



## **HDK AT STENEBY**

### **Play with conventions**

**Contemporary chair inspired by**

**Chinese classics and my personal travel experience**

**Ying-yu Wei**

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Essay/Thesis: 30 hp

Program and/or course: MFA Wood Oriented Furniture Design / Examwork

Level: Second Cycle

Semester/year: Spring 2017

Supervisor: Petra Lilja

Examiner: Torsten Hild

Report no:

## **Abstract**

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The purpose of this project is to interpret Ming chair through story telling concept. The narrative is based on my personal travel experiences, in particular how I spontaneously encounter with people from other culture and share different viewpoints on conventions. By Setting a start point on a Chinese historical artefact, I am interested in taking Ming chair out of the traditional box and develop it into a contemporary version. With various design method application, my goal is to present a chair with playful form language inspired from Ming chair.

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## **Background**

In this paragraph, I start with a self- introduction. It indicates how the working process varies from before to my current stage. Next, my travel experience and Ming chair are elaborated as two key elements for this project.

My identity contradiction:

I am an artistic person with many emotions and reflections that I wish to deliver in a non-verbal way. Luckily, my bachelor studies in craft and design education taught me that hands-on craft work can carry abstract thoughts. I realized that I can communicate conceptual ideas with the viewers through my furniture. I fell into craft, particularly wood working in furniture design and dug deeply into developing practical knowledge and technique.

I am so obsessed with details that once I have an idea, my brain will jump directly from the idea to the construction. Most of my process back then was focused on the very end design especially in the form and technical details. I lost the balance of making and designing as I sought precision and master levels of craftsmanship. For example, below is a scallion chair I made in 2012. The shape of spring onion is obviously shown in the form language. I worked very figuratively. It is good in a way that I can speak my idea straight forward.

but I want to put more abstract concept to extend my design process. I think a design should contain stories rather than just a functional shape.



Now I find myself in Sweden seeking this balance of technique and design thinking. The key learning outcome I get from my master education is how to use artistic approach making plentiful experiments and evaluate them. Step by step I can have an evolution in the process.

My Travel experience and philosophy:

In an easy definition, travelling is to go or be moved from place to place.

Travelling takes place when I am dissatisfied with the current scenario. The duration and distance can affect me in different degrees. Short distance travel helps me to get away from the blocked mindsets. Long distance trip may not have immediate beneficial result but the profound impacts always come afterwards to me.

One essential influence was from my childhood memories. I remembered that one weekend, aged 9, my friend invited me to cycle to her home in another village. "I stopped my bicycle in a cross section next to a tree and thought it might be the last land mark I can remember. "(My first travel long distance experience when I was a kid.) I went on a road trip but failed to complete it because I was felt insecure about breaking the discipline and stepping out the comfort zone. Ever since then I told myself to be bold and not afraid to try.

This was even more solidified in my later Europe journey experiences which I had in the free time of my master study. I was mostly alone in foreign surroundings trying to adapt to unfamiliar cultures and perspectives. There are many travel guides willing to take an outsider to the most well-known area or attraction. But I chose to do it in another way. I remember how excited I

was when I spontaneously turned into a narrow alley in Berlin, and ended up in a live jazz concert. I remember being nervous when a stranger approached me. But it turned out they just want to show me the best local restaurant and attraction. This unexpected exploring process lead me to an extraordinary result. As a well-known and wise Chinese philosopher Lao zi had said “A good traveler has no fixed plans, and is not intent on arriving.” I learnt that I should follow the explorer within my mind instead of the fixed ordinary guide.

Lao zi is the author of the classic book Tao Te Ching, 6th century BC and the founder of Taoism philosophy. The view point of Taoism is to let people return to their natural state and have their free will and desires. This theory is contrast to the Confucianism which has the greatest impact on Chinese culture. Confucius created a system of interdependent relationships in society. Here, the lower levels must obey the higher (extending from family to nationally). An adventure in Confucius context without a certain goal is not encouraged. Impractical ideas or experiments are thought to damage our stability. In my opinion, Confucianism suppresses creativity and strangles innovation, because one is supposed to act according to their social rank instead of how they think or feel. Taoism encourages one to change nature through trusting their instinct.



From usual ordinaries to surprise outcomes:

One contradiction in my mind when I am creating is caused by the Confucius upbringing. I used to follow a certain rule or frame. It makes me feel secure but also limit my ideas. My travel experience and the Taoism philosophy can be a key to solve my doubt. During the journey I had taken many spontaneous decisions which lead me to unexpected results. I realized that I should incorporate this impulsive approach into my design process. I have since interpreted my travelling into my process and projects.

Ironically, I have seen many historical monuments and objects from my trips, but I have not put effort to understand relics from my own culture. Therefore, I want my start pointing in this project is from my own culture, because that is where all my travels began. Of course, Chinese culture is a very general term.

As I began to focus more on furniture design, I have become particularly inspired by the Chinese Ming Chair.

Chinese Ming chair:

Like all the other places in the world, at the beginning, the ancient Chinese were sitting on the ground with woven mats. The chair was introduced and brought into China in late eastern Han dynasty (25-220 AD). Through thousands years, chairs became more and more common in the society. In 1368, the Ming dynasty, furniture industry reached its peak. The use of tropical Rosewood, enhances joinery techniques as it is a hardwood with strong fibers that can support the construction without nails. Chairs were made in a minimal and simplistic aesthetic form. Many basic symbolized patterns are transferred into carving or inlay as ornaments on the chair to represent good luck anticipation. With mature craftsmanship and decorative details and elegant forms, Ming furniture is considered to be the epitome of a Chinese chair.



In the social context, Chinese furnishing has a strong connection with Societies development including politics, customs and lifestyle. All these standards are based on Confucius theory. The displayed chairs at ones' house can reveal the owners' social status and achievements. The higher position the owner is; the more sophisticated decoration is made on the chairs. Traditionally, only scholars and wealthy people had the ability to afford the Ming chair. The furniture incorporated details to represent the owners' social status. For instance, one Ming chair is called 'Official's Hat Chair'. The upper back rest shares a similar shape to a government official's hat.



Ming chairs were arranged in symmetrical patterns and even numbers. It was believed that this will bring good luck.

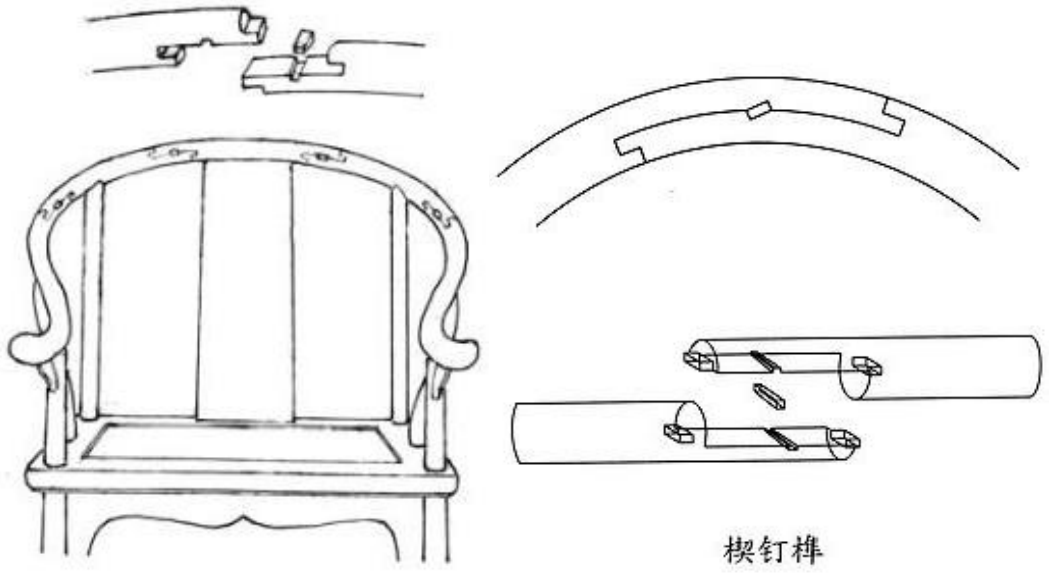


It wasn't just the arrangement, but also the form, of this furniture that was effected by Chinese beliefs in the 12<sup>th</sup> Century. Without today's advanced technology, Chinese people believed that the sky is round and the ground is square. This led to the development of the round-back chair (Quanyi). The curved shape is symbolic of how the Ming Dynasty believed the atmosphere is shaped. The air was thought to bring satisfaction and completion. The square seat embodies the ground we stand on. When a person is sitting in a round-back chair, they are supposedly embraced by the universe.



The structure of every Ming chair is designed to give a sense of respect from the furniture to the user. For example, the front rails are placed very close to the ground. This provides the owner both a footrest, and a subconscious security that the chair is stable.

Only the master carpenter was able to produce Ming chairs. In the technical part of Ming chair, the round shape is made in three parts with precise calculated mortise and tenon work. In the ergonomic part, an iconic S shape or C shape on the splat offers the comfortable angle for users' back to lean against.



## **Aim**

I have realized it is the metaphors and conventions in Ming chairs that fascinate me. Particularly inspirational is their ability to carry implication through graceful and minimal aesthetics.

The limitations of who could own these chairs and the social status they held is certainly interesting. However, I feel that this is what turns them into a historical and not contemporary object. I aim to replace these social confines with a chair for a public space. An indoor transition place for everybody to relax temporarily. The idea is from my waiting experience in my trips.

Since it is a temporary seating structure, I choose to leave the highlight away from chair ergonomics. Instead, this project is basically focus on form language development and reinterpret the conventions. The result can be a spread out experiments.

I hope I can introduce my culture through an artistic approach engaged in people from different perspective. I consider this project as a key to open up my design process and a foot stone to feedback to my own culture. I am hoping my project can stimulate more creative Ming chair related design in the future.

To meet the expected purposes, below are the summed up implements:

1. Study the Ming chair including its cultural background, history, form and craftsmanship.
2. Study lectures and design cases involved cultural interpretation of travelling.
3. Engage people from other perspectives in my project.

Here is a correspond agenda to sum up what I am aiming:

	Traditional Ming chair	My contemporary version
Social context	Distance perception	Inviting
possession	Minority as scholars or officials	Common citizen
Sensation	Classical, delicate	Playful, simplified
Craftsmanship	Sophisticated	poetic
Production	Exclusive, time consuming	Simple, module
Material	Exotic hard wood	Local eco-friendly wood

Among many of the Ming chair conventions, I will take only the identical simplified graceful form and the story telling parts into my project development.



## References

This chapter includes design references related to artistic interpretation about traditional craft and design, or deals with objects as story teller.

### A. Studio Glimpt

Glimpt is a Swedish design studio founded by Mattias Rask and Tor Palm.

Glimpt has travelled around and worked with four culture in four countries.

They explore craft and design through working with artisans from countries

outside of Sweden. By meeting with people from another perspective, they

exchange knowledge and experiences. As the shown picture, it is a project

they cooperated with South African ceramic studio and interpreted forbidden

fruit into a lamp. Using bright color and repetitive dots pattern to indicate a

metaphor of poisonous forbidden fruit.



I really like this design because I can not refer the lamp as the forbidden fruit from the first sight, instead I have to read the instruction to get what it is. I think this kind of transforming origin by taking parts of its detail is what design fascinates people.



B. Danish designer Hans J. Wegner (1914-2007):

In Wegner's early design career, he studied different furniture style origins as Shaker, Windsor and Chinese in order to re-design those iconic chairs. As the J16 Rocking Chair (1944) is inspired from Shaker style and Peacock Chair (1947) is inspired from Windsor style. There are of course a series of Ming dynasty inspired chairs. The inspiration of the set came from the collection of the Danish museum of industrial Arts, a painting of five Danish merchants sitting in Quanyi chairs.



In this series of interpretations, he reduced the complicated curly outlines and decorations to just simplistic proportion and pure construction. I traveled to Design Museum Denmark in Copenhagen in 2014 to visit the "Just a good chair Exhibition". The exhibition was put up as a memorial celebration as Wegner would have turned 100 years old in 2014. There I had the chance to witness the way Wegner performed to create modern refinements of traditional chair designs.



He at first simplified the original design and modify the proportion. After the first prototype is built, he will then continue to slightly modify the other detail parts of the whole construction. For instance, change the seat material from wood to leather or straw. Also design the S shape back rest into a wishbone shape. In this case, it provides the various diversity for the commercial production and consumption. What I can take on is Wegner's form language development. Described in Just one good chair from Hans J. Wegner "Many foreigners have asked me how we made the Danish style. And I've answered that it was rather a continuous process of purification, and for me of simplification, to cut down to the simplest possible elements of four legs, a seat and combined top rail and arm rest." (Just a good chair, Christian Holmstedt, 2014) Because this form language investigation in his early stage, he has developed more than 500 chairs in his career.

### C. Banmoo

Banmoo was established by a senior interior designer, Lv Yong Zhong in Shanghai in 2006. The aesthetic is based on Lv Yong Zhong's interest in Chinese calligraphy and painting along with his Taoism philosophical interpretation. Suzhou chair is one of their renown furniture, and its figure is inspired from an iconic scenery in Suzhou. The view of Waterway bridges and pavilions is the most attractive destination in Suzhou dialect.



In my understanding, the reinterpretation is built on the designer's own experience and the digestion of his believing philosophy. In this case, one can create endless design because of various life experience.



D. KIMU Design (Based in Taipei, Taiwan)



The New Old Divider is a creation launched in 2015, made in paper and metal. It reflects the environment adaptability by having the paper fan as the convertible feature. User can create their own spatial atmosphere. From my point of view, I appreciate the idea of having a minimalistic object among a living room filled with variables and the usage of the contrast material paper and metal. Especially, I am attracted by the eastern elements (paper fan) applied in a modern simplicity aesthetic context in this project.



E. Fredrik Paulsen (based in Stockholm, Sweden )



Torri chairs is a chair collection created by Swedish designer Fredrik Paulsen for an Torri art gallery in Paris. In this project he plays with the tradition and function by taking away the complicate form and remain simple frame works with various dimensions. Several chair in this collection are inspired from historical references such as Mackintosh, Thonet and Qing dynasty chairs. I was attracted by this inspiration because I can see the Qing dynasty chair identity in this collection. It is interesting how a historical shape can leave a timeless impression even it is constructed with different material and color.







## **Objective**

I want to create a contemporary chair inspired from Ming chair. The result should contain both a reinterpretation of Ming chair and playful form language developed from my travelling experience. The outcome should take Ming chair out of the conventional frame but leave a clue for the user to trace back to its origins. Since it is through my personal abstract interpretation, other user will develop their own ideas around the chair and then a cultural interaction will take place.

## **Question formulation**

- What travelling concept can I take to combine with Ming chair? How can I transfer an abstract idea into a solid furniture?
- What is the typical conventions in forming a Ming chair? Can a type of outline represent a sensation of traditional Ming chair?

## Approach

I took a Bachelor course called “Design meets history” which learned me the method to study the historical furniture in every aspects including its shape, decorations, structure, proportion and dimensions. Therefore, I had this idea to do a Ming chair research and experiments. I started with a spontaneous experiment. By taking an easy chair from our Fika room, I intuitively add two iconic Ming curve from my perspective onto the chair. After I present it to other people, I get the idea to investigate what shape makes a chair recognized as a Ming chair.



I begin with taking away unnecessary ornamentations in the Ming chair. From this reducing shape process, I get inspired to distinguish and reunite several featured curves. I decided to use laser cutter to print out many curves with minimal adjusted proportion in order to re construct a new shape. In this case, I can disassemble the Ming chair formal elements and reassemble it with my interpretation. In addition, it can be out of the conventional Ming format.

The way I bring the Ming chair and travel experience together is through an interactive workshop. I invite people from different cultural background to build models. My intention is to see if they will break the conventional form easily than me. I got this idea because I always have to explain where I am from and what is my culture when I meet someone during the travelling.

Through certain criteria to evaluate the models, I can decide my further action.

I have also used brainstorming design method to come up with key words related to travel. From the keywords I can make mood board and detail construction board to develop the result from the workshop. I choose to focus on more the form language and the meeting construction in the details. In the prototype, I think the ergonomics are fixed statistics and can be apply later on if there is a further development.

Reinterpretation practice:

From the Design meets history course, not only did I investigate the historical furniture but also I had the chance to visit Swedish designer Ake Axelsson's studio in which I found his Ferdinand chair very inspiring.

Therefore, I started an extra practice along with my exam work. The goal in this practice is leather material experiment and shape reinterpretation.



I was trying to work with the leather stretchy and formable ability. The charm of leather is the fact it reflects the time being on its color. Aside from this common sense, I wanted to emphasize leather adaptability and durability by shaping a curve back rest with a wooden mold and hollow structure on the chair arm rest.



I also practice traditional joinery and color on this work and it indeed enhance a certain touch on this chair. But I do not really find an excuse or concept for why I wanted to do that. Therefore, I decide to move myself from the practical technics and start to collect images and keywords to build a visual design pattern in order to continue my work.

## Process

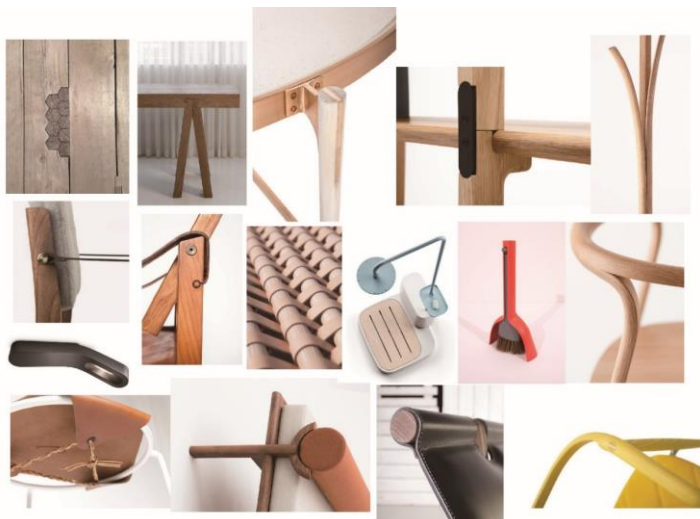
Design methodology:

At first, I did brainstorming to rapidly gather keywords relates to my travel experiences. I then roughly categorize them into emotions, social context, landscape, and transition.

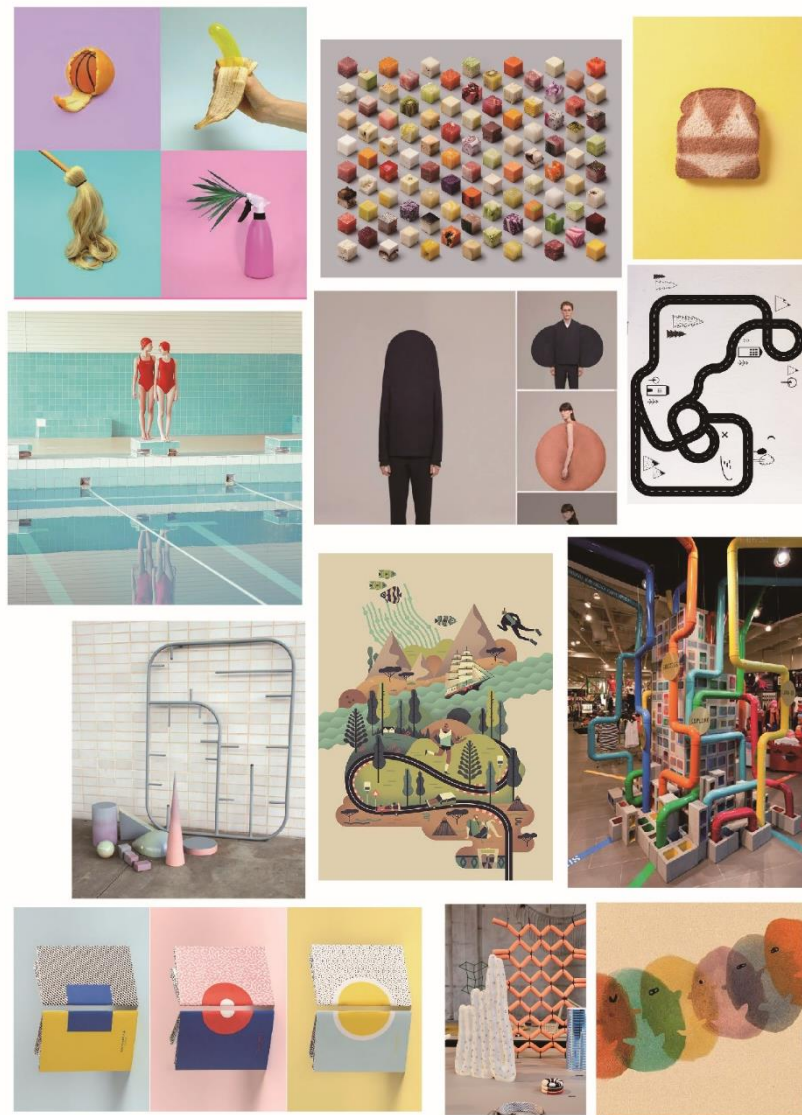


At step two, from the brainstorming keywords, I want to be inspired from some details which cope with similar sensations. I can relate these details to

Adaption, split road, cross section, transition.



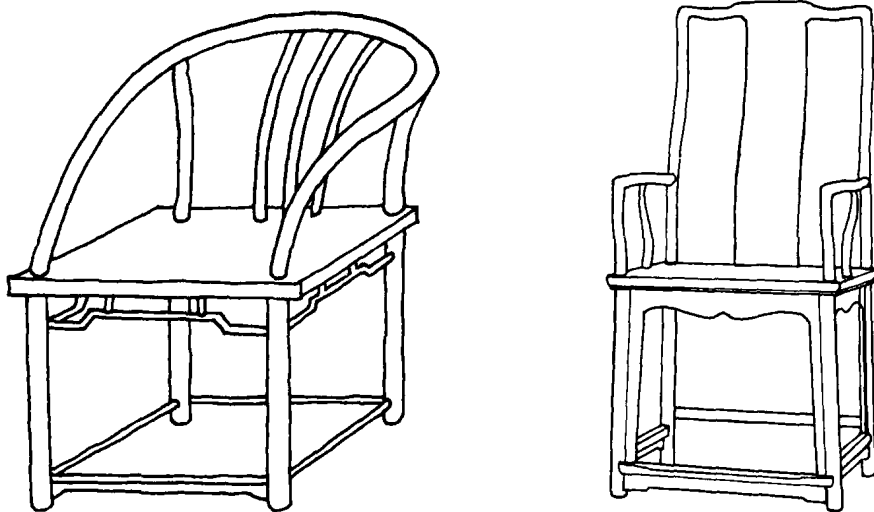
Step three, a mood board is made to show my intention that transfers abstract artistic cognition which happened during my trip into detail parts. To leave a playful clue of my narratives into the chair construction as a meaningful metaphor instead of making a chair out of pure functionalism.





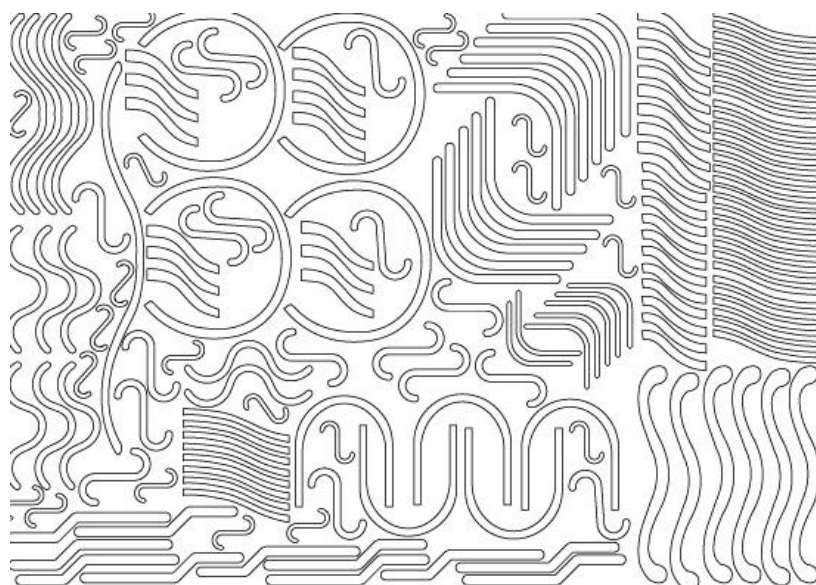
Modelling workshop documentation:

I started by choosing two type of Ming chair I have mentioned in the text. On the left is the Quanyi chair and the right one is the Official's hat chair.



I disassemble the Ming chair formal elements and draw the curves on illustrator computer program. These curves are S shape from the chair back or on the support for the arm rest. Then I print it out with laser machine.

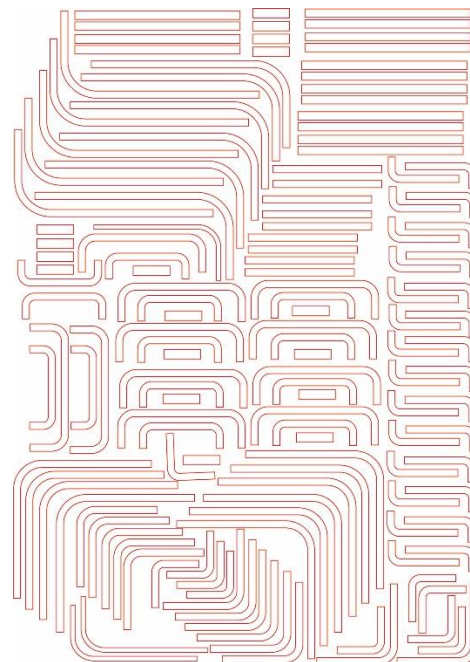
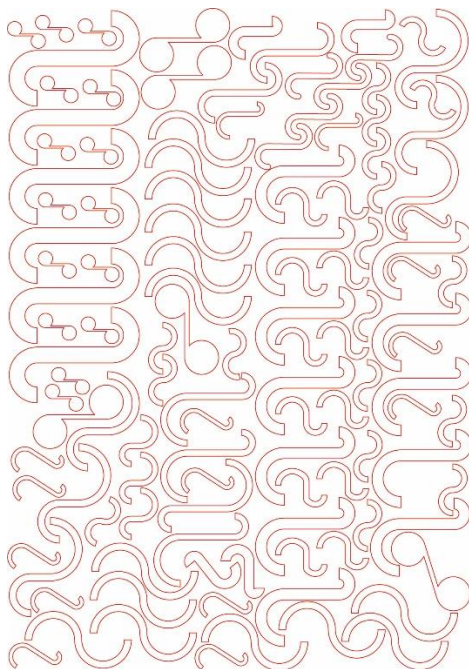
(stage1)



People were invited to the workshop to construct a chair model.



Some organic curves were fixed and draw in different thickness and porportion in the second laser-cut template. I also tried some intuitive reinterpration on the curve shape.(stage2)



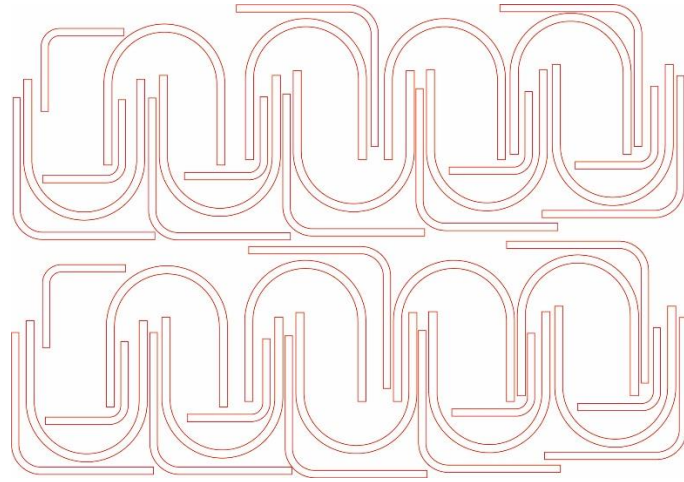
I put first and second laser cut result together and invite more people to play with the curves and make chair models. I want to see from which template they will take more elements into their design.



From these model results I have set several criteria for me to evaluate them so I can move on to the final design. (see criteria text)



In the end, I decide to use only the basic L shape and U shape repeatedly to create my models. In coordinate my idea that travelling is a continuous and a circular process, I have generated models with curves that goes unconventionally in a playful sensation.



### **The criteria for the modelling selection:**

1. Does it fit in my contemporary idea?
2. Can I tell a story from these outline construction?
3. Can I fit the design into my time plan?

At first, I want my contemporary interpretation includes a playful sensation and has a much simplified outlines and preferably with color. Second, I want to tell a travelling story which a squared seat is considered to be a space, and the curves are as travelers that interacting around this space. The detail construction on the curve is a metaphor for how two people meet with each other. Another interpretation can be the outlines are as the route to enter this space. The detail construction or the transition on the outlines represent the road circumstance. Third, I want to have a sustainable production by reducing the shape variety. In this case, I also choose to focus on just the simplified appearance more than the chair ergonomics.

### **The discussion in between three stages of modeling:**

#### Stage1:

Because the curve is exactly transferred from the Ming chair, the model in this stage remain a lot Ming sensation. However, it is contrast to my idea of taking it into a contemporary version. The contemporary version I want is to have a much simplified shape. So I decided to modify the proportion and angles towards more geometrical and simple appearance.

#### Stage2:

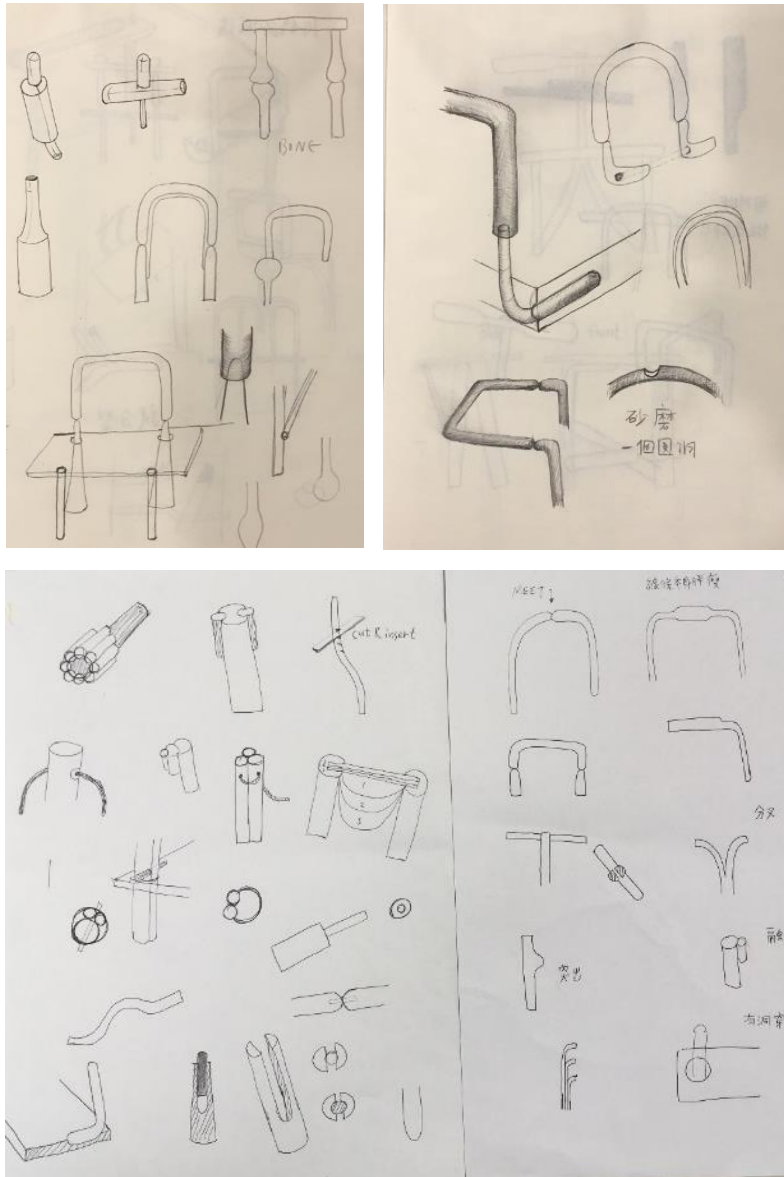
By putting the earlier and the later pattern together for the guest, I can observe and ask their opinion of what is contemporary shape to them. I got quite positive result that the second type of pattern are more contemporary. And I have asked them to construct model from their instinction along with phrasing a story behind it. I find most of the guest's narrative are based on their fast interpretation in those curves.

#### Stage3:

At this stage, I build the model with curves that overlapped to each other as a traveler meeting metaphor or cut the curve half way and continue with another direction as a route alternation metaphor. I have got many result by just these two simple shape.



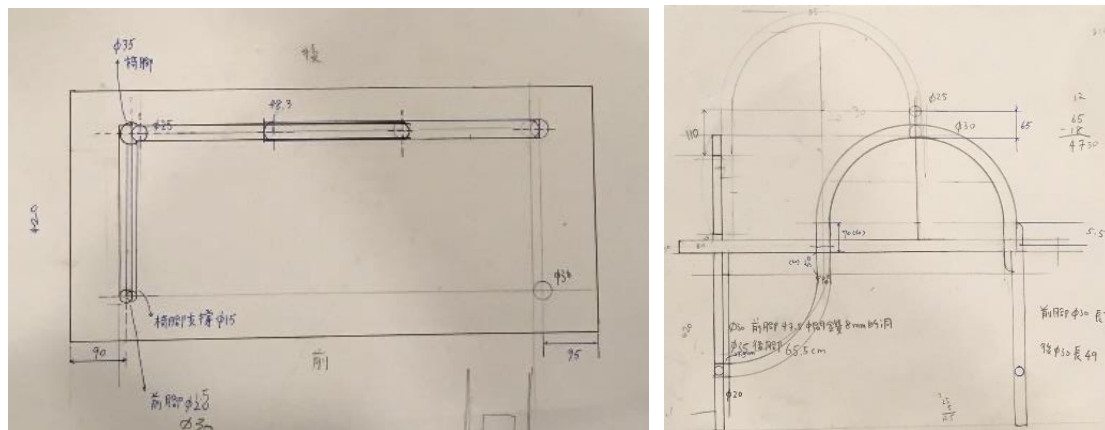
## Detail joinery and construction sketches:



I create a type of joinery which a groove is made on the end of one stick and join the other stick. It takes precise machinery work because the groove is completely round and the other stick has to be rounded by the router exactly the radius as the grooved one. I want this detail serve as a metaphor of how two people interact

and engage in each other. The rest of the leg construction is fixed by minimal radius difference in order to complete a clean and simple outlook.

### Technical drawing and Steam bending wood making



A simple technical drawing is made according to my models. I am used to have a basic dimension indication before I go into production. The good thing in this kind of quick technical drawing and modeling is that I do not have to spend much time on computer rendering and modeling if I am better on doing hands-on work. The downside is that I have to improvise and make adjustment during the making process.



“Permanent curves in wood can be achieved by the following methods: cutting to shape from the solid timber, steam bending, coopering, saw kerning and laminating thin sections together (Joyce, 1987). “

Steam bending is to render the wood semi-plastic either by heating it with live steam or immersing it in boiling water, in order to increase its compressibility ratio. With a metal or lather strip along with the steamed wood, it is locked in position until the fibers have cooled and dried. This step can also secure rigid to the desired curve. The technique is straightforward with a sufficient head of steam at atmospheric pressure to heat the wood thoroughly to 100°C, and to maintain that temperature for at least 45 minutes for every inch of thickness, i.e. 32 mm section will require approximately one hour's steaming.

Very green timber will obviously bend more readily than dry seasoned wood, although hydraulic pressures induced in the moisture-choked cells may cause extensive rupturing, while old dry wood is usually too stubborn or too brittle to bend well; therefore, the ideal is probably partially seasoned wood with a moisture content of around 25 %.

I have been always wanted to try steam bending technic in wood working. I decided to take action in this project. Among plentiful wood species, Ash, Oak and Beech wood are considered to be the most suitable material for steam

bending. I wanted to have a light color as a contrast to the tropical wood used in Ming chair and I have chosen Beech wood.



L shape steam bending in Beech wood.



U shape steam bending in Beech wood.

Difficulty and failure are the best teacher in the making process keep me trying and learning. Several wood cracked because the wood fiber was not completely against the metal strip.



Other process includes wood turning and a lot of machining work. Because wood is twisted in the bending process, it takes a lot of jigs and hand carving to adjust its shape.







In the industrial production, wood stick was made into a round bar and placed into a half round metal strip, but I can only use the flat metal strip in the school to make the bending. I choose to shape the curve into round and different diameter to show a friendly playfulness afterwards. In this case, it enhances the difficulty to make because of the lack of the correct router bit, I have to free hand the diameter with a scooper.



## Result



Expression of the result:

The story I have in this bench is based on my travelling back in Granada, Spain. I was walking towards a museum on a hill and the road was along with continuous mountain. In the end, even the museum was closed, I had the chance to see the beautiful landscape. This impression has inspired me to create the constant curves that appeared to be connect to one and another. To respond to the metaphor in Ming chair. In a travelling context, I interpretate these outlines as the routes towards a destination(seat), The meeting points on the curve details are considered to be how the travelers meet up with each other and interact around the space(seat). In this picture, an abstract concept of travelling and gathering is delivered which achieved my purpose of breaking the Ming chair conventions. The only connection with Ming chair is the story telling part.



The set up in the exhibition hall:

The exhibition in Steneby konsthall I put the steaming bending mode on the wall to show the working process. Along with my model workshop result to show the difference between stages.



## **Discussion**

### **1. the connection with original Ming chair**

There are many valuable elements in my culture that has been forgotten or abandoned. I could have worked as usual, figuratively transfer the round back shape into another design as many other designers, but I believe a design can also serve as an educational platform to introduce a cultural story. There are actually many types of Ming chairs with various meaningful ornamentations, I chose to focus on one typical round back chair in the project. To narrow down a big subject into a single piece of furniture, I was afraid of losing my points in studying traditions. However, I realize afterwards that the result is just a trigger to the whole process and that includes all the researches. The combination of travelling concept and ancient Chinese belief had worked out fine in this work. Furthermore, this process can be developed into a collection to emphasize the travelling storytelling. In this hacking system, I can reserve the Ming chairs resource as the basis of many of My chairs.



## 2. the future development

This bench can be applied in an indoor waiting area for temporary sitting usage or interior decorative bench. Places such as airport, train station and public reception. This idea also fits my travelling concept. Below is a project called “Modified social bench” created by a Danish artist Jeppe Hein. He has developed numerous benches with various shape. The purpose is to make the act of sitting a conscious physical process. This reference can be a reminder for me that my creation leads me to open another route to redesign Ming chair and the collection can be endless.

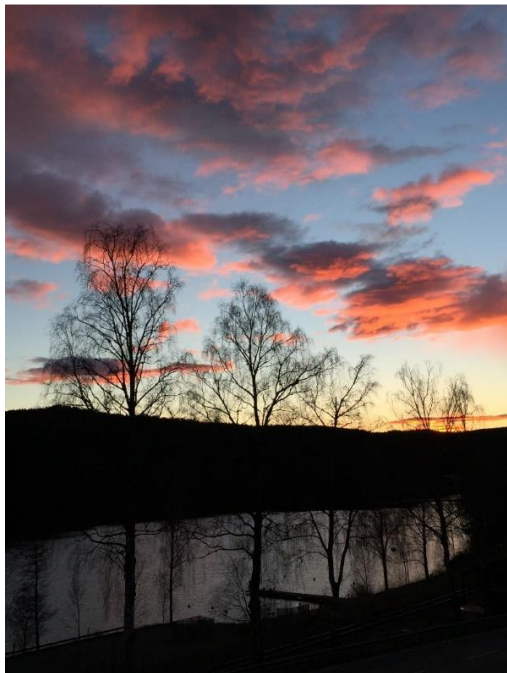


I have used steam-bended wood technic in this project because it has been one of the desire in my wood working studies. In addition, wood can always

provide an object a gentle exclusive aesthetic. However, if this conceptual design is taken into a scale production, metal tube can be a productive option. The design of same curve can reduce the production cost and meet the sustainability.

### **3. the color selection**

The material selection in traditional Ming chair making is extremely restrict. Tropical hard wood are used not only to maintain the furniture durability but also to show the wealth of the owner. To play with this kind of grim convention, I have chosen to use a joyful shrimp pastel color that appears in the sunset moment. I quite often see this beautiful color from my travelling or from my work when I return to my dormitory room, my home.



## **Reflection**

To have innovative ideas through material experiments and logical design thinking has been my greatest goal in my master study. If I take this exam work as a review of my three years' study, I have learned how to communicate the abstract concept through a visualized process not just the physical work by reinterpreting a traditional craft furniture into a contemporary conceptual sitting structure. This project not only satisfied my goal of contributing my work to my culture, but also help me to declare my design practice.

I think an innovative design follow after a personal unique experience. I may not accomplish a dedicated design compared to Hans J. Wegner but I have created another design thinking path for people who interested in Ming chair reinterpretation.

In the project development phase, I really appreciate group discussion more than before. I used to work alone in my previous education, but since I have joined many courses to work with groups, I have learned how to cooperate with others and take others insight. It was a good idea to have an interactive workshop to exchange perspectives with other students, especially those who have not seen any Ming chairs was introduced a new input. I think I will continue work in this interviewing method in the future.

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