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# DFB312 Look&Feel!

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## Introduction

For the elective Look&Feel! the goal was to create a dynamic chair that transitions between two states. By going through several explorations from making mood boards to material explorations a definition of what transitioning from vulnerable to strong is was formed and integrated into the design of a dynamic chair. This report describes and shows this process.

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## Individual Moodboards

During the first week of the elective the exploration method of making mood boards was introduced. The assignment was given to create a mood board from one of the eight terms used throughout the elective (friendly, distant, vulnerable, strong, organic, mechanical, determined and insecure). By going through magazines images were gathered for the creation of these mood boards. It was encouraged to try multiple compositions and develop the mood board over time. The creation of this mood board should help in defining the related term.

On this page you can find the two individual mood boards that were created, one depicting distant, the other vulnerable.



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## Team Moodboards

The first team assignments to help in starting the process of designing a chair that transitioned between a vulnerable and strong state were to make a big amount of sketches depicting either a vulnerable or strong chair and to create a mood board within the team that showed a transition from one to the other quality.

After discussing the sketches made by the team members, images were gathered from magazines that felt appropriate for the transition qualities. The images were divided up into three categories: vulnerable images, strong images and background or connecting images. Compositions were made by combining images from all three categories leading to the first mood board.



A transition from strong to vulnerable was depicted by moving from: darker to lighter colours and strong images with direction to more organic shapes.

After receiving feedback a second iteration was made removing several images and making the transition from straight, powerful to smooth, organic images stronger.





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## Final Moodboard

A clear theme of nature was visible within the mood board. The team quickly agreed on the fact that nature could show vulnerable as well as strong sides and therefore liked to use it in their mood board. During the final feedback round of the mood boards a suggestion was made to exclusively use images of nature in the mood board to show the, already clear, transition within the theme of nature. A few final adaptations were made to arrive at the final mood board that shows a clear transition from vulnerable to strong, within the theme of nature.

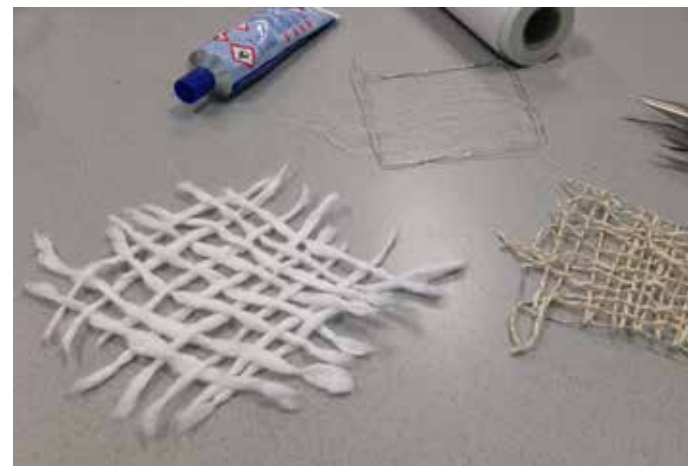


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## Material Explorations

Now that there was some more clarity within the team of what vulnerable and strong meant for them the next step was to explore materials that expressed these terms. Several scale models of chairs depicting a vulnerable or strong state were created and discussed.

For the vulnerable quality weaving techniques were explored in several materials. for the strong quality several similar scale models were made out of different materials.

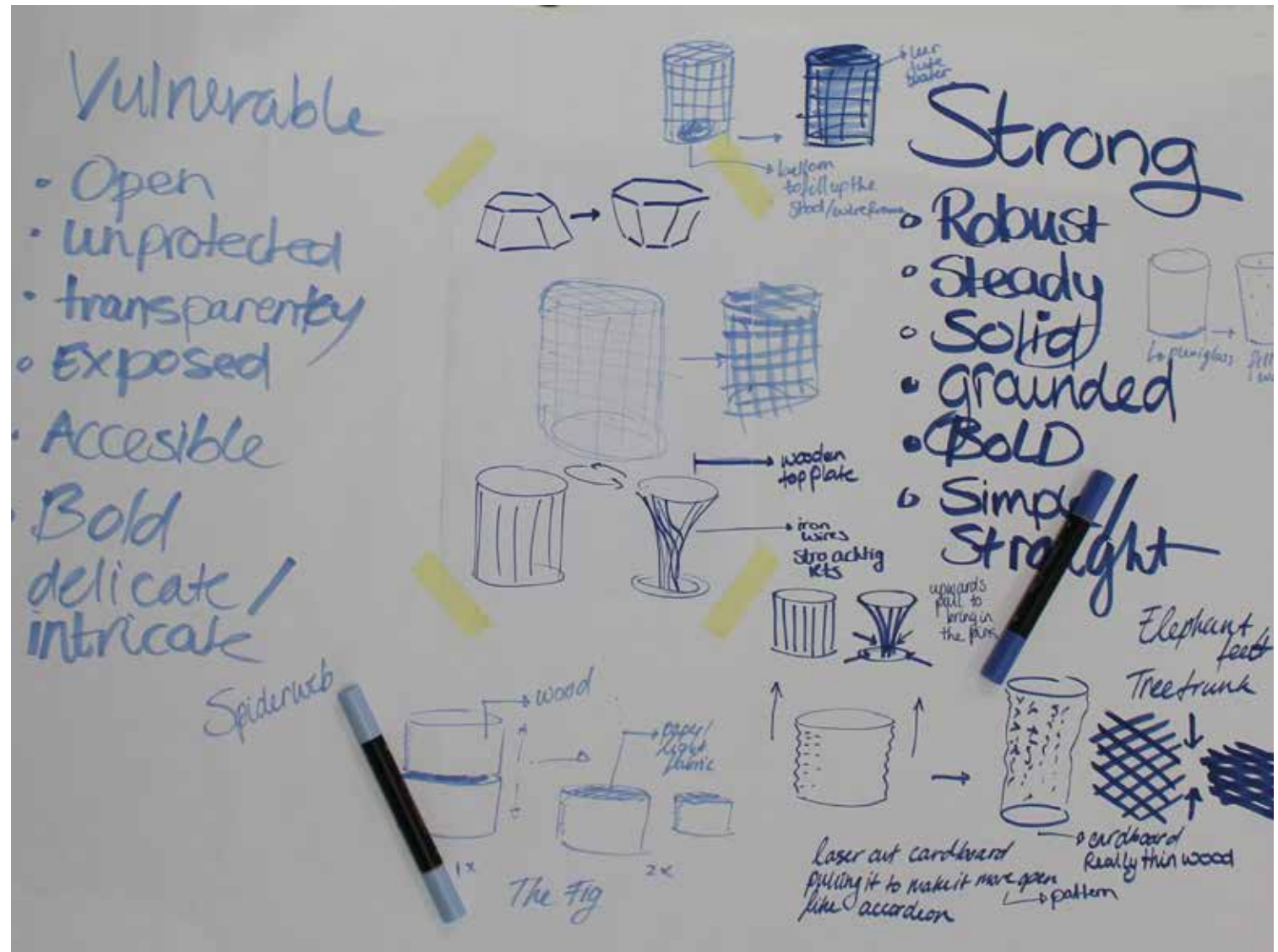


## Term Definition

In order to get to an actual design for the dynamic chair the team felt that it would be helpful to define their qualities more clearly and start designing dynamic chairs using their term definition and mood board as inspiration.

In order to define the qualities all previous work (sketches, mood board and material explorations) were gathered and discussed. The quality strong mainly provoked words like solid and straight, whereas vulnerable resulted in words like open and unprotected.

Here you see the quality definition lists that were created and served as a guideline for the designs throughout the rest of the design process. Several ideas for dynamic chairs were created after the term definition session.





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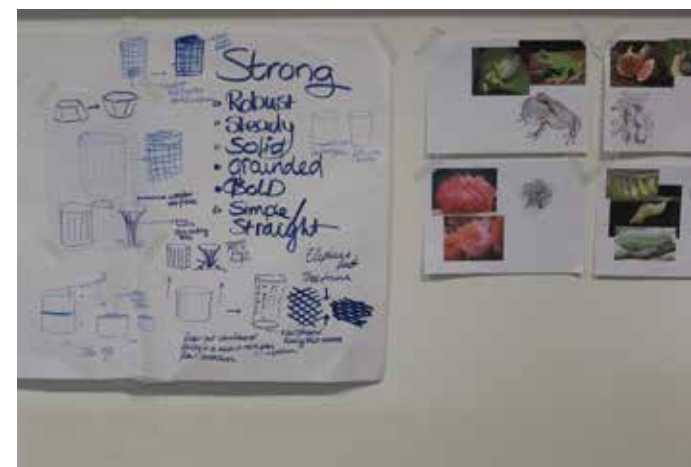
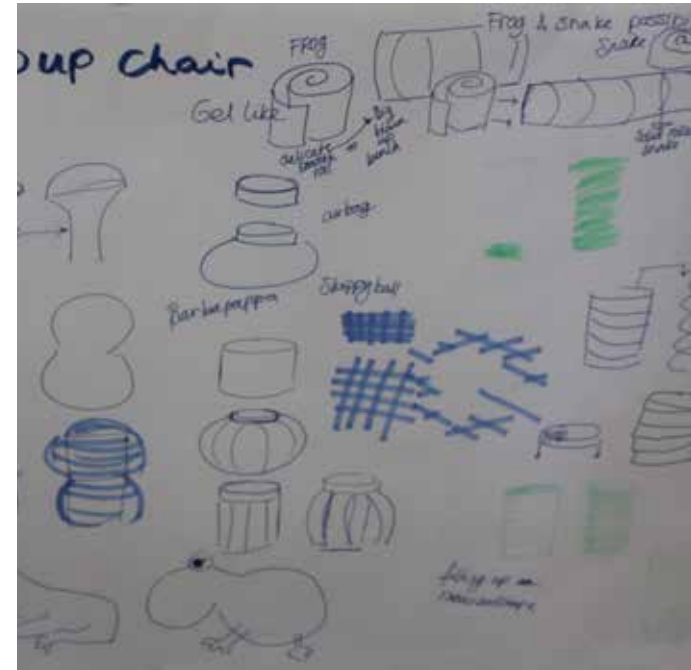
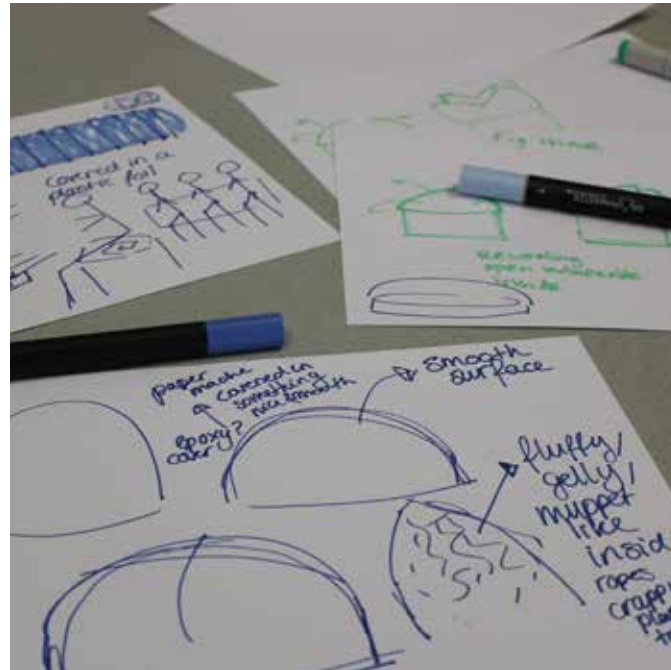
## First Nature Inspiration

When discussing the ideas created after the term definition session, the team was encouraged to find a source of inspiration in nature for each of the designs. They had been inspired by nature during the creation of their mood board and it might provide them with some new insights or ideas for the designs, ultimately leading to a well substantiated design for a dynamic chair.



## First concepts

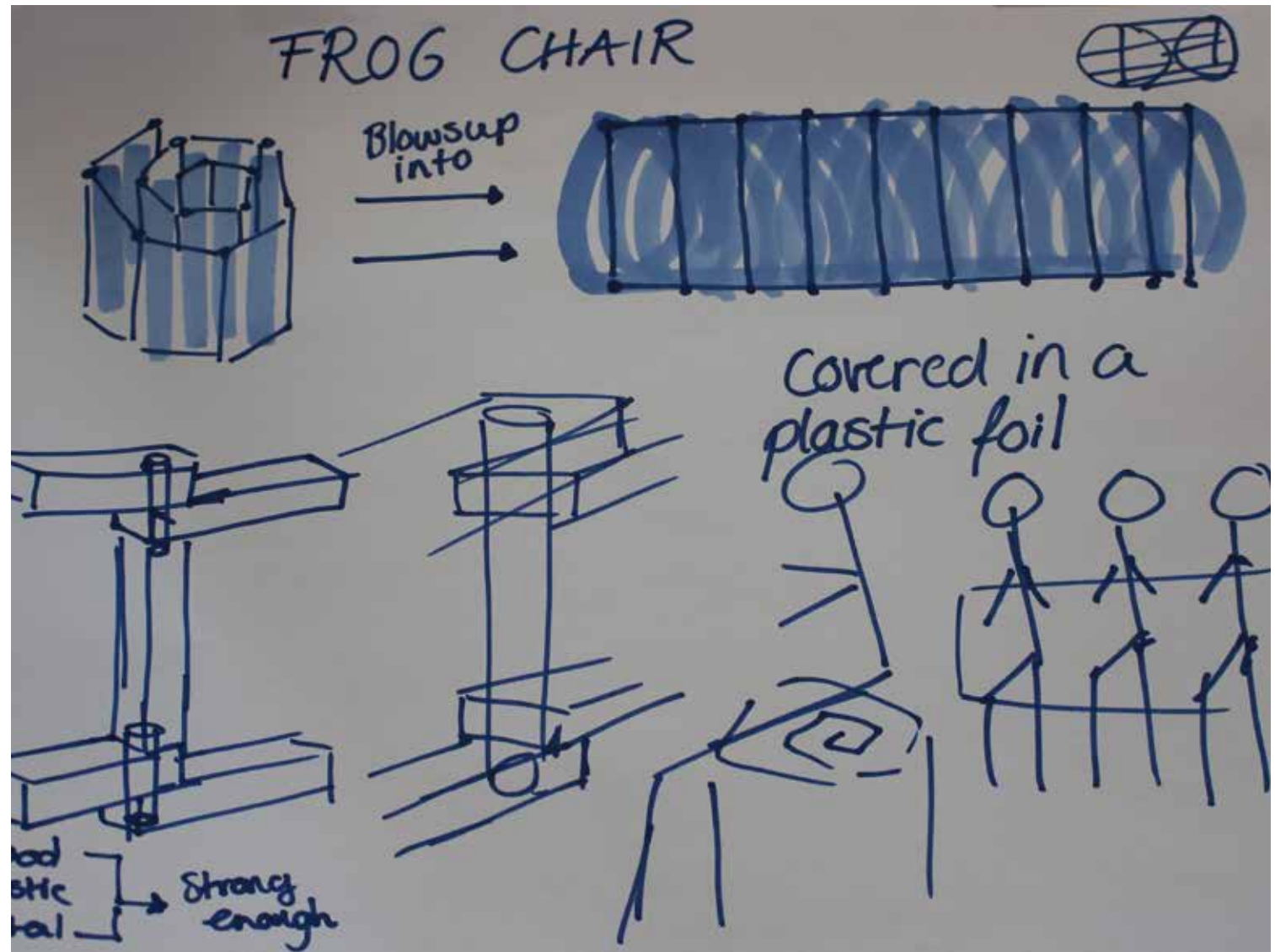
The previously created designs were discussed within the team and links were formed with natural occurrences or appearances. Images of the inspiration sources were gathered. Using these images the team iterated on their ideas, trying to capture the essence of the related inspiration source in the design. This led to several dynamic chair designs, inspired by nature, like a fig chair that would be strong looking on the outside, but could be opened up to reveal a vulnerable inside and a blow up chair that will be elaborated on in the next section.





## First Prototype Concept

Since inspiration was found in nature a lot of ideas arose which translated transitions of animals. After some discussions, team felt that the blow up chair had the biggest opportunities for creating a desired transition. This chair was inspired by the vocal sac of a frog during its call. This sac expansion conveyed strong against the loose hanging vocal sac, which would be more vulnerable. Mainly the extension, integrated in a chair, can look and feel much stronger than the normal loose state. In this way a transition from vulnerable to strong could be visualized.



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## First Prototype Construction+FB

The chair was made out of a frame covered in plastic that will blow up and unroll the chair. The height and diameter of the chair was made a bit too low and thin in order to provoke the feeling of vulnerability. The translucency of the used plastic bag needed to be as transparent as possible since that can convey openness. In the strong state people would sit on tight air instead of the fragile construction. Since the size of the chair is also tripled, more than one can sit on the chair. This creates a strong feeling of connectedness between people. In the vulnerable state only one person can sit on it, with almost half of his/her bottom.

After presenting this concept in class a lot of feedback was obtained. Firstly, both states were not clear in conveying the qualities they should represent. Moreover, people had opposite feelings with both and tended to mistake the vulnerable state for strong and the other way around. The team also received some feedback on the realisation of this design. It was brought to their attention that air is a difficult medium to work with.





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## Second Nature Inspiration

After the received feedback the team decided to reconsider their used inspiration source, the frog that blows up its vocal sac. The essence of this inspiration source was an animal expanding itself to either impress possible mates or enemies. More examples were gathered that showed a similar transition in different animals than the frog. A selection is shown on the following pages.



When considering this transition in animals the team defined the transition as follows. The animals expand themselves from their normal, loose, hanging state into an straight, expanded version of themselves. Two products that inspired the team were the '3 second tents' that quickly transition from a small circle into a voluminous tent and the press puppets that collapse when being pressed but will transition back into their erect and solid state when the grip is loosened.





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## Second Prototype Concept

After a second nature exploration, there was found a common transition with animals, which could be used. Most of the animal examples found were expanding to make themselves bigger and stronger in order to impress the outside. This expansion was really interesting and had big opportunities to convey a transition between the qualities vulnerable and strong in a chair. The vulnerable state represented the normal state of animals, in which their skin, feathers, backside etc. is hanging loose and is looking very rippled. Whenever animals expand themselves that part (skin, feathers, backside) would be tighten up and look very strong. This represented the strong state after the transition.

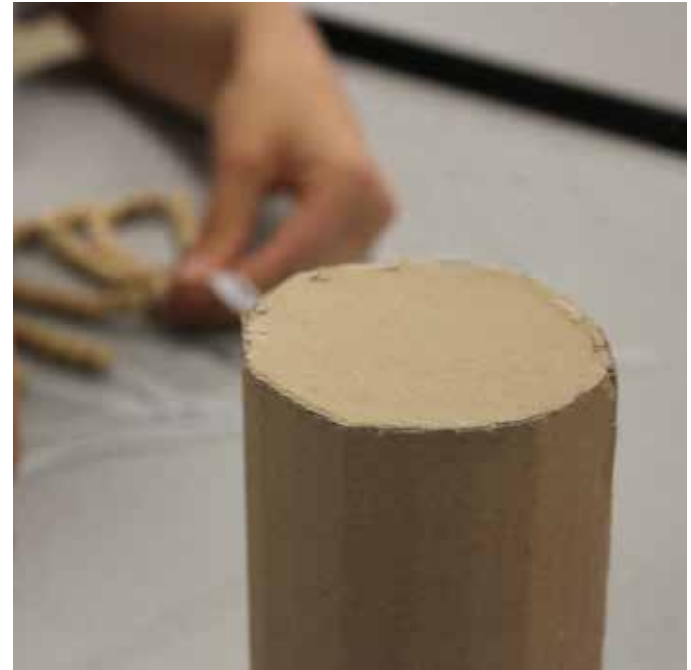


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## Second Prototype Construction+FB

The transition was built with the use of wooden beads. These beads were all connected through an elastic wire. While pulling this wire all the beads supposed to climb upon each other and would expand in height. The backrest which was lifted up by pulling the elastic wires would be very big and height in order to look very impressive. This giant backrest would then support a total back and head and could provoke feelings of strength and comfort. When the backrest is loose, laying at the ground, there is no back support and people might feel more vulnerable and unprotected to their surroundings.

During the demonstration in class the prototype unfortunately did not show the transition as intended. This was due to the roundness of the beads. In the next prototype this needed to be considered in order to realize a quick but smooth transition. In this phase also the realization was an important point of feedback. However, the transition itself resembled its intentions really good, according to the class. There was belief that the look and feel of the chair to represent the desired transition.





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## User Test



There was some discussion within the team about the height of the chair and how that would contribute to how the user would experience the designed transition. Three different heights were considered, a chair on ground level, a slightly to low chair and a slightly to high chair. In order to improve the feel of the transition for the user of the chair a user test was done to test the effect of the transition for the user at different sitting heights.



The slightly to low chair and a collar were created from cardboard. participants of the user test were asked to first sit on the floor and explain how that made them feel, similar for the other two heights either on the created chair or the edge of a table. After explaining how the natural sitting state of that height made them feel, the collar was pulled up behind them and they were again asked to explain how that made them feel about the way they were sitting, but also the difference with the natural state.



The result of the user test was that the desired experience of the transition was experienced most intensely on the slightly to low sitting height.

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## User Test





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## Final Prototype

The final concept did not change when looking at the concept of the second prototype. The team decided that this was a concept they were both satisfied with and decided to take this concept and design a look and feel for it that would convey the designed transition in the best way possible.

In order to define the details of the look of final design the team decided to focus on the lizard and peacock as main sources of inspiration. The team discussed about what kind of material to use to cover the frame of the chair.

Since nature was the main source of inspiration they deemed it important that the material would have a natural look and feel to it. The material had to be able to have a loose and wrinkled look in the vulnerable state and a straight and solid look in the strong state. The material also needed to be easy to manipulate and move freely in order to create a cover for the frame and allow the frame to move within the cover. Fabric was considered to be most suitable for achieving all goals mentioned above.

During a feedback session it was pointed out to the team that, when using fabric, it was important to consider all qualities of the fabric like how sturdy it is, the structure, the way it reflects light and how it moves in relation to the inspiration source of the design.

The team visited a fabric store and compared many fabrics. The final choice was to use the brown goldish silk seen on this page. Silk is a fabric made from natural materials, it had a nice natural feel to it that both team members liked in relation to their design. The colour of the fabric related mostly to the lizard, but since the fabric shines in different colours when light hits it also provides a reference to the iridescence of peacock feathers. This links the material to both inspiration sources while not literally translating to either one of them making a literal lizard or peacock chair.





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## Final Prototype Construction

The construction of this prototype consisted of two connected parts. A sitting surface and a backrest. In order to lift up the backrest from the ground, several wires need to be pulled. The framework of the backrest was made of wooden beams and consisted of two parts to allow the right angles. While pulling the wooden beams would click into the holes on the edge of the sitting surface. The stool was made somewhat too low in order to resemble the strongest association of the quality vulnerable. This low chair had a small diameter as well, since that afforded more senses of vulnerability during the user test.



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# Vulnerable





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# Strong





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## Conclusion & Discussion

### *Conclusion*

A final design of dynamic chair that transitions between a vulnerable and strong state was created using nature as a source of inspiration throughout the design process. By working together closely on term defining activities like making the mood board and finding natural inspiration sources, the team was able to clearly formulate a definition of both qualities and successfully integrate them into a design.

Using two animals as exclusive inspiration sources for the final design, design decisions on material and look can be accounted for. This led to the final design of a collar chair that can expand itself by pulling wires in the frame, providing the user with a supported, comfortable and strong sitting experience as opposed to the initial open and exposed vulnerable experience.

### *Discussion*

After evaluating the final prototype a few elements were found to develop in future stages of the design process. Firstly, there are some opportunities with the chair's sitting experience. There is potential to do more user testing on the experience with the height, diameter, softness etc. of the chair while sitting. These parameters can influence the way people experience the associated qualities in the different states.

This sitting experience can also be strengthened via the construction of the chair. In order to convey the right qualities an expert can be consulted. Input on the construction of the chair from an expert will result in a more supportive backrest and a smoother transition between the two states.

In short, the experience can be improved via obtaining more understanding of the used construction and next to that via extended user studies.

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## Personal Reflection Olivier

This elective was a start for me to obtain understanding in how materials, shape and movement could have influences on the experience of the person interacting with it. I wanted to learn how an object could convey different qualities while using different senses. I hoped to realize and construct this in an eventually inspiring artifact. On the other hand I desired to get more understanding of the way materials provoke certain qualities.

During all the explorations and iterations we did I already noticed the importance of this subject. I became aware of how extremely important the appearance of an object is, while conveying different qualities. I learned how mood boards can help to express qualities like 'vulnerability' and 'strong' apart as well as opposed to each other. Since I never expressed myself through a mood board I can argue that there were major improvements in that field. I learned to assess mood boards and similar boards of inspiration.

Now, I understand the purpose of this board and can really use it to express myself as a designer while developing artifacts, like in this case a chair. Through the mood board iterations I noticed that I got inspired by the theme 'nature' and obtained understanding, later on, how this can be used in a design process appropriately.

Understanding of qualities, expressing themselves in the look and the feel, can, in my opinion, influence the way they can help changing people's behavior. This is my approach as a designer and is definitely something I learned in this course. I think the course had valuable additions to this belief, since I had opportunities to end up with a design completely focused on its appearance rather than its functionalities. This approach was new to me, but can be used while eventually developing end products in a later stage. The elective 'Look and Feel' supported me a lot while developing as a designer.

I do believe that some aspects could have been worked out in a better way. I wanted to explore material, but did not focus on that while developing the prototypes that much. During the course I think I underestimated the power of materials and did not fully try to get the maximum out of it. I did notice this and now I am aware about how to involve this in future processes. In the design process we went through, I mainly focused on shape and the construction, enabling movement, in the prototype. This can help me to develop shape changing interfaces in the future. The construction of the interfaces of the chair also could have been better. This was unfortunately hard to realize, but can be considered in other projects at all times.

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## Personal Reflection Laure

This is a personal reflection on my learning experiences during the elective Look&Feel! The reflection is divided into three segments each related to a learning experience. The reflection will be concluded with a general statement about my development within the elective.

### *Work vs. Personal*

During the first two weeks of the elective a mood board of one of the terms used in the elective had to be created individually as well as a set of sketches related to the term assigned to you. I had to work on the term distant. Besides chairs there was no clear context for the sketches or mood board yet. This resulted in having to use my own experience and interpretation for the visualisation of the term.

The only guideline I had were my feelings related to the assigned term. This made the process of sketching and creating the mood board quite emotional which I did not like at all. Of course you will always put a part of yourself into the things that you create, but I discovered that like to approach my work in a more rational way,

using sources of inspiration that speak to me to fuel my design, and keep my emotions for my personal life.

I struggled during the first few weeks of the elective because of this, however when we were teamed up to work on the assignments my motivation and ability to work on the assignments improved. The context for the design now consisted of the collective personality of the team and our combined vision on how to express our assigned terms.

### *Making the abstract tangible and substantiated*

It became apparent at the start of the elective that working with the kind of terms we were using is a difficult thing. Everyone has their own interpretation of what vulnerable or strong is and how to convey it in a design, I would therefore call them abstract terms.

I like making designs of which the design decisions can be substantiated with some form of inspiration, research or background information. Within the team we quickly defined nature as an effective source of inspiration for illustrating our terms.

By finding the correct inspiration sources from nature we were able to make our terms and designed transition more tangible, understandable for everyone. It was based on a natural occurrence that served as a guideline for making substantiated design decisions.

### *Use of mood boards in a team context*

Making mood boards is an ideation technique that I have used in projects before, however this elective provided more insights in how to approach the creation of a mood board and how it can support your design process.

I learned that I really like making mood boards in a team context as it provides you with a creative tool for ideation that evokes in-depth discussion about the related subject. By looking at visuals together and explaining why you interpret a certain image as vulnerable or strong you quickly get an idea about each others vision on the subject. Going through visuals, discussing them and creating compositions together lead to our team being on the same page for our interpretation of the subject within a short period of time.

This provided a good base for the rest of the design process and we referred back to the mood board during many stages of the process when we had difficulties agreeing on design decisions.

### *Overall*

The product that we have created during this elective and using abstract terms as an inspiration for a design are both things that I do not like. I feel that it does not contribute to society in any way and I did not enjoy going in depth on the terms and how to convey them with the right shapes, materials, etc.

However I liked the challenge of trying to create a substantiated design in an abstract context like this. I was lucky that both me and my team mate liked having a more direct approach. I am satisfied with the way we tackled our process and the final concept and prototype we presented. Also the ideation techniques of sketching and making mood boards we were asked to use, I perceive as very useful within a team context to share ideas and get on the same page for a design direction.