesis project to Kvadrat, they have been willing to support us with upholstery fabrics for our prototypes. Moreover we had the possibility to visit their showroom in Copenhagen and choose fabric samples from their collection. The high quality textiles from Kvadrat have become an optimal addition to the moulded wood parts that we are using. In combination with the moulded wood, the textiles create an added value of our objects.

↑ *[34] Kvadrat, last modified 7.5.2018, https://kvadrat.dk/about/we-are-kvadrat*

↑ *[34] Vilax, last modified 6.5.2018, http://www.vilax.eu/om-oss/*
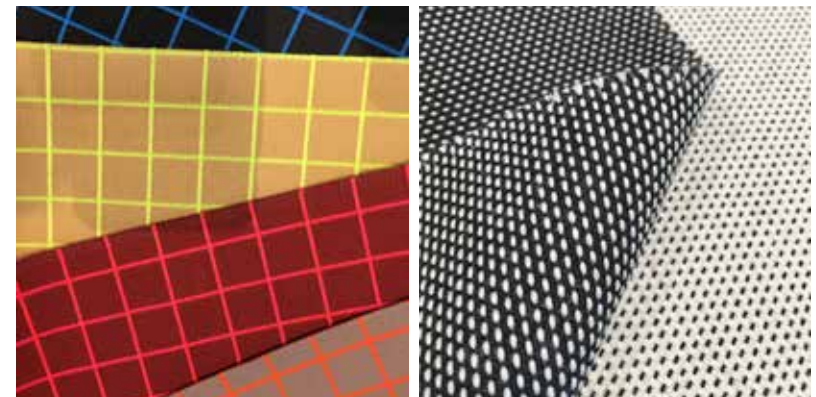
Practical part
Starting off

In 2017 we already had the idea of collaborating with industrial manufacturers. We decided to get in touch with Becker Brakel to see if they would be willing to support our project with already produced moulded wood pieces. The moulded wood was particularly interesting for us, since it is very difficult to produce moulded wood on our own. The material is of high quality and thus was exactly what we aimed for with our designs.

When we first visited Becker Brakel in November 2017 we got the opportunity to take some material samples with us to Lund. After a first approximation with the material, we took all the pieces we got to the workshop and started to work with them. By cutting it in smaller pieces, cutting slots into the material or treating the edges with different strengths of sanding, we got a feeling for the material and the potential of plywood.

We quickly noticed, that simple geometrical shaped forms were not only easier to handle than already shaped seating shells, they also let to more freedom in the form-finding process. Also, they allowed a bigger variety to be cut and used for potential designs.

For example a half circle could be used as a big piece, with the full depth of about 500mm, or we could cut the same form into stripes of 20 mm - which opened up completely different possibilities to design a product. With this realization we started to sketch the very first ideas that came to our minds.

After these two important first steps - working with the material as well as sketching down first ideas - we were able to select shapes from Becker's pressing tool portfolio. We picked out several shapes and formulated a wish list that we sent out to Joachim Schelper at Becker Brakel.

Process path
From given shapes to novel designs

1. Visiting Becker Brakel / 20. November 2017
2. Getting the first sample pieces
   a. (Angle parts / Radius parts / Constructional parts / Backrests / Seats)
3. First ideation phase with given shapes
4. Experimentation with material
5. Conclusion: radius and angle parts are easier to handle and ensure a bigger variety of concepts
6. Formulation of a wish list
7. Material pickup at Becker Brakel / 20. March 2018
8. Second ideation phase
9. Arrange the sketches into cluster and continue sketching
10. First round: ranking of concepts
11. Double-check: Which design concepts can we realize with the material we have?
12. Second round: Ranking of concepts
13. Redefining the concepts / Develop variations
14. First sketch models
15. First selection round to narrow down the number of concepts
16. Analysis and development of alternatives in CAD
17. Prototypes in 1:1 scale
18. Redefinition and measurement setting
19. Production start of final prototypes

Given material

Moulded wood
Material we got from Becker Brakel

After sending a wish list of shapes to Becker Brakel we got a list with material back that they could provide us with. We agreed that Becker Brakel only equips us with parts that were in production at that time anyway. No extras were made for us. A few weeks later, on March 20th, we drove to Brakel to pick up the material that they had promised us. We got all the parts just the way they come out of the pressing machines - with untreated edges, loaded them into the car and took them back to Lund.

Part 6.961 / Upholster quality / 3x *
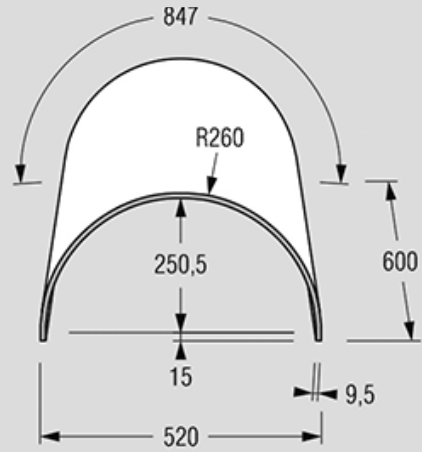
Part 6.918 / Oak / 2x *
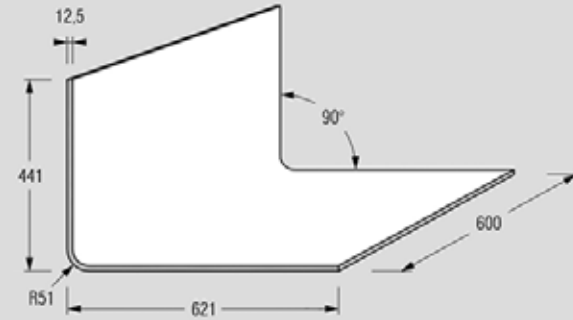
Part 4.168 / Upholster quality / 4x *
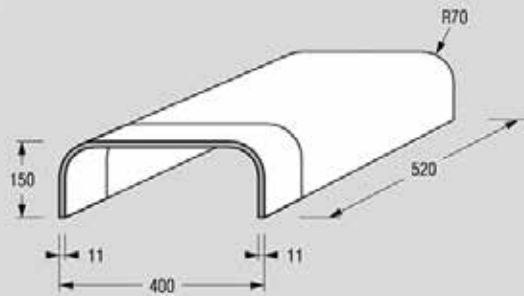
Part 3.083 / Ash / 3x *
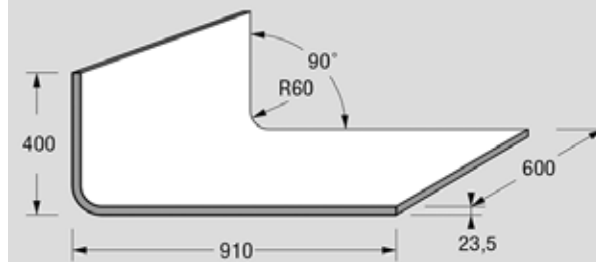
Part 3.110 / Walnut / 3x *

24,5

1100

175   90°

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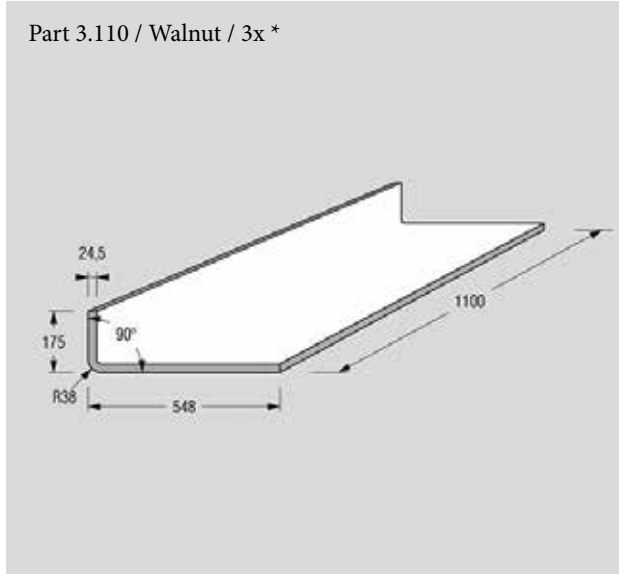
*Some of the parts that we got vary in
dimensions and are a little different
than the tool catalogue states. Moreover
the measurements of moulded wood
pieces always include tolerances. Due
to the fact that wood is a living material
angles or radii might not be exact.

pictures: https://www.becker-brakel.de/formholz/#werkzeuguebersicht

Ideation

Ideation phase
Sketching first ideas

Now that we had the final moulded plywood pieces it was time to start the second ideation phase. Our first step was to sketch down all conceptual ideas that came to our minds. That led to a wall full of sketches. To get an overview we arranged all sketches into a cluster with different categories for different types of furniture and accessoires. By this we could see where the two of us had similar ideas that could be combined into one and where we where lacking concepts. To generate further concepts we kept on sketching. After we felt that we had collected a wide range of conceptual ideas we started to rank the concepts according to their potential, originality and producibility. To assure that we could actually realize different concepts with the wood samples we had, we assigned the concepts to the material. To narrow the number of concepts further down we ranked them once again. An important basis for decision-making was the producibility and the potential we saw in the idea.

After limiting ourselves to 12 design concepts, we elaborated them, redefined them and developed variations of the concept. This was done with the help of sketch models. Seeing the concepts in 3D helped us to get a better feeling of what would work and what wouldn't. Like this we sorted out some of the concepts to narrow down the overall number of designs. In the next step we analysed the concepts in terms of size, stability and appearance and developed further alternatives in CAD. Later we built mock-ups in a 1:1 scale. This helped us to redefine the concepts and set the right measurements.

After finalizing 10 design concepts we started to produce our final prototypes. Some parts were produces by manufacturers, some parts were produced by us in the schools workshops.
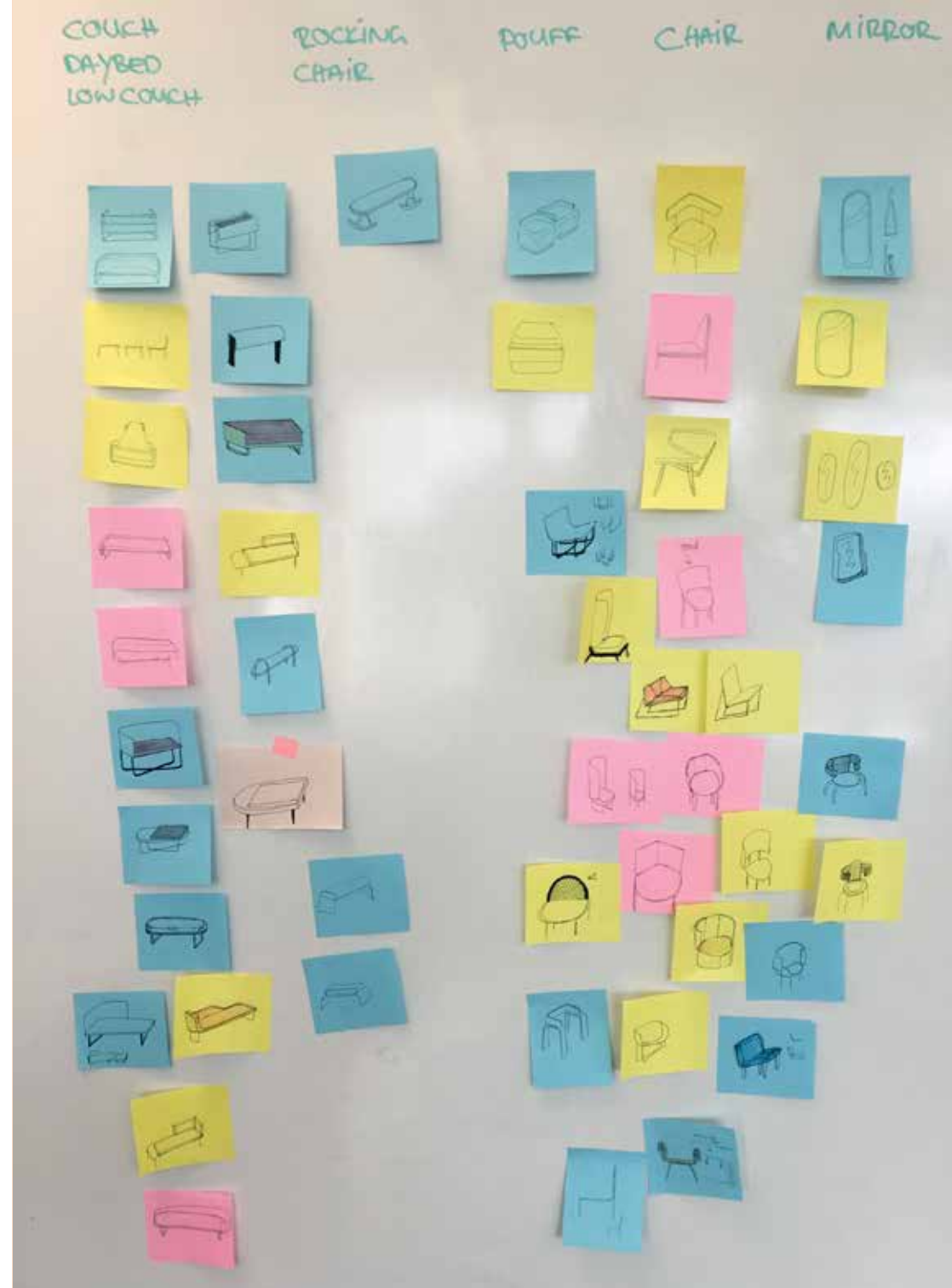
Colour, materials, finish
CMF strategy

Within this project we will not plan a coherent colour, materials and finish strategy. The purpose of the product line is to generate a number of different designs that can be placed in different market sectors and within a range of brands.

It is important to us to use materials as idea- and inspiration-sources. Colour will be used as a placeholder. We will use a few different surface treatments like powder coating, spray painting or wax treatments to show different possibilities.

We expect that each brand will have their own CMF strategy that includes specific materials, material treatments and colour palettes.

While we mainly used sponsored materials like the formed wood, we will have to make decisions on colour and finish within our process. We are aware that each colour and finish will represent a style and thus creates a specific formal language. We tried to vary in our selection from classic colour and finish to rather extraordinary patterns and daring colour.

Lounge chair
Ideation & mockups
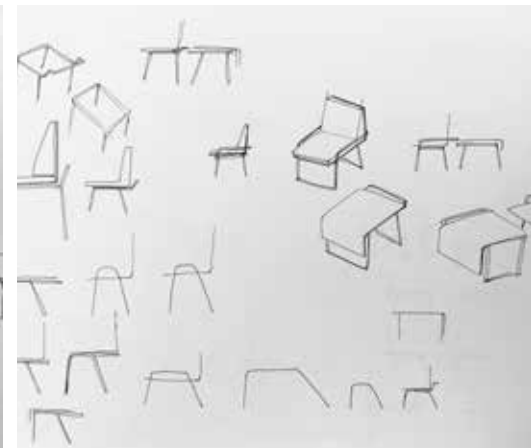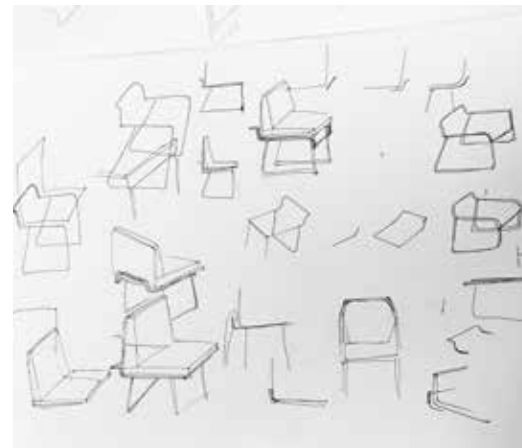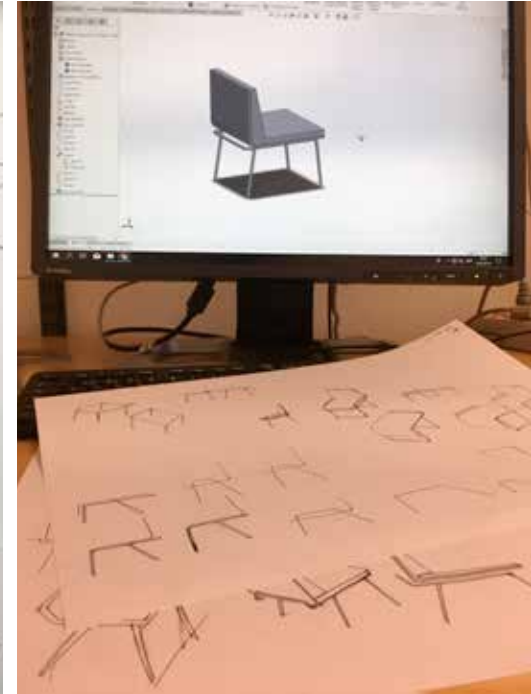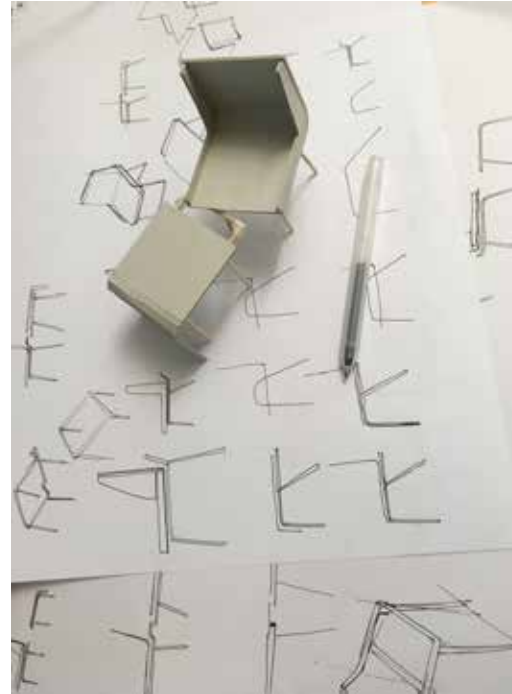
Beginning
Moulded wood as a supporting element
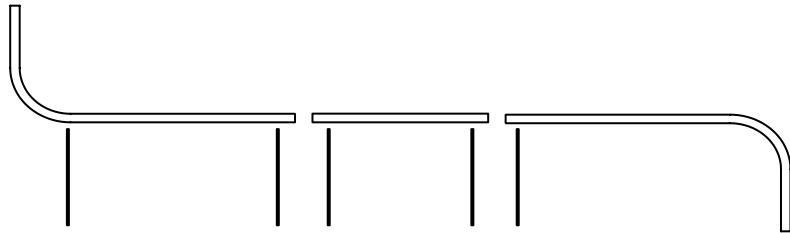
The biggest moulded wood parts we got were three L-shaped ash parts. Since they had a material thickness of 16,5 mm they were very stabile. That was why we wanted to use them as supporting elements. We decided against cutting the pieces and rather use them in their original size. As a result, we used two of the shapes in a similar way but turned one of them upside-down. This gave us the inspiration to create a chair with an upright backrest and a footrest/side table with a short sloping sidewall.

01-04-201?

LOUNGE
CHAIR
+
TABLE
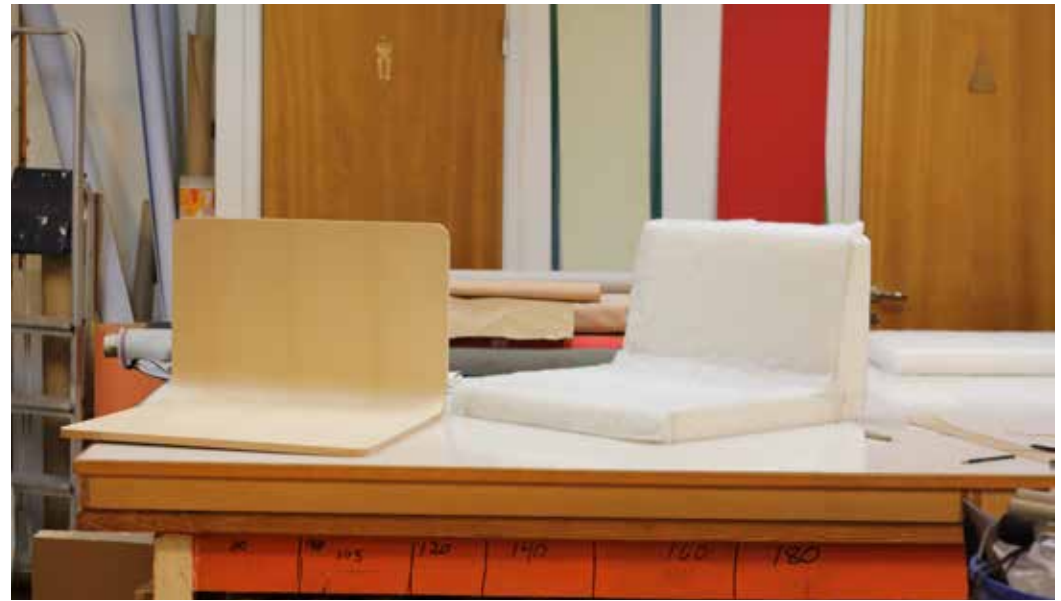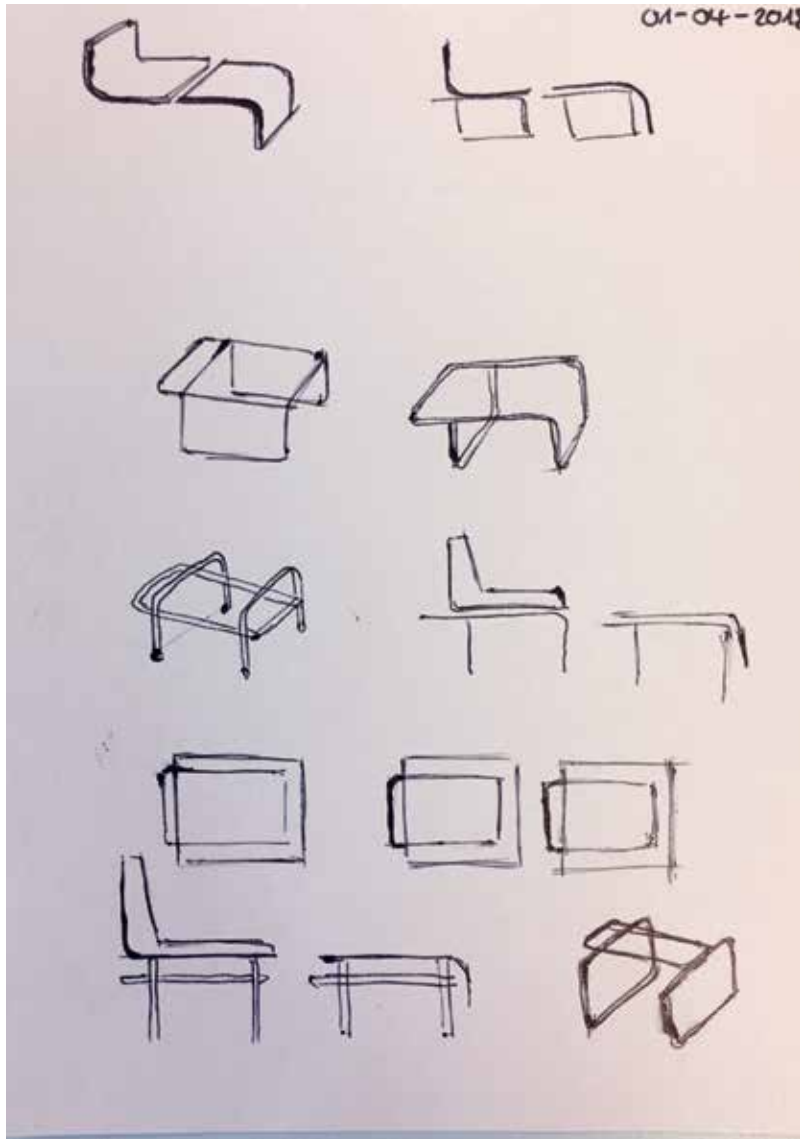
CAD variations

Development of the support structure

*Selected version
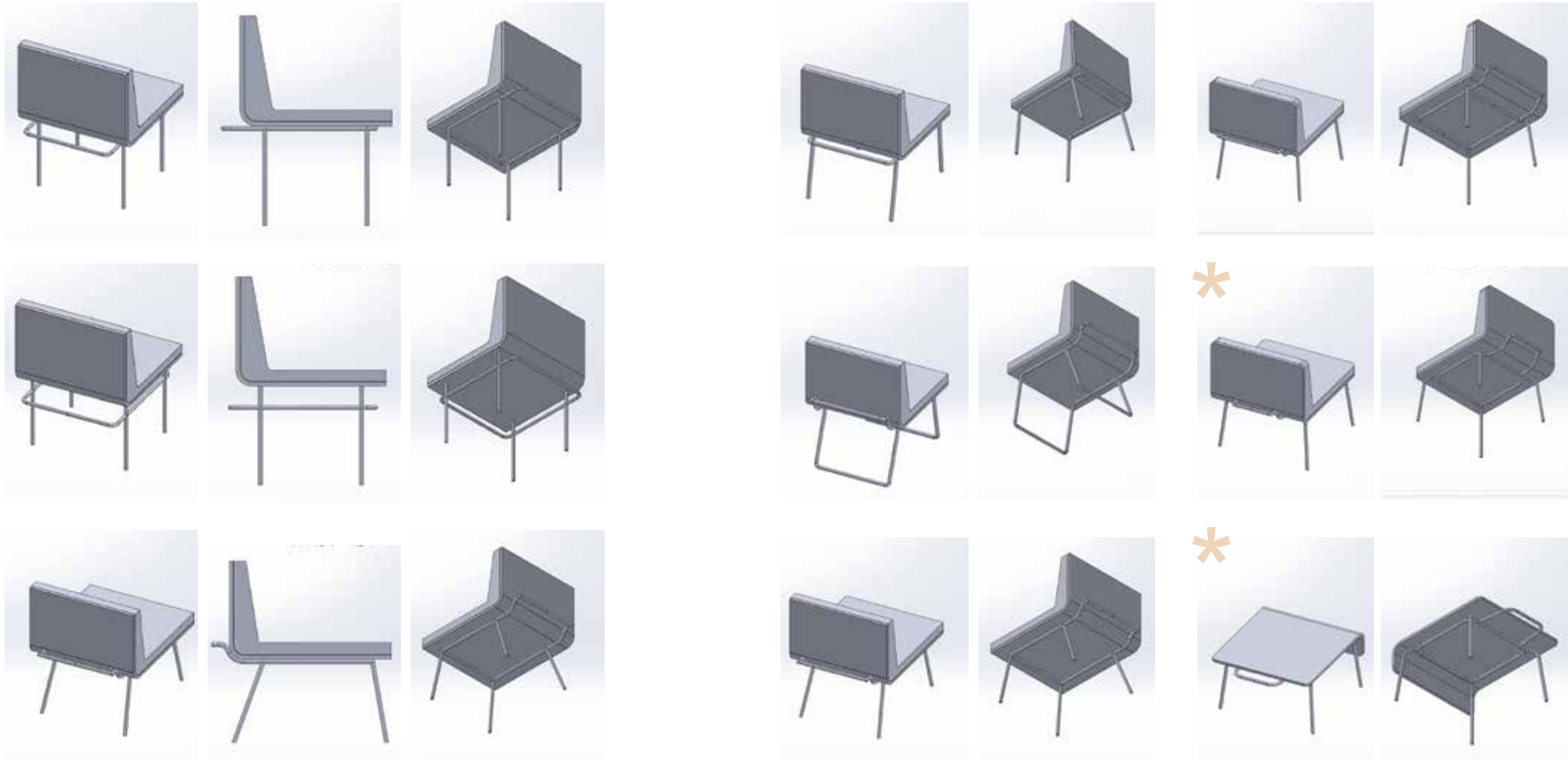
Bench
Ideation & mockups

Beginning
Moulded wood as a form-giving element
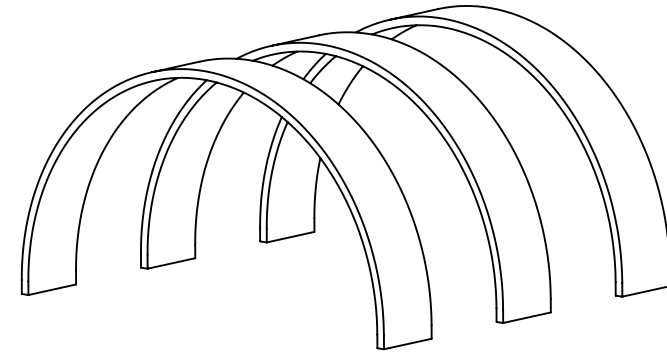
When we were experimenting with sample
pieces, we cut the moulded wood into slim
stripes. The quality of the shape guarantees that
it stays stabile. Within this concept we used
a stripe of the radius part as the form-giving
element. Furthermore we decided to put the
focus on that piece. As a result the bench was
composed out of simple geometrical forms.
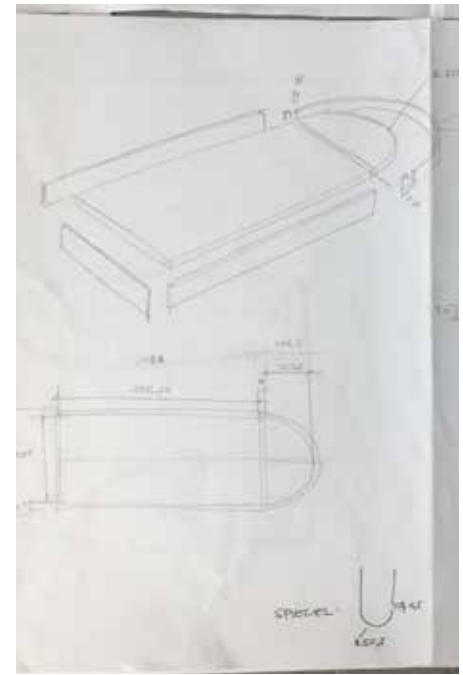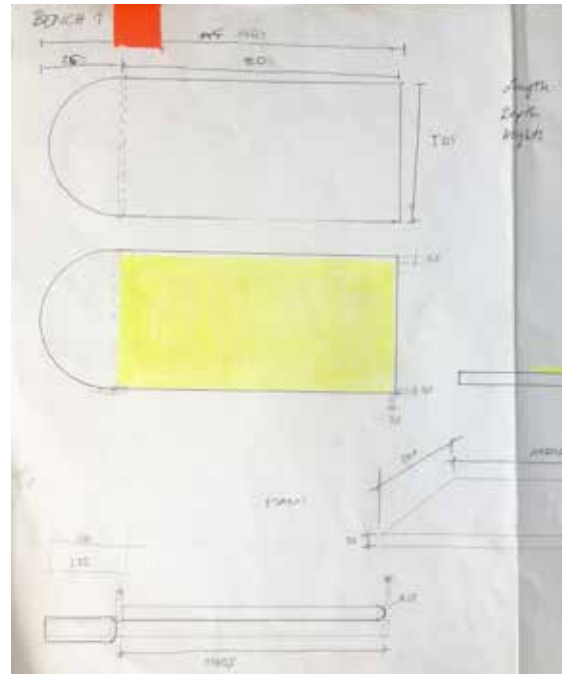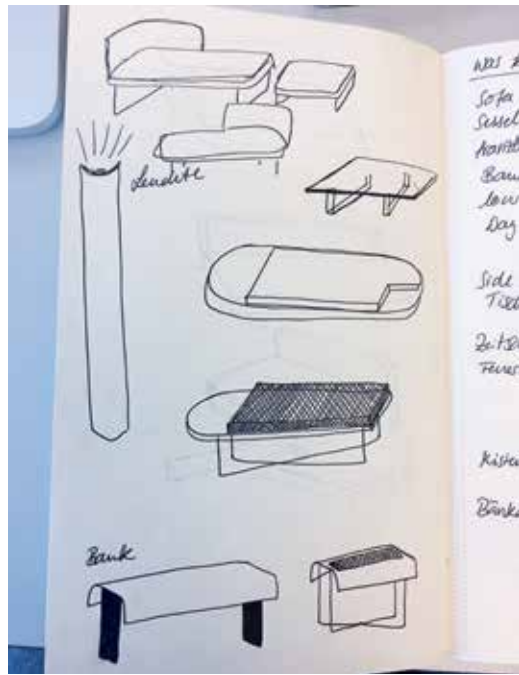
CAD variations

Development of the dimensions and the construction

Stool
Ideation & mockups
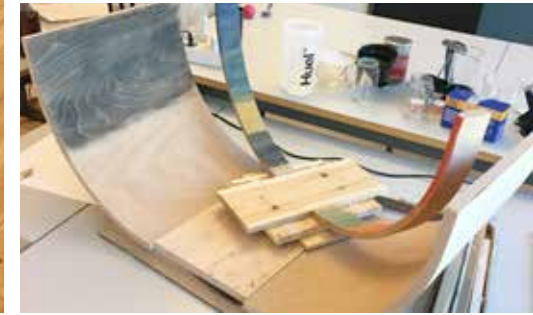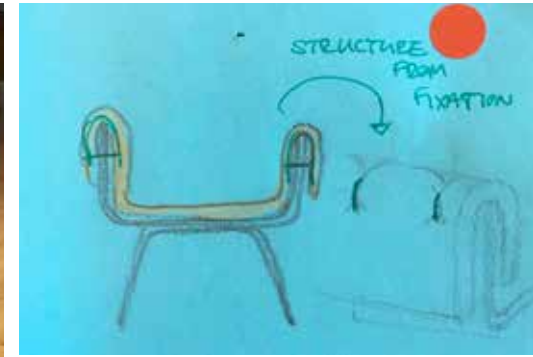
Beginning
Moulded wood as a static element

Inspiration
Reinterpretation
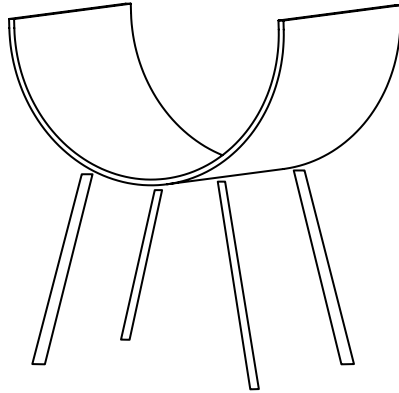
We were fascinated, how stabile the radius pieces were. Out of an intuition we tried to sit in the radius part and directly noticed the potential of the armrest. Although they were a bit too narrow they were quite comfortable. We soon started to experiment with upholstery material. We tried different variations to fix foam to the wooden shell. Pulling strings through the foam and the moulded wood not only tied them together, but also deformed the upholstery in an appealing way.

Sitting in the crude form of the shaped wood gave us the association to sit in a medieval Scissors Chair. From that point one we used this historic chair as a reference for our design. The medieval Scissors Chairs where often pompously decorated and at the same time intriguing in their simple, formal composition. Within our conceptual elaboration we tried to keep the simplicity and give it a playful twist.

CAD variations

Development of the dimensions and the construction

Sideboard
Ideation & mockups
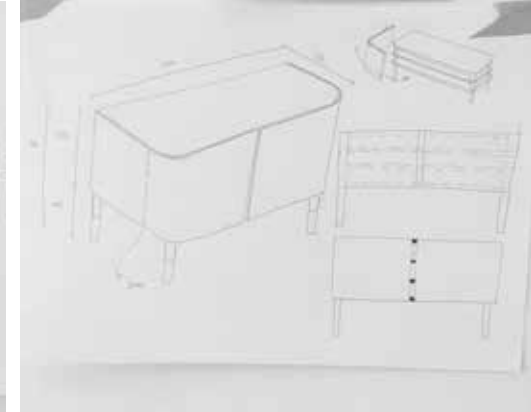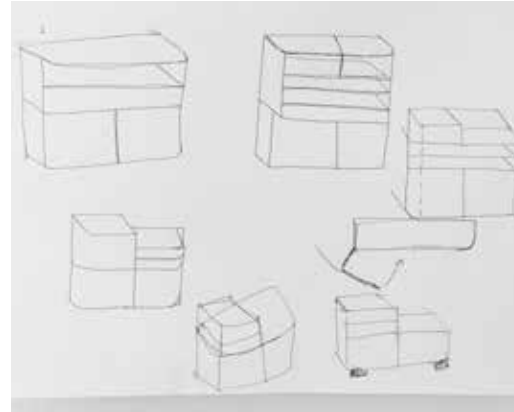
Beginning
Moulded wood as a forming element
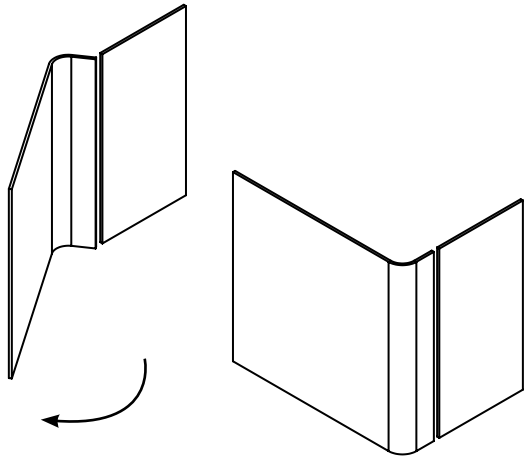
Similar to other concepts the starting point was the L-shape of the unprocessed moulded wood that intrigued us. Within this concept the intention was to let the big radius of the angled piece detect the shape of the furniture piece. Since the material thickness is only 8 mm, it does not provide a lot of sturdiness and could not be used as a constructive piece for furniture like e.g. a chair. We decided to use the two similar pieces as the outside parts for a sideboard. We placed the hinge of the doors behind the rounded corner so that the doors can open widely.

Inspiration
Reinterpretation

From the point on that we decided to use the moulded wood as doors of a sideboard, it was important for us what one would see behind the widely opening doors. Due to the fact, that the inside of the sideboard is spacious revealed, once the doors are open, we wanted to give the insight and unexpected appearance. We referred the inside of the sideboard to the inside of a kiln. When one fires ceramics, layers are stacked on top of each other by using thick stone cylinders in different heights. These cylinders are placed in all four corners to hold the heavy stone plates. This support structure became our inspiration for the sideboard.
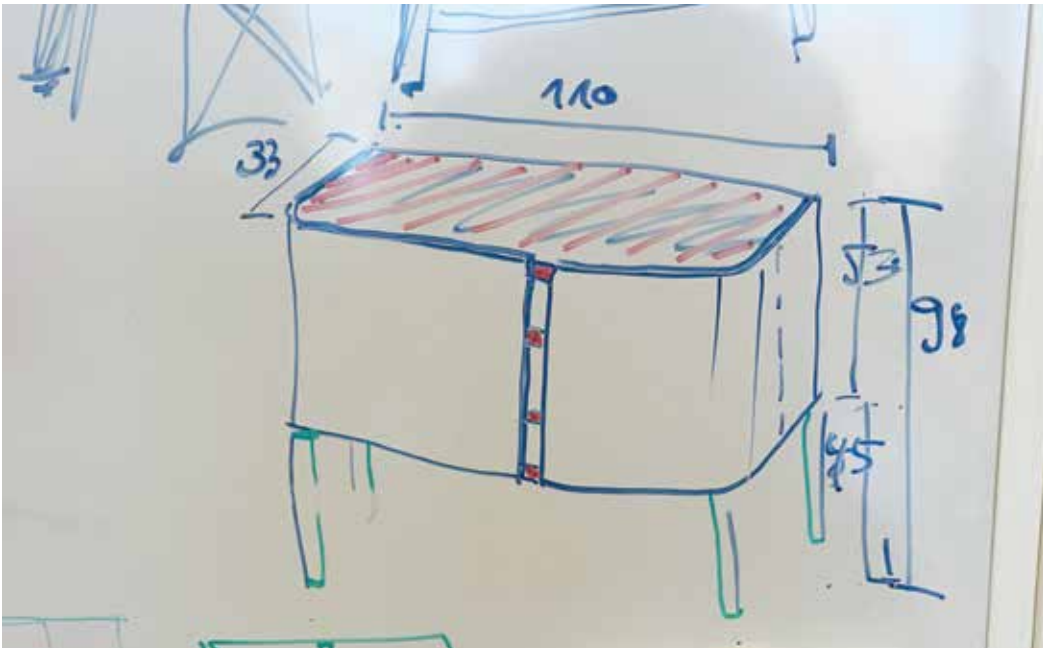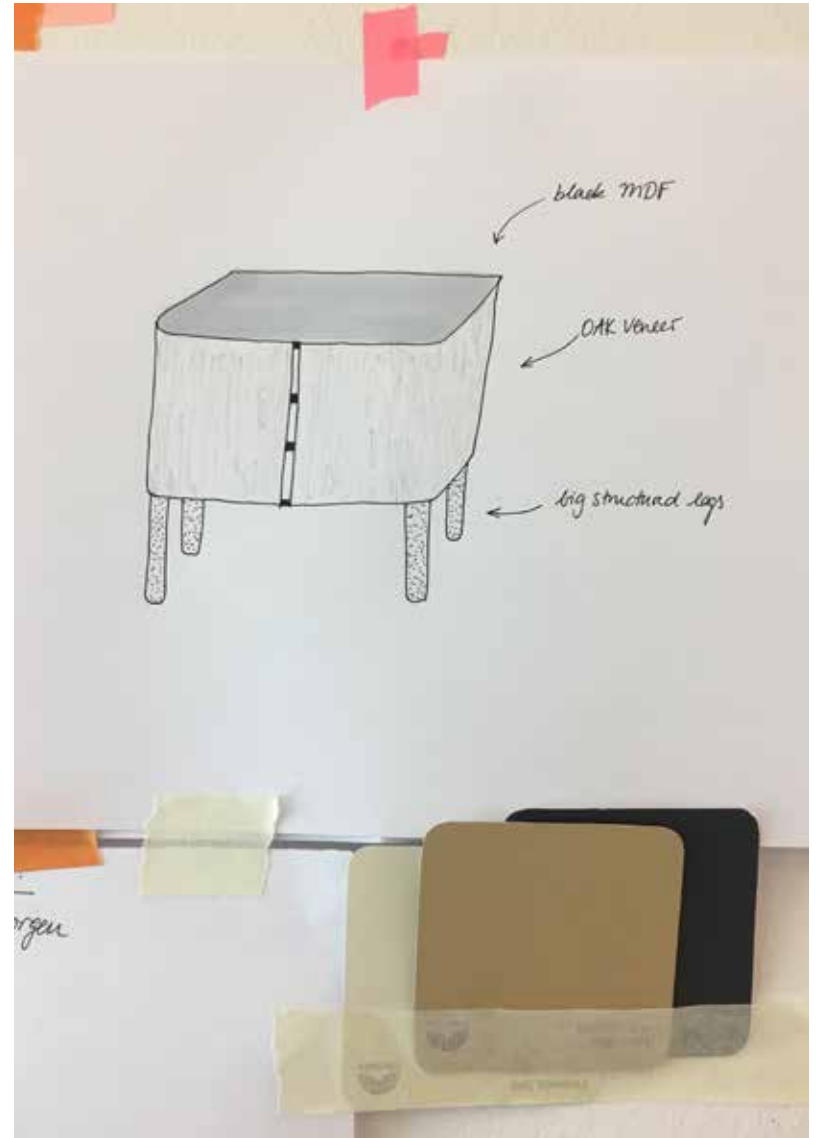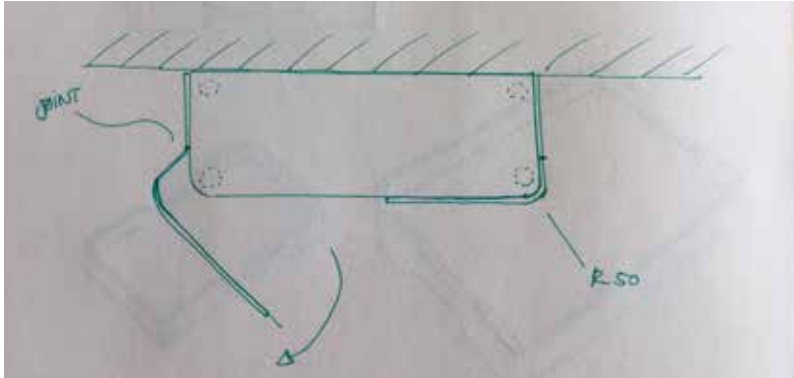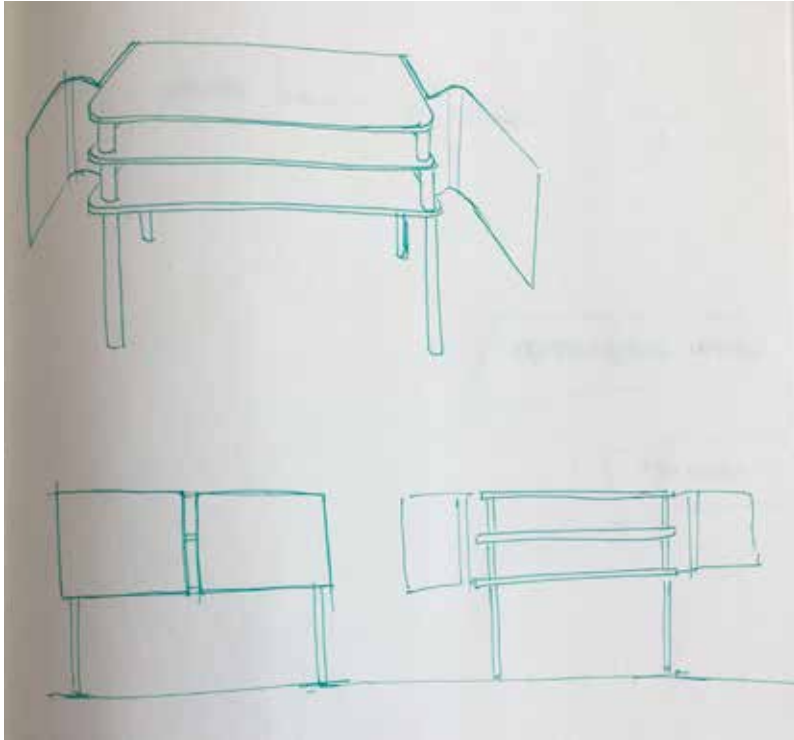
CAD variations
Development of the legs
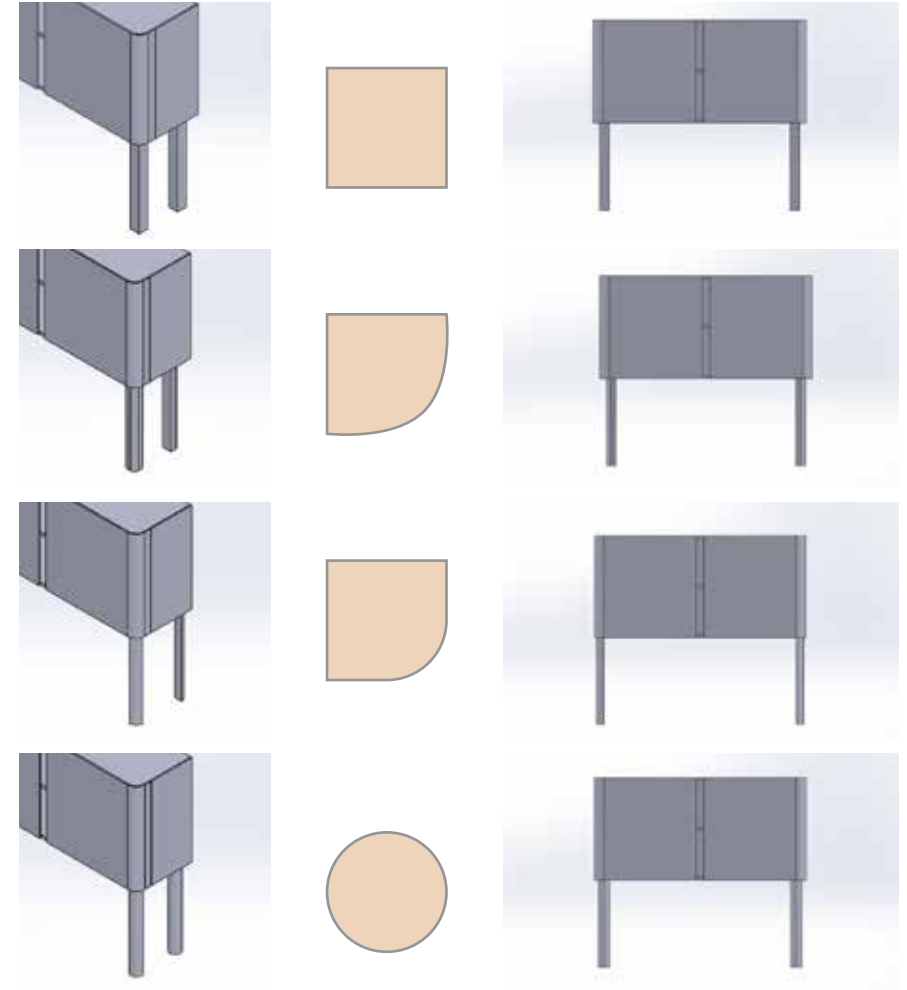
Mirror
Ideation & mockups
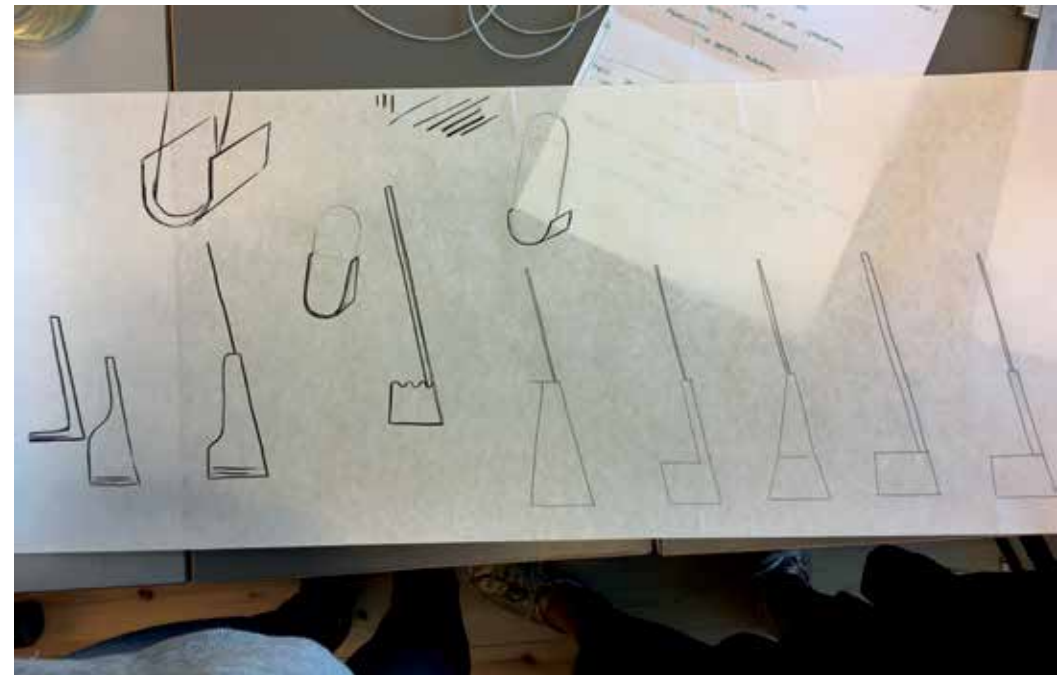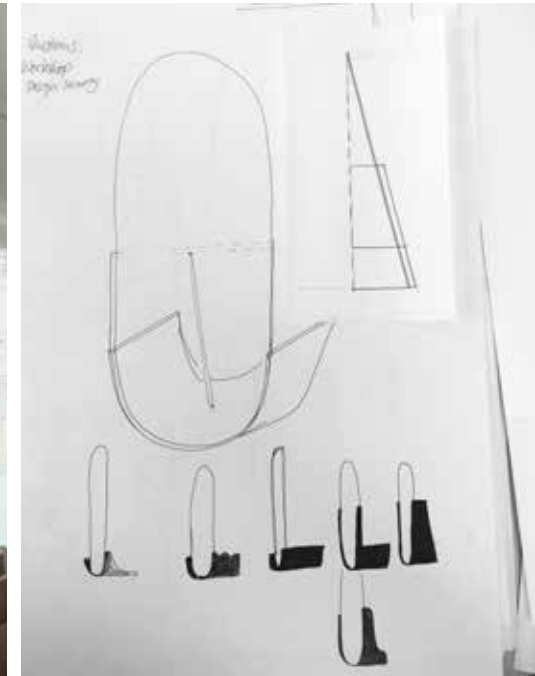
Beginning
Making use of the shape's characteristics
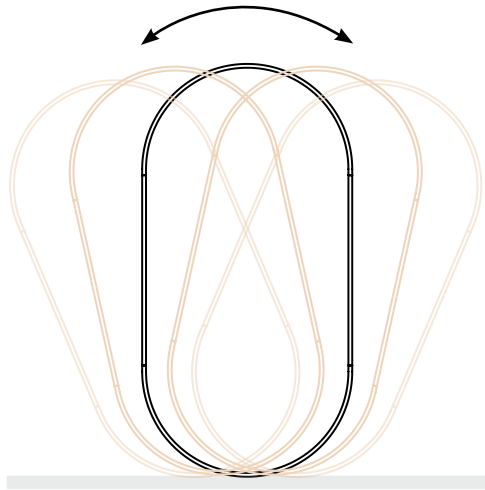
The starting point of the mirror was the shape of the uncut radius part of the moulded wood that intrigued us. For this concept the intention was to let the big radius detect the shape of the mirror. When the radius is placed on the floor it starts to swing. We liked the movement and thus combined it with a function.
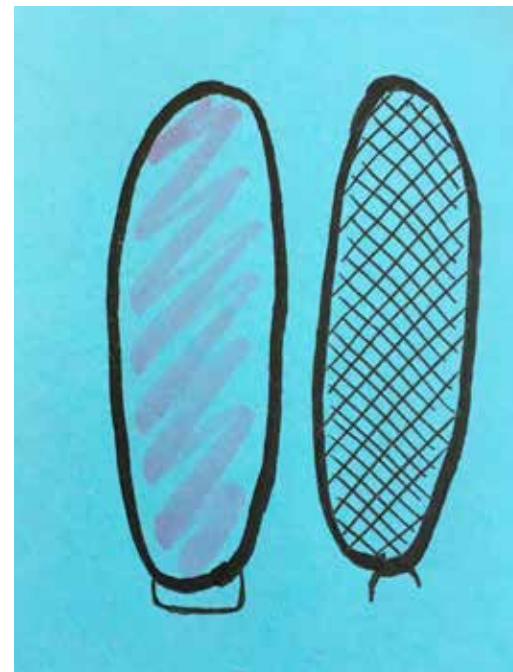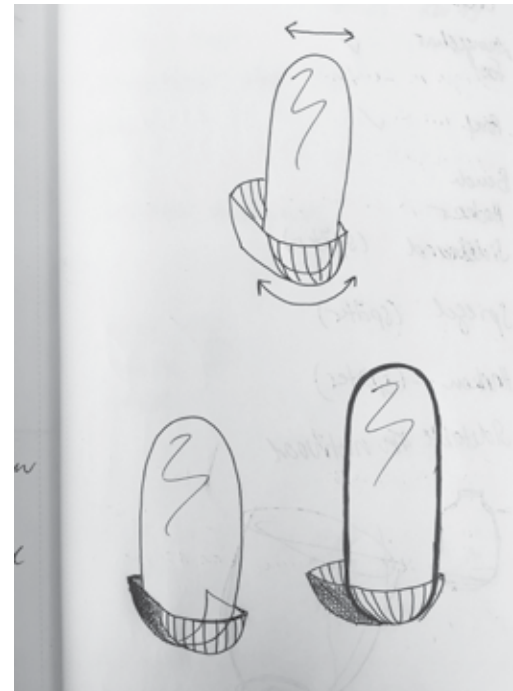
CAD variations
Framed mirror: Development of the size
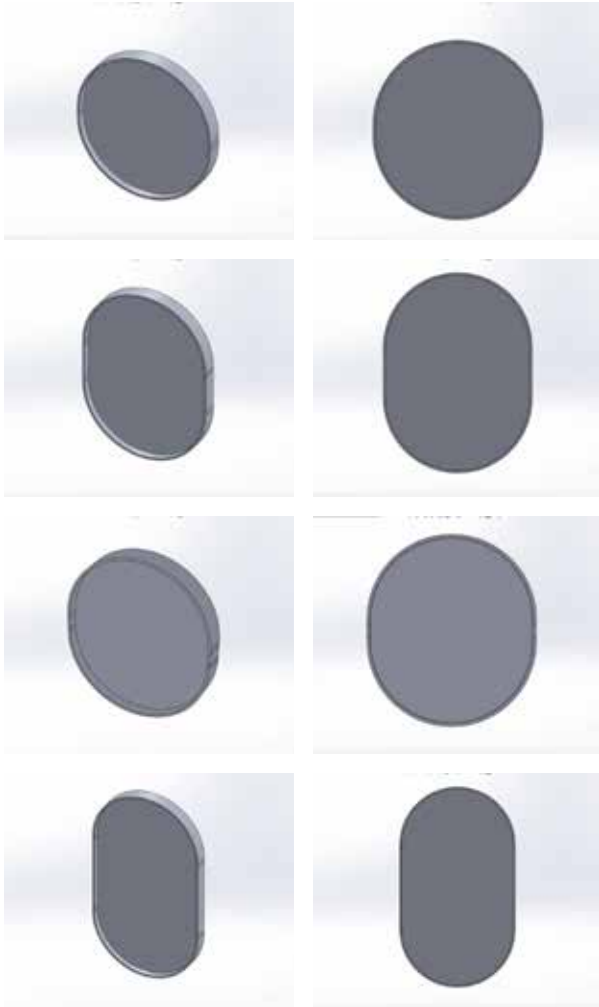
CAD variations
Floor mirror: Development of the construction
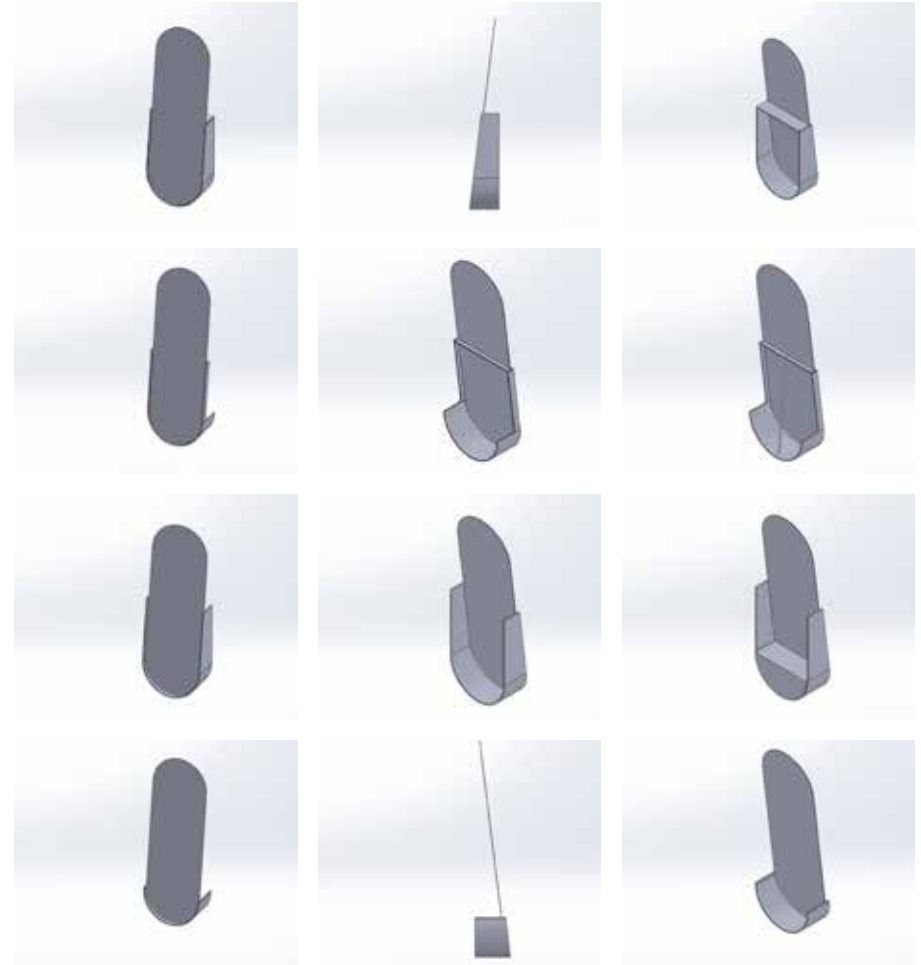
Table
Ideation & mockups

Beginning
Moulded wood as a form-giving element
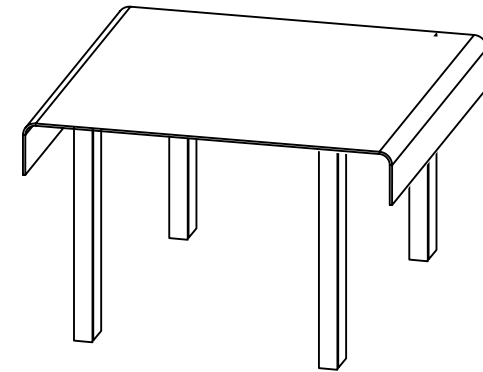
This design concept was developed out of an active process rather than a sketch. We placed two angled wood pieces in their original size of 70x70 cm on top of a table base and realized that it looks like a tablecloth that hangs down on two sides. In a further step we tried different versions by turning one of the pieces upside down. We ended up with a version where one end of the tabletop stands upright and creates a wall. This would provide some privacy for two while eating.
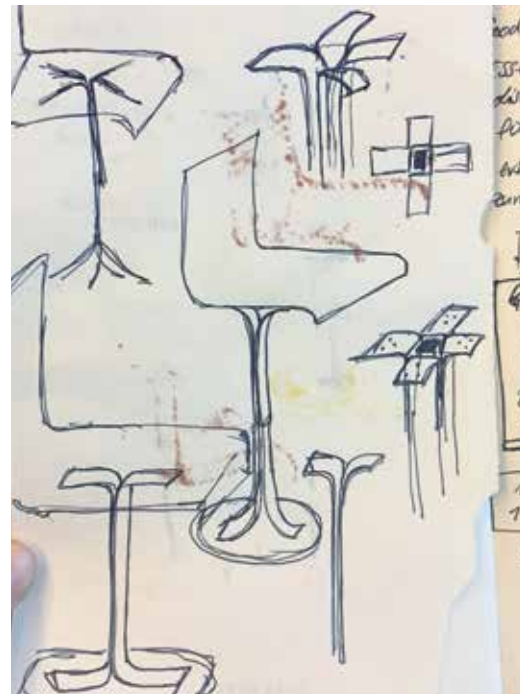
Inspiration
A privacy-creating table
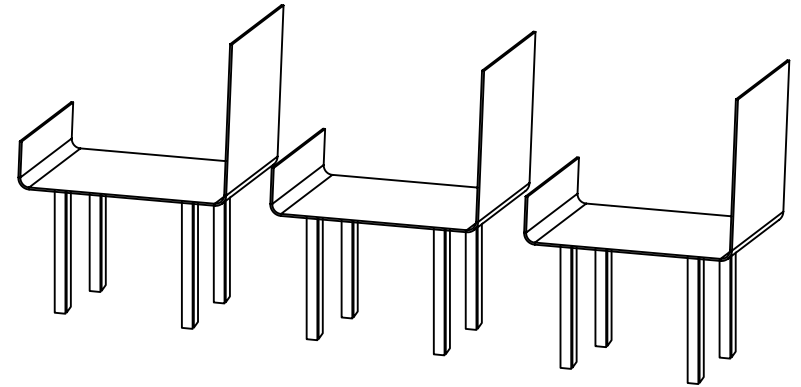
Creating a dining table for two in the setting of a restaurant doesn't seem to be too hard. However, often restaurants place tables for two close to each other to safe up space or to give the possibility to put several tables together for bigger groups. This leads to a lack of privacy. We wanted to create a dining table that creates a private sphere within a restaurant, which suits our modern society's needs.
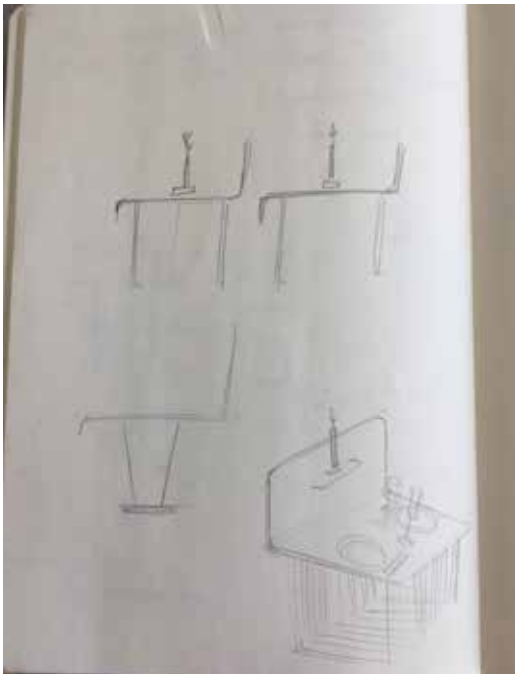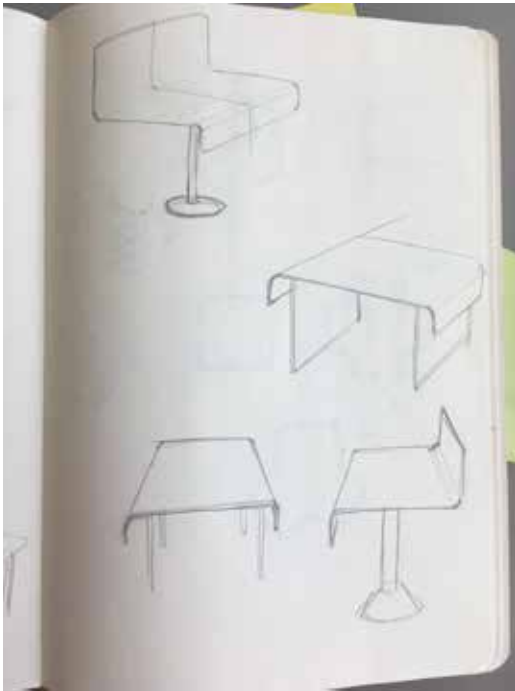
CAD variations
Development of the table top
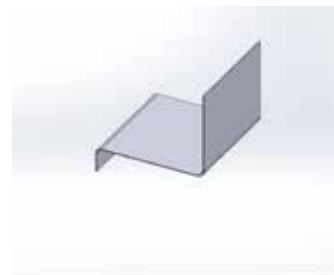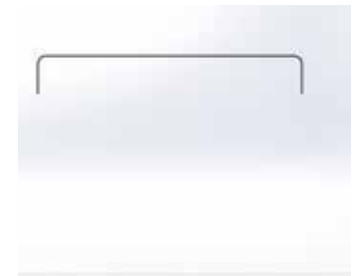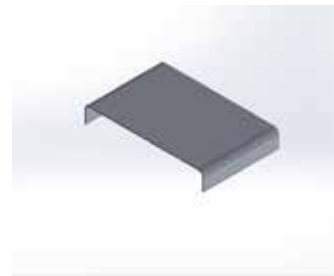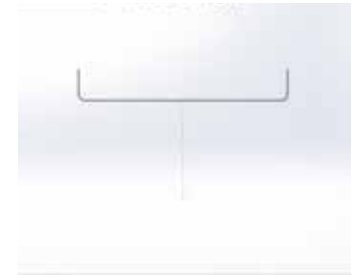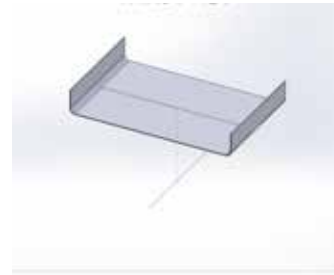
Renderings
Conceptual draft
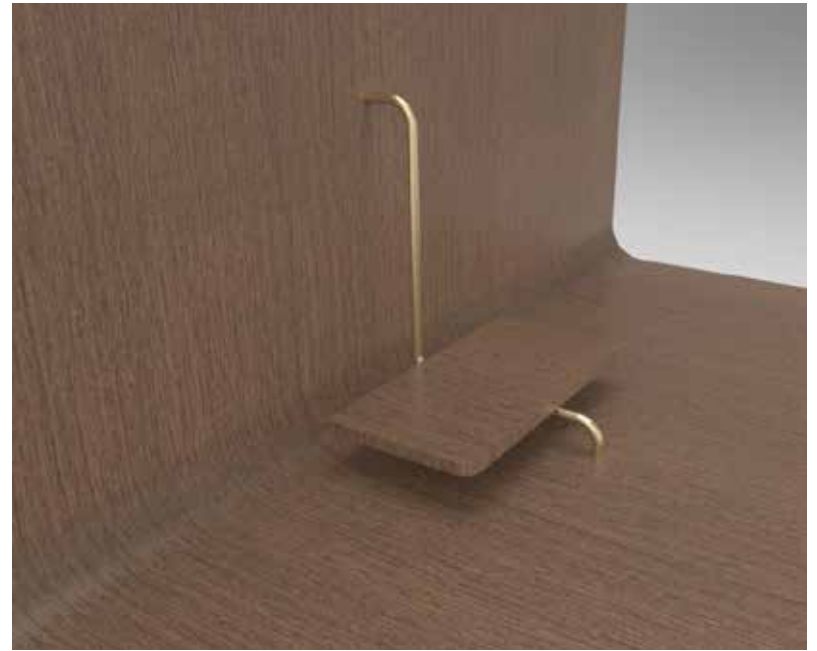
Pouf
Ideation & mockups
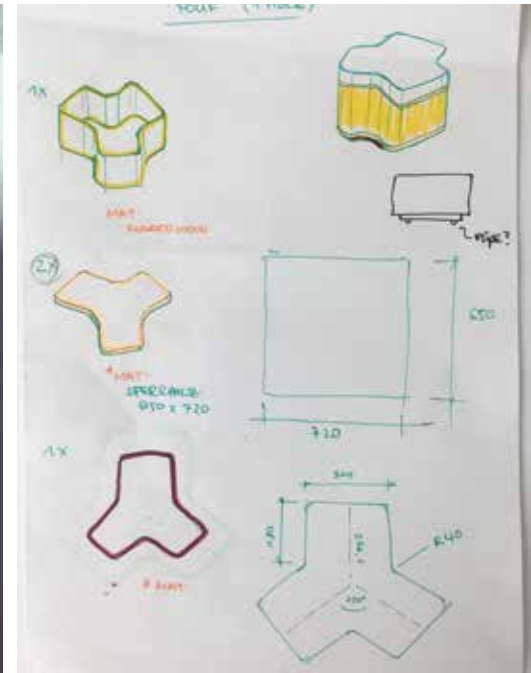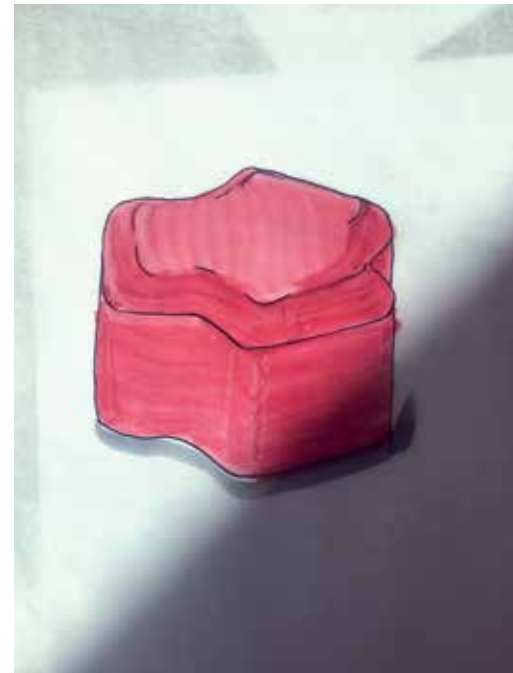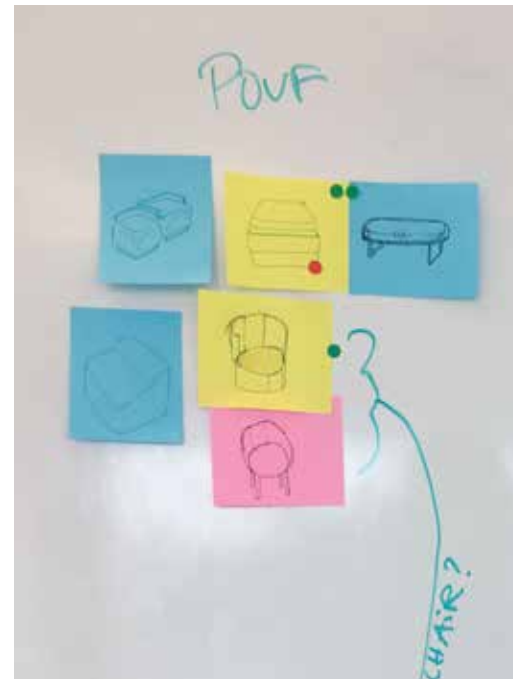
Beginning
Moulded wood as a hidden structural element
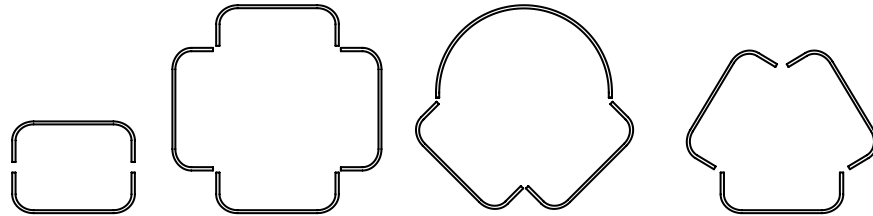
The initial application area for the used moulded wood pieces is the furniture sector and especially upholstery furniture. This means that moulded wood is not visible in the final product. Some of the moulded wood shapes that we got delivered were in upholstery quality, which means that their surface is not high-end quality. Therefore we developed a concept that used the wood as a pure form and structural integrity giving element. Our goal was to differentiate our design from other furniture's by finding a way to use the shapes in an uncommon way. More precisely, we didn't want to design a chair seat or backrest that is covered with thin upholstery materials. By putting together several of the same pieces in different patterns we created new shapes.
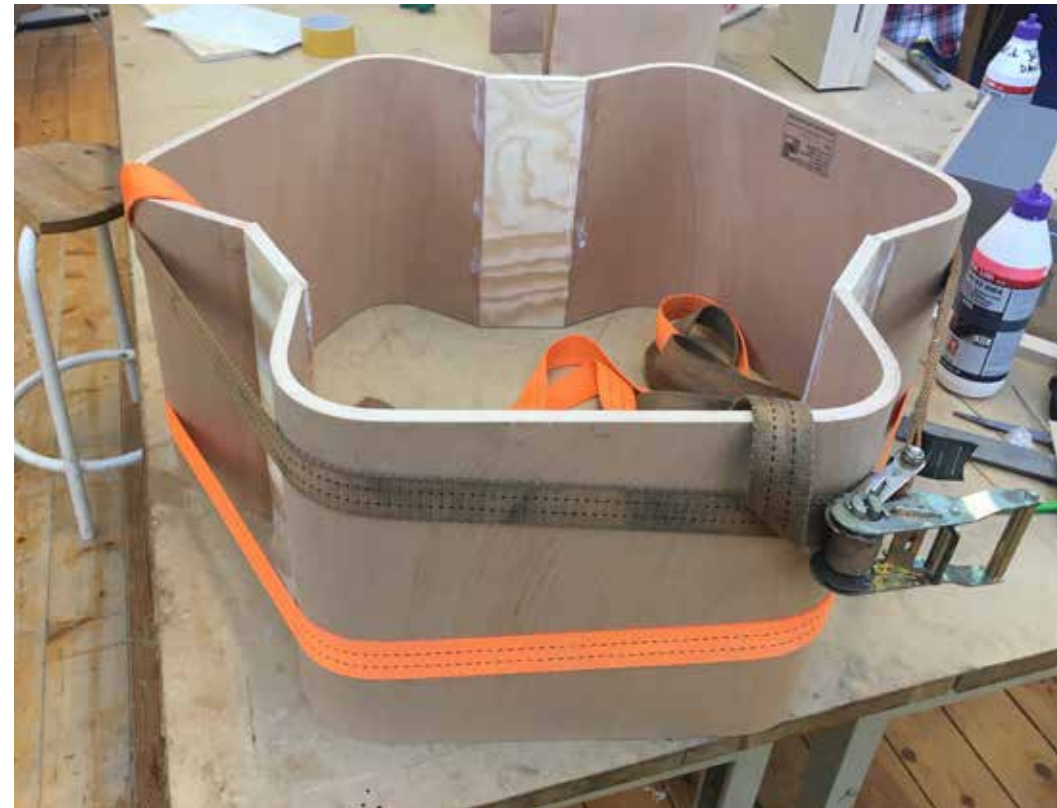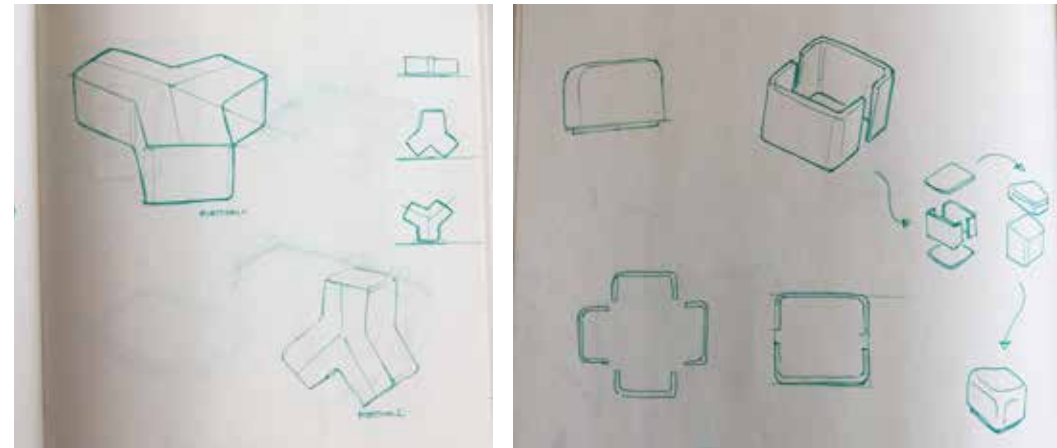
CAD variations

Development of the shape
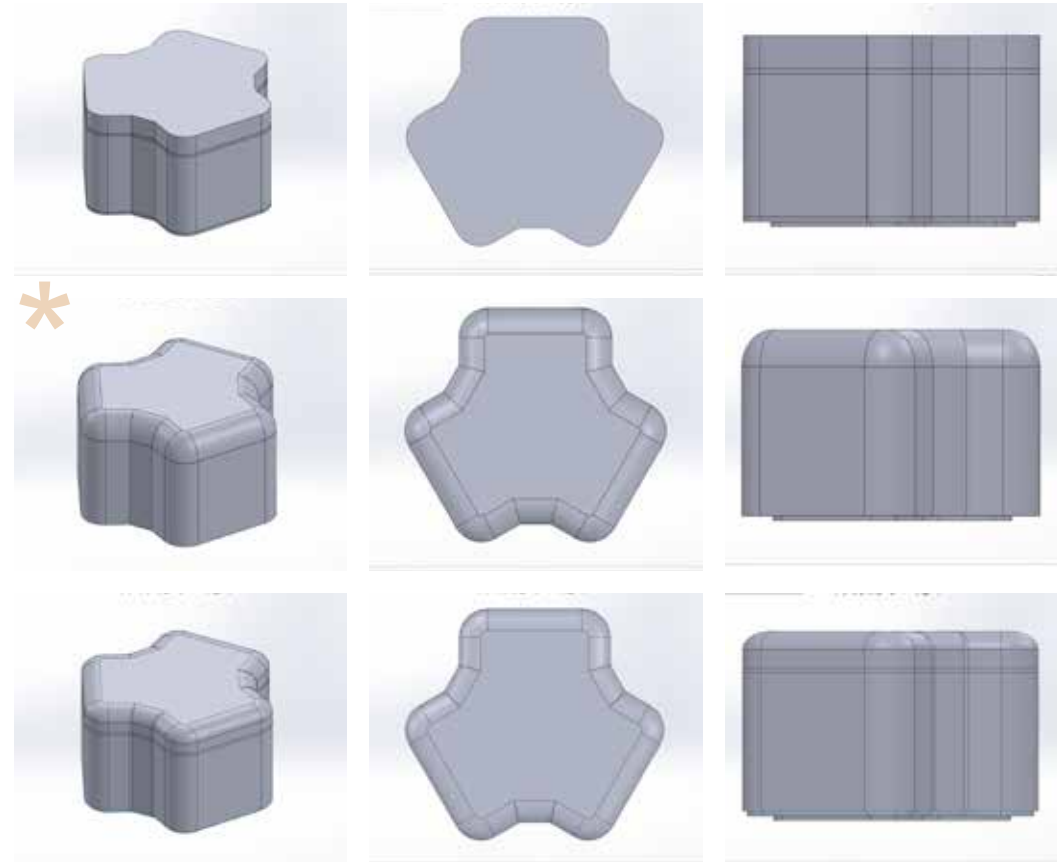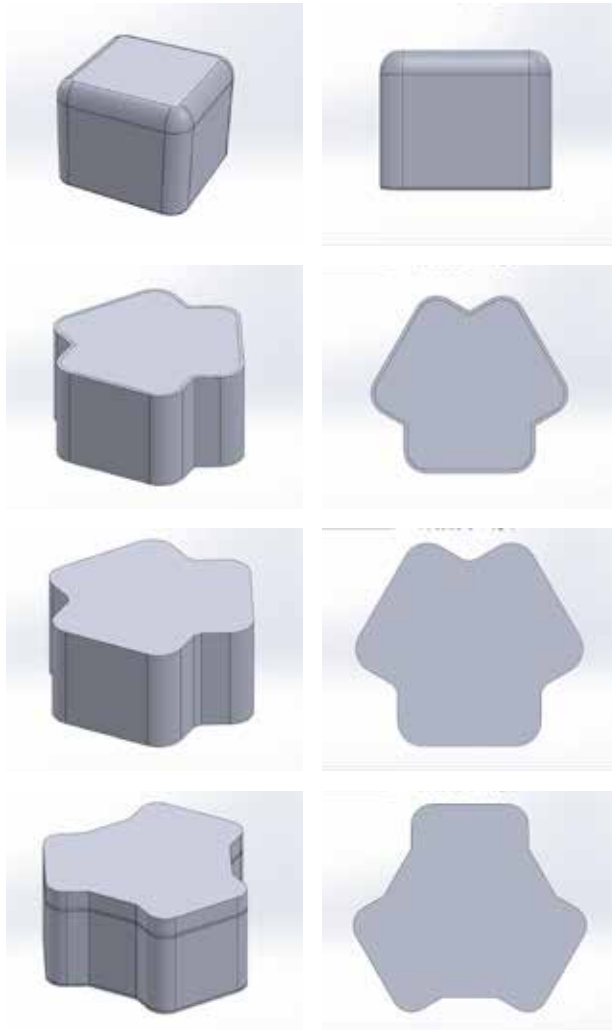
Trivet
Ideation & mockups

Beginning

Moulded wood as a repetitive element
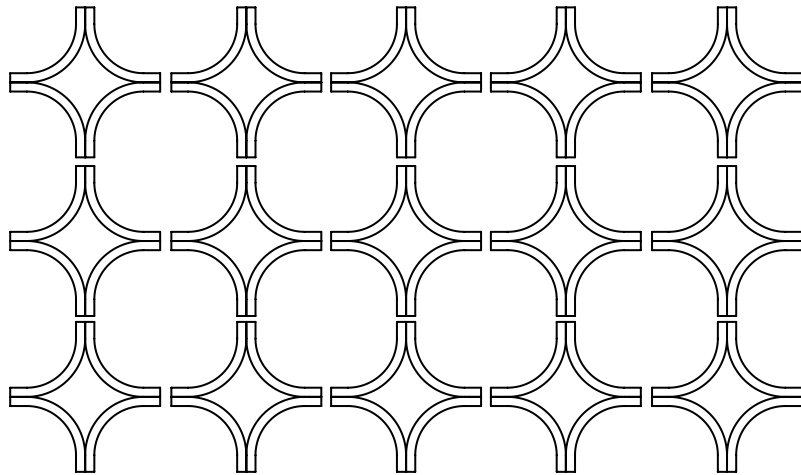
This concept started with experimenting with a mix of shapes. We cut moulded wood pieces into thin stripes and put them together in many different ways to create patterns. Out of this resulted the idea to create trivets that have the same shape, but differ in heights and sizes. The patterns consisted out of square shaped plywood stripes that are connected in a repetitive pattern.

Inspiration

Reinterpretation

https://www.homedepot.com/p/Brewster-25-6-in-x-18-5-in-Blue-Azulejos-Kitchen-Panel-Wall-Decal-CR-67215/300098120

The reference we used as an inspirational source for the patterns were found in historical ornament structures of tiled walls and floors. We particularly referred to traditional Portuguese tiles called "Azulejos".

CAD variations
Development of the composition and measurements

Tray
Ideation & mockups

Beginning
Moulded wood as a form-giving element

3D variations
Development and alteration
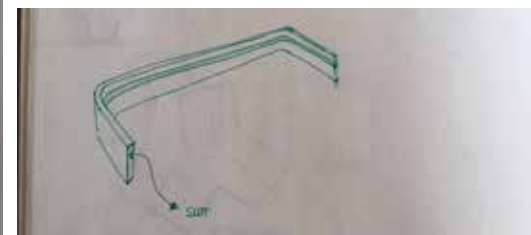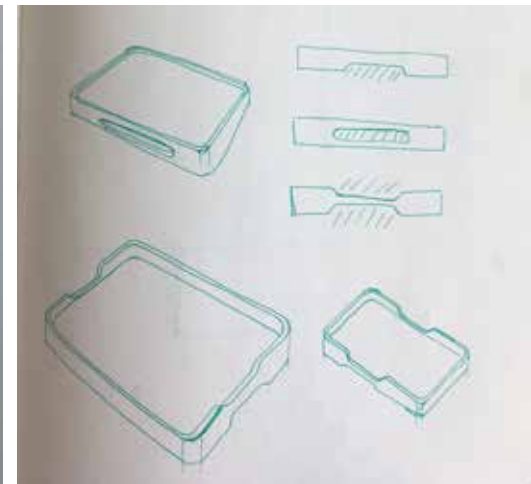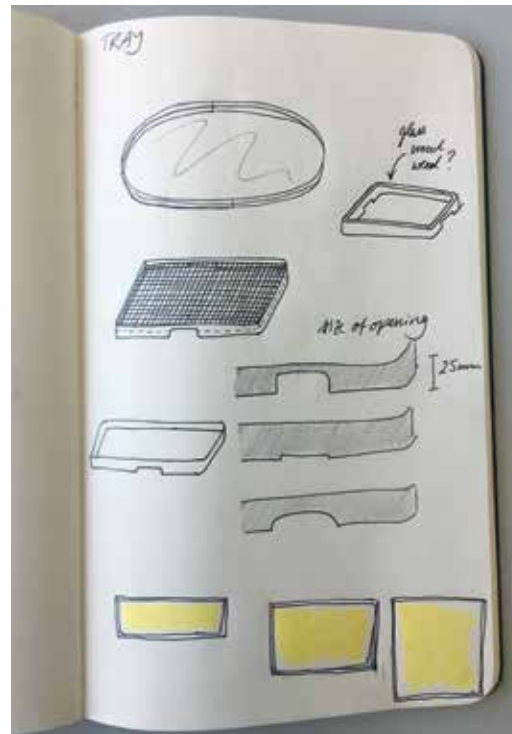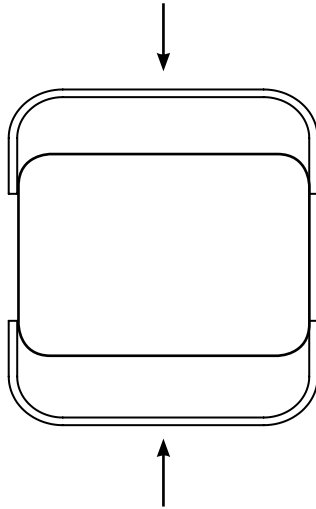
Another outcome of the experimentation with assembling thin stripes of shaped wood in patterns resulted in a symmetrical frame. This was the starting point to design a tray. The assembly of the trays are easy. We simple created slots that would hold the trays surface by sliding it into the slots of the two U-shaped framed pieces.
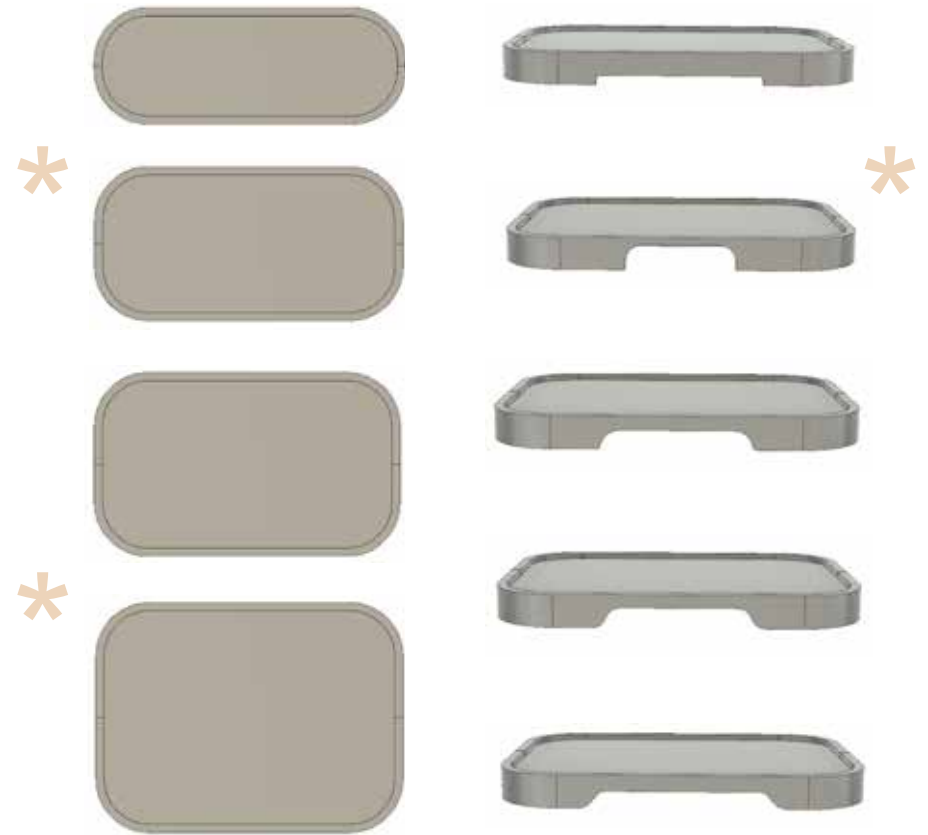
Wardrobe
Ideation & mockups
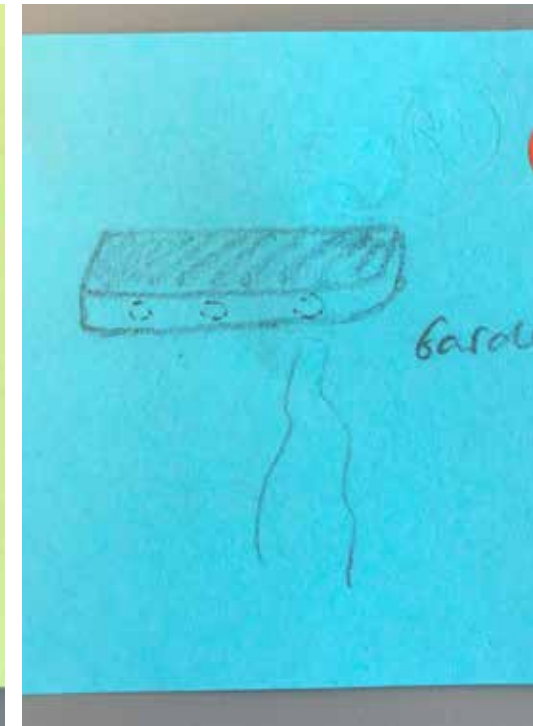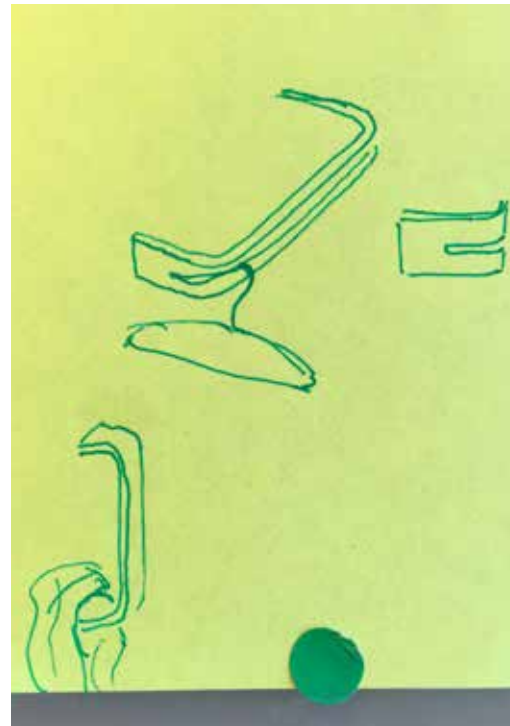
Beginning and inspiration
Moulded wood as a forming element

Renderings
Conceptual draft

Stripes that we cut off from an U-shaped moulded wood piece immediately gave us the intention of a wardrobe. We started to place the shape in different ways to be able to hang something on the two ends.

We all know that sometimes it is the easiest way to hang something up by simply putting it on the backrest of the nearest chair, the door handle or a handrail. This wardrobe concept refers back to this habit. We consciously did not include any hooks or the possibility of adding cloth hangers. Rather than that we wanted to open the possibility of placing something on the wardrobe without thinking too much about the right way to do it.
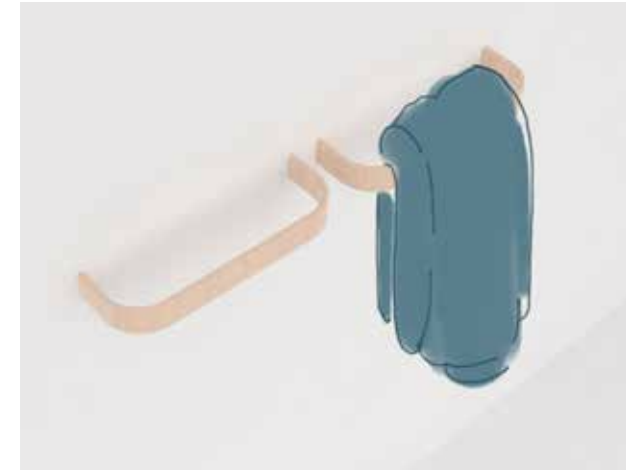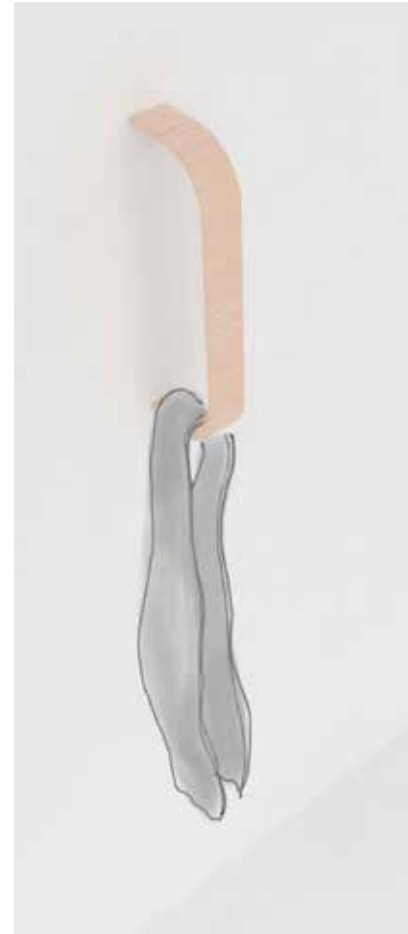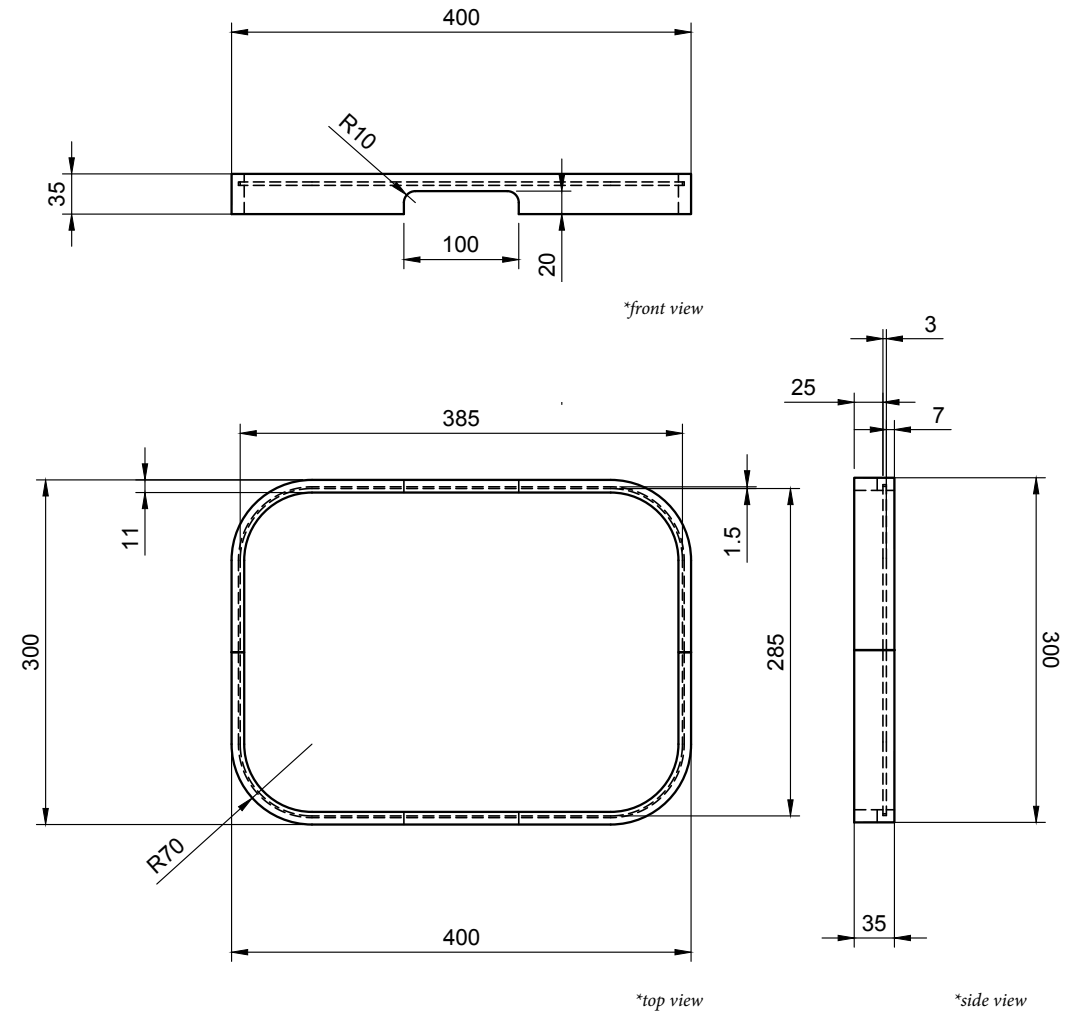
Final concepts
Realisation

Technical drawings lounge chair

600

R30

660

top view chair top

50

400

99°

50

16.50

R60

side view chair top

R60

166.50

16.50

side view table top

135°

135°

R54

R54

322

322

312

239

438

578

top view leg construction

370

729

578

side view leg construction

R54

Ø9

588

front view leg construction
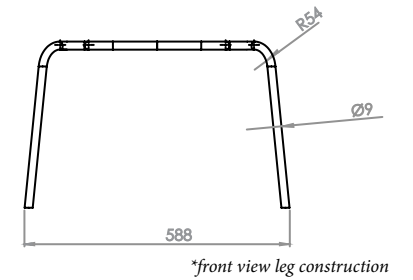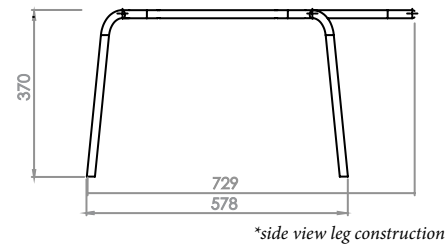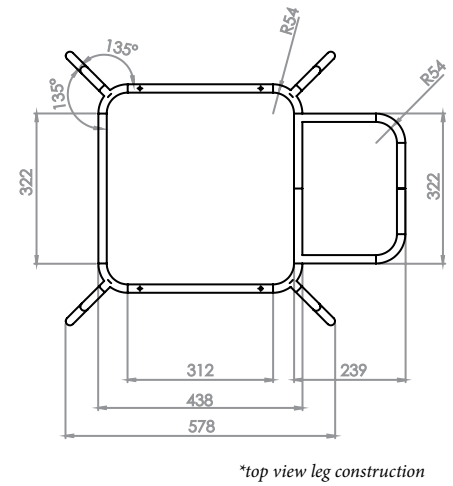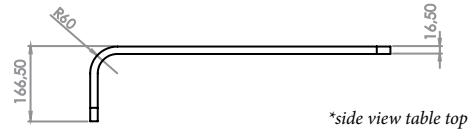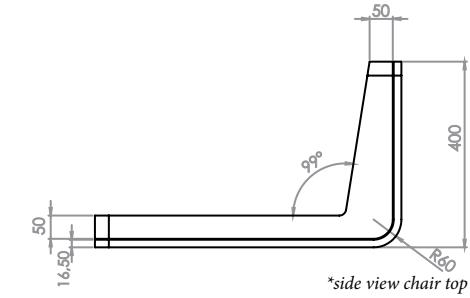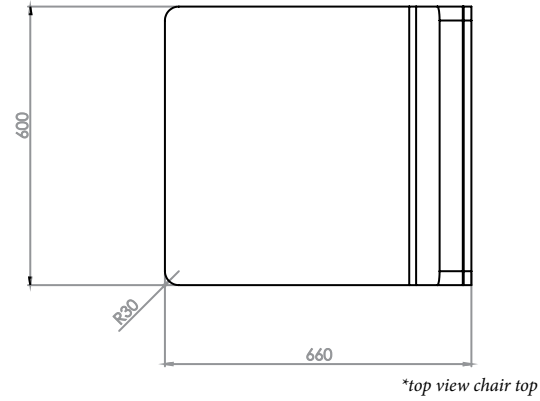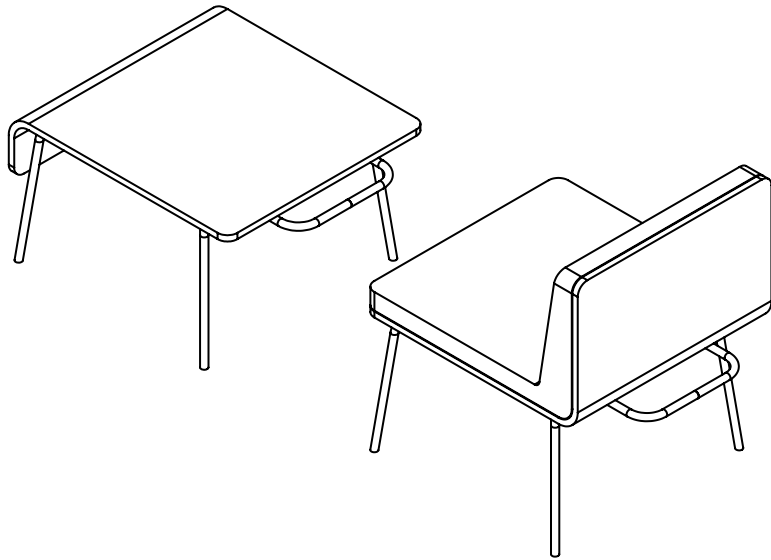
Technical drawings bench

top view

R260

520

9 50

1460

side view

80

500

Ø15

50

450

85°

bottom view

100

500

400

1070,50
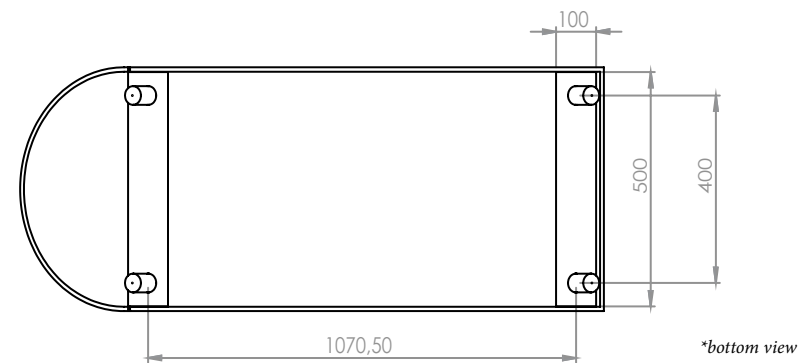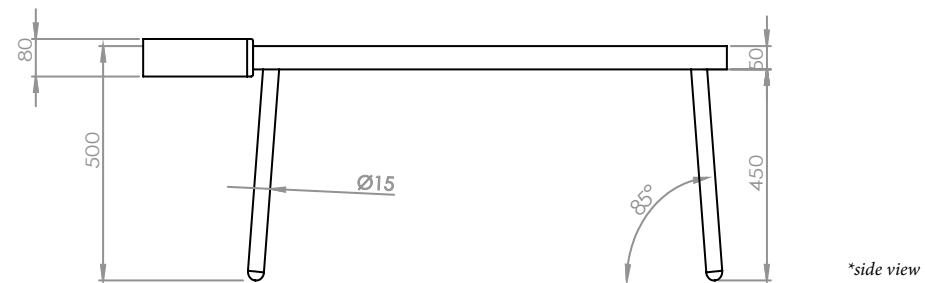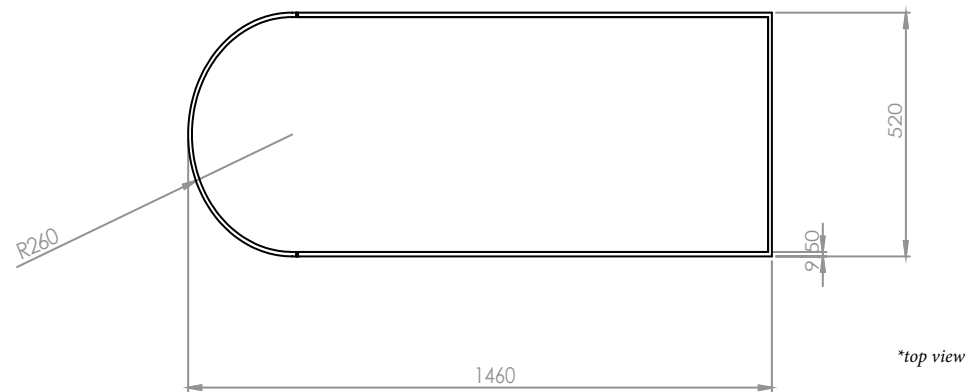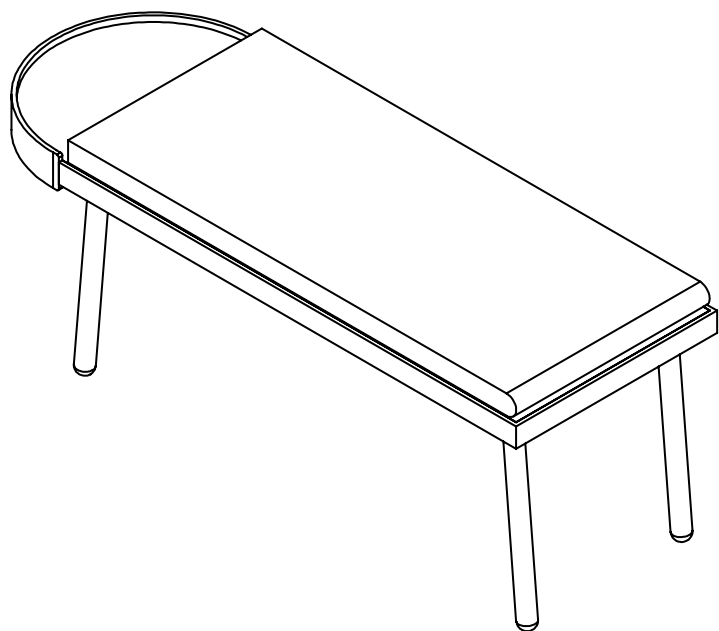
Technical drawings stool

bottom view

400

355,98

front view

520

400

355,98

9,50

15

450

340,83

80°

R260

Ø30

430,46

side view

400

281

84,77°

172

173
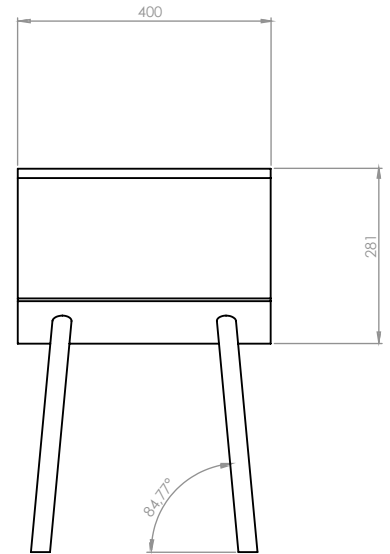
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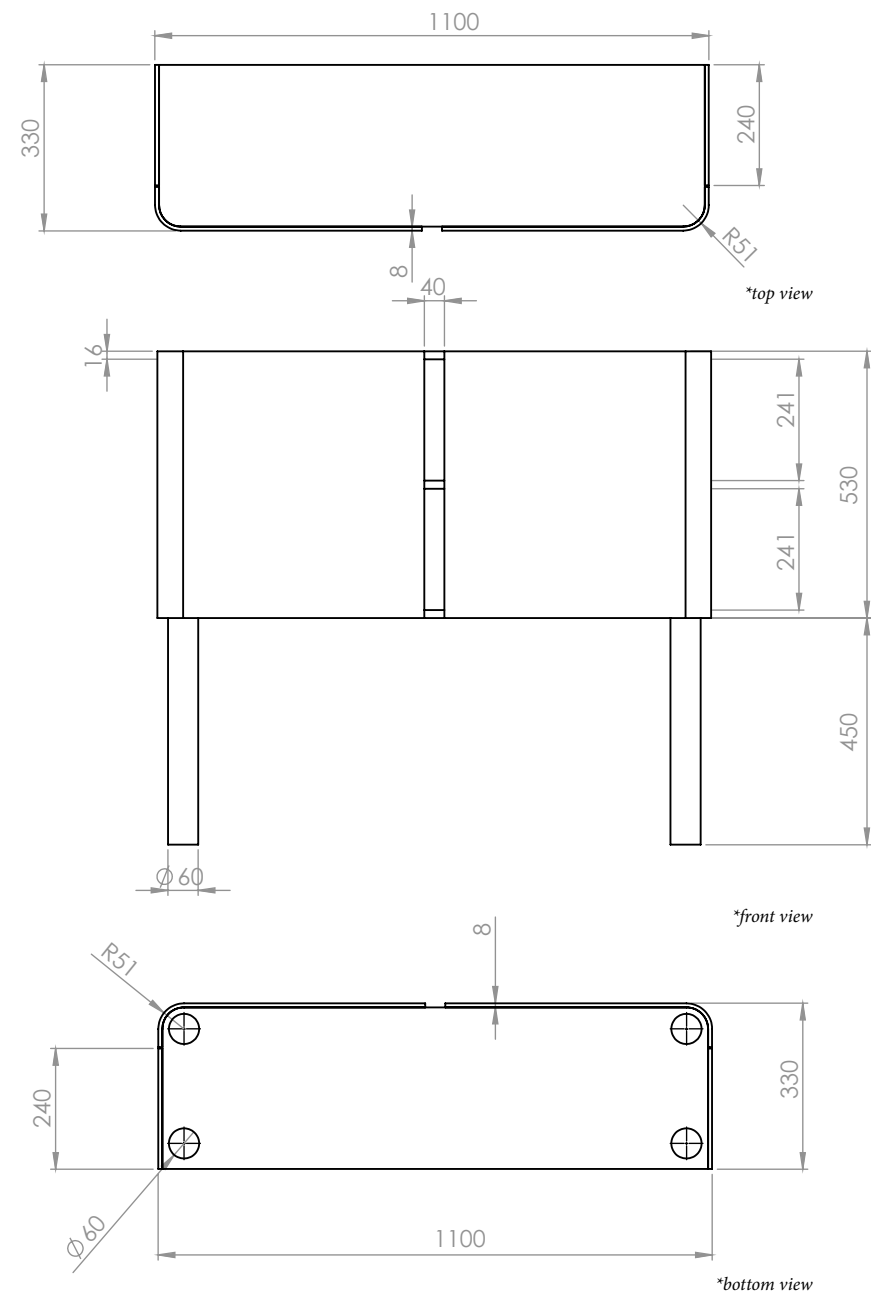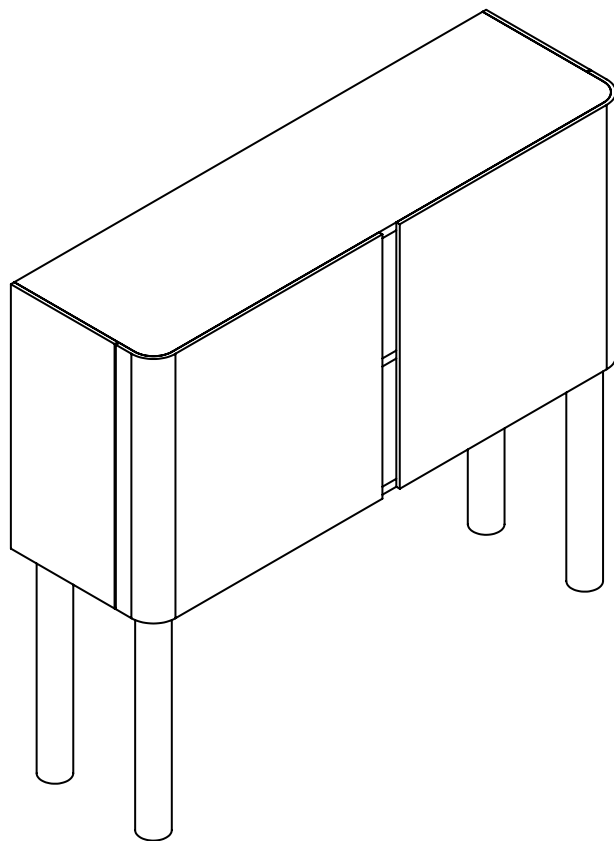
top view
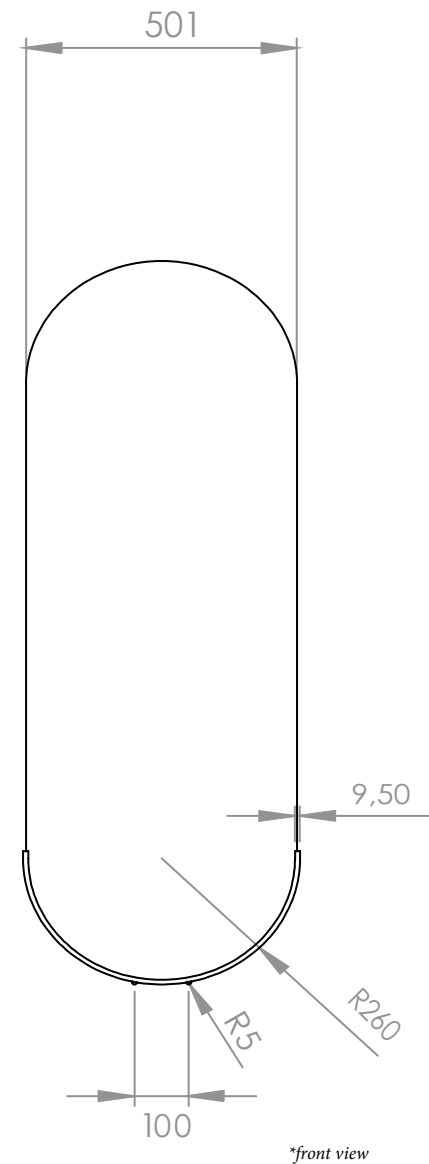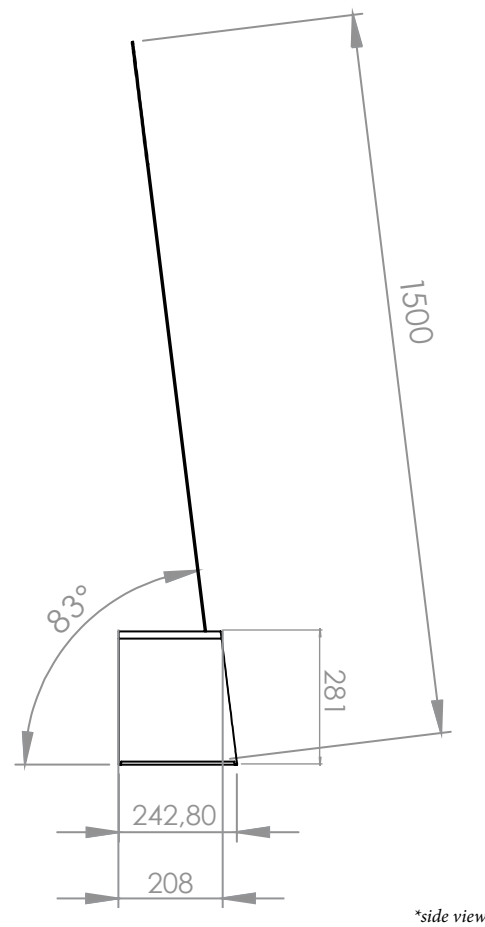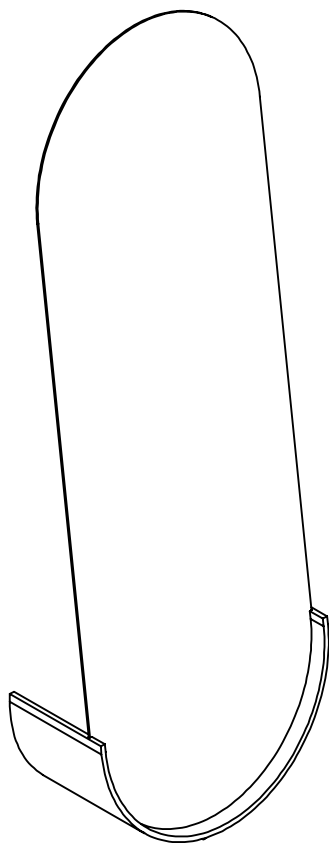
1100

330

240

R51

8

40

16

241

530

241

front view

Ø 60

450

R51

8

240

330

Ø 60

1100

bottom view

Technical drawings mirror large

501

1500

83°

281

242,80

208

9,50

R260

R5

100

side view

front view

Technical drawings mirror small

5

590

75

side view

501

R250,75

9,50

R260

520

front view

Technical drawings pouf

647,5

70

10

300

10

10

400

side view

R40

R70

300

150

400

89

bottom view

Technical drawings trivet

150
300
11
80
R70
top view big trivet

300
R15
25
side view big trivet

90
180
11
R70
top view small trivet
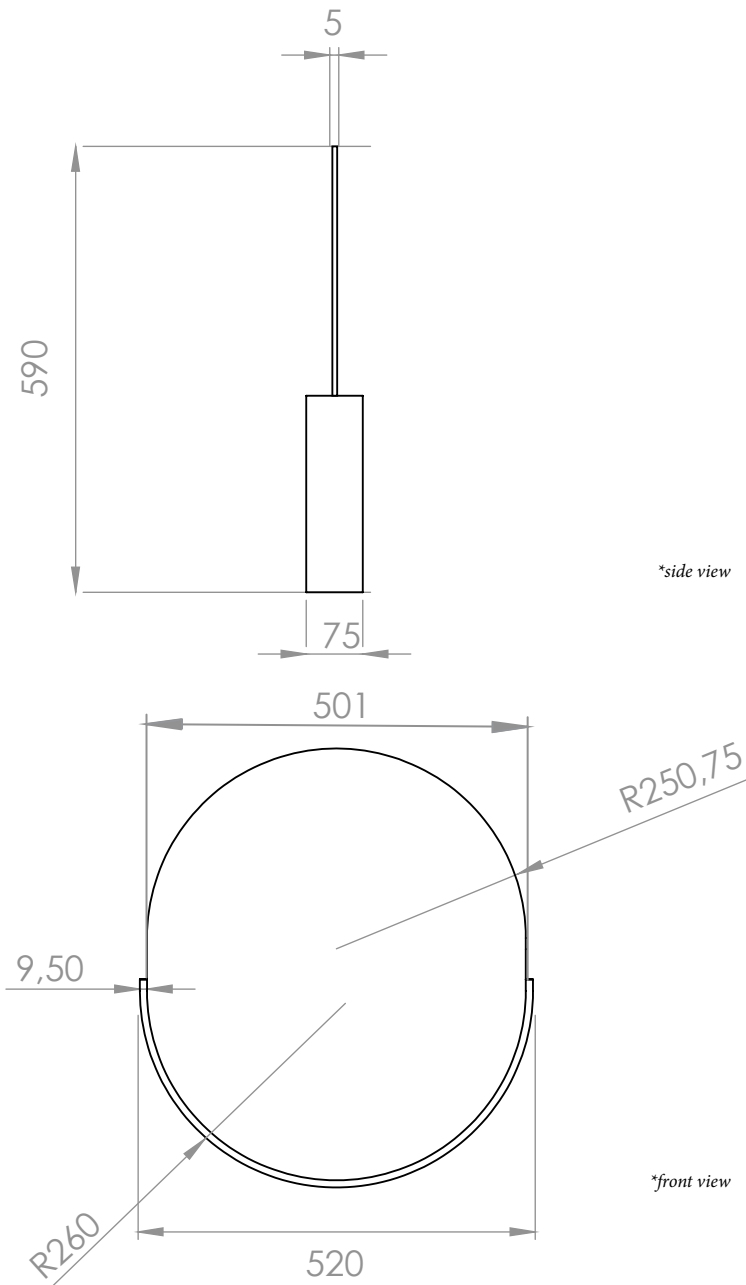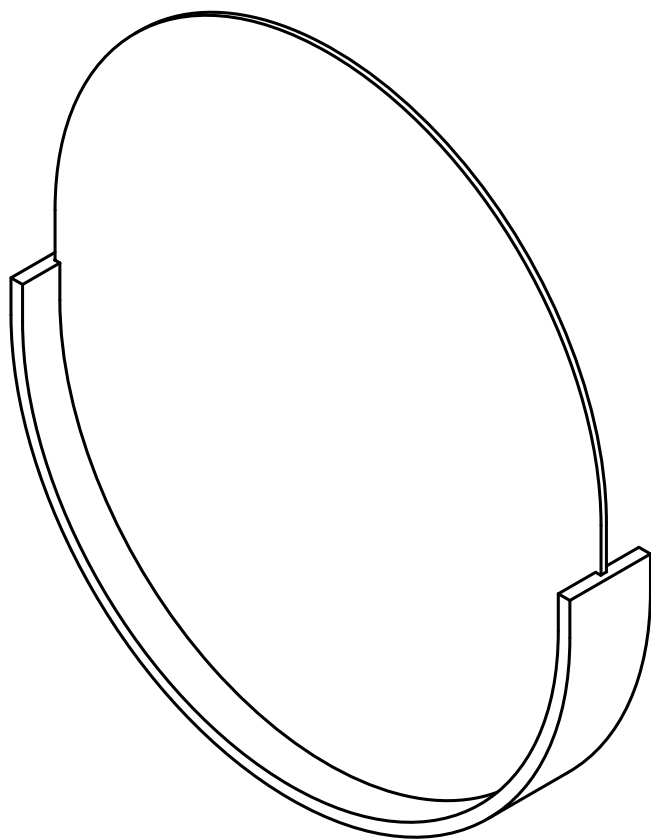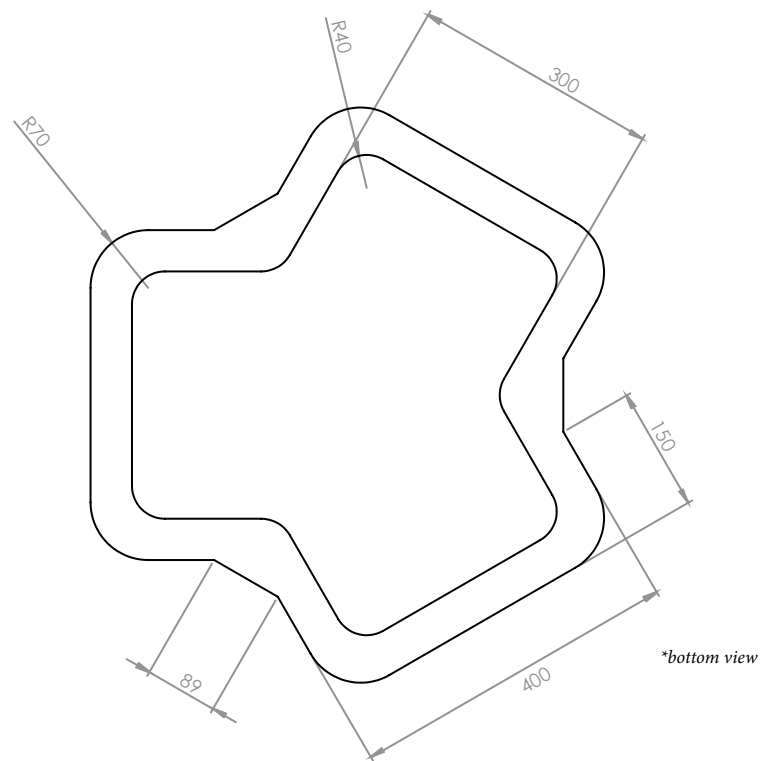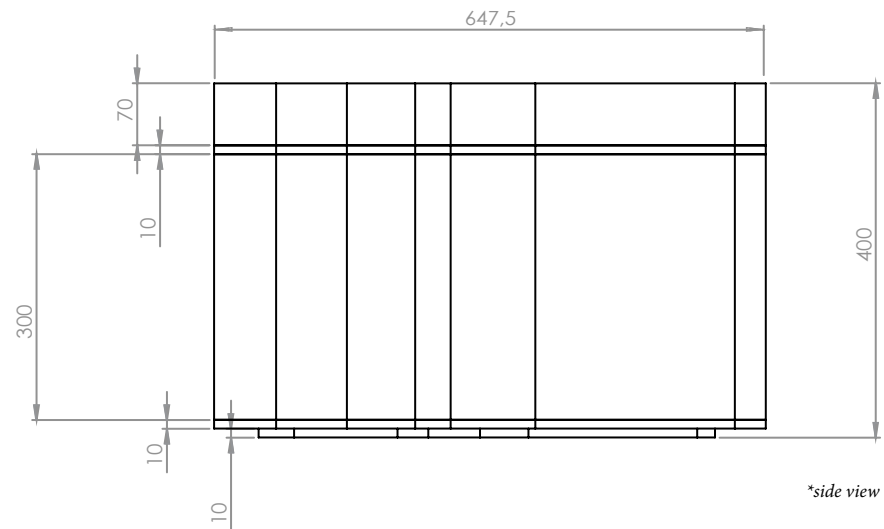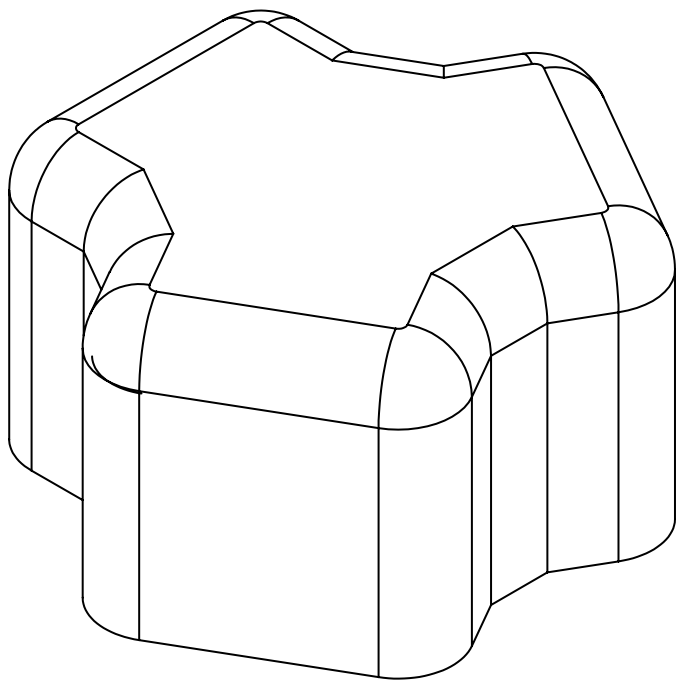
180
R15
30
side view small trivet

Technical drawings tray large

400

R10

35

100

20

front view

3

25

7

385

11

1.5

300

285

300

R70

400

35

top view

side view

Technical drawings tray small

400

35
7
3
25
R10
100
20

front view

400

11
168
165
R70
385
90
180

35
180

top view

side view
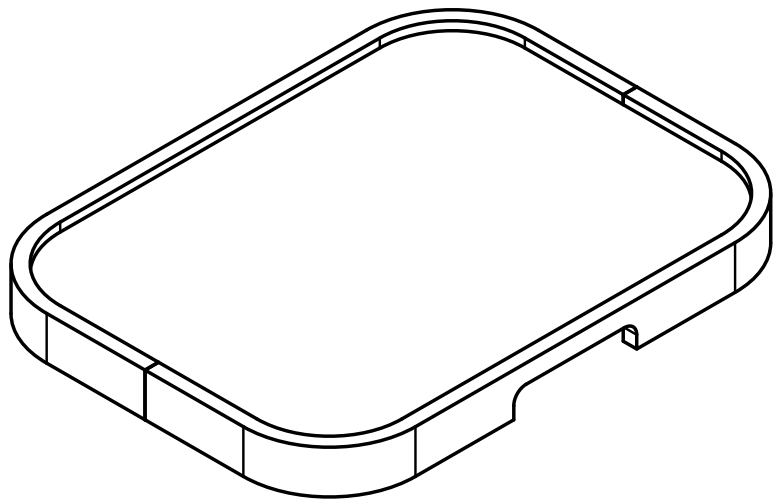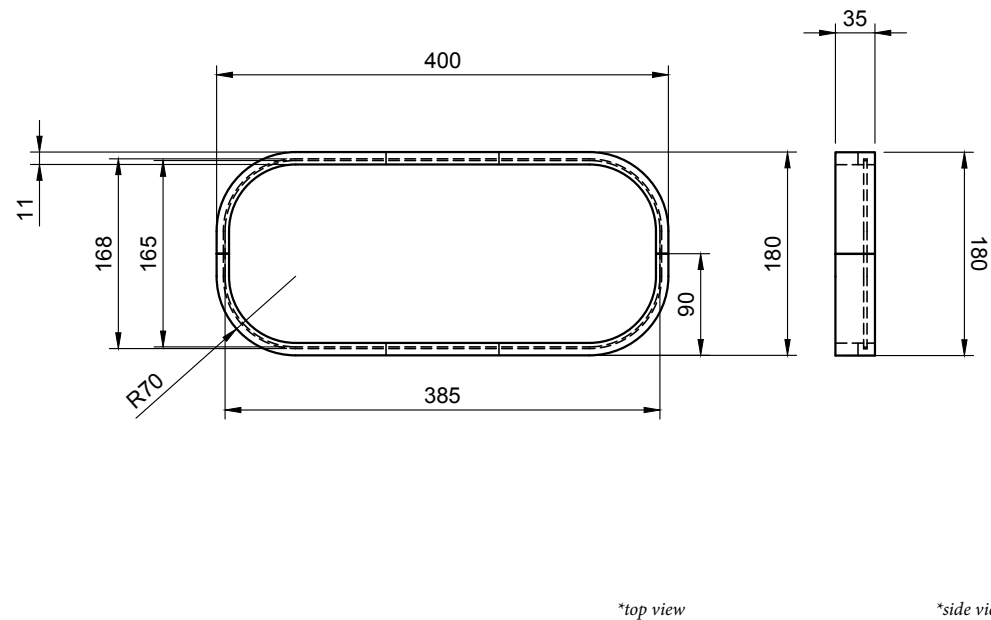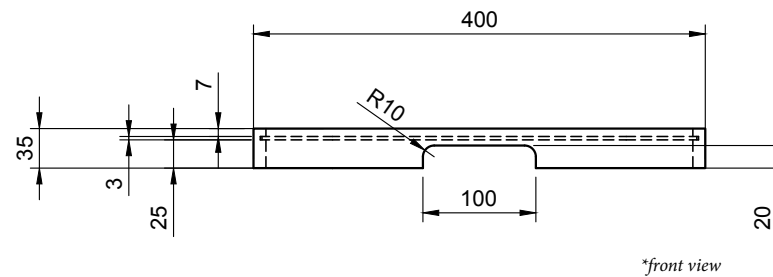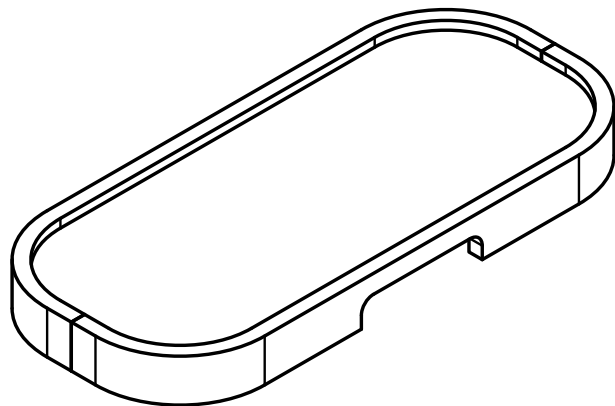
Product placement
Possible licencing by brands
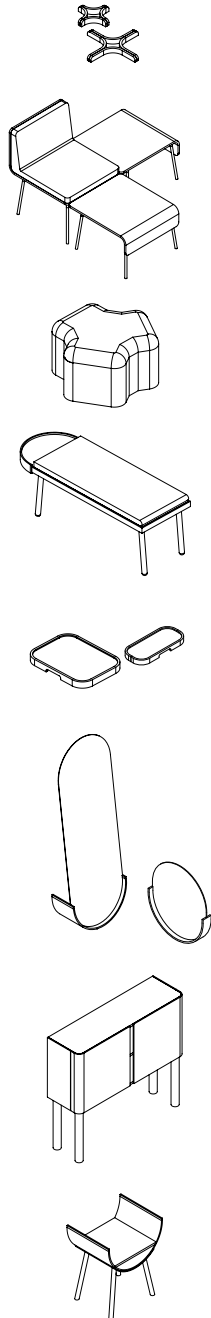
Product placement
Entering the market

Corresponding to our conclusion to create a series of furniture and accessories that can be licenced by brands, we did not only think about the different price levels and markets we would address, we also considered different brands that could possibly licence our furniture.

It is to say that our designs were not influenced by the brands design language or by what they might need in their portfolio. For us it was important to create our own design language. However, creating a collection that repeats the same shapes and aesthetics wasn't the intent either. Since we used moulded plywood in all our designs they certainly can be identified as a line when seen in the same context.

To get a feeling of the potential of the individual items, we started to list several brands that are based in Northern Europe. For each of the eight product concepts we set the target market, the price segment and possible brands. While the placement on the market and the price segment were decided during our design process, driven by aspects like production or the usability of the product, the correlation to brands was mainly done afterwards.

The fact that all of our designs are in a conceptual state gives us the option to possibly adapt final decisions regarding manufacturing or materiality to a brands portfolio in case of successful licensing contracts.

The following categorisation of the products and the listing of brands are not finalised. Reaching out to brands is a step we will take in the future. Hence, we will expand and eventually refine in the course of time. We see this product placement as a good starting point to initiate our intent to enter the market.

Lean on

Lounge chair, footrest, sidetable
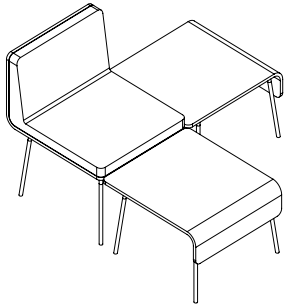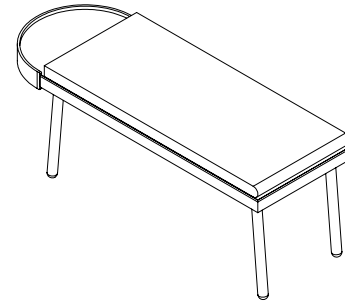
What: Lounge chair with sidetable / footrest
Where: Contract market
How much: High price segment
Brands: Blå Station, ClassiCon, Massproductions, Dedon , Offecct, Skandiform
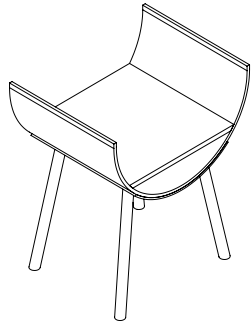
Fairytale

Bench

What: Bench
Where: Private market
How much: Medium - high price segment
Brands: ClassiCon, Offecct, Schönbuch, Karl Andersson & Söner. Skagerak
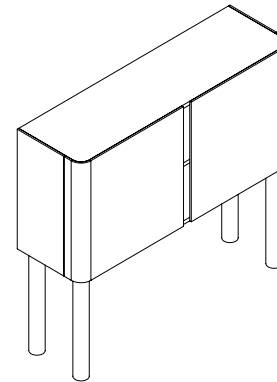
Caersar

Stool

What: Stool
Where: Private market
How much: Low - medium price segment
Brands: Magazin, Ligne Roset, Skandiform, Blå Station, Dedon, Habitat, Hay, MAZE interior, Schönbuch, Offecct, Moroso
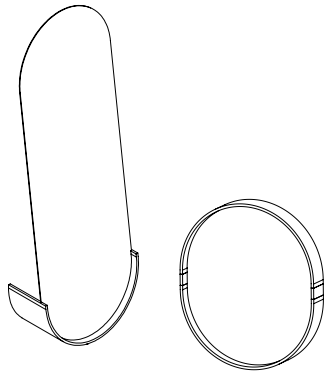
Kiln

Sideboard

What: Sideboard
Where: Private market
How much: High price segment
Brands: Manufactum, Schönbuch, Karl Andersson & Söner, Skagerak, Northern, Bolia, Habitat
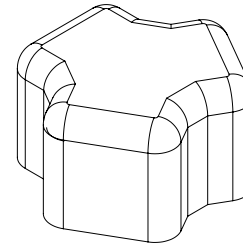
Oh darling
Mirror

What: Mirror
Where: Private market
How much: Medium price segment
Brands: Cappellini , Bolia, Habitat, Offecct, Pulpo. Schönbuch
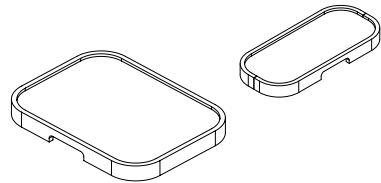
Bloom
Pouf

What: Pouf
Where: Contract market private market
How much: Medium - high price segment
Brand: Manufactum, ClassiCon, Dedon, Moroso, Ligne Roset, Northern, Elementa, Offecct,
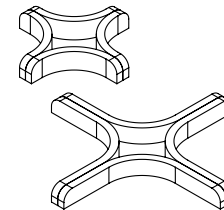Massproductions, Schönbuch

Tender

Tray

What: Tray
Where: Private market
How much: Low price segment
Brands: Bolia, Habitat, Normann Copenhagen, MAZE interior, Schönbuch

Intro

Trivet

What: Trivet
Where: Private market
How much: Low price segment
Brand: Bolia, Habitat, Normann Copenhagen, HAY , MAZE interior, Schönbuch, Skagerak

Lookbook

Description of product line

"Make something great because you care deeply about it"[35]

The formal language of our design has its origin in the shape of moulded plywood pieces that we got from our main collaborator Becker Brakel. These shapes are restricted to simple, geometrical forms: a radius, a 90°-shape and a U-shape. Each design consists out of at least one of these moulded wood parts. The shape of the wood is either used to give stability or to dictate the formal language of the object. Even though each design relates very much to the materials' shape that it is made from, it was important to us that each pieces functions as a piece of furniture that satisfies a specific need. Some of our in total 10 designs are modern interpretations of historic references.

Overview of all products:
Lounge chair with sidetable/ foot rest, bench, stool, sideboard, mirror large, swinging mirror small, table, pouf, trivet, tray large, tray small, wardrobe

[35] *Studio Neat, It will be exhilarating, (New York, 2012), P.15*

*Read more about "Becker Brakel"on page XXX
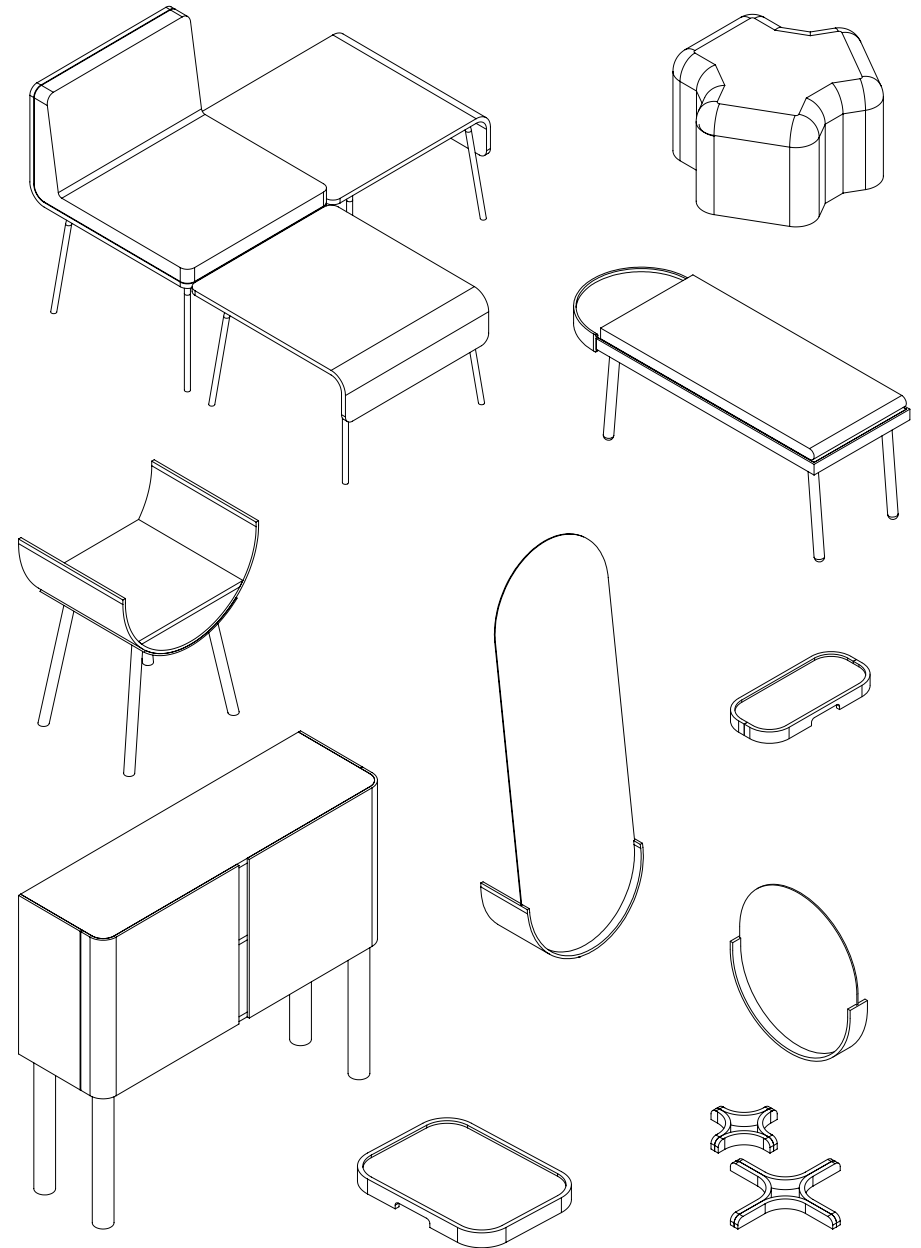
Lean on

The Lounge Chair "Lean on" comes with a comple-ment that can be used as a side table or a footrest. Both furniture pieces are consisting of the same L-shaped parts. The square moulded wood parts are combined with a metal leg construction. The lounge chair is completed with comfortable seating upholstery. The upholstery determines an angled seating position to assure a high seating comfort. The metal frame of the leg constructions of both the lounge chair as well as the side table/footrest stick out on one end and can be used as a railing, to hang a plaid or a magazine. It additionally deals as a connecting joint, to side the table/footrest in the correct position right next to the chair. The lounge chair is meant to be placed in hotel rooms or public lobbies as well as in generous private homes.

Fairytale

The bench „Fairytale" is a two-seater. The round shaped wood not only determines the formal language of this furniture piece, but also creates a small counter space for coffee mugs or reading material. The bench is refined with a coloured cushion. The bench is designed for indoor use in private homes and is placed in a mid- to high-price range.

Caesar

The stool „Caesar" plays with its simple but remarkable composition of geo-metrical elements. The half circle acts as a seating shell and comfortable armrests at once. The raised seat creates a space that is ideal for storing books or magazines. A fluffy cushion follows the form of the wooden structure and creates a comfortable and soft seating experience. The leg construction is made out of metal. The stool was designed for private homes and is located in the lower price segment.

Kiln

Furnace is a fusion of a low sideboard and a high cabinet. The doors do not completely cover the front side; this detail makes handles redundant and gives a sneak peak into the inside. When opening the sideboard, the doors open up widely since the hinge is placed behind the rounded edges. The structural build-up is as simple as convincing: four wooden boards are stacked on wooden cylinders that are placed in all four corners. The cylinders serve as distance pieces as well as connecting pieces and it appears as if they follow continuously through all levels of the shelves. The sideboard is made from three different types of wood and creates an unusual material appearance. The sideboard was designed for private homes and is placed in a mid- to high price range.

Oh darling

The tall floor and small portrait mirrors "Oh darling" are free standing. The outlines consits out of oval shapes that are made from moulded wood parts. Each mirror is standing on its round side, which gives its whole appearance an unusual lightness. Its continuous wooden frame provides a tray area where small items can be placed. The small mirror offers a surprising effect. When being touched it starts to swing and rocks from side to side. Both mirror have been designed for private homes and would be available in a medium price range.
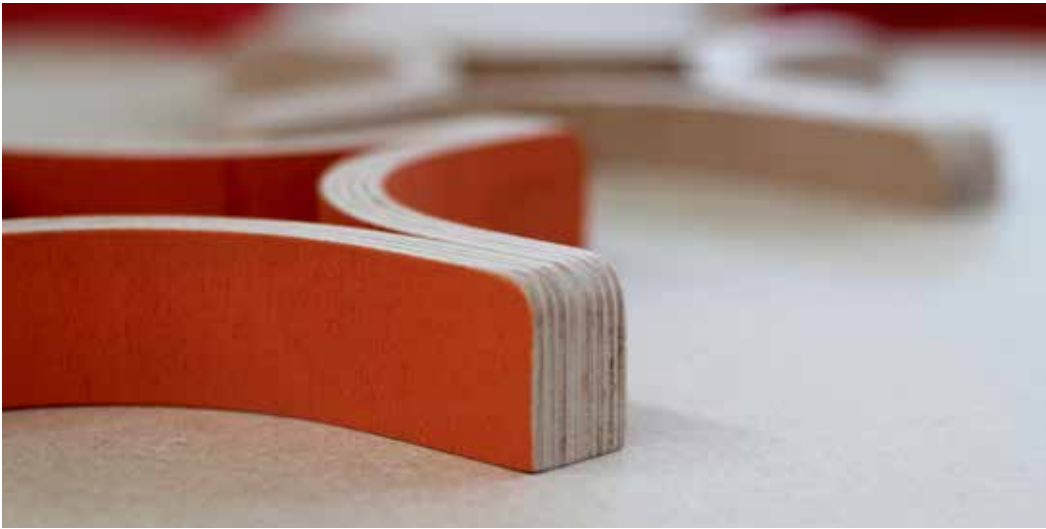
Bloom

The poufs form is determined by the inside construction that consists out of three identical moulded wood pieces. Covered with upholstery materials, the pouf becomes soft and comfortable to sit on. Up to three people can sit on it at the same time. "Bloom" is a pouf that is designed for private homes and public spaces like library's or lobbies.
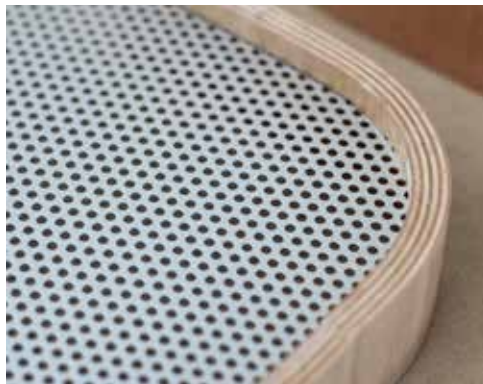
Intro

Intro are a series of trivets. They come in a set of two – a small one and a large one. The trivets are not only useful at home but also playful in their shape and colour. They were created as accessories for the private home in a low-price range.

Tender

Tender is a tray that comes in two sizes and in two material styles. A big and a small tray provide the user with a helpful tool for their everyday live. The moulded wood frames are completed with attractive surface materials such as mirror glass and powder-coated perforated steel. The trays are designed as accessories for private homes
 at a low-price point.

What will follow next?
Our next steps

Reflection
What we have learned from the project

We plan to continue the theoretical as well as the practical part of this project. It is very important to us to share the collected information with others. The whole purpose of the interviews was to broaden our mind-set to then be able to share the outcomes. We specifically want to address young designers, graduates and people who are about to start their design education. Share what it means to work with the design profession and that it is a great field that offers many possibilities and potentials is something we´d like to spread into the world. Design education is about developing a variety of strengths that are needed in the work life. We decided to publish the collected content "GOOD ADVICE IS FOR FREE" on an instagram page. We will spread the link and or hash tag during and after the graduation exhibition. Postcards with keywords and phrases will attract interested visitors and guide them to the website or blog where all informations are posted. We want to edit the interviews in a way that we could post them online to make them accessible for a broader group of readers. At the moment we are only allowed to publish the interviews within this documentation for research purposes.

Our practical outcome is still facing the biggest challenge: We want to test if the designs are capable to reach the markets needs. Do our designs have the potential to make it on the market? As we stated before, a design project that has been developed in a design school usually ends before it even gets the chance of being send to a company. We will send out some of the designs to brands to find out if we can place them within their collection. We hope, with this last step to complete our master project and actually start earning royalties to create a base on which we potentially could start our own business(es) in a few years.

Today we can look back on our process and think about how things have developed during the project. There are many things that we are happy with and some things we would do differently if we would start the process again.

We started into the interview series without having any former experiences how to conduct interviews. For the first interviews, we hadn't prepared a systematic procedure to assure that all interviews would be comparable. We thought it would be fine and fun to just sit down and chat about the topics of our thesis. After transcribing the first interviews, we realized that we would have to change the way we were doing the interviews. We developed a guideline for the following interviews. Like this we could prepare the interviewees with a clear guideline and it also allowed us to compare the interviews with each other. We interviewed 18 designers and design studios. It was so much fun that we couldn't stop talking to designers. In retrospect one can say that interviewing people is fun but one should never underestimate the amount of work one has to put into each transcription. Nevertheless the interviews not only gave us plenty of insights but also enriched us with experience and the ability to talk to people we have never met before.

Some critique that could be voiced regarding our practical project is why we decided to design so many objects in such a limited timeframe as we had for this thesis project (End of January until end of May). Instead of developing a whole furniture collection it would have been possible to design fewer or only one object. It might have been even closer to circumstances in the professional life to concentrate on one furniture piece. Going through numerous variations, developing details and building several prototypes often takes several months. Splitting the time between the theoretical part and practical part shortened the time to concentrate on the design process but gave us other great input. To design ten different design concepts additionally to our theoretical part and the interviews we held was a challenge. Nevertheless, we made this decision out of the conclusion we took after our business counselling and the understanding that if we create a whole furniture collection all products could possibly be

licenced by furniture brands as a first step into starting our own business. Since we wanted to create a whole collection, we gladly accepted to work under time pressure to reach that goal. The goal to design items in different styles for different markets and price ranges opened the possibility to target more brands and clients and therefore chances will be higher to licence at least of few of the products.

We are aware that some of our design concepts could be more elaborated and designed more precisely on the level of detail for each piece. One example for this is, that we did not solve how legs would be fixed in all detail. Although we did determine constructional solution and details for all of our designs, we wanted to leave space for further development of the products production. Since the aim of the furniture line is to target different furniture brands and furniture producers, who have individual ways how to solve for example connections, we deemed it plausible to refine such solutions later on in collaboration with the brands or, by their own product development.

It also would have been better if we have had more of the insights developed in our theoretical elaboration, before we were already involved with our practical part. It would have been good to take in some more of the hints we got from our interview partners. Within the set time frame, the preliminary stage of our design work had to start before having all final conclusion collected. Finally, we can say, that we met the goal to touch the many topics that we started off with. We wanted to gain interesting insights and to get closer to finding answers to our main two questions. While at the beginning of this elaboration we were still in doubt where the future would go after graduation, we now are both very confident that we will find our way. Being able to deal comprehensively with the topics made us calm. We understand now that the university is a great place to develop and live out your strengths and interests. Anyone who will work in a design job later on will learn from practical work and fill in gaps that still need to be filled. The capability for self-empowerment is an elementary part of any academic education and its importance should not be underestimated.

We now know that there are several ways to make a living for designers. They might differ due to individual experiences, but to a certain degree they follow the same patterns. Graduates usually need some time after the design education to find their way. Every designer we talked to during the interviews created his or her own way and became a successful designer. Successful in that sense means that they are all happy with their daily life and work in the filed of design and they all seem to be able to live well from it.

We fulfilled our design brief by successfully producing prototypes in collaboration with Europe-based industrial manufacturers that have the potential to be produced in series. The prototypes are realized on a high-quality standard since they benefit from professional production processes of our collaboration partners.

Over-all conclusion
Impact of the thesis project

The project was very helpful for us and created some confidence about topics of the design brange. We would like to pass on some of the confidence that we gained to other designers who feel like they can only struggle after graduation. We hope that, with all the insights we collected through our theoretical research and the interviews we conducted, this thesis project will be inspiring and helpful for people who consider studying design, design students and up-and-coming designers.

Our aim, from the beginning on, was that we wanted to raise questions that are as interesting for others as they are for us and that the outcome of this thesis will allow the reader to engage with these questions on a deeper level. Although we cannot give final answers to our main two questions as raised in the beginning, we provided many perspectives. It is important to us to share the collected knowledge and insights. Since we are aware that not many people will take time to sit down to read through everything we wrote or through all the interviews, we gathered all valuable information in our list "GOOD ADVICE IS FOR FREE" and our map "PATHWAYS OF THE DESIGN PROFESSION". There is so much a designer needs to know about the business, that all this knowledge is not and probably cannot be taught during the design education. Knowing a bit more about what is needed by each person individually which strengths and skills should be developed, might help people to set a focus early on. We had to walk this path ourselves and have learned a lot from it. We can only publish our work and spread the suggestion to everyone who reads this that there is a lot to take into consideration when – or even before – becoming a designer. Walk this path and learn from it!

We want to say THANK YOU to:

Acknowledgment

Imprint

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