



LUND UNIVERSITY

## BACK & FROM Furniture set

A furniture set inspired by Chinese collective memory of the 1990's

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# Abstract

Collective memory is a psychological and sociological concept. This theory provides a reference for defining the characteristics of a community from the perspective of memory. Further research also shows that its internal connection to culture and community. This has many similarities with user research in product design.

By focusing on typical or iconic products, objects, or the interacting procedure in a certain period of time, the memory about a certain kind of product that shared by a community can be found for which provides product designers with a way to understand a particular group of people and their product preferences. This article mainly takes China in the 1990s as the main research object, with a focus on analyzing the core of classic products that providing familiarity and psychological or emotional resonance to the new products.

Keywords: Collective memory, the 1990s,China, product design

# 1.Introduction

There are always able for people to write down a list of classic products for a period of time, which reflects the design style and even the life philosophy of a specific period or region. In the context of globalization, designers are constantly exploring new possibilities to meet people's needs with a calling for a new way of thinking and reviewing how people interact with their objects.

According to Moalosi, R. et .al (2016), as the world becomes more connected, designers are facing localization challenges to reach foster cultural diversity. In the context of globalization, the design result should have regional characteristics and meets universal values and public aesthetic needs. Today's product design should not be considered as simply choosing a product that adapts to all types but to impress people based on a full understanding of different backgrounds and human emotions. The industrialized mass production that gradually formed in the industrial world requires more "human" as a factor in the post-industrial world.

They also argue that designing products has similar attributes as the culture for which can be both visible (functional and aesthetic) and invisible (emotional need). They also announced that products are able to symbolic to society. In this way,

products are able to transport the connection between the image and the source to the next generation. By reviewing and redefining the product or objects from the old-time, new products may be able to achieve psychological resonance and get interaction clues by awakening the users' memory about old objects to meet both visible and invisible needs. Ross (2002) argues that people are the start of innovation, not technology which means that advanced technology is not an essential factor in designing impressive products. This is theoretical support to the fact that not all products are high-tech in daily life.

When it comes to reviewing old products in the past with a focus on people's memory, collective memory theory provides a possible path to explain the causes and ways of forming classic product impressions.

## 1.1 Collective memory

Collective memory is a theory that firstly used by the sociologist Maurice Halbwachs in his article Social Framework of Memory in 1925.

According to Jeffrey K. Olick (2008), It is a complex process including different people, practices, materials as well as themes. David Manier and William Hirst (2008) have a clear definition of identifying the collective memory from the knowledge shared in a group of people: collective memory is not a simple combination of individual memory but having a function for a community. It provides a cue for a group of people to create self-construal and identity. Jeffrey K. Olick (2008) made an addition about defining a collective memory that the process should not start with confirming where and how collective memory would appear. It is more important to understand the request from different parts of the target society. They also mentioned that many people are keeping some long-lasting traditions and rituals they have unconsciously, these people regard certain things as natural while not a learned experience.

It is obvious about the relationship between culture and collective memory which are mentioned multiple times in different studies. Assmann (1995) talked about communicative memory and cultural memory. Based on his point of view, communicative memory is based on daily communication in a community for which lasts in one generation. While cultural memory is able to keep over generations by social practices and initiations. He called certain things as "figures of memory" Jeffrey K. Olick classified collective memory into a more

detailed way based on the maintainability over time: collective episodic memory, collective semantic memory, and collective procedural memory. Collective episodic memory can last for one generation. Collective semantic memory is able to transmit across generations, but it is fragile and becomes weak over several generations. The only way of keeping is to externalized by text or cultural artifacts. Collective procedural memory is more about skills at using instruments and tools. In his paper, he claimed that collective memory is over-summarized for products, practices, and processes. He also mentioned in his research, collective memory refer to multiple product and practices which is different from each other.

*"The former (products) include stories, rituals, books, statues, presentations, speeches, images, pictures, records, historical studies, surveys, etc.; the latter (practices) include reminiscence, recall, representation, commemoration, celebration, regret, renunciation, disavowal, denial, rationalization, excuse, acknowledgment, and many others. "*

When translating the abstract psychological and sociology theory into a more visualized form to be applied by product designers, the collective memory for a period of time or a community should be more clarified by specific products or behaviors. When it comes to the focus on products, the user experience of a certain product is able to create a specific memory that is shared with a group of people who own certain product for which also show the identity of the owner. Jeffrey K. Olick's conclusion draws out the basic range of the collective product memory which is the base of this research.

## 1.2 The 1990s of China

In the 1990s, China stood in the second decade after the application of Reforms and Opening-up policy. According to Rawski, G. Thomas; et al. (2008), large-scale privatizations lead to the change of market share with a huge market share increase of private sectors and the market share decrease of non-private enterprises. The development of the market economy enabled the Chinese to gradually enjoy the outcome of industrialization and modernization for which shown by improving life quality. Nevertheless, the 1990s of China was in the period of implementation of privatization reforms, which under a shadow of the Soviet Union marketization failure and disintegration.



From today's perspective, the 1990s of China can be described as a crossroad of development for which also reflected in Chinese people's daily use products. The traditional solutions and modern industrial mass-produced products can exist in one picture as a miracle.

As the 1990s is a special period of time which is the eve of the 21st century, some scholars even describe this period as the golden age. Since this time, people's lives have undergone rapid changes. Consumerism encourages people to pursue newer products. As a result, people's select range of products has exploded over the decades. With the development of science and technology, although product developers provide more powerful products comparing to the past, people's need for psychological resonance from the emotional aspect is increasing day by day. It is the performance that "human" as a factor in the post-industrial world.

The old objects bury deep in the memory create a line that connects people from an early age to now, showing the identity of the owner. With the familiarity that picked up from memory, people are able to use the products following their own habitat.

## 2. Objective

The research is to understand the collective product memories in the 1990s Chinese daily life. The product symbol of the 1990s in China would be described by tracking back people's memory of typical or iconic products and lifestyles. The following product design of this project would be inspired by the collective product memory research of the 1990s to create a psychological or emotional resonance of the young Chinese generation to the products.

The research question can be described as:

How can the collective product memories of the 1990s be used to provide psychological or emotional resonance for new product designs in the 2020s?

The sub research question is as listed:

- What kinds of products or behaviors are able to represent the Chinese collective product memory of the 1990s?
- What kind of properties can be used to describe the Chinese collective product memory of the 1990s?
- How to apply the 1990s collective product memory into the product design of the 2020s context?



# 3. Methodology

## 3.1 Action research methodology

The action research methodology was adopted in this study. Mills, J. and Birks, M. (2014) pointed out that the action research methodology is action-oriented and is often used for qualitative research. Action research methodology gradually guides the improving, refining, and summarizing of the research findings through continuous contact and communication with participants. They also mentioned that the action research methodology is suitable for research including both knowledge contribution and practical improvement goals within a specific field.

Following this methodology, many different design research methods could be formulated and implemented in order to obtain high-quality data and information.

The project progress could be promoted through the researchers' active action for which also provide a more reasonable workload and a better schedule. A higher degree of freedom from action research methodology provides the internal motivation to actually progress the research project.

## 3.2 Narrative research methodology

Mills, J., and Birks, M. (2014) also described the narrative research methodology for which test the significance of participants' experiences based on stories. Since the research is mainly focused on the collective product memory of the interviewees, in order to understand the research content, the participants' stories and opinions are an important source of information. On the other hand, the research context has been limited in a specific region and a specific time period. The properties of narrative methodology enable the researcher to better immerse in the context and understand the research content.

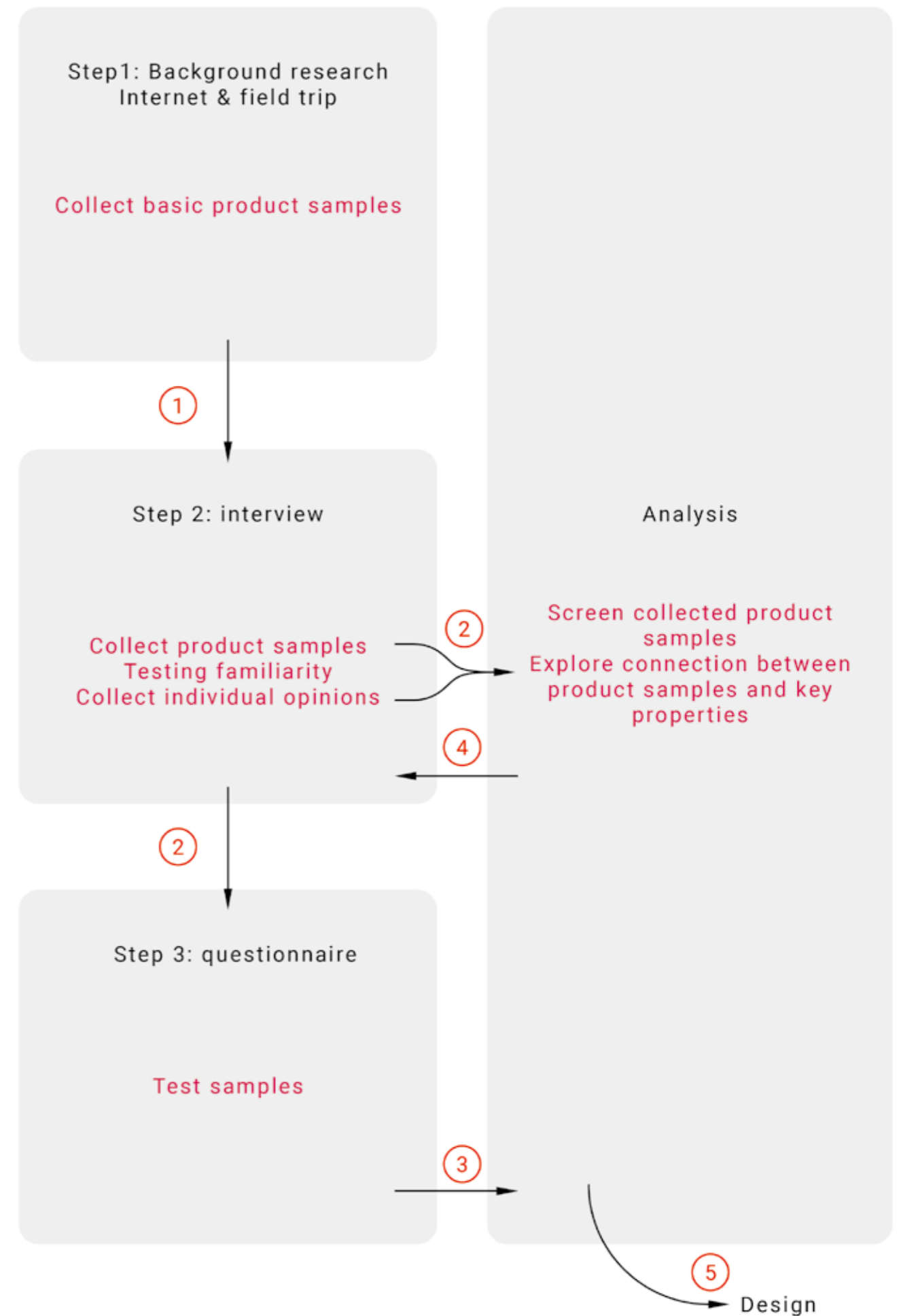
In case of the critical opinions on narrative research about particularity and inaccuracy from the participating individuals, this methodology would only be used as a guidance of content extending stages. In order to find a more general answer through the research, further data collecting and processing methods should be applied to involve more people. It is necessary to further use the data method to obtain specific weights or rankings to test and describe the story generality.

The old objects bury deep in the memory create a line that connects people from an early age to now, showing the identity of the owner. With the familiarity that picked up from memory, people are able to use the products following their own habitat.

# 4. Research design

## 4.1 Research framework

According to the main research content of this study, this study was a qualitative study. The research framework was formed up in 3 stages as shown in the figure: Data collection stage, Analysis stage, and Design stage.



### 1) Data collection stage

In order to collect and screen the most typical 1990s products as much as possible, several different research methods with different sub-goals were applied in different steps to form up the research framework. The data collection work was mainly divided into three steps.

#### Step 1: Background research and field trip.

This step was aimed at gaining a brief understanding of the 1990s products of China. The first round product sample collection process would be collected in this step.

#### Step 2: Semi-structured interview.

The semi-structured interview was applied with a focus on expanding product samples and screening the samples from Step 1. In step 2, people's opinions about the 1990s would also be collected. By combining the information from step 1 and step 2, the information would be imported into the analysis stage.

#### Step 3: Questionnaire.

Based on the product samples summarized from previous steps, a questionnaire with a focus on testing sample accuracy would be made and spread into a broader community. The data from the questionnaire is the main source of identifying the iconic product in the analysis stage. The high volume quantitative data from respondents would help to analyze and explore the most typical product samples of the 1990s, China.

### 2) Analysis stage

Multiple sorting and accounting rules would be set up to clarify the typicality and conformity of the product samples with the majority of people's product memory of the 1990s, China. By further setting the screening conditions, the qualified product samples will be used to summarize and visualize the most representative and memorable properties and key points of Chinese products in the 1990s. Several mood boards are expected as the visualization of certain properties and key points for which providing inspiration for the following product design.

### 3) Design stage

By considering as many aspects as possible, the design stage would be executed as practical testing of the research results.

## 4.2 Research methods

### 4.2.1 Semi-structured interview

As the traditional semi-structured interview procedure provides a limited ask-and-answer time, it may not be able to carry out enough effective information for mining into deeper memories.

The interview should be processed with extra preparation.

Considering time management, around 10 people were interviewed. The interview with Chinese people could be described into 3 stages:



#### **Authorization and introduction**

- permissioning
- introduction
- giving tasks



#### **Thinking and searching**

- review memory
- select stories
- search pictures



#### **Formal interview**

- open-ended conversation
- share opinions
- find familiarity

### **1) Authorization and introduction**

In this stage, the interviewee was asked if he/she agrees to attend the interview and share their stories. An introduction to the research goal and the whole process was carried by the researcher. A question list is given to them for the next stage.

### **2) Thinking and searching**

Based on the question list, the interviewee should reviewed their memory and selected the story they would like to share. after that, he/she should searched for some pictures for better describing their stories. The question list mainly included the following questions:

(1) What is the most memorable product (or products) for you in the 1990s

- What is it?
- How does it work?
- Why you use that?
- How does it feel like?

(2) What are the products you know were very common in the 1990s?

- What is it?
- How does it work?
- How common is it?
- Do you think it is a symbol of identity?

(3) What materials, textures, and colors are most impressive in the 1990s?

### **3) Formal interview**

The formal interview to includes 2 parts.

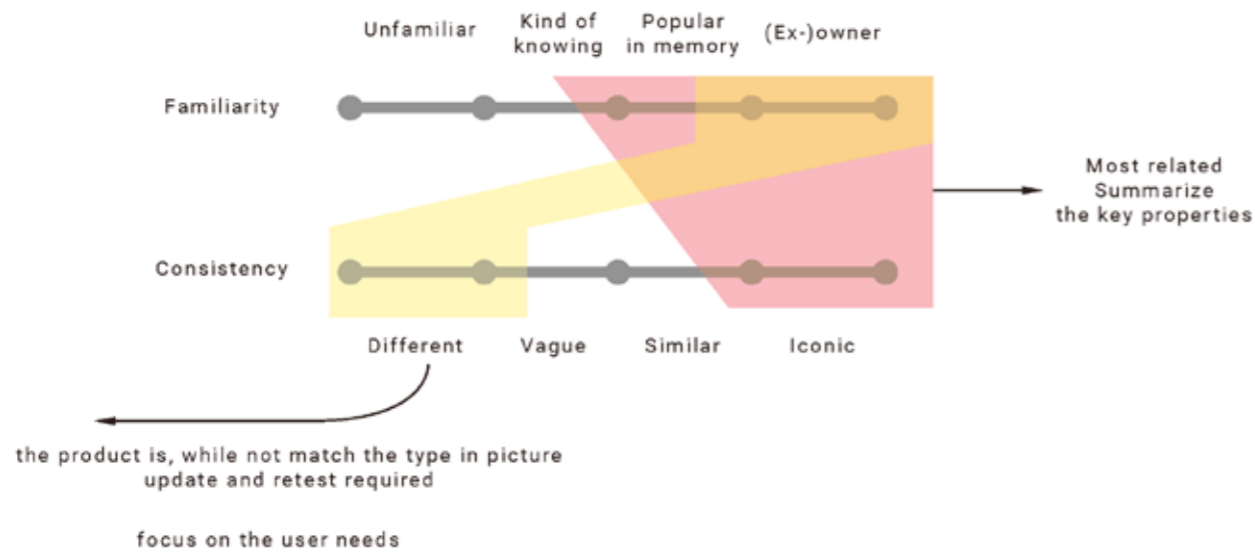
The first part was to answer the previous question list by using collected pictures. The conversation was based on open-ended relevant questions for a better understanding of interviewees' opinions. By inspiring the interviewees thinking deeper into their memory and share their opinions, more contents input was expected to the research. The alternative questions in the interview framework were as follows:

- What do you think about the products of the 1990s?
- Compare to nowadays, what has been changed? What keeps still?
- Has the culture changed a lot?
- Do you miss products from the 1990s? What exactly you are missing?

The second part is to show them the relevant product puzzles that made based on the background research and the previous interviewees answers. This part is to confirm familiarity and deepen the detailed image of a certain kind of product.

### 4.2.2 Questionnaire

In order to confirm the validity of the product samples from the interview, a questionnaire was made to involve more people into the research for bringing their own idea of the 1990s iconic products samples in their memory. The questionnaire was formed by refining product pictures from the background research and the interview, with 2 questions with 5 different levels after each product.



### 关于九十年代中国老物件熟悉度的问卷

家用电器



	完全陌生/最不符合	听说过/较不符合	见人用过/一般	曾经拥有/较符合	至今在用/非常符合
是否熟悉图中产品	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
是否符合对该产品的记忆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Are you familiar with the product in the picture?

have no idea    have heard somewhere    have seen somewhere    own this before    still using

Does the product in the picture match your memory of this product?

completely different    quite different    no feeling    kind of same    exactly same

1    2    3    4    5

# 5. Data collection

## 5.1 Semi-structured interview

The interviewees were randomly chosen based on the rule of people who experienced the 1990s in China. For the final participants of the interview, 9 people from Beijing, Shanghai, Jiangsu province, Shanxi Province, with the age range from the 1970s generation to the 1990s generation were involved into the interview.

Interviewees were given 1-2 days to search for their product memories and related stories from the 1990s. Their stories are shown through product pictures on the Internet or their own photos. The length of the interview was controlled within one hour. Before the formal interview, the interviewee was told that the interview process will be recorded. The recording is only used as an assist of memorizing the point of the conversation. It will be deleted after the research is completed and will not be used for other purposes.

During the interview, the question framework was basically followed, but some adjustments were made based on the interviewees' interaction, including the question order and the focus of the questions. Since the interviewees were all Chinese, Mandarin was used as the interview language.



### 5.1.1 Record summary

#### A, born in 1995, growing up in Jiangsu Province

Interviewee A mentioned the customize of old-style bicycles. He talked about his parents' using scenario of bicycle enamel basins and iron lunch boxes during a regular workday of the 1990s.

He also mentioned that Chinese summer mats for which are widely used as products in the 1990s summer when the air-conditioner was not so popular. However, some people believed the summer mats are somewhat backward from the aesthetics aspect.

He believed that personal identity cannot be represented by a single product. However, some products were able to reflect the users' cultural background. He tried to describe the ways of traditional Chinese family dinners in the 1990s from talking about old-fashioned square wood tables and benches.

Because of the single child policy during the 1990s, people born in the 1990s were mostly single children of the family, especially urban families. However, the whole family was still huge. The family dinner with most family members sitting together around a big table during the Chinese New year was the most memorable moment for most Chinese people.

Compare to nowadays distancing feelings between people, he showed a strong preference for the close family connection in the 1990s.

When it came to opinions about the 1990s products, he said that they follow the practical requirements despite the lack of showing more personalities.

Due to the limitations of materials and finances in the 1990s, Chinese people tended to modify products based on their own using habits by themselves. They also more treasured their own objects in the 1990s.

He felt that in the process of rapid social transformation in China for recent decades, Chinese people influenced by western aesthetics about products. However, they were still looking for the most suitable balance point for them.



**B, born in 1993, growing up in Beijing**

Interviewee B described the use of old-fashioned yarn cupboards at home to store tableware, fruit as well as newly cooked food to prevent insects and dust.

As for impressive house appliances, the combined stereo embodies people's pursuit of fashion and technology in the 1990s.

When it came to products that are widely used in the 1990s, she mentioned about the brooms made from branches. The kind of broom was known for its easy making and repair, as well as its long life-circle.

She also mentioned the mosquito nets. because of the high temperature during summer, the mosquito was very annoying for a sleepy person. The mosquito nets provided a sense of safety to her.

When been asked the description of the 1990s products, she used the word "old school fashion". She said that the colors of the 1990s products were full of visual impact. People tended to use a product for a longer time before buying a new one. She also mentioned about he imported products in China during the 1990s have a better look and fashion sense than domestic products.

She missed a lot about the 1990s products in China since people tried their best to innovate with limited resources and fulfill their own needs quite well.

**C, born in 1997, growing up in Shanghai**

Interviewee C was born in the late 1990s. He talked about rabbit paper lamps, which was a handcrafted Lantern Festival toy. As the lamp having wheels at the bottom, he was able to drag it for playing.

When it came to the most memorizing texture, he mentioned the large-particle engineering plastic which was frequently usually used in electronic products in the 1990s.

He also mentioned about the old-fashioned thermos that is visible almost everywhere. It was one of the most important products for daily life since storing hot water is important. The cork part impressed him deeply.

He said that most products in the 1990s are the necessities of life. These products satisfied the people's basic function need with the simplest structure and the lowest price.

In the 1990s, the products with the same name were almost the same in shapes and functions, no matter which company manufactured them. The purchasing behaviors in the 1990s were mostly replacing the old product which was unable to repair with a new one. The main purpose is not for updating but a replacement. He pointed out the most memorable things in the 1990s are the people related to products, not the products itself, which means the products are more like a container of memory.

**D, born in 1991, growing up in Shanxi Province**

Interviewee D lived on the outskirts of a city in Shanxi Province in the 1990s. In his memory, for China, the 1990s was an era in which modernity and tradition, advanced and backward coexist. In his memory, private cars and horse-drawn carts were both available on the roads in the city.

He said that since the street lights were not so popular in his hometown during the 1990s, flashlights were widely owned as a must-have household appliance. The shapes were almost the same, with a red button for the metallic appearance.

For the other household appliances, he mentioned the concept of "three big items", which were refrigerators, TV, and washing machine. He said that due to the popularity of televisions, radios are no longer so popular. He said that an aerial was set up on every roof to receive TV signals. As the technology limitations, sometimes it was necessary to adjust the angle to improve the signal quality.

He also said that tapes were very popular. In the 1990s, copyright awareness was not so universal among Chinese people. They usually made their own copies of their favorite songs from the original copies.

He said that when he was young, he liked to buy cards for card games. The gaming cards were printed with different pictures

for collection and playing purposes. By tapping with other children on the ground to win each other's cards, he extended his collection.

There were also laser pen for which regarded as high-tech toys among children, which can illuminate different patterns by replacing the laser head.

He described the process of three meals for his family in the 1990s. Since the financial condition was not as good as today, the basic idea of life in the 1990s was to save as much as possible. For example, lunch was usually made by themselves. In the following decades, their consumption idea gradually changed to eating at restaurants.

The consumption idea and life quality have undergone tremendous changes, as a result of economic development. On the other hand, their traditional cooking skills have gradually declined since fewer practice times in life.

Regarding snacks, he mentioned about the old-style popcorn machines selling on the side of the road. The most impressive image was the complex feeling when the stove was opened with a delicious smell of popcorn and a loud noise. It was a terrifying noise for a kid like him in the 1990s.

When it came to a description of the Chinese products in the 1990s, he used the word: practical, simple, necessary, and generally cheap. He said that it was easy to guarantee a basic life quality with little money. However, it was very luxury to pursue higher material living conditions in the 1990s. He said that the economic condition allows more people afford more commodities. China's economic development brings more choices and possibilities for Chinese people's life, but their traditional manual skills are not as good as before.

He was missing the 1990s as that was a wonderful era, for which advanced products and traditional products keep a very delicate balance.



**E, born in 1969, local residence of Beijing**

She mentioned the house appliances in the 1990s, including old TVs, combination stereos, and video recorders. She mentioned the foldable mesh pocket used when buying eggs and the insulation bag sewn with two towels. In the 1990s, different materials, such as plastic belts and calendar paper were used to make different bags or baskets. She mentioned that the food choices at the time were less than that of now. however, vegetables and meat can be bought directly from farmers instead of going to the supermarket.

In order to save space in urban apartments, the furniture always provided various functions to cover more application scenarios. She mentioned the foldable table which is unique in the 1990s. The foldable table can be standing stored and converted into the shape between round and square when using, which provides more temporary solutions for the different needs of daily meals and family dinners.

**F, born in 1965, local residence of Beijing**

Due to the vast territory and climate differences in China, the living habits in the north are quite different between that of the south.

He listed a series of cooking tools, including graters, plate clamps, and cage drawers. He believes that the handmade products of the 1990s have a special charm that not only reflects the Chinese lifestyle but also reflects the regional differences.

He also pointed out that in the 1990s, Chinese people preferred to use the materials from nature, and the easy reaching materials to carry out a series of creative productions.

**G, born in 1994, growing up in Jiangsu Province**

He specifically mentioned the flashlight of the 1990s. Since the circuits in urban residential buildings at that time were not as reliable as that of today, the temporary tripping often appeared at that period. The metal cased flashlight has an adjustable red button. Despite its large size and heavyweight, it was held by most families due to its high brightness and long working hours. However, the demand for flashlights has been reduced over the decades. Now it has been largely replaced by lighter flashlights and even mobile phones flashlight.

He also mentioned household sewing machines. In the 1990s, the Chinese were more used to repairing products when they were broken. As a sewing machine provided more professional sewing quality than manual sewing, it represented the convenience the industry provided for people's daily life in the 1990s.

Although the importing products were way more expensive than domestic products, Chinese people still showed a strong interest in buying these unusual products for catching up fashion.

He believes that in the 1990s the achievements of China's reform and opening-up policy have brought tremendous improvements to people's lives.

However, the new and old technologies and concepts were integrated, which may put bamboo benches and Western-style leather sofas in one picture. People have a strong desire for better products, but they still keep a simple and traditional lifestyle.

When he viewed back from nowadays to the 1990s, he used the word pragmatic to describe the feeling of the 1990s products. The quality of the product was entirely determined by the product itself, rather than using various commercial operations to package and promote. He was missing the pure feeling of the 1990s products.

**H, born in 1994, growing up in Jiangsu Province**

He mentioned that the shape of the furniture in his home was more squarish with the shape corners. He still remembers the pain of hitting his head on the corner when he was a young kid. He mentioned the PVC floor that would be used in Chinese households in the 1990s. The pattern on it was always wood grain. He believes that the Chinese have always been very fond of the texture of wood. PVC as a product of the industrialization era is widely used for which shows the impact of the basic industry on modern Chinese family life.

He shared a story of playing his mother's thimbles as a ring. He also mentioned his father's precious electronic calculator, which becomes a reason for not using traditional abacus nowadays. Although as he knew many of his university classmates from other provinces still proficient in traditional abacus.

He believed that today's products provide more functions than that in the 1990s. However, the 1990s products could provide a more simple feeling and the sense of the times. Due to the popularization of industrialization, industrial materials such as plastics entered the family in the 1990s. While the limitation of technology development level, the significant artificial feeling often appear on products. Natural elements were also tend to be applied to a product deliberately, which bring a cheap feeling to the users.

He believed that Chinese people's life changes a lot In recent decades. During the period from 2008 to 2010, because of hosting the Olympic Games and the World Expo in China, he could clearly feel the large advanced on scientific and technological before 2008 and the increasing popularization of science and technology in citizen after 2010.

**I, born in 1995, growing up in Anhui Province**

She did not share much about single products since she feel that she was too young to remember much. However, she did feel familiar when she saw the product picture collected in the previous research.

Based on the products she felt familiar with, she shared some opinions about the Chinese 1990s products. She believed that the products of the 1990s contain the memory of that era. The products at that period always have a simple shape and color while more attention was paid on practicability. Nowadays, products are pursuing different functions and satisfied the aesthetics of different users.

However, she did not miss much the products from the 1990s. She preferred products with more attention to aesthetics, rather than the high similarity among products from the 1990s.

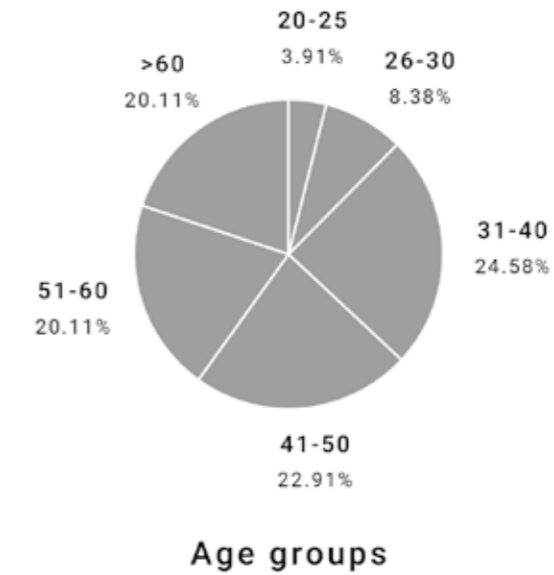


## 5.2 Questionnaire

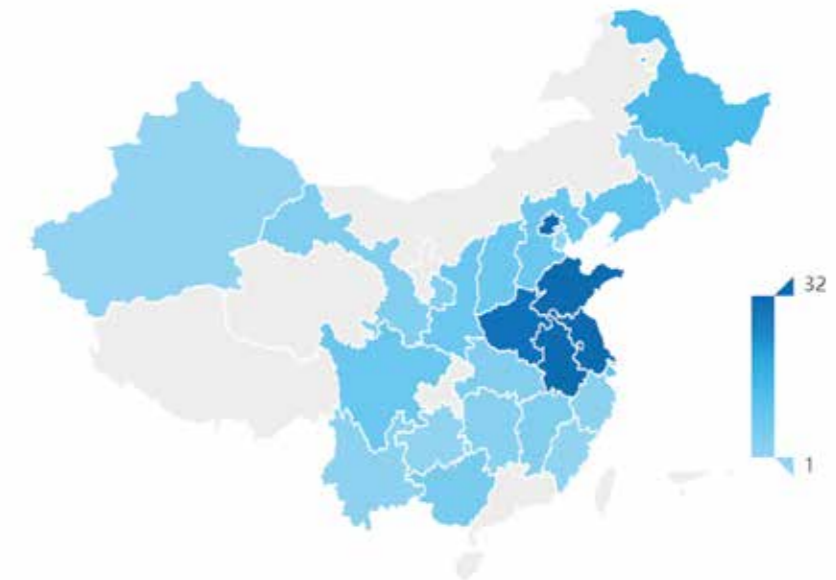
During the semi-structured interview, the product pictures from the background research (Step 1), together with the product pictures provided by the interviewees (Step 2) were explained by interviewees about what it is and how it is used.

The product in the product pictures with validity confirmation by the interviewees was conducted as product samples for inputting into the questionnaire. The questionnaire finally contained 71 product samples, covering most scenes of Chinese domestic life in the 1990s. The questionnaire was conducted in the form of an online questionnaire. Due to the convenience and randomness of network diffusion, it met the requirement of the respondents' living area. The questionnaire lasted ten days in total. A total of 179 valid respondents participated in the research, covering 24 Chinese provinces and direct cities.

The final summarized product samples lists were sorted based on catalogs on the next page.



Jiangsu	30
Beijing	30
Sichuan	4
Shandong	18
Yunnan	1
Jiangxi	2
Shanxi	7
Heilongjiang	7
Henan	15
Liaoning	5
Shaanxi	4
Shanghai	5
Guangxi	3
Hebei	4
Tianjin	1
Gansu	2
Anhui	32
Hubei	2
Zhejiang	2
Hunan	3
Jilin	2
Guizhou	1
Xinjiang	1
Fujian	1



Questionnaire respondents map

# Accessory



Enamel washbasin



Hot-water bottle



Mosquito net



Glass and cloth on the table



Banana leaf fan



Back scratcher



Chinese summer mat

# Business



Steelyard



Steamer/breakfast



Modified freezer for selling ice-creams



Candied hawthorn stick and bike



Old pop-corn machine

Clothes

Military coat



Boss pants



Self made sweater



Chinese tunic suit

Containers



Iron lunch box



Thermos



Stainless cup



Plastic belt bag



Foldable mesh pouch

# Decoration



PVC floor with wood texture



Textured glass

# Electronic appliances



Fridge

Double-tub washing machine

Fan



3.5 inch floppy disk

Coloured TV



Ceiling Fan



Desk Lamp



Combined stereo



Aerial wire

# Electronics



Mobile phone



BP machine



Calculator



Cassette



Walkman

# Furniture



Foldable Table



Spool stool



Old solid wood furniture



Grass beads (curtain)



Foldable chair



Yarn cupboard



Square wood table



Chinese long banch



Wicker chair



Sofa with wooden tea table

# Household tools



Bamboo baby seat



Sewing machine



Charcoal fire



Clamp for plates



Mosquito coil



Big metallic lighting torch



Thimble



Loofah



Crock



Water sealed jar



Stainless scissors



Abacus



Branch broom



Turning pen holder

# Toys



Rabbit paper lamp



Card flipping game



Laser pen with different pattern



Diabolo



Nintendo gaming console



Xiaobawang gaming console



Bamboo dragonfly

# Vehicle



Old style bike



Tram



Horse carriage

# 6. Analysis

## 6.1 semi-structured Interview

In order to unpack the information from the interviewees, 2 forms are been made for accounting the number about sharing opinions and the shared memory of products.

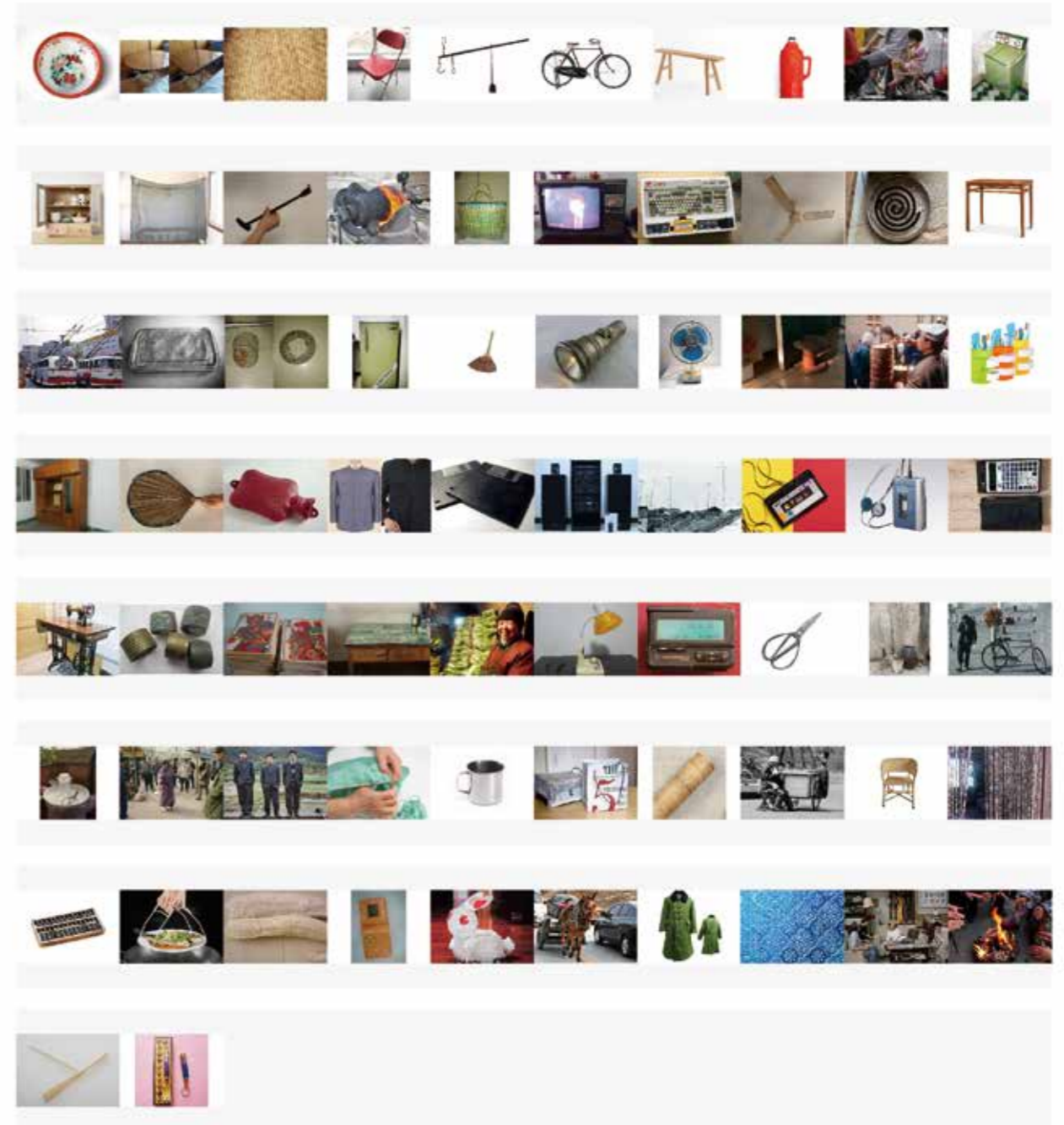
### The form of the products

Around 70 products are finally found from the interview. The interviewees' answers about the products are counted in scores. By accounting the final score for each product and sorting based on the mentioning frequency, the form on the right is to describe the mentioning frequency and highly memorized products from interviewees. The score is counted as follows:

5- directly mentioned  
based on pictures provided by them

4- indirect mentioned  
show strong familiarity when seen pictures

3- kind of knowing  
not so familiar in person, but many people are using





Opinion		number
1990s	2020s	/
Out of date		2
Reflect the culture		1
Repair, craftsmanship, value the objects	buy new and throw away the old	4
Close relationship	distancing	1
Standard,almost no difference	customized	2
Mixed value	Impact of localization and globalization	2
Stable, Reliable	Consumerism	4
Practical	Aesthetics and practical	6
Miss the related people		2
Cheap generally (with cheap feeling), something extremely unaffordable	More choices, affordable for more things	5
Pure in function	Multifunctional	3
Pursuing the high-tech(basically electronics)	Life with Internet	2
Memory about time		1
Missing the 1990s products		8

### The form of opinions

Most of the interviewees described opinions with a simple comparison between the 1990s products and the 2020s products in China. Generally, interviewees missed the products in the 1990s. They describe the impression of the 1990s Chinese products by the following words: practical, cheap, stable, repairable and crafting, etc.

Interviewees were able to give corresponding pictures and stories based on the questions in the question table. They provided more stories than required by the question list. The stories are quite different, and the 1990s' objects involved are also relatively broad, for which covers a quite big range of user scenarios. However, according to interviewees' general expressions, due to the limited economic conditions of a general Chinese people in the 1990s, the style of the 1990s' products are not as varied as nowadays. Therefore, when referring to a certain type of product in the 1990s, the products have a high similarity, which means, for products with the same name, the shapes are almost the same, the purchasing behavior in the 1990s is more about replacement while not an update. Which also means that a certain product shape can remind them the time of 1990s. However, the interviewees also indicated that there was a huge gap in product purchasing behavior between the 1990s and the present. Products in the 1990s quickly disappeared in the past decades. The product as an updated iteration is extremely different from the previous one in the 1990s.

Although there are some differences in the perception of the products of the 1990s, the interviewees generally appreciate the 1990s' products' practicality and life-centered property. Interviewees mentioned about the unconsciousness about the 1990s' products' properties for which mainly shown by the "of course" feeling when talking about the user experience of

the 1990s' products. The interviewees generally talked about natural materials and more primitive production and processing methods when talking about products in the 1990s. On the other hand, they also expressed that the cognition of product style and design in the 1990s was vague, which reflected on the "impactive" color combination of some products. Some interviewees also pointed out that in the 1990s, it was common for users to modify products based on their actual usage habits. People who crafted more of their own objects in the 1990s are more than that nowadays.

The interviewees generally pay more attention to the "people" related to a certain product. They hold a similar opinion that their missed memory of the 1990s products is more related to stories and the people. They generally believe that a community of people cannot be simply summarized by one or two specific (or iconic) products. However, these specific products can reflect their cultural background and shared emotions.

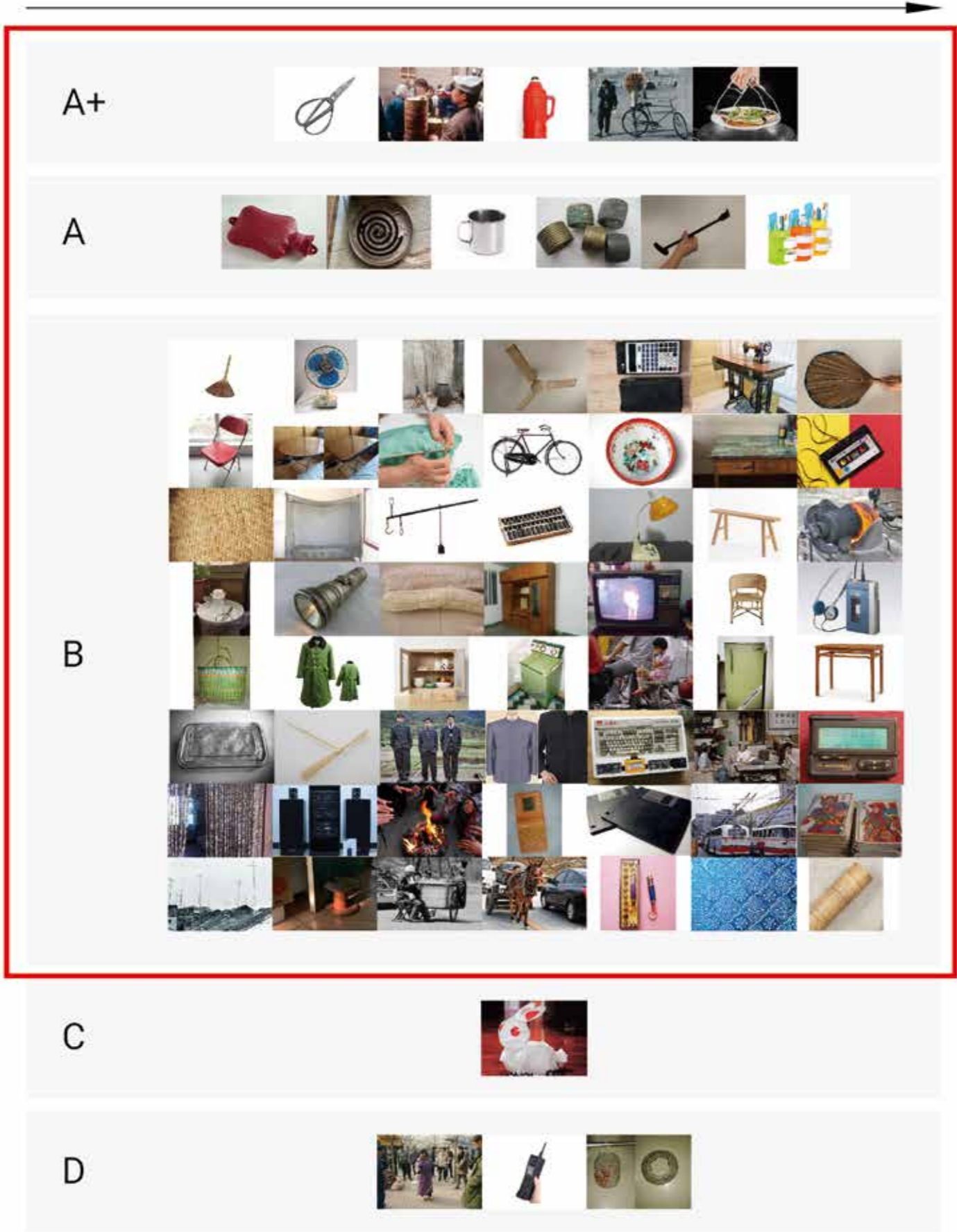
## 6.2 Questionnaire

The analysis of the data from the questionnaire is based on mixing the results from the mode ranking and average sorting. The mode ranking is obtained by adding the mode of the two questions for each product. A product with a higher mode rank means that it is iconic in people's memory and closer to the current using situation.

The average sorting is obtained by adding the average of the two questions for each product and sorting. The average sorting is done among a certain rank as a secondary sorting rule. A product with a higher average calculation score means that more people have used before or are still using a certain product.

The explanation of different mode ranks can be found as the figure on the right:

Rank	Mode	Meaning
A+	10	People still use certain products exactly the same as years ago. These products can be described as collective products while not just product memory.
A	9	This product is quite popular and close to people's lives in the past. However, it is not as popular as in the past. More people no longer use the products in the shown style. But the product sample is almost the same as the ex-owners' product memory.
B	8	The product sample is kind of popular and easy to see in the past, while some people did not own one in their home. Nowadays, people almost no longer use the product sample, but the memory about the product in the picture is still in their mind.
C	7	People's memory on a certain product has become a little vague and the product sample does not have a strong representation of collective product memory.
D	6	The representativeness of the product sample is quite low. It may be caused by low consistency of the picture with memory or the product itself was not that popular.



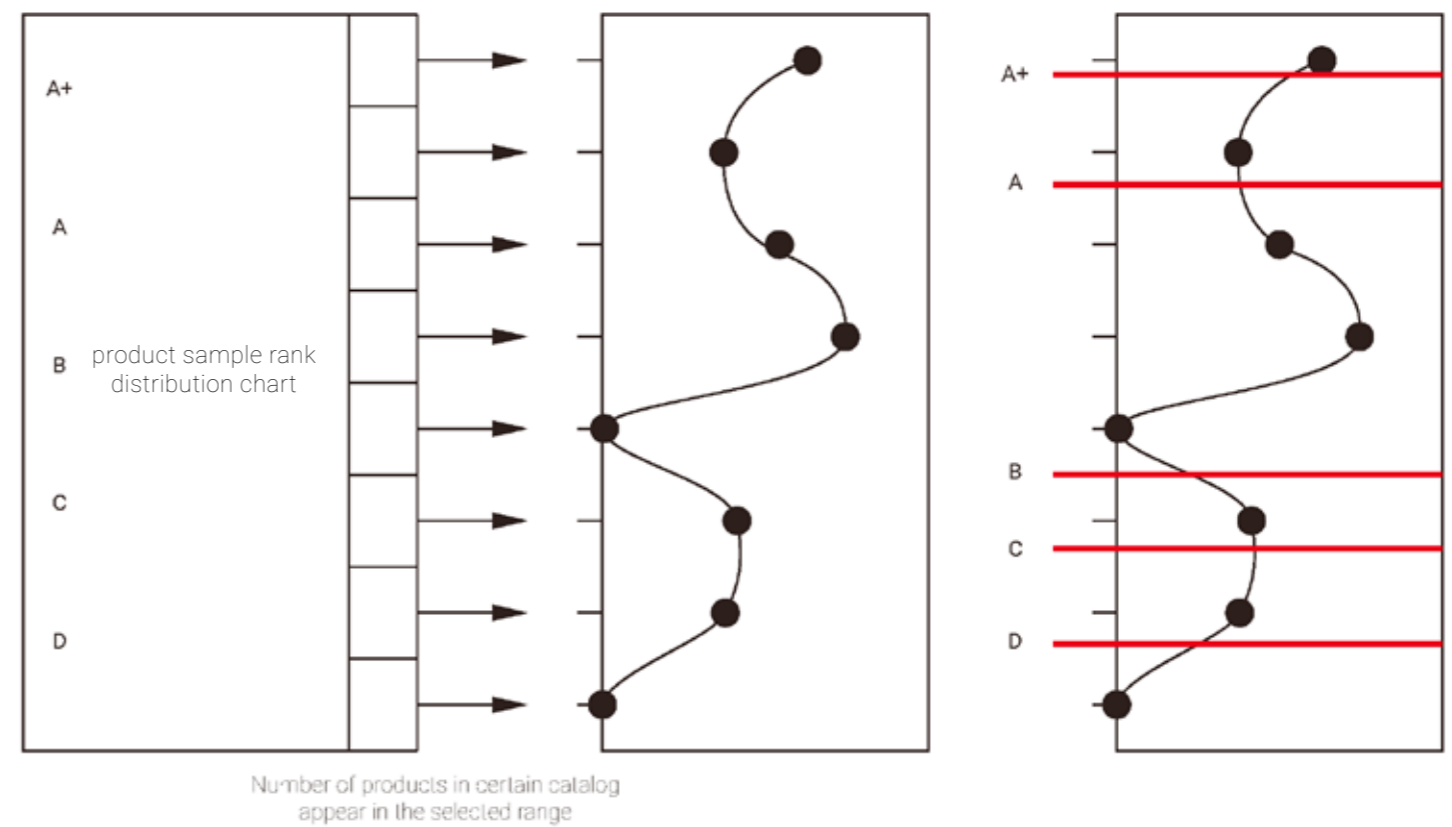
**The product sample rank distribution chart**

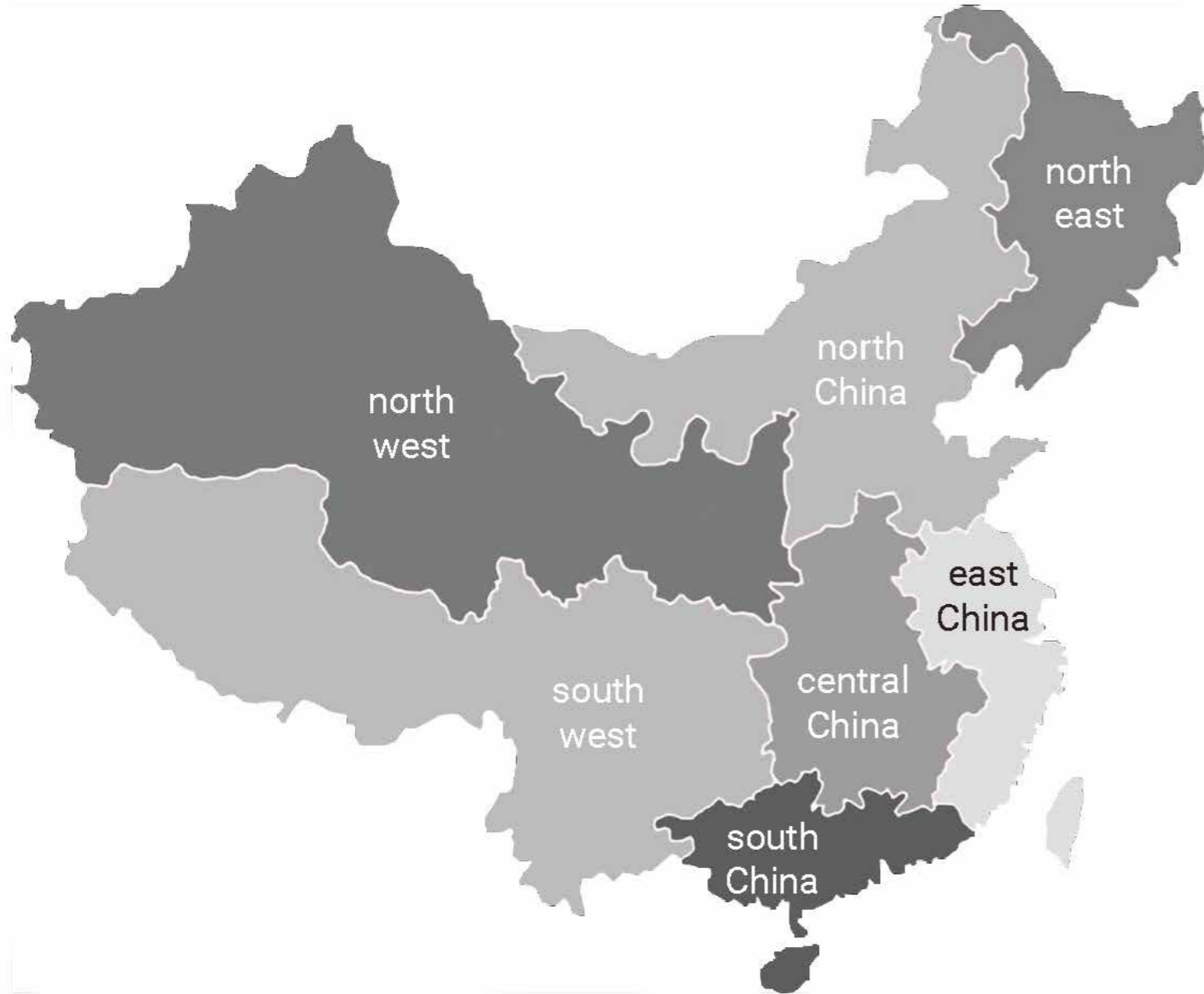
According to the above rules, a product sample rank distribution chart can be obtained by comprehensively sorting the data of product samples. From top to bottom is to obtain the product sample rank distribution in pictures according to the mode ranking. From the left to right is in the order of the average score (for product samples the same rank, the upper left corner is the highest, the lower right corner is the lowest).

**The catalog-based rank trend distribution chart**

In order to understand the product memory differences in different regions and different age groups in detail, as well as to find the product category with the highest possibility of forming collective memory, a catalog-based rank trend distribution chart is created by further analyzing the product sample rank distribution chart.

Combining the catalog-based rank trend distribution chart from different screened replied questionnaires, the curve that shows the appear frequency in a certain product catalog can be compared over different region groups or age groups.

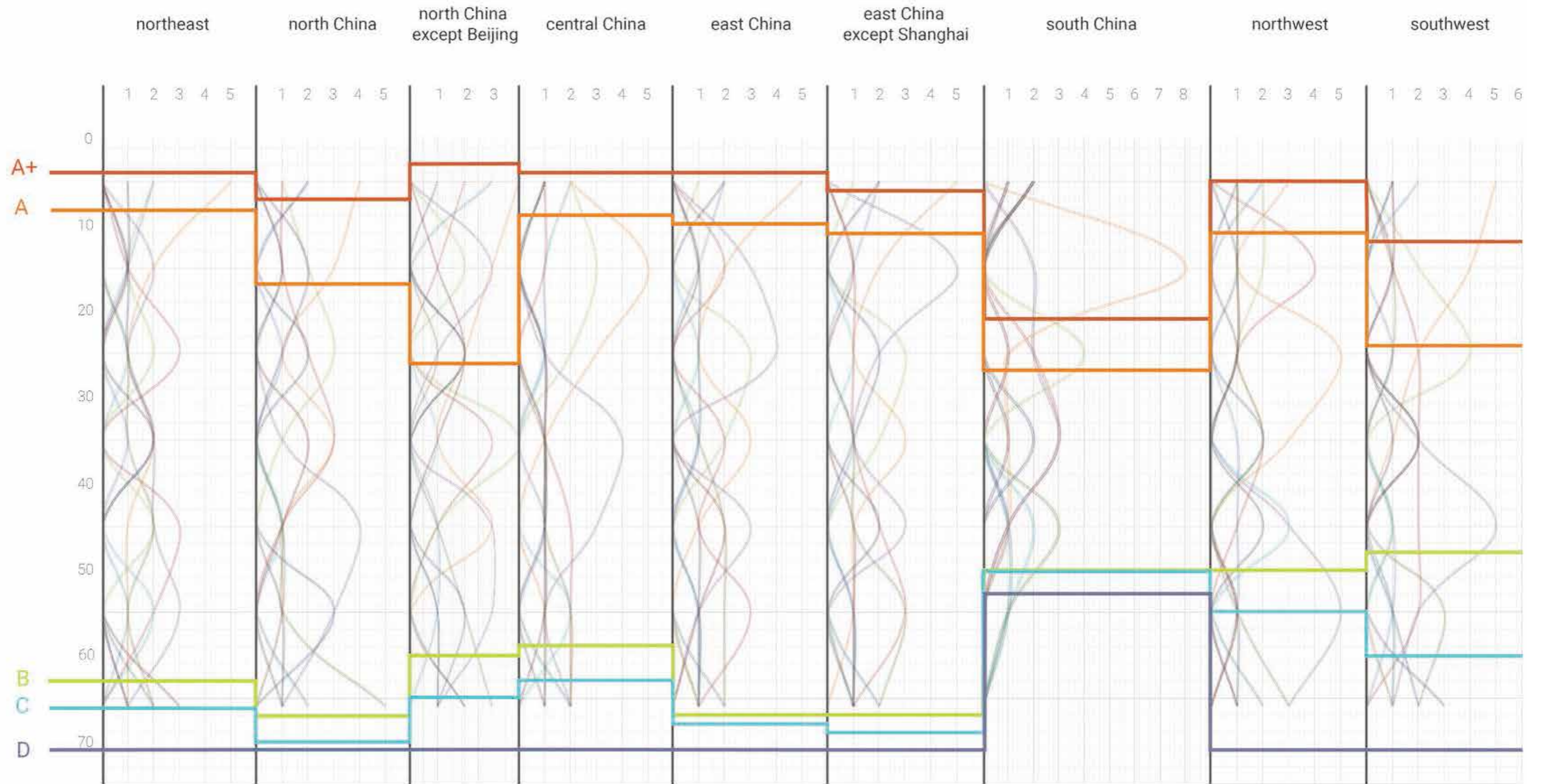




**The China region map**

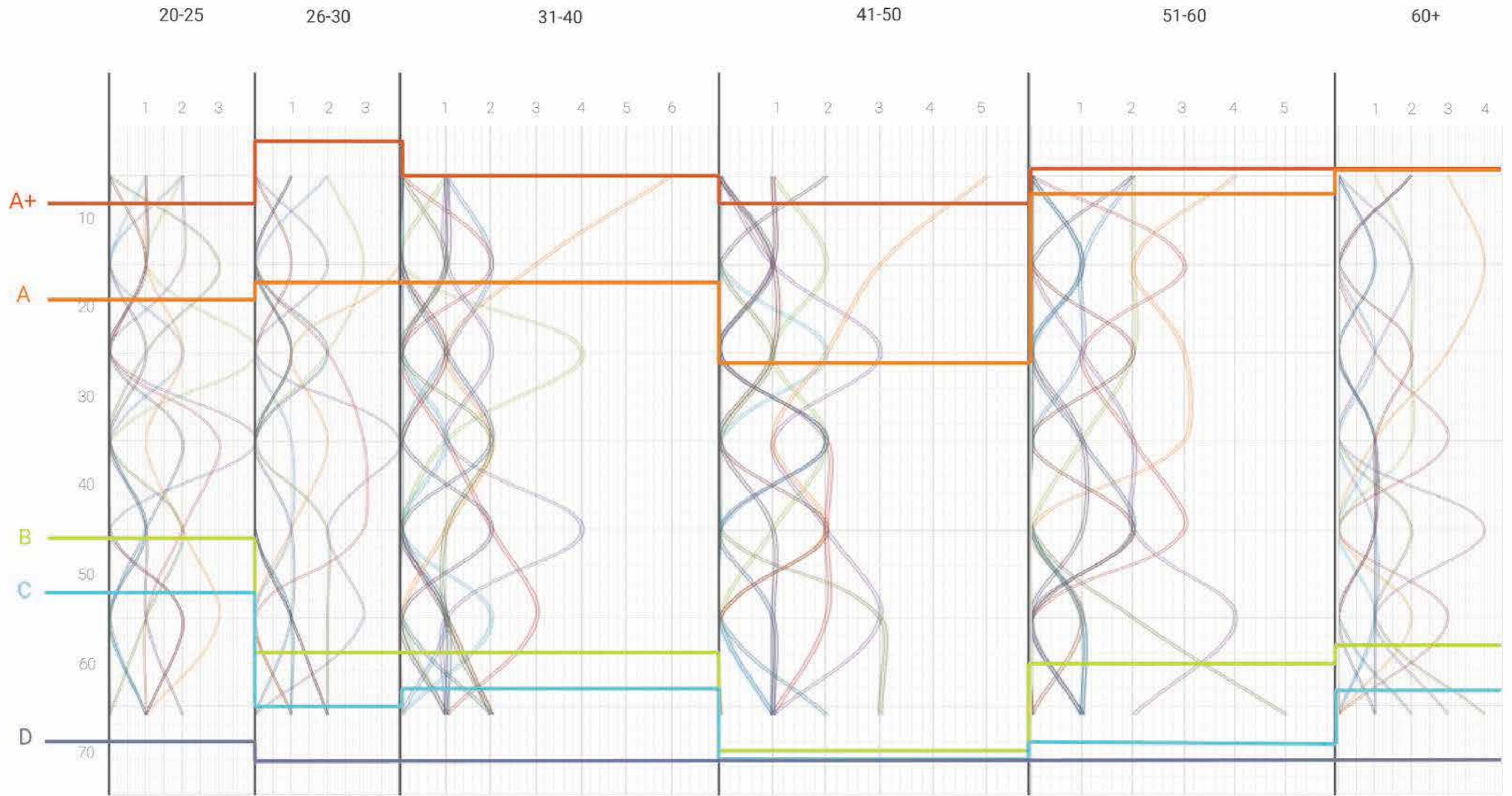
The region-based catalog rank distribution chart

- business
- electronic appliances
- accessory
- furniture
- vehicle
- household tools
- electronics
- clothes
- toys
- container
- decoration



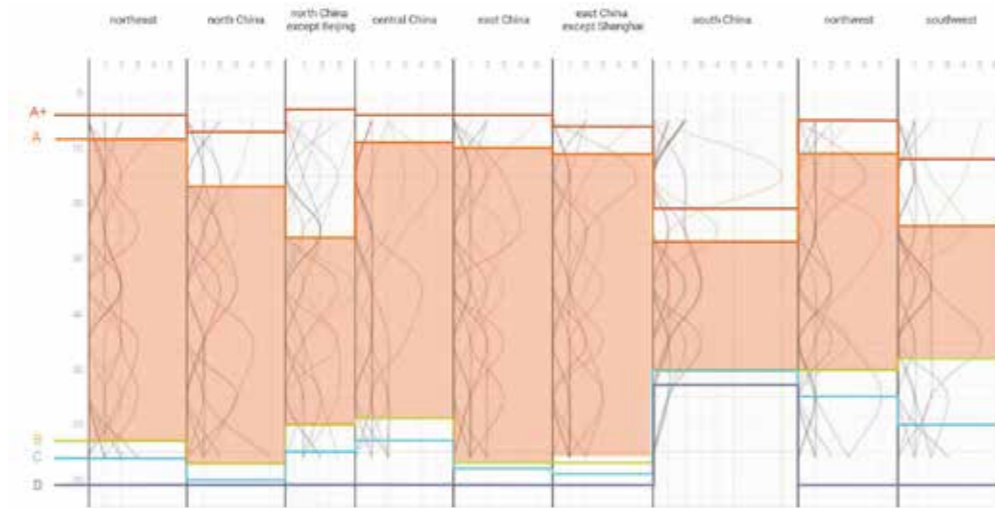
The age-based catalog rank distribution chart

- business
- vehicle
- toys
- electronic appliances
- household tools
- container
- accessory
- electronics
- decoration
- furniture
- clothes



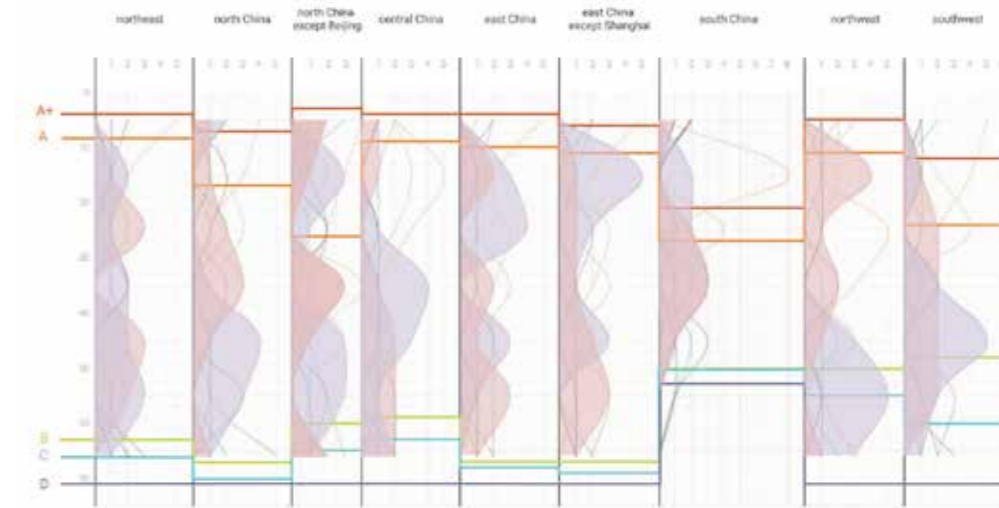


Although the data from the interview and the data from the questionnaire are different in the sorting of specific product scores, there is a similarity in the distribution of products in terms of trends.



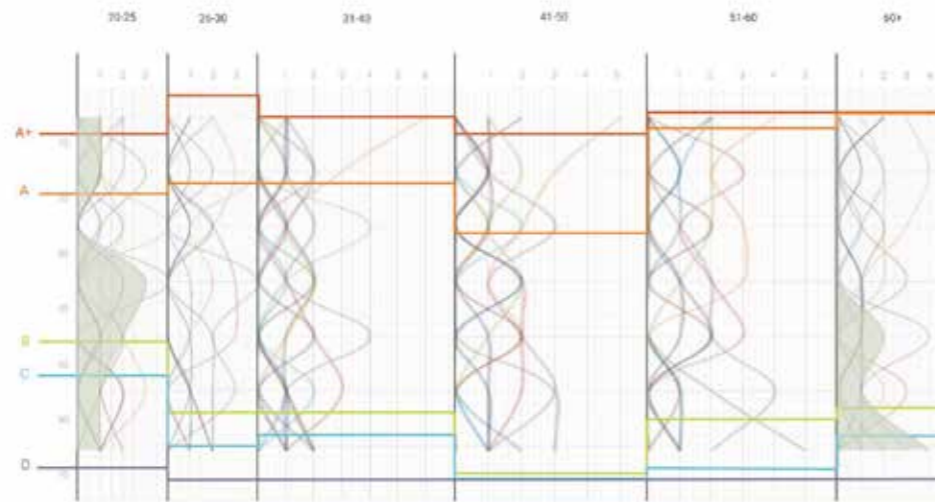
In general, the majority of product samples are located in Rank A+ ~ Rank B, and more of them are located in the B rank, which proved the conformity of products and popularity at that time and the magnificent change and updates among the decades. Following the same trend, the ranks of most furniture and household appliance product samples are located in A and B grades, which shows that there are high similarity and popularity in these products among the 1990s Chinese home. However, it also shows that these product samples have been widely replaced by other products in the following decades. Despite the upgrade and replacing trend to most product samples from the 1990s, most of the products in the Rank A+ ~ Rank A is still owned and used by today's Chinese people.

The uneven development of China in the 1990s is also reflected in the richness of product categories in different regions. In the less developed regions such as the north-west China and south-west China, more product samples show lower rank in the region based form.



The product samples that belong to furniture, electronic appliances, and household tools appear in a higher rank in most regions for which means Chinese people used similar products in these catalogs during the 1990s.

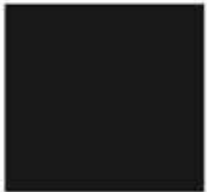
Although the rank of electronic products shows that it meets the memory of most people, its average score is low for which means the owner is not as common as the product sample itself.



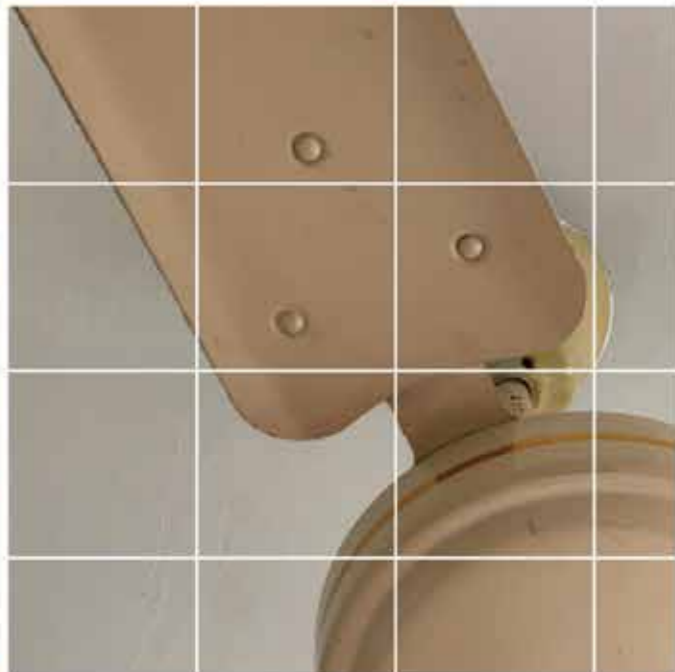
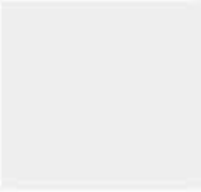
From an age perspective, participants aged 20-25 who were born in the mid to late 1990s have little memory of traditional or early type electrical products. Participants over 60 years of age showed lower resonance on entertainment product samples such as toys. Participants aged 40-50 showed a high degree of similarity in the memory of the products of the 1990s. The product samples in the toy catalog are generally low in familiarity and conformity, except in the age group 20-25. It is obvious to see the toy catalog distribution differences between the age group 20-25 and the age group more than 60.

## **6.3 Mood board**

By further sorting and analyzing the product samples obtained after the screening, the typical properties of Chinese products in the 1990s can be shown by several mood boards.



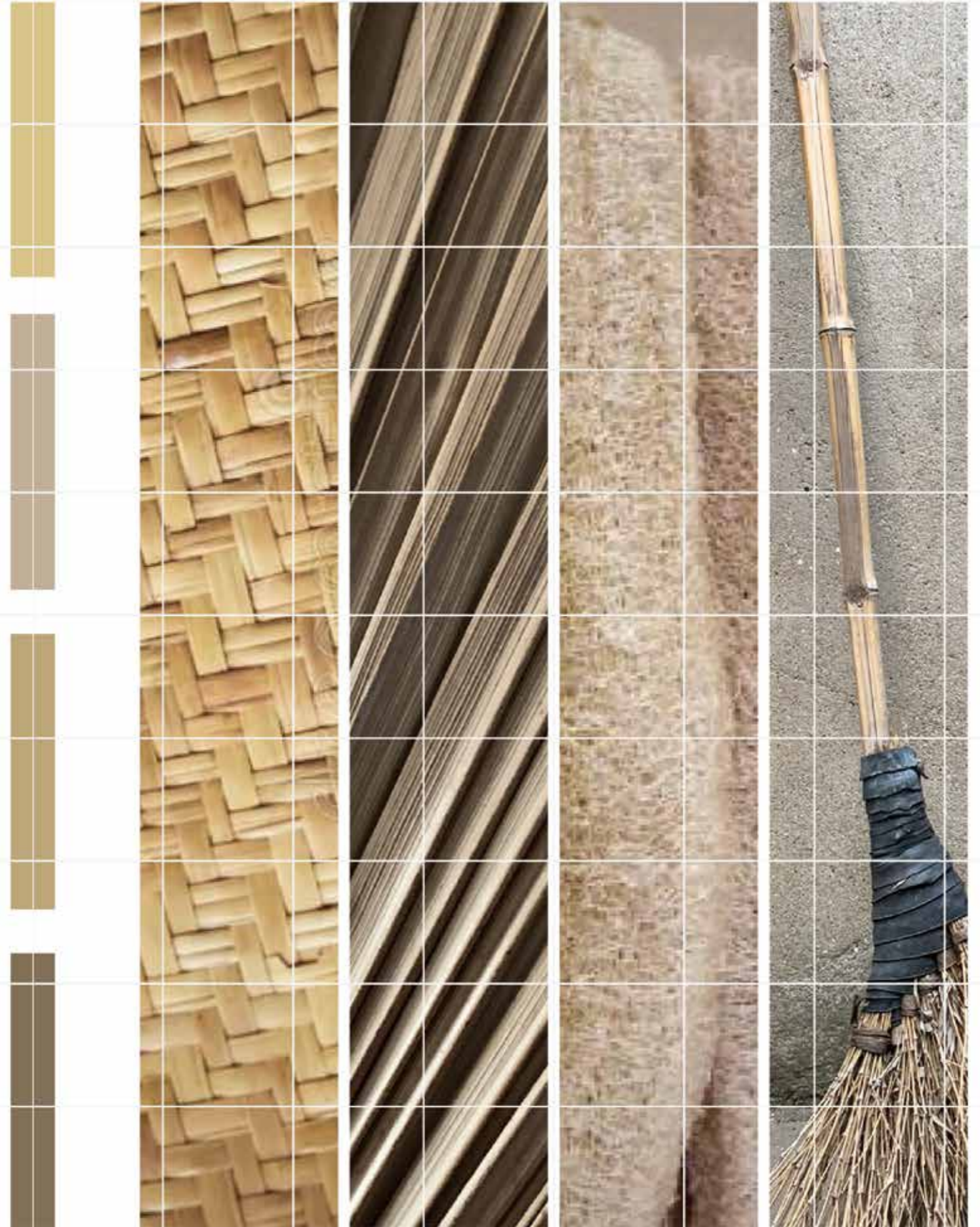
# Glossy

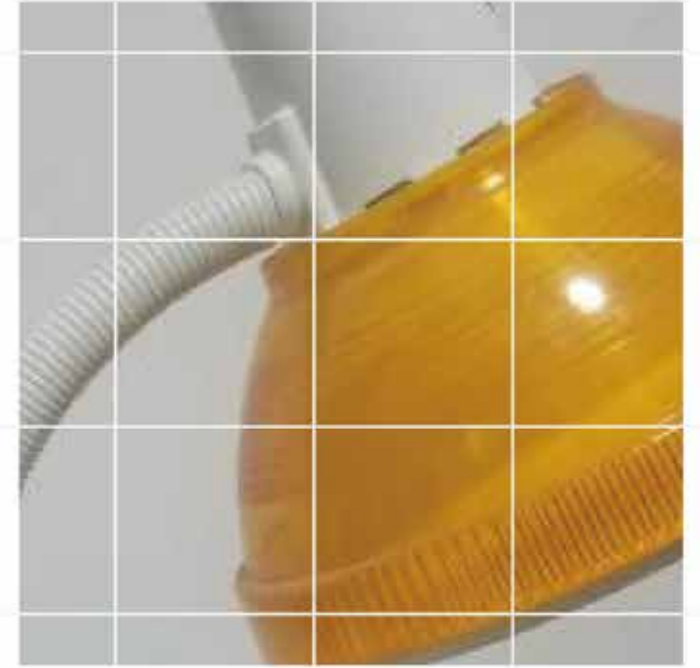




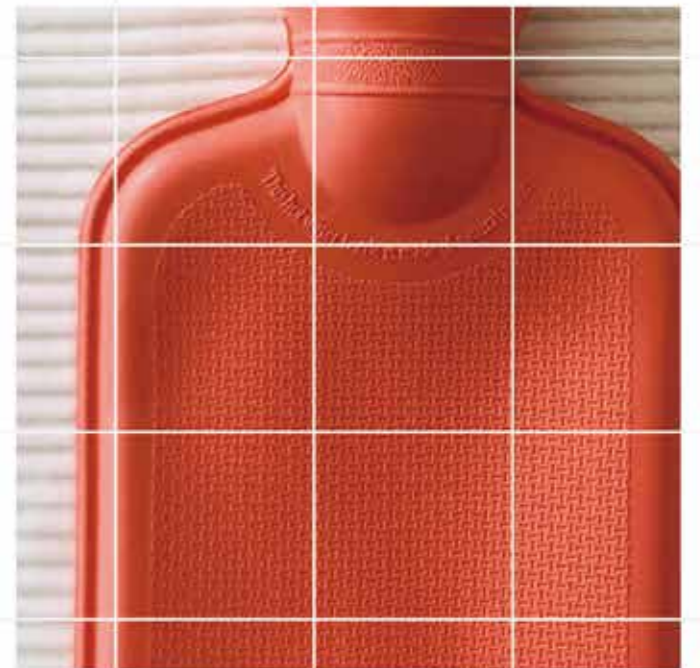
# Leathery

# Plant based



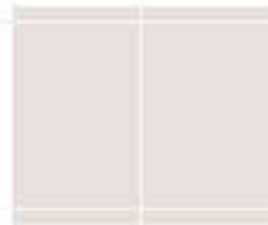


Artificial

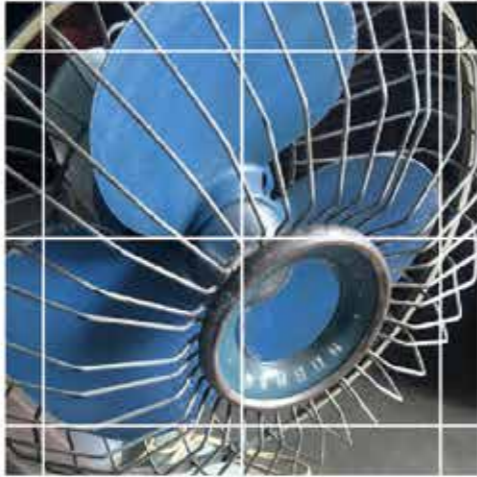
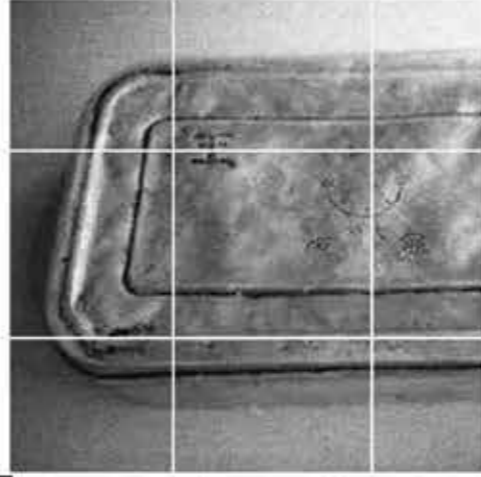




Flamed / smokey / ash

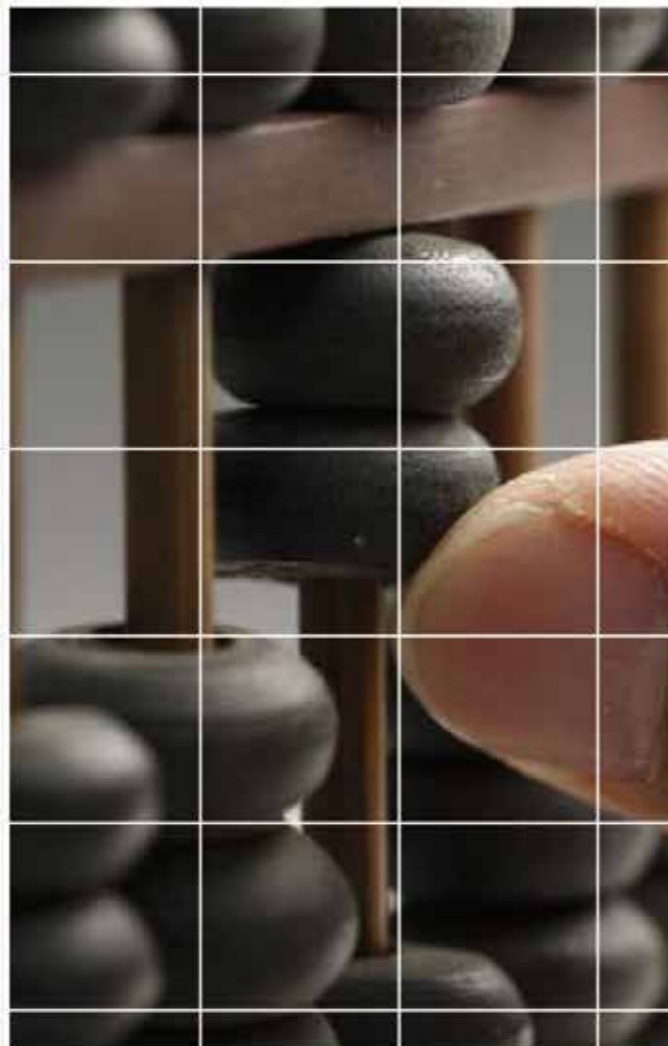
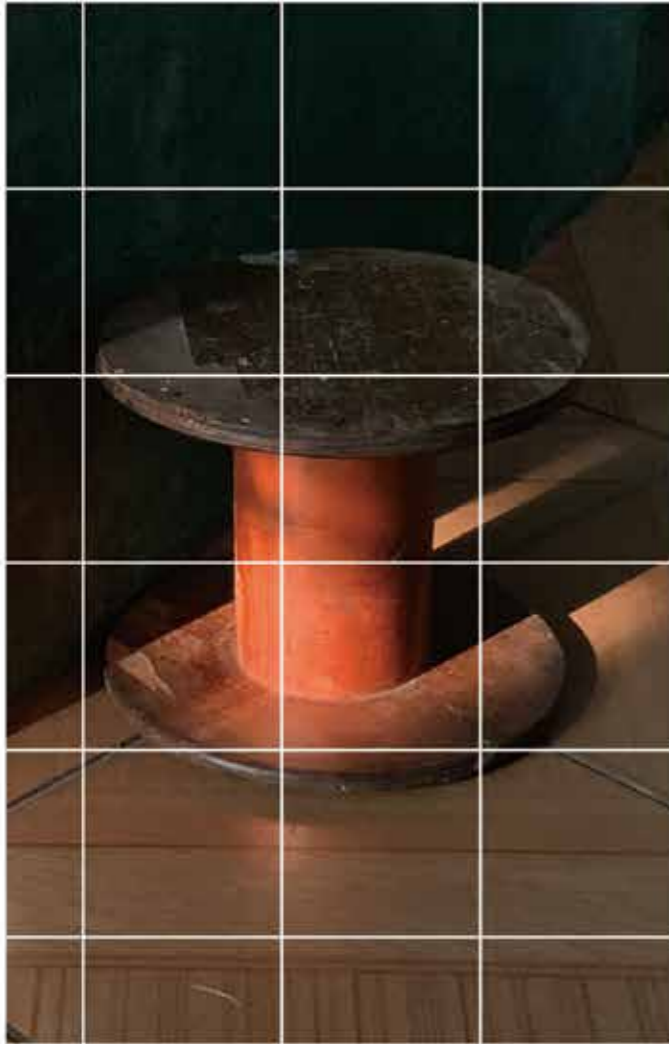






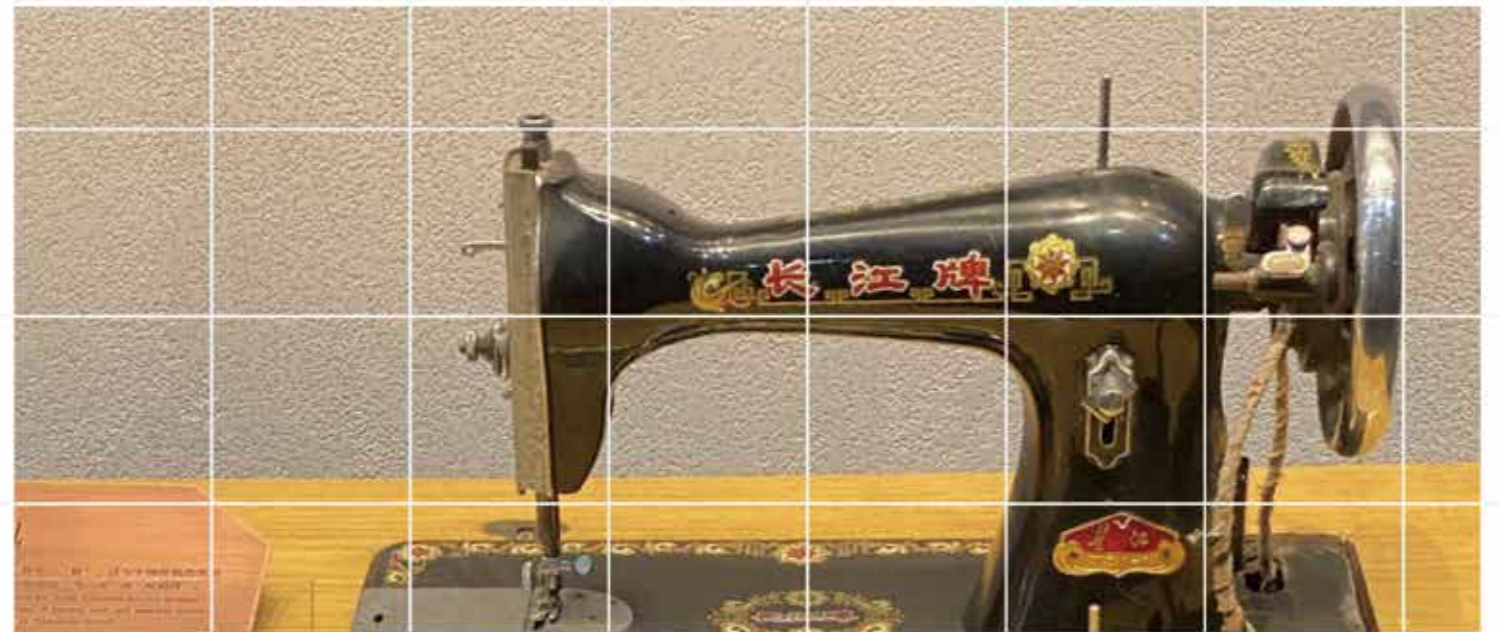
Metallic





Warm/deep coloured  
wood

# Crafting



## 6.4 Summary

Due to the limited economic condition in 1990s China, the product styles are not as rich as they are today. When referring to a certain name of the product in the 1990s, the product showed a high degree of similarity, that is, a fixed style, or a specific symbol. Despite the reality that the market has limited choices, it, on the other hand, strengthens people's inherent impression and cognition of the styling of products with a certain name. The 1990s Chinese products are aiming at more people's basic functional needs. Although these products do not meet the subdivided individual needs and changing aesthetic needs, the products designed with a practical and general view with simple structures for which suitable for various use scenarios and easy maintaining.

It is also obvious that the Chinese family decoration style has gradually changed from similar to more personalized. In the decades after the 1990s, people upgraded most of the large-scaled items in their homes for which aiming at long-term use, including furniture and various electrical appliances.

In the following decades since the 1990s, people's consumption concepts have changed. The selection of iterative products is very different from the 1990s. In the 1990s, more household items originated from their own customizing, producing, or maintaining, only to reduce the cost of living as much as

possible. Over the past few decades, people have gradually transformed into purchases and upgrades. Nowadays, Chinese people tend to choose industrial products that are specialized in mass production to meet specific needs. Although many things have been replaced by different products, many people still retain some products or habits. The products or habits that are still in use are more belong to accessories, or some craftsmanship and business only exist in a traditional way.

Although people do not attempt to return to the living condition of the 1990s, the majority of interviewees and respondents to the questionnaire showed nostalgia for the products of the 1990s. Specifically, stories and people related to the specific product.



## 7. Design

Based on the product sample ranking form and the various properties summarized in the mood board, 3 different concepts are selected from the ideation cloud and formed up 3 design works for which inspired by different 1990s properties. The main target group of the design work is the young generations in China who experienced the 1990s.

The design process is also a proving process, showing the possibilities of applying different properties from the research results different way.

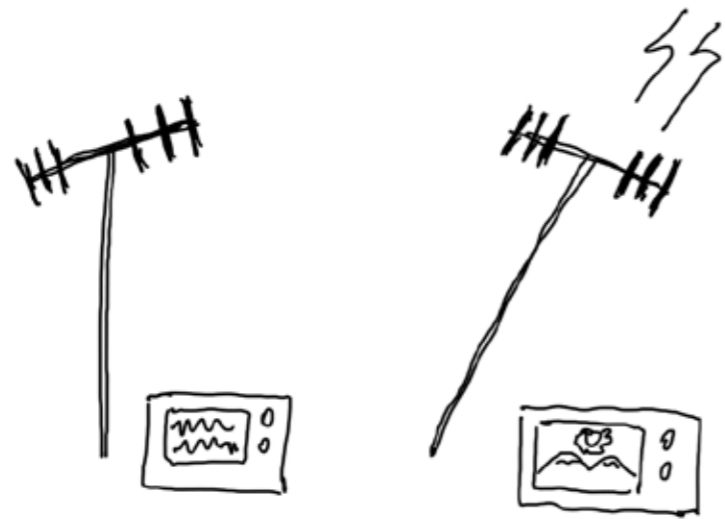


## 7.1 Antenna lamp

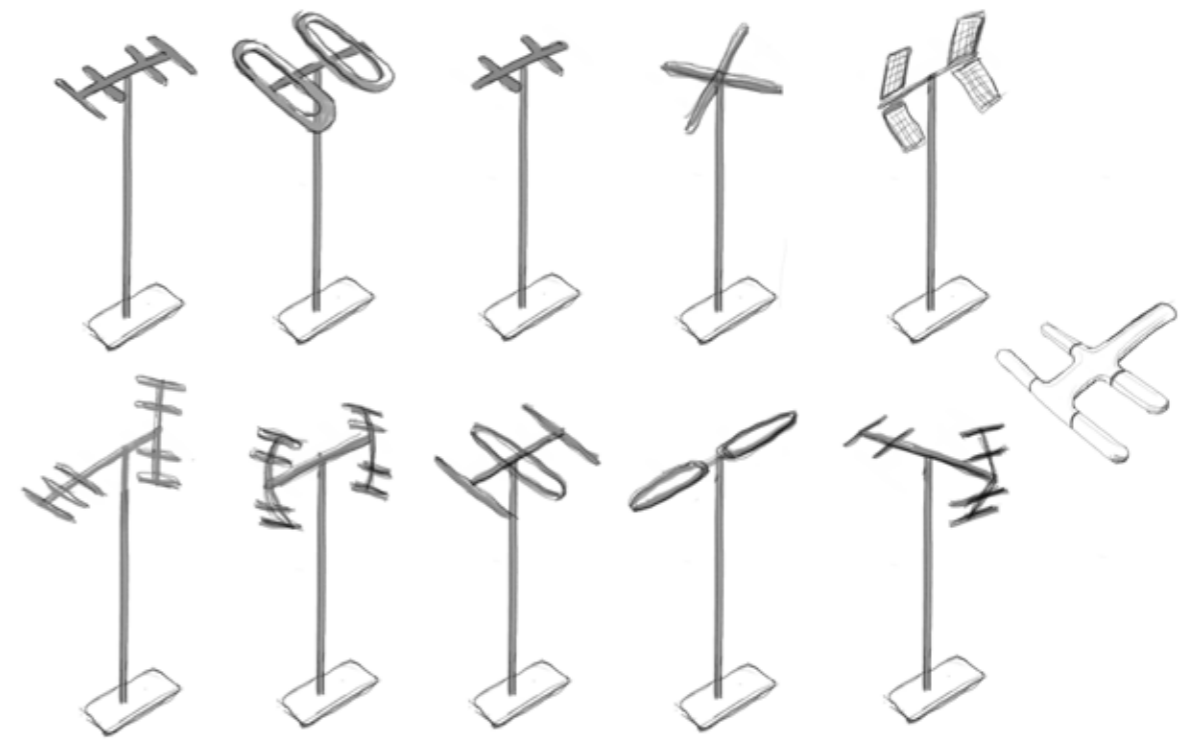
## Story

In the 1990s of China, although televisions have become popular in people's homes, technological development limited Chinese people's TV watching experience. The closed-circuit antenna is widely used for receiving TV signals. In order to receive better signals, people often need to manually adjust the antenna direction. Therefore, the closed-circuit antenna on the roof of every house has formed an icon of the times. People have experienced many historical moments around TV sets that constantly need to adjust their signals.

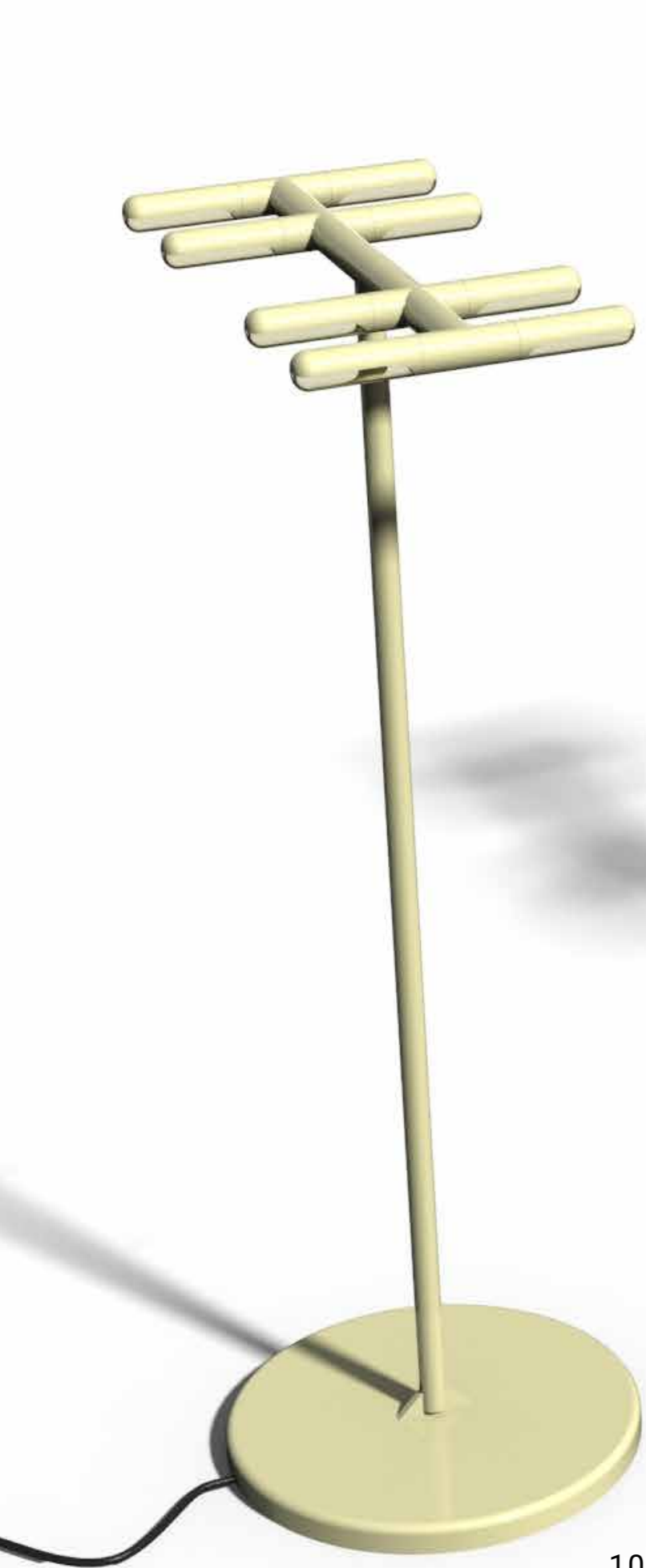




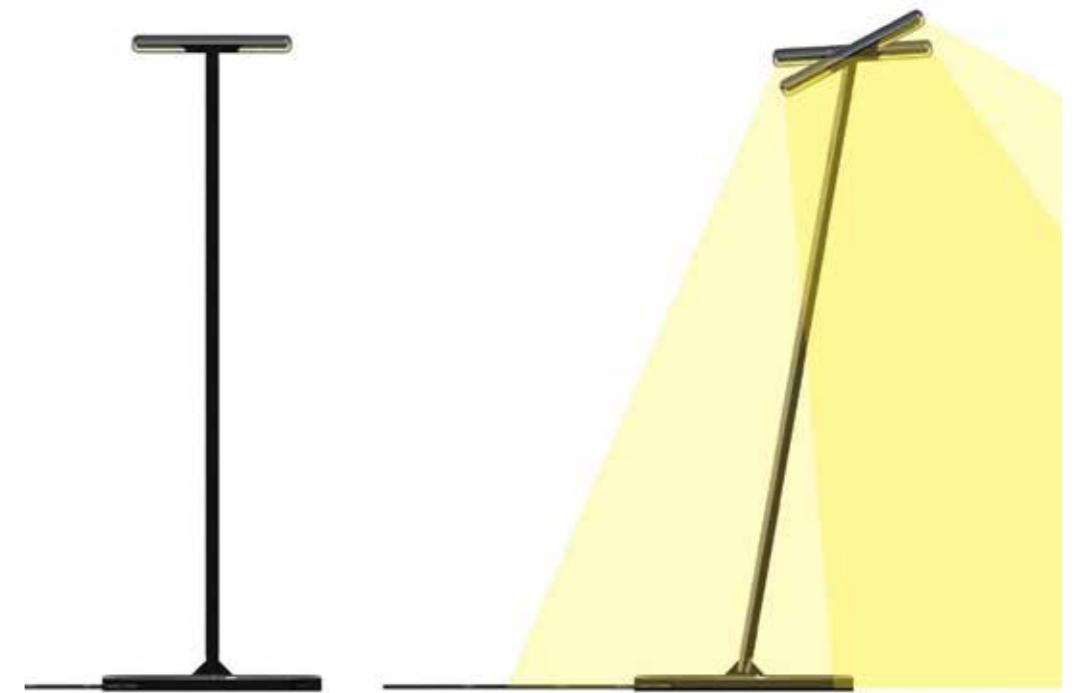
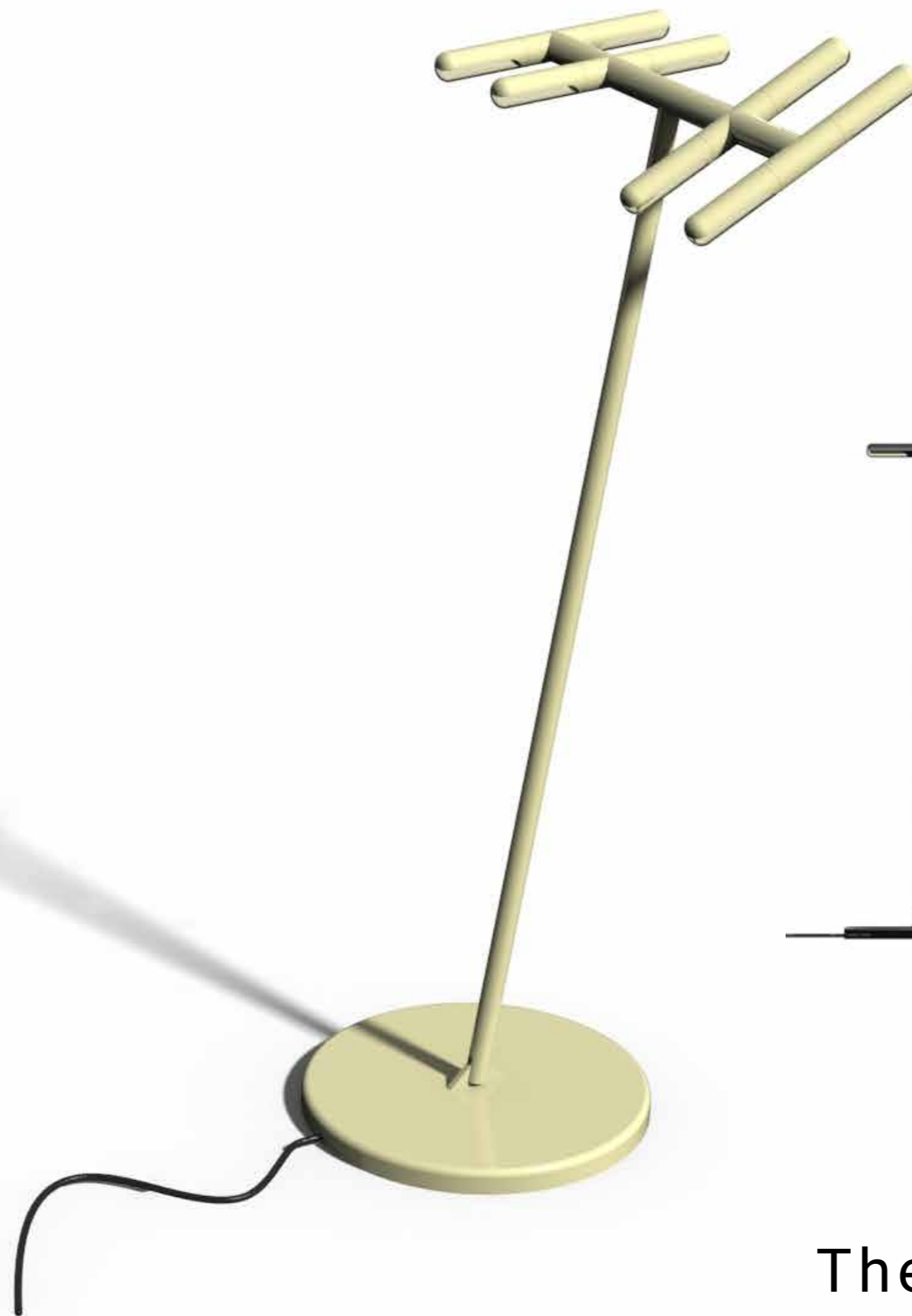
The lamp is inspired by the impression of the old closed-circuit antenna and the behavior of manual adjusting antenna. By extracting and symbolizing the closed-circuit antenna in the 1990s, as well as deploy modern touch control technology, the product memory with negative user experience is converted to be a clue of positive user experience.





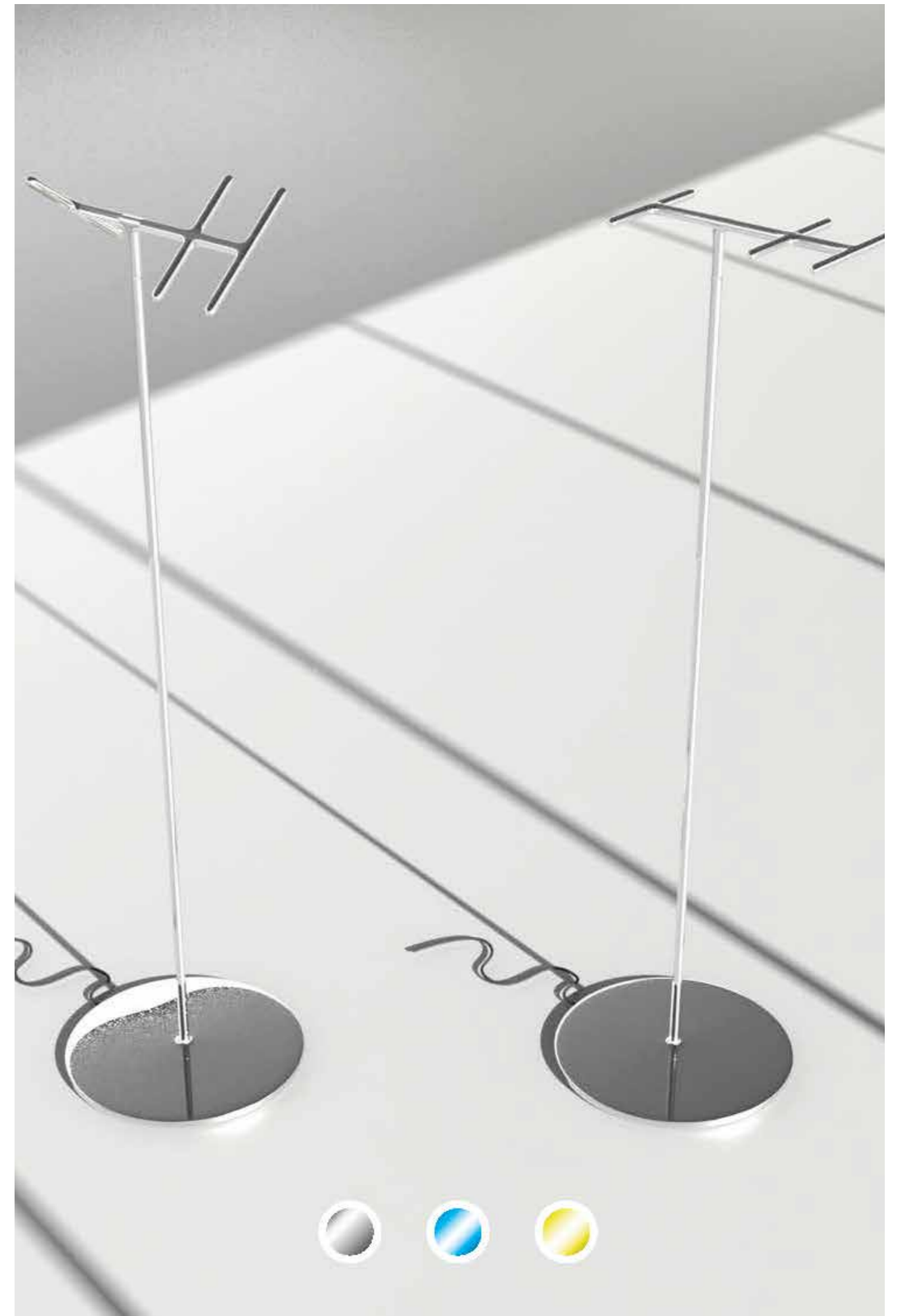
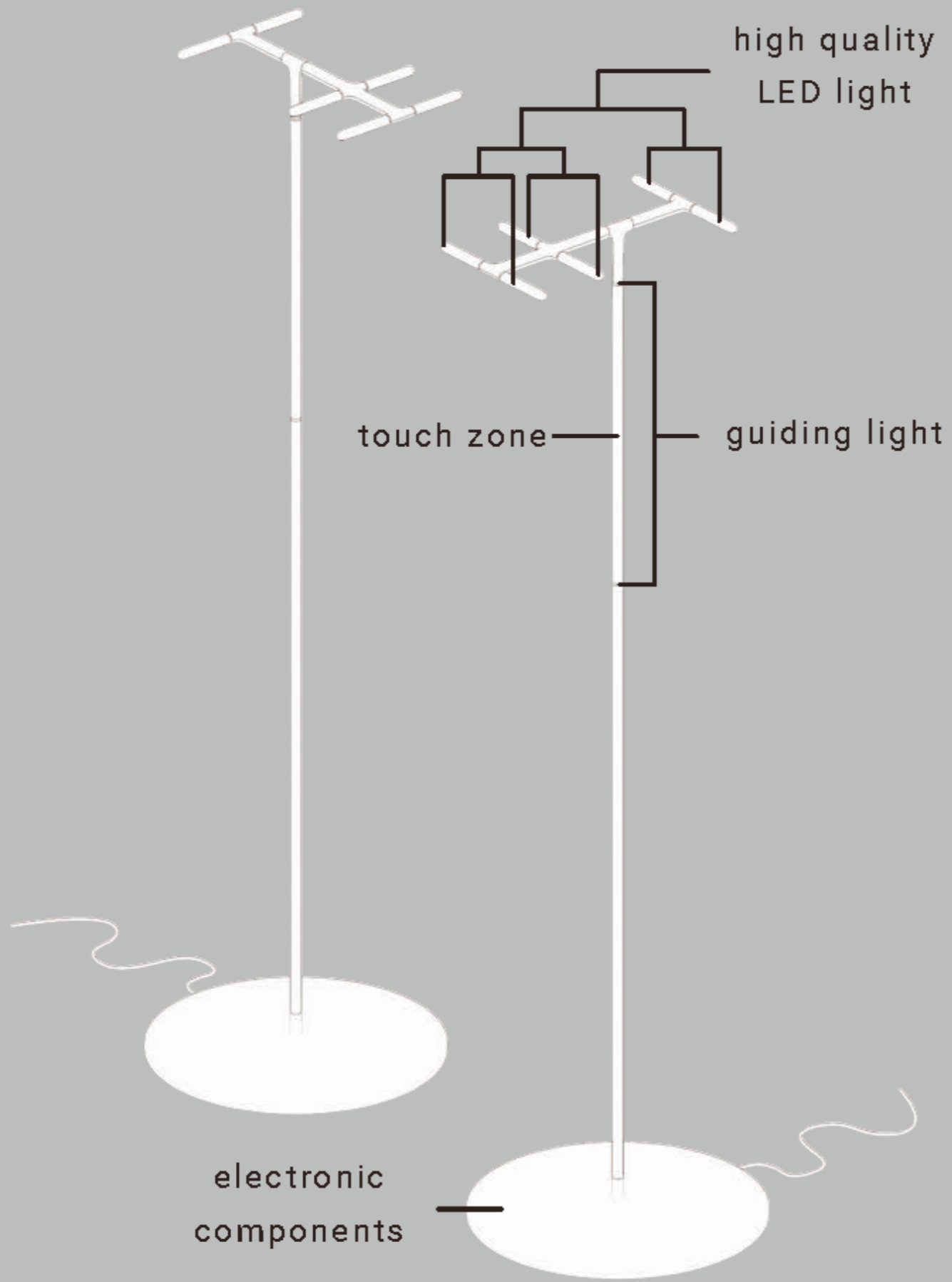


108



The first concept

109





# Interaction



Switch  
ON/OFF



Change  
mode



Brightness  
UP/DOWN

6 separated light head

3 different light mode

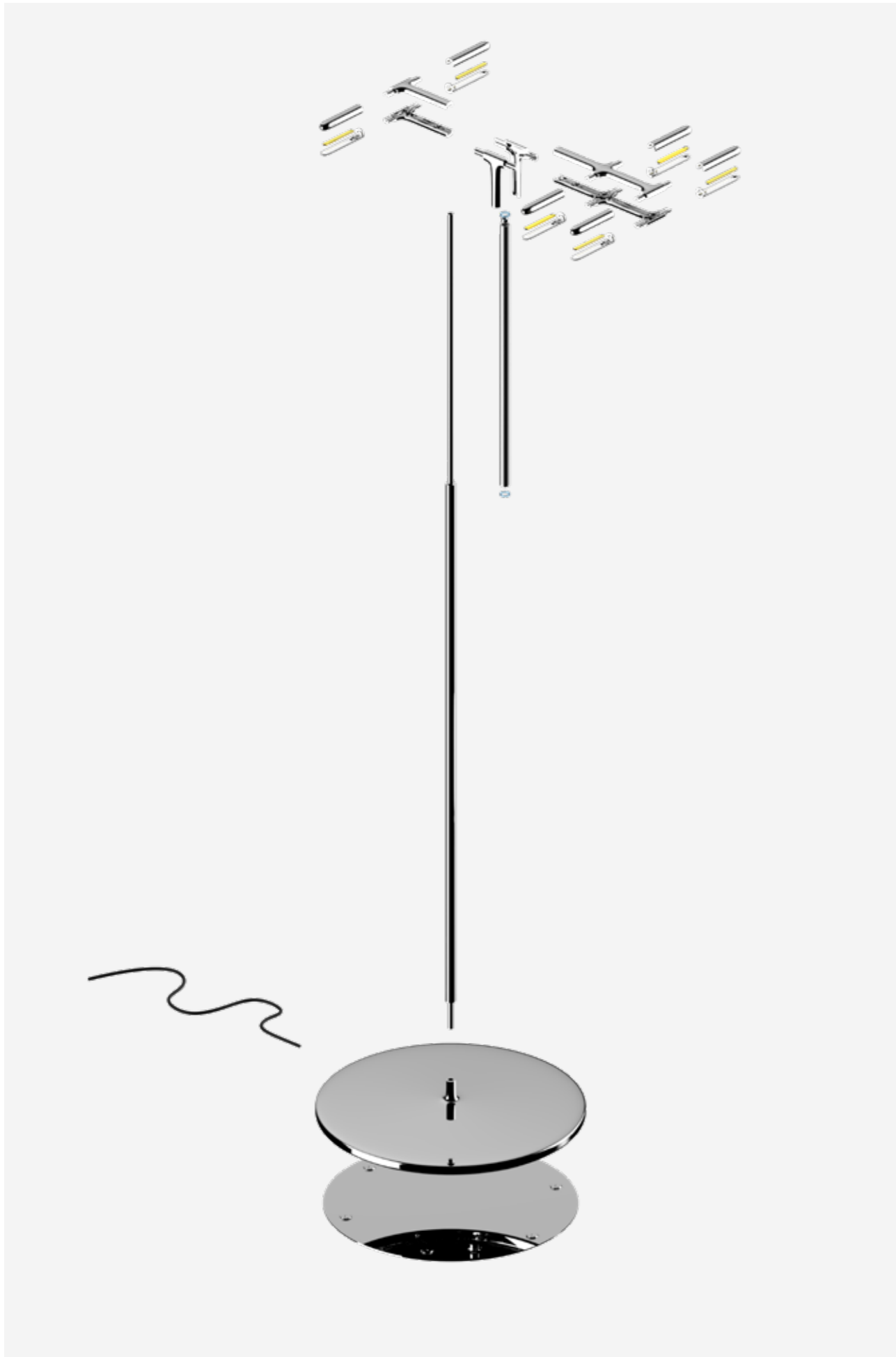
Full-angle joints



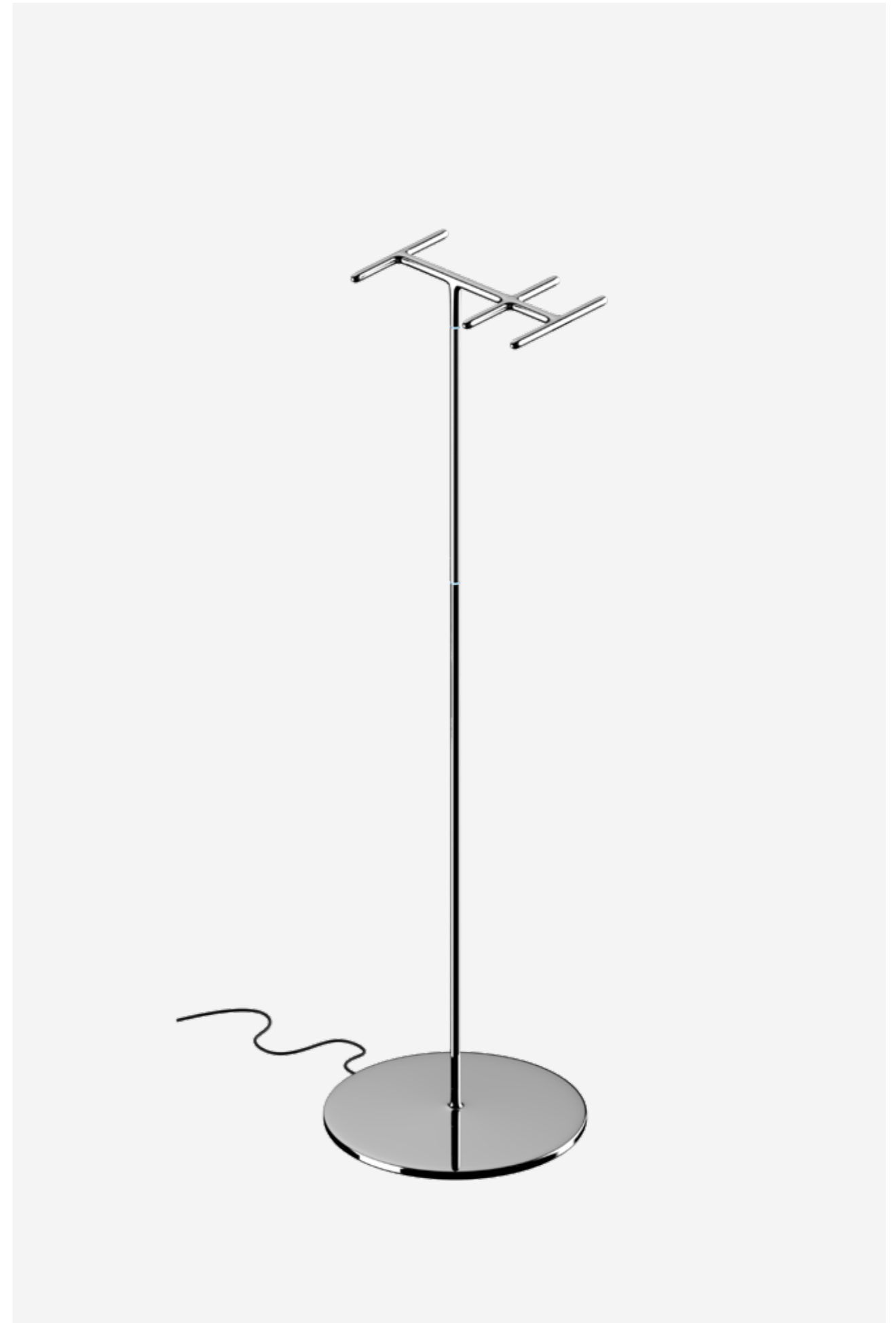
114



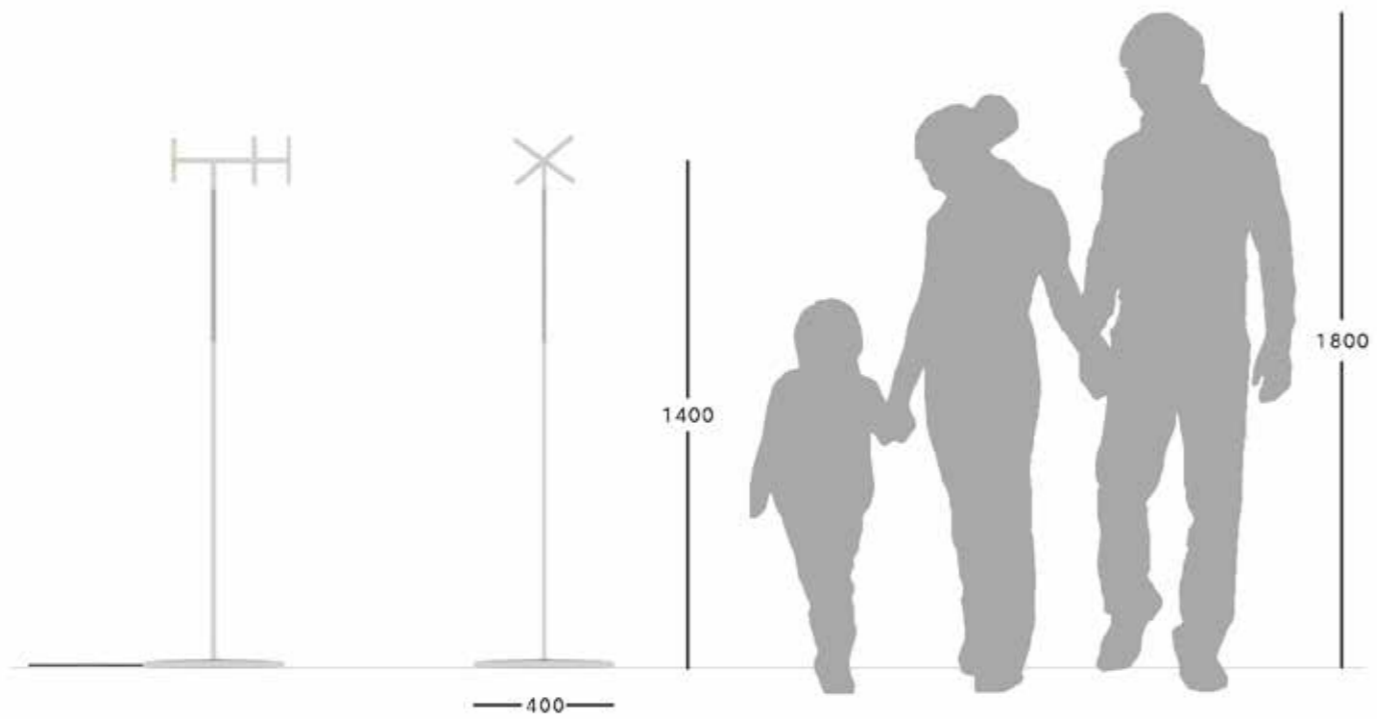
115



116



117



118



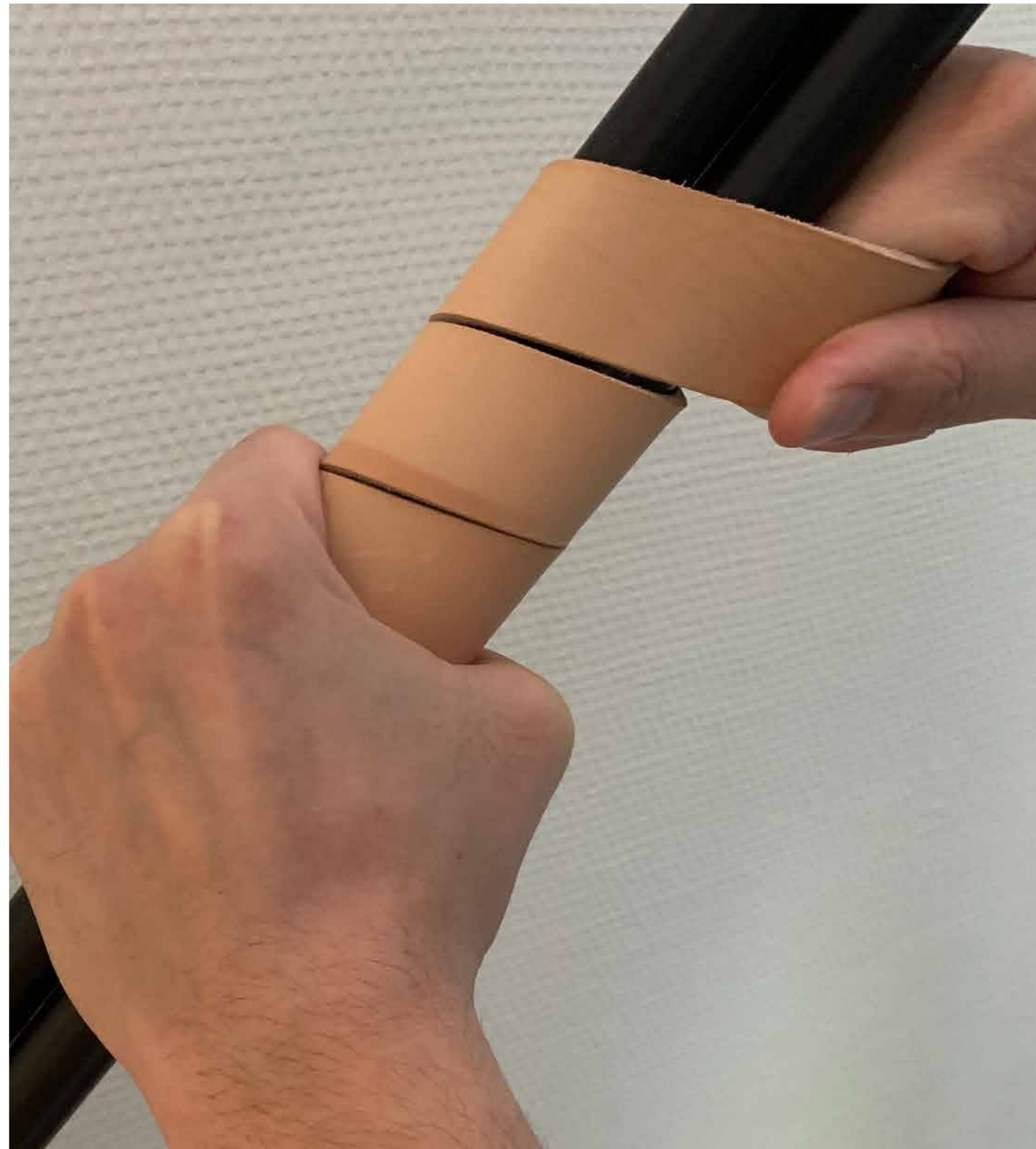
119



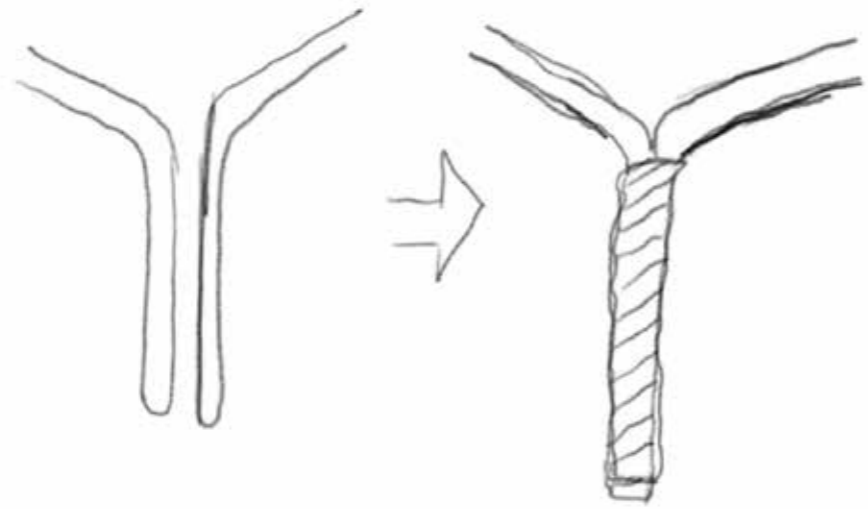
## 7.2 Belt chair

## Story

In the past, people often customize tools or objects by wrapping tape, string, or belts around parts or components for connection. The soft wrapped material on the other hand provides users with a more comfortable gripping experience.







The chair is inspired by the major customize behavior in the 1990s among Chinese people. The front and back legs are two independent parts, for which are tightly wrapped and connected by belts on the chair back.





The first concept



iconic behavior

+

flat package

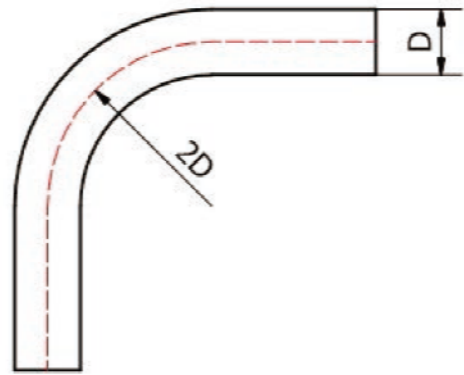
+

structural reliability



Refining

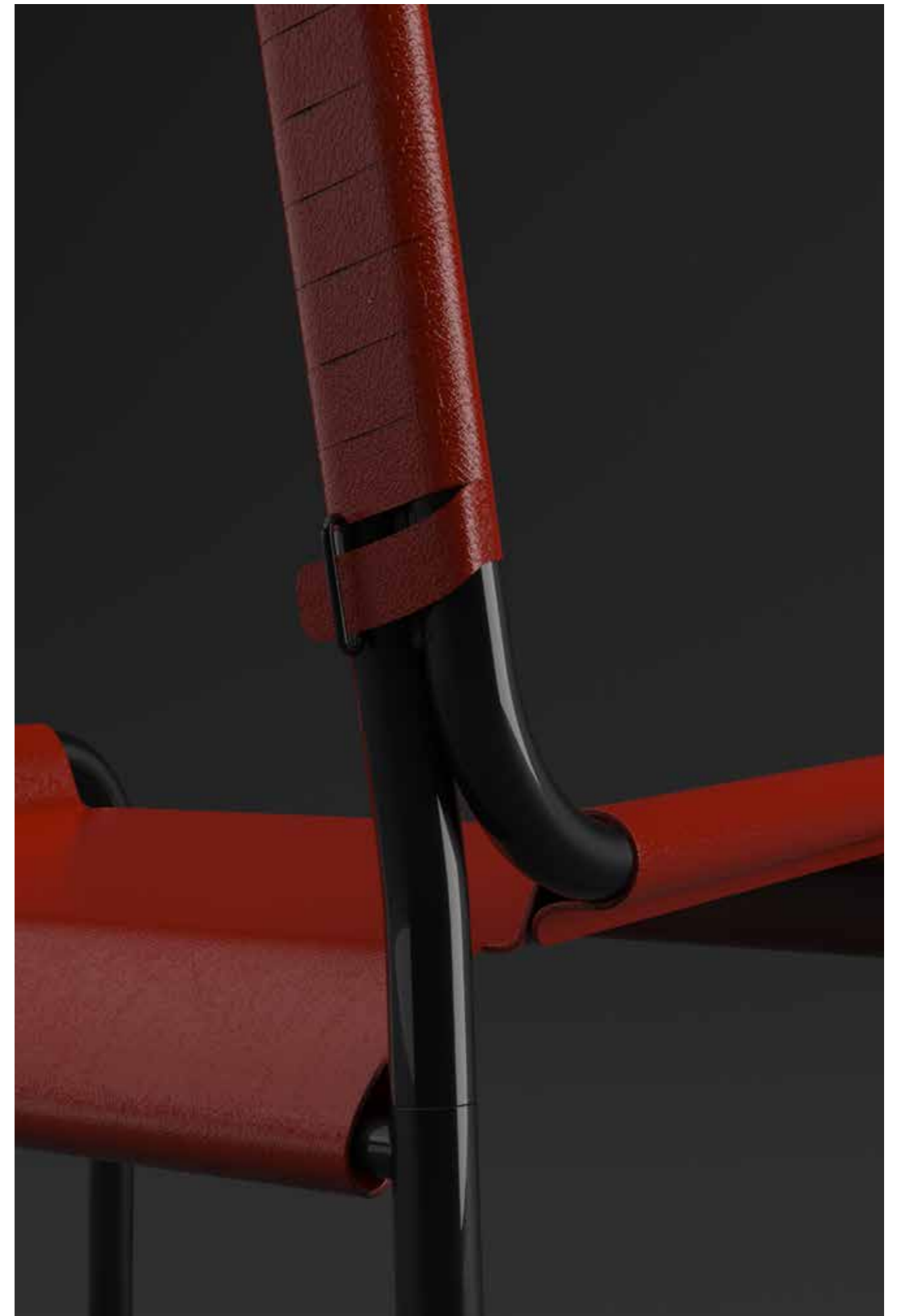




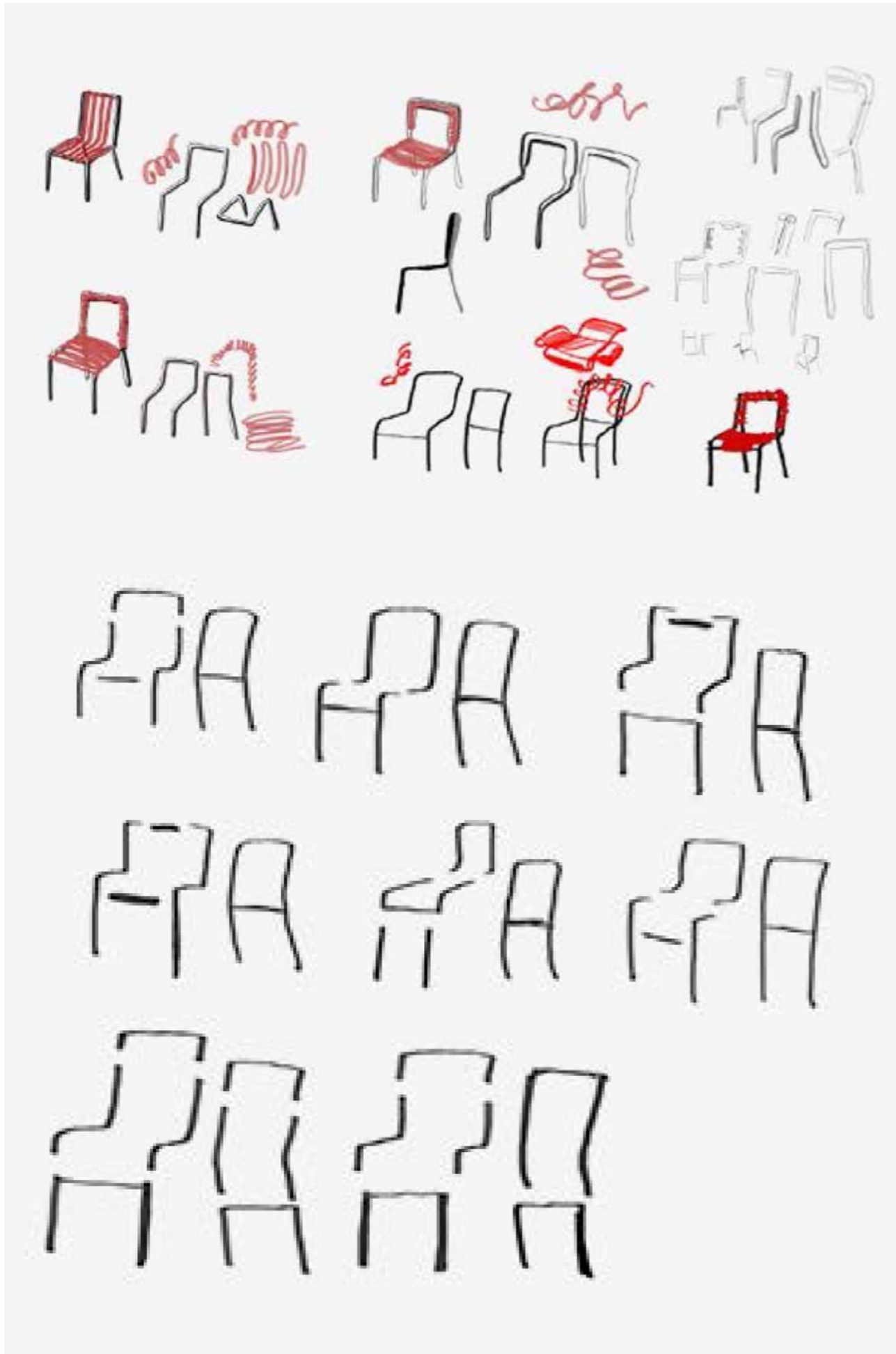
20mm tube bending  
belt lock



Force analysis

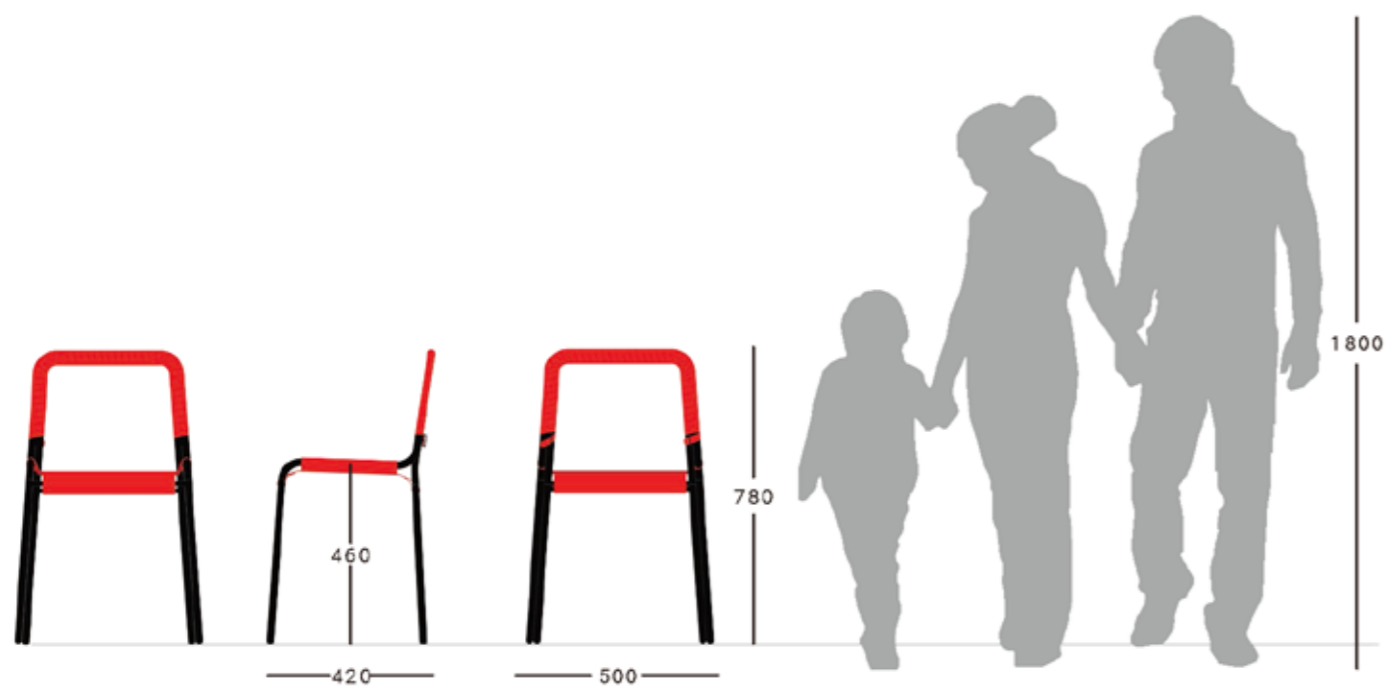






Flat package





136



137



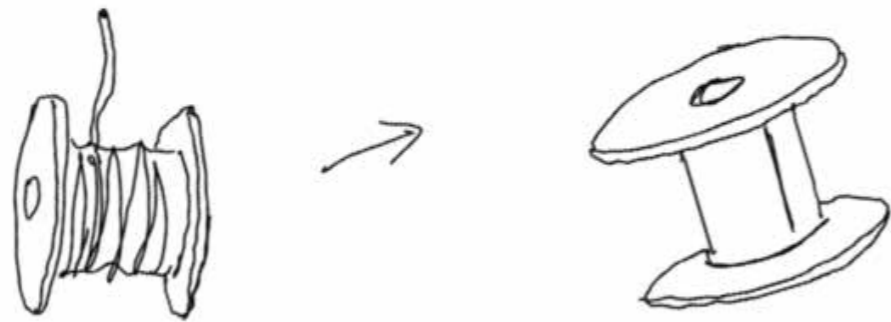
### **7.3 Spool side table**



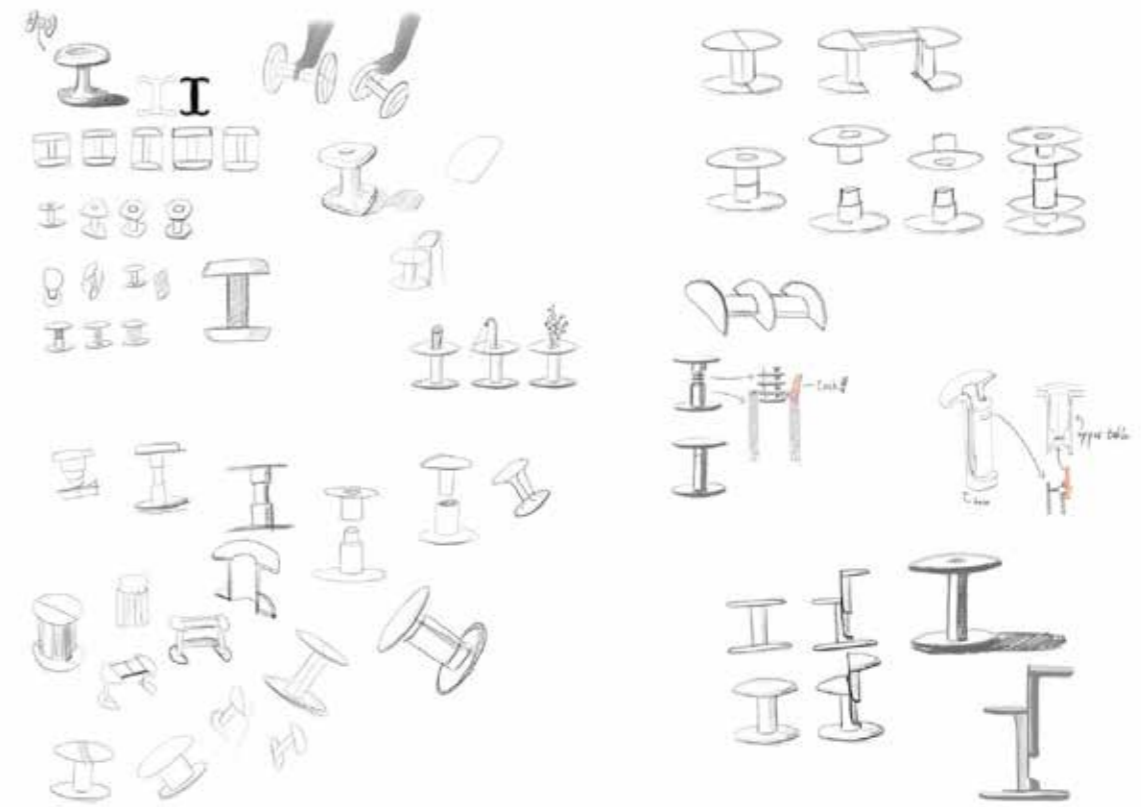
## Story

In many 1990s Chinese families, people smartly repurposed the empty spool to be a small stool at home. The wooden spool was a common waste from the high-speed industrial development for which has enough strength for its original purpose. It is so suitable as a stool that it is even visible in some old generations' home today. Repurposing behavior can also have a sustainable meaning nowadays. With a shape and color comes from a wooden spool stool, furniture for which can switch between a stool and a side table is designed.





Repurposing behavior can also have a sustainable meaning nowadays.  
With a shape and color comes from a wooden spool stool, furniture  
for which can switch between a stool and a side table is designed.





Iteration milestone

iconic colour

+

practical function

+

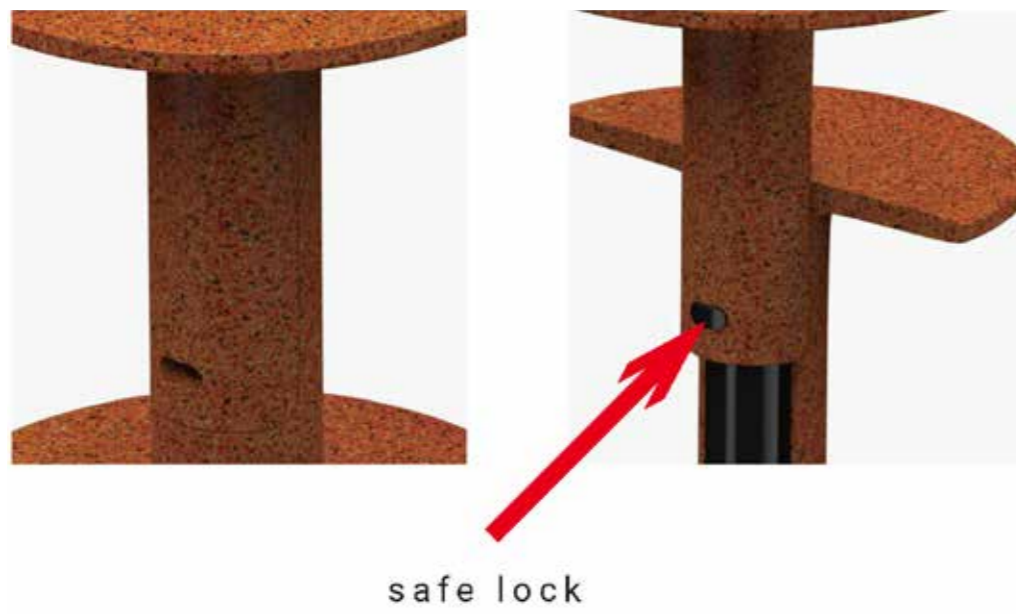
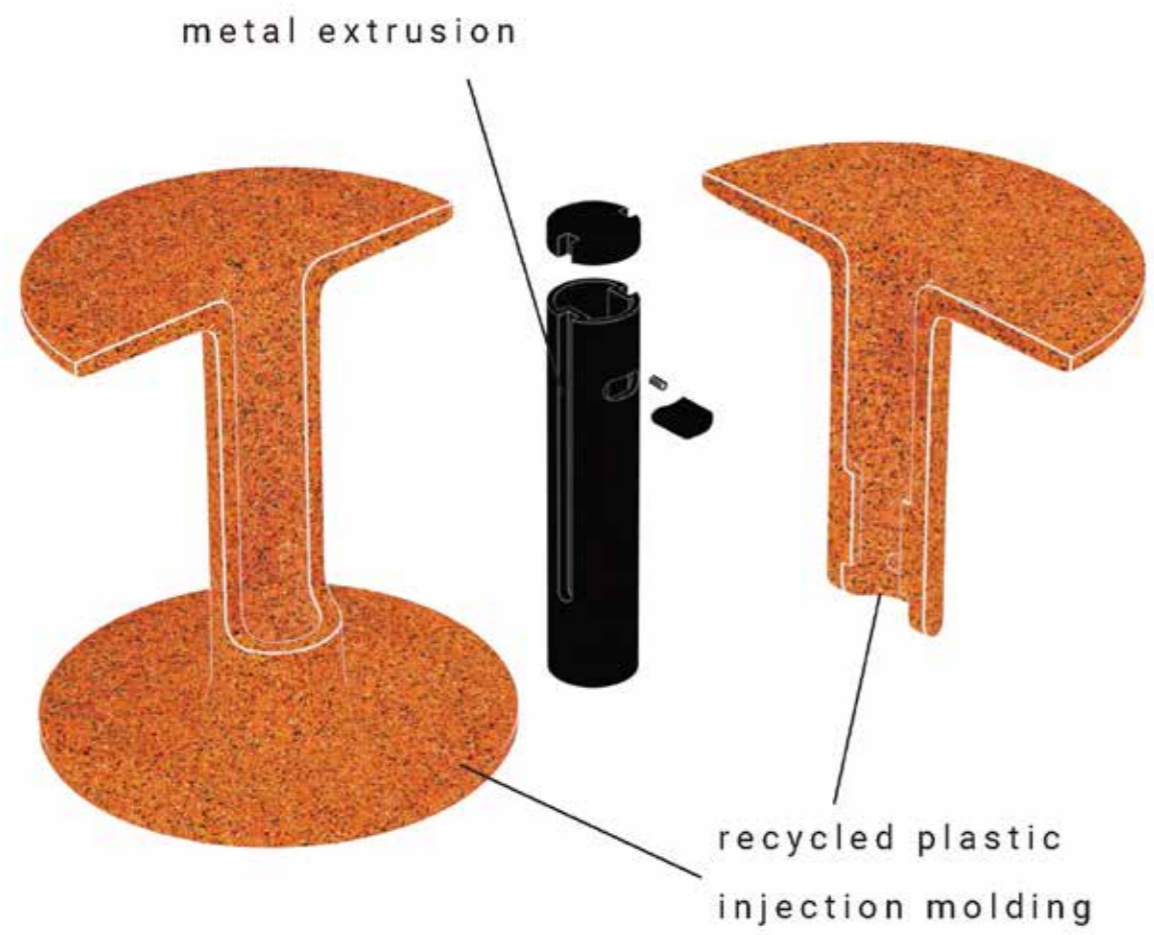
sustainability

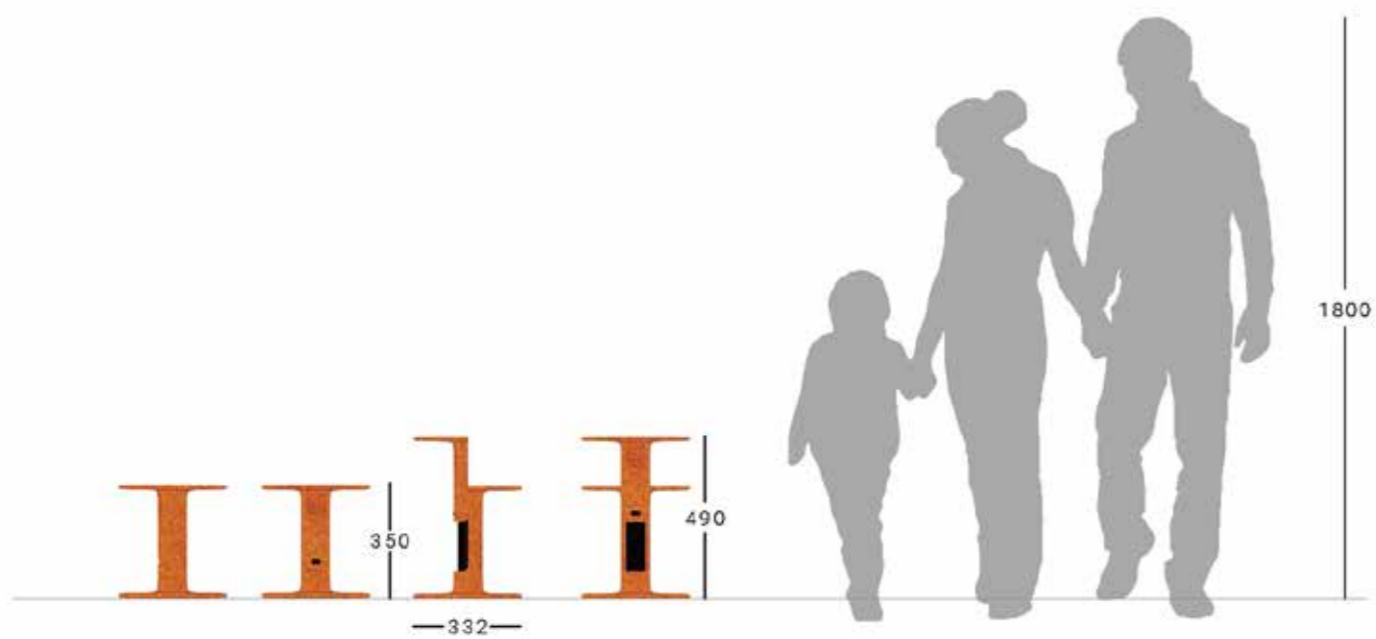


146



147

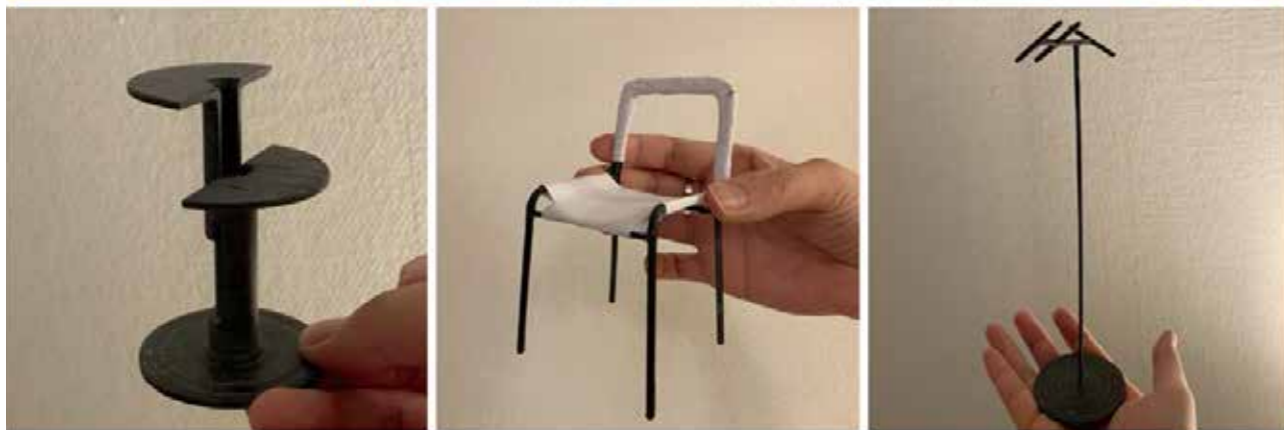




150



151



## 7.4 Feedback from participants

In order to confirm the Back & From furniture set showing clear properties of the 1990s Chinese products, as well as knowing how people think about the design outcome, a short second-round interview was made with 5 Chinese for which were participants in the research phase.

The researcher showed the participants with the product renderings of the Back & From furniture set and asked them how they feel about the design.

Almost all the interviewees showed a strong interest in the design outcome and easily recognized the original story (or inspiration source) of each product. Some of the interviewees started to talk about their stories about the source product they owned before.

The interviewees' reaction proved the psychological resonance was able to bring to the Chinese users by researching on their memory of the 1990s. The following page shows the most representative answer from the interviewees.

*"The lamp just reminds me of the antenna in the me movie 'my people, my country'. The side table is obvious that it comes from a spool. I really like this furniture set."*



**Adjusting antenna**

*from the movie "My People, My Country"*

*"I really like the antenna lamp, I would like to see more about that"*





Back & From  
furniture set



## 8. Discussion and conclusion

By importing part of the collective memory theory, this project conducted a wide range of design research about the 1990s Chinese products. According to the research results, people's memory about products is broad and can be continuously described, subdivided, and improved by expanding product samples. Due to limited time, only 71 product samples were included for further sorting and analyzing. The number of participants is also able to expand for more and accurate data.

The second-round interview after the design phase has shown the validity of the design and research method in this project. Due to the time limit, only a few people were involved in this part. Ideally, all the participants in the previous research can participate in the second-round interview and leave their opinions.

Nevertheless, it has been proved that the product samples collected in this research are able to be used to summarize basic properties and provide inspiration for the following design.

Setting different screening conditions in the research would help to divide the characteristics of the different communities in society especially for understanding society with a complex population structure.

The differences in product memory caused by different living conditions can be located in a more detailed way. This research can be applied to explore iconic products used by people in different communities in a period of time through a different setup of contexts and expanded participants. This research project made an attempt of studying Chinese product design in the 1990s, for which providing a possible way of understanding Chinese users. On the other hand, it is also able to provide a possible standing point for exploring the evolution of product design in the Post- Mao period in China.

Based on the summarized mood boards, it can be found that Chinese design can not only expand the visual elements in traditional culture but also extend the product properties or deeper-level behaviors influenced by the social development in a certain period of time. Although these internal factors are abstract and difficult to describe visually, they can spiritually define the difference between a community of people from another.

For Chinese people who have experienced the 1990s, their living conditions and consumption concepts have undergone

tremendous changes in decades. However, people still generally miss some specific products or behaviors from the 1990s, which provides a potential design opportunity. By reflecting and reviewing the product style or features of a specific time period, it is possible to redesign from a modern perspective with the psychological resonance after jumping out of the original functions of the old products.

Taking into account the nature of the project, the design process in three different emphases has compromised with each other in order to achieve the set of goals. However, for any formed product design work, the form and function can be extended and serialized under the same proposition.

The design process of the project also proved that it is possible to use the concept of collective product memory to deconstruct and conduct it as a new concept starting point, which has great extensibility.

Through the research of collective product memory, it can provide an effective idea for product designers to track back the users' stories and products that related emotional factors for which increase the chance of generating psychological resonance in the products.

# List of references

Assmann, Jan. Trans and John Czaplicka, (1995) '*Collective Memory and Cultural Identity*'; *New German Critique* 65 ,125-33

Cash, H.-H. P. C., Borum Olsen, S. and Christensen, T. T. M. L. Y. M. (2017) '*Uniting individual and collective concerns through design: Priming across the senses*', *Design Studies*, 49, pp. 32–65. doi: 10.1016/j.destud.2017.01.002.

David Manier and William Hirst (2008), '*A Cognitive Taxonomy of collective memories*', *Cultural memory studies*. [Elektronisk resurs] an international and interdisciplinary handbook (2008). p.253-262. Walter de Gruyter (*Media and cultural memory*: 8). Available at: <https://search-ebSCOhost-com.ludwig.lub.lu.se/login.aspx?direct=true&db=cat07147a&AN=lub.5679512&site=eds-live&scope=site> (Accessed: 1 March 2020).

Halbwachs, Maurice. (1925) '*On Collective Memory*'. Ed. and trans. Lewis A. Coser. Chicago: U of Chicago P, 1992.

Jeffrey K. Olick (2008) '*From Collective Memory to the Sociology of Mnemonic Practices and Products*' , *Cultural memory studies*. [Elektronisk resurs] an international and interdisciplinary handbook (2008). p.151-162. Walter de Gruyter (*Media and cultural memory*: 8). Available at: [https://search-ebSCOhost-](https://search-ebSCOhost-com.ludwig.lub.lu.se/login.aspx?direct=true&db=cat07147a&AN=lub.5679512&site=eds-live&scope=site)

com.ludwig.lub.lu.se/login.aspx?direct=true&db=cat07147a&AN=lub.5679512&site=eds-live&scope=site (Accessed: 1 March 2020).

Mills, J. and Birks, M. (2014) '*Qualitative methodology : a practical guide. Second edition*'. Sage Publications. Available at: <https://search-ebshost-com.ludwig.lub.lu.se/login.aspx?direct=true&db=cat07147a&AN=lub.6263288&site=eds-live&scope=site> (Accessed: 17 May 2020).

Moalosi, R., Setlhatlhanyo, K. N. and Sealetsa, O. J. (2016) '*Cultural Memory, an Asset for Design-Driven Innovation within the Creative Industries Sector: Lessons for Design Education*', *Design and Technology Education*, 21(2), pp. 9–22. Available at: <https://search-ebshost-com.ludwig.lub.lu.se/login.aspx?direct=true&db=eric&AN=EJ1119407&site=eds-live&scope=site> (Accessed: 28 February 2020).

Nora, Pierre,(1996) '*Realms of Memory*',New York: Columbia UP

Rawski, G. Thomas; et al. (2008), '*China's Industrial Development*', in Brandt, Loren; Rawski, G. Thomas (eds.), *China's Great Transformation*, Cambridge: Cambridge university press

Ross, J. (2002) '*Convergence of Technologies and Terminals, Will PCs Replace the TV?*' Proceedings of the second annual broadband networks and services conference. Stockholm. Retrieved January 3, 2015 from [http://www.ideasociety.co.uk/files/01\\_banter.pdf](http://www.ideasociety.co.uk/files/01_banter.pdf).

Schacter, Daniel L, and Endel Tulving.(1994) '*Memory Systems*'. Cambridge: MIT Press,1994