



## Design and Development from the Qing Dynasty Armchair Inspired for Modern Home Decoration Business

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### Abstract

**Background and Aims:** Chinese traditional culture is extensive and profound, among which the Qing Dynasty culture has a more profound influence on modern home decoration. The Qing Dynasty was a period of rapid development of Chinese furniture culture, and many representative works appeared in the history of furniture. In these works, the chair of the Qing Dynasty has a unique style, unique design, atmospheric beauty, and simple beauty. Thus, this paper aims (1) to define and characterize the Qing Dynasty Armchair. (2) to study 5 well-known brands of new Chinese-style chairs in the market. And (3) to develop and design new Chinese chairs based on the Qing Dynasty style.

**Methodology:** Three new Chinese chairs that skillfully combine tradition and innovation are the result of the research process, which carefully combined cultural heritage with modern design trends. The final designs were confirmed to be in line with modern consumers' preferences for distinctive shapes, eco-friendly materials, and functional versatility through surveys and expert interviews. This strategy emphasizes how important it is to respect cultural heritage while satisfying the changing needs of the modern furniture market.

**Results:** Nowadays, the progress of modern home improvement enterprises has brought new changes to people's needs, so the design of the chair must also change. The main consumers of the modern home improvement market are young customers, so it is important to meet their needs. We should make some chairs that conform to the trend of The Times and have Chinese characteristics. To sum up, the author thinks that this research should develop and design a new Chinese chair based on the Qing Dynasty style. Through the questionnaire survey of 30 people and the interview of 3 people, we understand the consumers' evaluation and expectations of the existing 3 new Chinese chair design cases and then improve the chair cases to determine the final design innovation scheme.

**Conclusion:** The findings highlight the need for contemporary home improvement companies to modify chair designs while preserving Chinese cultural elements to satisfy the changing demands of younger consumers. The study emphasizes the significance of creating new Chinese chairs with Qing Dynasty design inspirations and incorporating customer and expert interview feedback to improve designs that meet modern trends and expectations.

**Keywords:** New Chinese style; Armchairs of Qing Dynasty; Modern Home

### Introduction

Now at the beginning of the 21st century, China has developed into a furniture manufacturing power, but the concept of Chinese chair is not optimistic, because manufacturing is not the same as design, especially in the current era, when modern home improvement companies are more and more like the new Chinese style, but the lack of originality in design makes China's chair development gradually into the bottleneck period. Chairs are the furniture most closely related to people, so the design of chairs should also progress with the increasing progress of society. The improvement of the design style of the new Chinese chair is mainly based on the Chinese Qing style round chair as a template, creating a new Chinese chair that meets the aesthetic needs of contemporary people and conforms to the trend of the modern home improvement market.

In the field of modern home décor, the creation of furniture that draws inspiration from historical artifacts, like the armchair from the Qing Dynasty, is highly significant. Modern designers can draw inspiration from historical furniture pieces, which offer a rich tapestry of artistic craftsmanship and cultural heritage (Hornung, 2017). Modern furniture designers can imbue their creations with a sense of authenticity and timelessness by referencing the elegance and subtleties of traditional designs, such as the Qing Dynasty armchair. This will appeal to consumers who are looking for distinctive and culturally significant pieces for their homes. In addition, the incorporation of historical components into contemporary home décor enterprises cultivates a more profound admiration for customs and artistry,





thereby aiding in the conservation and commemoration of cultural legacy (Chen, 2019). Furthermore, the adoption of Qing Dynasty armchair designs for use in contemporary home décor enterprises is in line with the preferences of modern consumers for eco-friendly and sustainable goods (Stupples & Phu, 2020). Compared to mass-produced, disposable furniture, traditional furniture designs typically use natural materials and artisan techniques that are long-lasting and environmentally friendly. This indicates a more sustainable approach to production. Modern designers can capitalize on the inherent sustainability and quality associated with traditional craftsmanship by reinterpreting historical designs, such as the Qing Dynasty armchair. This will draw in environmentally conscious customers who value authenticity and longevity when choosing home décor. Therefore, incorporating historical design elements into contemporary home décor products not only improves their visual appeal but also reflects the shifting consumer values of sustainability and cultural appreciation.

In this paper, the Qing Dynasty style armchair including style, material, and structure of three aspects of investigation, through the combination of Chinese new home design style to enrich its composition form, and make it more in line with contemporary tastes and life pursuit. To get closer to the modern life concept, this paper integrates the new Chinese style into the design concept of the new Chinese armchair, which provides a certain theoretical and practical basis for the subsequent design research. At the same time, it is also more in line with the ecological development and sustainable development advocated by modern society.

### Research objective

To define and characterize the Qing Dynasty Armchair.

To study 5 well-known brands of new Chinese-style chairs in the market.

To develop and design new Chinese chairs based on the Qing Dynasty style.

### Literature Review

#### Qing dynasty culture

Li (2000) mentioned that the Qing Dynasty was one of the most important dynasties in Chinese history, which had a profound influence on China's politics, economy, culture, and other aspects. The commodity economy developed rapidly in the Qing Dynasty, and handicrafts were widely developed and prospered. The culture of the Qing Dynasty had a profound influence on the development of Chinese history and culture and also left many precious cultural heritages, which are of great significance to the study of Chinese history and culture.

#### Modern Home Decoration Business

Yang (2006) once said: "Chair design is the beginning of any interior design." No object is more closely related to human beings than the chair. Li (2000) found that people need "diversified" design to meet the fast-changing, high-demand, and high-taste lifestyle, so the design of chairs should also progress with the increasing progress of society and the improvement of science and technology. The design of the chair should meet both the physiological needs of people and the psychological needs of people. For people aged 25-50, fashion and cost performance are important factors to consider when they choose and buy furniture. Li and Chai (2009) found that young people are the main consumers in the current design furniture market, so it is particularly important to meet the needs of young customers. Therefore, we should sort out these needs, and at the same time make some chairs that conform to the trend of The Times and have Chinese characteristics, so that the transformed chairs are more in line with the aesthetic of 25-50-year-old people. By creating the chair, any designer is also interpreting the special needs and functions of the chair itself. At the practical design level, the design and creation of chairs should be linked with people's psychology and physiology, and the shape and material of chairs should also be considered. At the same time, it must also involve the special needs of users in knowledge, emotion, aesthetics, culture, and other spiritual aspects. On the other hand, it is the basic link between design and manufacturing, process and structure.

#### Chair design

##### 1. Qing Dynasty Chair Introduction

Xu and Zhang (2005) put forward the round chair in the Qing Dynasty, adhering to the ancient concept of a round sky and round earth, and adopting the square combination shape of upper circle and lower circle, outer circle, and inner square, with people sitting in the middle, symbolizing "harmony between heaven and man". This is also a philosophy of life advocated by Chinese tradition. The specific styling functions and different styles are shown below. Some handrails in the Qing Dynasty are shaped like semicircular handrails, which are smooth and linear, and the detailed structure is not complicated by decoration. Some chairs have patterns on the backs for decorative styling. Some chair-shaped armrest lines are more square, and square inches echo. (As shown in Figure 1)






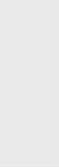






		Legs	Back Rest	Armrest	Reinforcement Structure Component
	Basic				
	Variation				
Round-Back Armchairs	Proportion		Backrest Height : Seat Height 1:1	Radius : Seat Width 1:1.1 Inner Radius : Outside Radius 1:1.3	

Figure 1 Qing Dynasty armchair style and the characteristics of different parts  
Source: Xu Qiupeng and Zhang Fuchang (2005)

In terms of the selection of chair materials, craftsmen in the Qing Dynasty liked to use high-hardness wood to make armchairs, such as yellow pear, red sandalwood, chicken wing wood, and so on. Hard and ductile, non-splitting, fine-grained wood is the ideal choice for making armchairs. The above-mentioned wood chairs can last for hundreds of years because of their unique physical characteristics, and they are also favored by classical furniture collectors because of their preciousness and scarcity. Material characteristics are shown in the following table:

Table 1: List of material characteristics

Wood	Name	Characteristics
	Huanghua pear	Huanghua pear, also known as Xiangxiang rosewood, is produced in Hainan. It has the texture of mahogany, the undertone of flower pear. The color is yellow, the material is fine, the texture is soft, and the aroma is sweet.

Wood	Name	Characteristics
	Rosewood	Rosewood, mainly produced in tropical areas, not hundreds of years can not become wood, known as "an inch of rosewood, an inch of gold". The color is deep, the material is hard and dense, the texture is slim and floating, and the change is endless, and it has the reputation of "Emperor's wood".
	Chicken wings wood	Chicken wings wood, a mahogany, the so-called chicken wings, refers to the wood heartwood on the chord section of the "y" type of pattern. Mr. Wang Shixiang divided it into the old chicken wing wood with "dense texture, purple-brown dark, and light alternating lines, especially the longitudinal and slightly oblique section, delicate floating, giving people the feeling of bright feathers." New chicken wings wood "rough wood, purple and black, the texture is often cloudy, rigid and no rotation, and the wood wire is sometimes easy to warp and crack stubble."

Zhang and Wang (2001) proposed that the structure of armchairs in the Qing Dynasty (as shown in Figure 2) can be mainly divided into four parts: the back of the chair, the seat surface, the legs and legs, and the armrests. The components used by the back of the armchair mainly have the following parts: First, the lone chair circle is shaped like a crescent, and the chair circle of the armchair is mainly used for the support and support of the head, neck, back and elbows when people sit. Next is the back plate in the center of the chair. The backplane covers about one-third of the width of the entire back of the chair. In shapes, there are two common types, the "s" shape and the "C" shape. They all have one thing in common, that is, they are all curved structures that are narrow at the top and wide at the bottom. In terms of function, the "s" type is more suitable for the person's back than the "C" type, which can allow people to get a good comfortable experience when sitting.



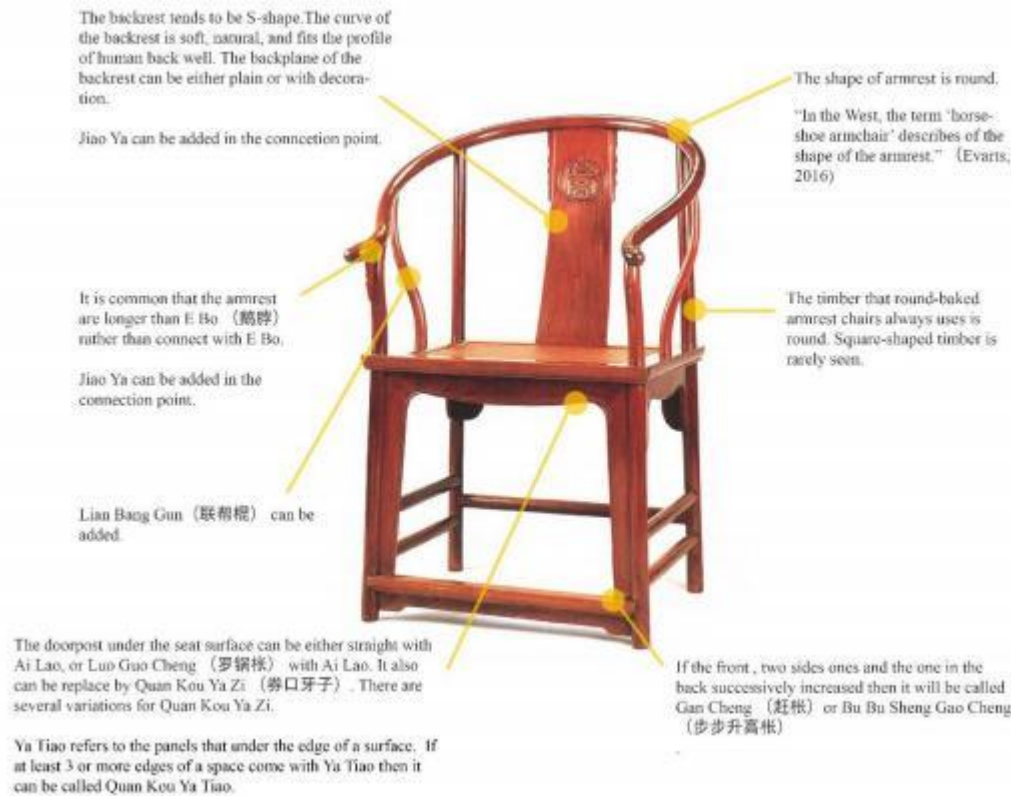


Figure 2 The structure of the Qing Dynasty armchair  
Source: Zhang and Wang (2001)

Yu (2006) proposed the knots between these components of the armchair, that is, the use of a four-convex connection, and the use of the bite relationship of the mortise and tenon to form the overall structural framework of the armchair. (as shown in Figure 3) From the perspective of furniture design, the structural combination of wedges and dovetail makes the chair ring more firm and durable in the changes between wood and wood, concave and convex, high and low, long and short, fully reflecting the scientific and artistic nature of the Qing Dynasty chair.

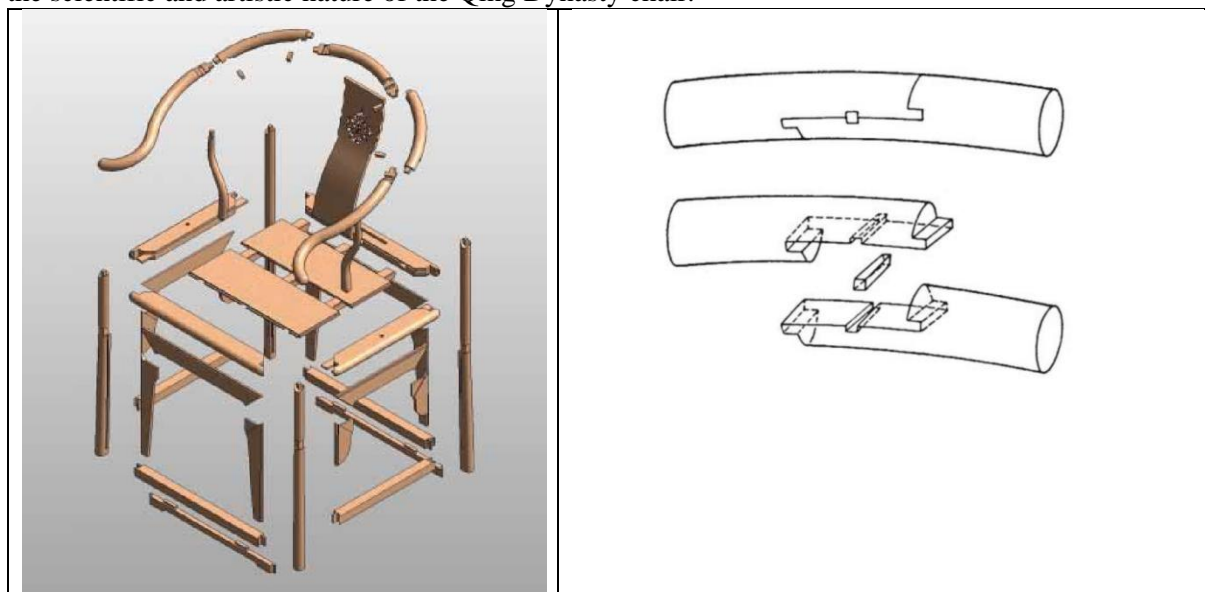


Figure 3 Structure diagram of mortise and tenon joints  
Source: Yu (2006)

## 2. Limitations and problems of chair design

Xu and Zhang (2005) pointed out that since the 20th century, traditional Chinese chairs have been difficult to adapt to the industrialization process of today's society and the needs of modern people. Therefore, the new Chinese chair needs to improve its style, design a chair that is more in line with the preferences and needs of contemporary people, make the size of the chair more comfortable, the arc of the chair back and armrest more humane, and pay attention to the comfort, convenience, and safety of consumers in the use of the process.

The manufacturing material of Qing armchairs is usually hardwood wood with excellent performance, and now the natural environment is deteriorating, and the output of these woods is extremely low. This complex processing method also leads to its low production efficiency, obviously can not adapt to today's highly industrialized social market, and it is difficult to meet the needs of a large number of supplies.

The traditional Qing Dynasty chair has a wide seat plate and a high base because of its original design intention and the people it faces are different from today's living environment. Such a structure cannot adapt to the living habits of modern people. Therefore, to promote the new Chinese chair in the modern furniture market, it is necessary to transform the structure and function of the chair to meet the needs of modern consumers and meet the preferences of modern consumers.

## Methodology

**Scope of the study:** Customer group: 25-50 years old. Yang (2002) found that People aged 25-50 are generally well-educated and market-trained, and are more willing to accept and try new things. They have their aesthetic and taste for the current consumption upgrade. This group receives multicultural education, has a new understanding of Chinese tradition, and has modern living habits and ways of thinking.

**Participant:** Sample size: 30 people, including 6 designers, 6 new Chinese furniture sales, and 18 customers who love the new Chinese style. Five brands of new Chinese furniture: Yeswood, Erhei Wood, Kuka, Linsy, and Fanwu from Taobao (2023), these brands have stores offline, high product sales, fans, novel designs, and new Chinese characteristics are obvious.

**Significance of the study:** To get knowledge about the Qing Dynasty style by analyzing style, material, and structure to be a guideline for developing New Chinese chairs based on the Qing Dynasty style.

## Research Process

Step 1: To study the culture of Qing Dynasty armchair design, is the most effective way to combine modern and traditional styles to reconstruct the chair based on the style of the Qing Dynasty.

Step 2: To study 5 new Chinese furniture brands and 15 Taobao selected cases. It can be concluded that customers in today's era love new Chinese chairs with novel shapes, environmentally friendly materials, innovative structures, and functions, that meet their daily life needs or social needs.

Step 3: To design 3 new Chinese chairs based on step 1 and step 2.

Step 4: To questionnaire survey 30 target customers and interview 3 experts in different fields.

Step 5: Position the final design as a new Chinese chair design with traditional Chinese cultural characteristics and innovation in style, material, and structure based on the analysis of the survey results.

## Results

### Online research

Through the investigation of Taobao (2023), we selected 5 new Chinese furniture brands with high sales and good evaluation, namely Yuan's Wood Language, two black woodwork, Gu Family Home, Lin's Home, and Fan House Furniture. The reason for choosing these brands is that these brands have their stores online and offline, and their products have high sales volume, many fans, modern design, and obvious new Chinese characteristics. Then, the top 3 chair cases with high sales volume were

selected from the 5 brands, and a total of 15 chairs were analyzed from three aspects: style, material, and structure. Through the analysis of these high-sales chairs, we can draw the following conclusion: in today's era, customers love new Chinese chairs with novel shapes, environmentally friendly materials, innovative structures and functions, and in line with their daily life needs or social needs.

### Three new Chinese chairs design

#### 1) The first draft

Although the manual production mode adopted by the traditional Qing Dynasty armchair in agricultural society makes its structure and appearance very beautiful, it also leads to its production efficiency being very low, and can not adapt to today's highly industrialized social market. Therefore, the design adopts modern industrial furniture manufacturing technology and mortise and tenon technology, which can not only greatly improve the production efficiency of furniture, but also greatly reduce the waste of materials in the production process, and the production cycle will be greatly shortened. At the same time, the chair shape is extremely simplified (as shown in Figure 4), the backrest is Y-shaped, the armrest is curved, and the sitting board is enlarged and widened to improve comfort.



Figure 4 Armchair Draft 1  
Hu Jialin (2023)

#### 2) The second draft

The design retains the semi-circular armrest shape of the traditional Qing Dynasty armchair and raises the arc at the wrist of the armrest to better fit the human wrist. At the same time, materials such as textiles or leather products can be selected in the application of new Chinese armchair processing materials (as shown in Figure 5), making the shape of the armchair more gentle than the traditional all-wood indifference, and more soft and comfortable to sit up.



Figure 5 Armchair Draft 2  
Hu Jialin (2023)

### 3) The third draft

The design (as shown in Figure 6) in the design of the shape of the new Chinese armchair, the bold play of imagination, the use of similar categories, the similar function of the furniture products' orderly arrangement, and a reasonable combination of methods, to enrich the functionality of the new Chinese armchair, to meet the needs of people's lives. This one-piece armchair design scheme, while retaining the semi-circular armrests of traditional Qing Dynasty chairs and the material characteristics of wood, deconstructs and recombines the traditional furniture design elements with different functions, and adds a small coffee table in the middle of the two seats to form a new chair structure, so that the chair has both seating functions and social functions, meeting the different needs of modern people.

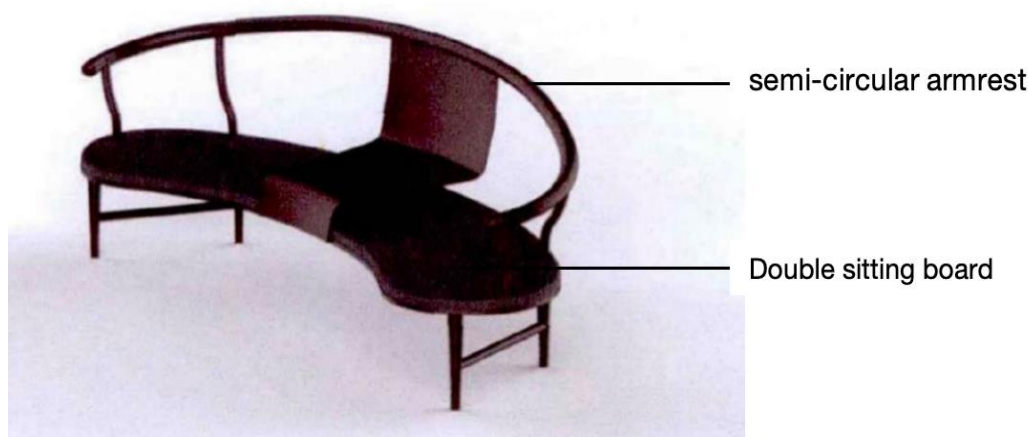


Figure 6 Armchair Draft 3  
Hu Jialin (2023)

### Data results and analysis of the questionnaire

Through the analysis of the results of the questionnaire, it can be concluded that people like traditional Chinese culture and the new Chinese-style chair that combines Chinese elements with modern elements. The modern style, comfortable wood, and rich functions of the new Chinese-style chair are the key points for people to choose the new Chinese-style chair. However, the existing new Chinese-style chairs in the market generally have the same shape. Single function, not easy to clean, and heavy chair, and other shortcomings, this is the new Chinese chair needs to improve. The chair design needs to be more ergonomic because most people prefer a 15° to 20° seat back angle. In short, the third draft is the chair with the largest number of choices by 30 customers, and it is the chair design scheme that can be improved.

### Online interview data results and analysis

Table 2: List of interviewees

Interview code	A	B	C
Name	Li Juan	Xiao yang	Liu Rongjun
Age	35	32	48
Professional field	New Chinese furniture sales	Furniture designer	History teacher

Throughout the interview, A said that a small coffee table could be added between the two seats to meet people's social needs so that the sales point would be greater. B said that the relative Angle of the two chairs can be adjusted to 72°, which is more convenient for two people to communicate with each other, and the chair will be more beautiful. Then lower the height of the sitting board and increase



the area of the sitting board, which is more ergonomic and more comfortable for customers to sit up. C said that the two chairs can have their own backrest and semicircular armrests, while the handrails should retain the S-shaped bending shape so that the characteristics of traditional armchairs will be more obvious.

In the final design scheme, the third draft can be transformed into two independent armchairs, and then add a coffee table in the middle of the two seats, so that it is more comfortable to sit up and can meet people's social needs. At the same time, the seat Angle and the width of the seat board are adjusted, and the S-shaped armrest elements of the traditional Qing Dynasty armchair are retained.

### Conclusion and final design

Through two methods of market research, a questionnaire survey, and an interview, it can be concluded that the percentage of options selected in the questionnaire and the summary of interview questions are consistent. The summary shows that people have the following needs for the style, material, and structure of the new Chinese chair:

1. The style is modern, the chair lines are smooth, and the armrest shape is semicircular.
2. The material is biased toward wood, which can be combined with new materials to save costs and improve production efficiency.
3. Maintain the mortise and tenon structure of the traditional Qing Dynasty armchair, and carry out diversified functional design to meet the diversified needs of customers.

I combined the functions of seating, reading, drinking tea, etc., and came up with the following scheme (as shown in Figures 7, 8, and 9). In this scheme design, I deconstructed and reorganized traditional furniture design elements with different functions to form a new chair design, whose functions meet the diverse needs of different people in modern life.

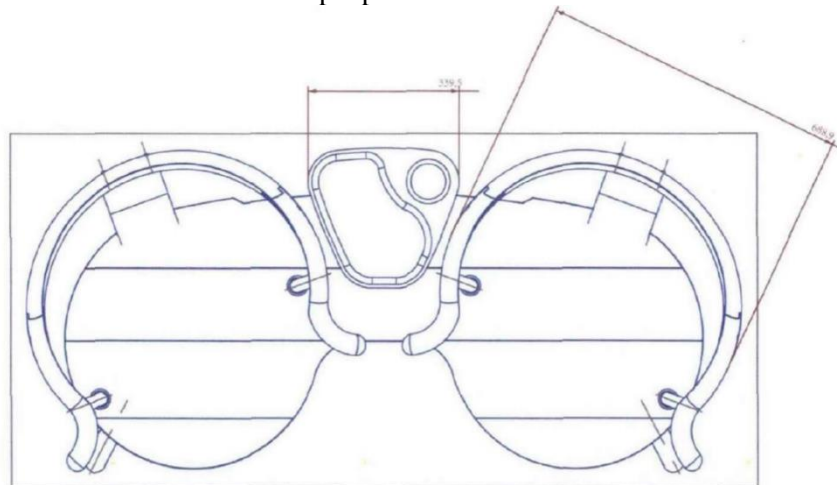


Figure 7 Armchair design  
Hu Jialin (2023)



Figure 8 Armchair design  
Hu Jialin (2023)



Figure 9 Armchair design  
Hu Jialin (2023)

## Discussion

The design focus of the new Chinese style chair is people-oriented, and the ultimate goal of people-oriented is to bring people's actual use feelings according to the use habits and overall feelings of the chair in the current era, that is, the style, material, and function of the chair. However, due to the development of the Qing Dynasty armchairs have been difficult to adapt to the needs of people today, there are defects in use, such as outdated style, expensive materials, complex workmanship, difficulty to clean, and difficulty to mass production, chair function is also very single. Therefore, the design of the new Chinese chair has become very important, which requires the designer to stand in the perspective of different customer groups to meet the diversified needs of customers to a greater extent. The similarities between this design and the "Y-shaped chair" designed by Hans Wigner are that the semi-circular armrest structure of the round-shaped chair is retained, but it is also different. The "Y-shaped chair" retains the shape of the round chair to a large extent, and the backrest of this design is a large curved wood board. Adds comfort but lacks styling. The similarities between this design and the "Water chair" designed by Zhu Xiaojie are that the seating area is large and the comfortable experience is very good. However, the difference is that this design deconstructs and reorganizes the design elements to form a new chair design, combining the functions of seating, reading, drinking tea, etc., to meet the diverse needs of different people in modern life.

There is insufficient evidence to support the claim that the development of contemporary home improvement businesses requires modifications to chair design. Although it's accepted that customer



demands can change over time, it's unclear how much this will impact chair design specifically. This claim runs the risk of oversimplifying the intricate interactions between design trends, consumer preferences, and market dynamics in the absence of empirical data or market analysis (Gibson & Gibb, 2019).

The diversity of consumer demographics and preferences within the modern home improvement market is overlooked in favor of catering primarily to the needs of younger consumers. The argument ignores potential market segments made up of older consumers or people from different cultural backgrounds who may also be looking for innovative chair designs because it only focuses on one demographic (Hudson & Ozanne, 2018). Ignoring these markets could lead to lost chances for consumer interaction and market growth.

The paragraph suggests creating chairs in the Qing Dynasty style, but it doesn't critically consider the possibility of cultural appropriation or historical artifacts being misrepresented. To ensure accurate and respectful representation, it is necessary to carefully consider and consult with relevant cultural experts when designing products with "Chinese characteristics" (Chang, 2016). Ignoring these issues could lead to the spread of false information or stereotypes, which would compromise the integrity and authenticity of the suggested design strategy.

## Recommendation

The author puts forward two suggestions, the first is the design suggestion. If someone wants to study the Qing Dynasty chair or the new Chinese chair, they can go to Beijing, the capital of China, to make a field visit. The Palace Museum and other buildings in Beijing are all displaying Qing Dynasty furniture, which is of great historical significance and research significance. It is not very convenient to go to the Qing Dynasty History Museum or the new Chinese furniture market for field study and research, so this article still has a lot of room for improvement. Entering the museum can better understand the culture of the Qing Dynasty, and then have a deeper understanding of the chair, which can make the design more suitable to the needs of users. The second is commercial advice. To make the sales of chairs better, we can first research the market of new Chinese-style chairs to understand the preferences of target users. We can also conduct market research and investigation in some large Chinese-style furniture markets to collect accurate data, such as questionnaires, online interviews, expert consultations, etc., to make the research more accurate and accurately meet the market demand. Boost sales of new Chinese chairs.

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