

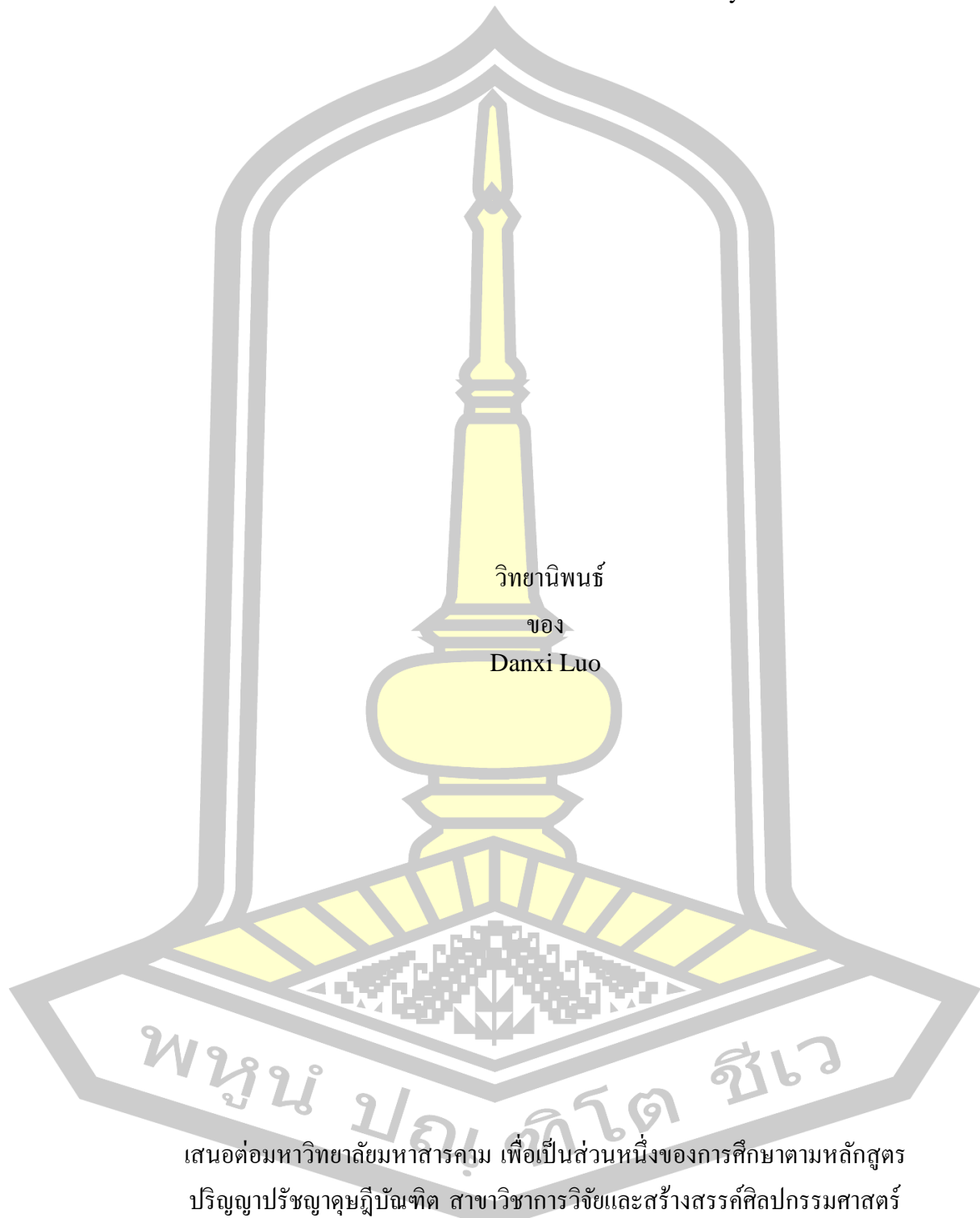
Chinese Traditional Porcelain Garden Stool:Material Culture And Innovative Design
In The Process Of Chinese Modernity

Danxi Luo

A Thesis Submitted in Partial Fulfillment of Requirements for
degree of Doctor of Philosophy in Fine and Applied Arts Research and Creation
June 2024

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Chinese Traditional Porcelain Garden Stool:Material Culture And Innovative Design
In The Process Of Chinese Modernity



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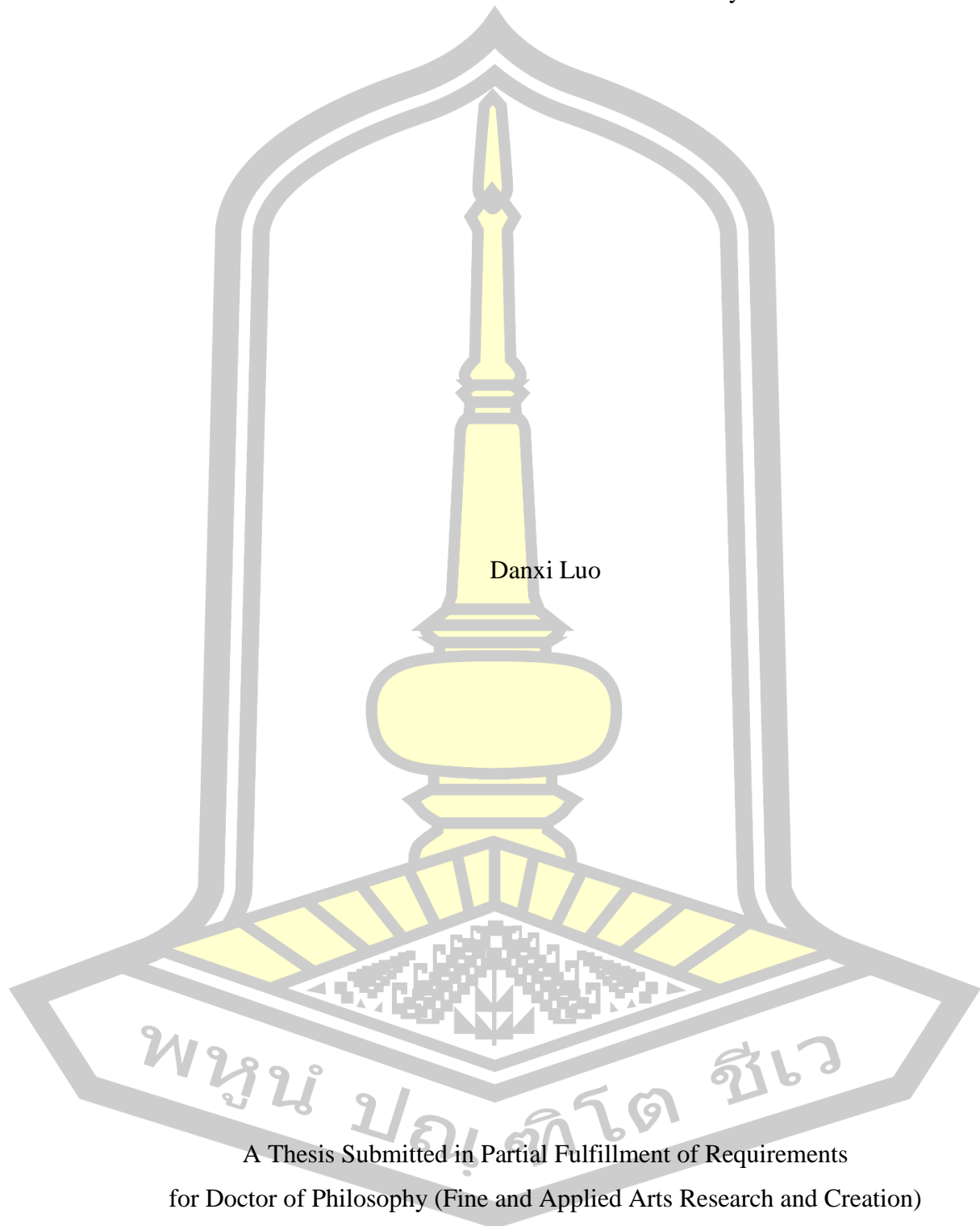
Danxi Luo

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June 2024

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The examining committee has unanimously approved this Thesis, submitted by Ms. Danxi Luo , as a partial fulfillment of the requirements for the Doctor of Philosophy Fine and Applied Arts Research and Creation at Mahasarakham University

Examining Committee

Chairman

(Assoc. Prof. Niyom
Wongphongkham , Ph.D.)

Advisor

(Assoc. Prof. Arkom Sa-
Ngiamviboon , Ph.D.)

Committee

(Asst. Prof. Metta Sirisuk , Ph.D.)

Committee

(Assoc. Prof. Suebsiri Saelee ,
Ph.D.)

Committee

(Asst. Prof. Vuthipong
Roadkasamsri , Ph.D.)

Mahasarakham University has granted approval to accept this Thesis as a partial fulfillment of the requirements for the Doctor of Philosophy Fine and Applied Arts Research and Creation

(Asst. Prof. Peera Phanlukthao , Ph.D.)

Dean of Faculty of Fine - Applied Arts
and Cultural Science

(Assoc. Prof. Krit Chaimoon , Ph.D.)

Dean of Graduate School

TITLE	Chinese Traditional Porcelain Garden Stool:Material Culture And Innovative Design In The Process Of Chinese Modernity		
AUTHOR	Danxi Luo		
ADVISORS	Associate Professor Arkom Sa-Ngiamviboon , Ph.D.		
DEGREE	Doctor of Philosophy	MAJOR	Fine and Applied Arts Research and Creation
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ABSTRACT

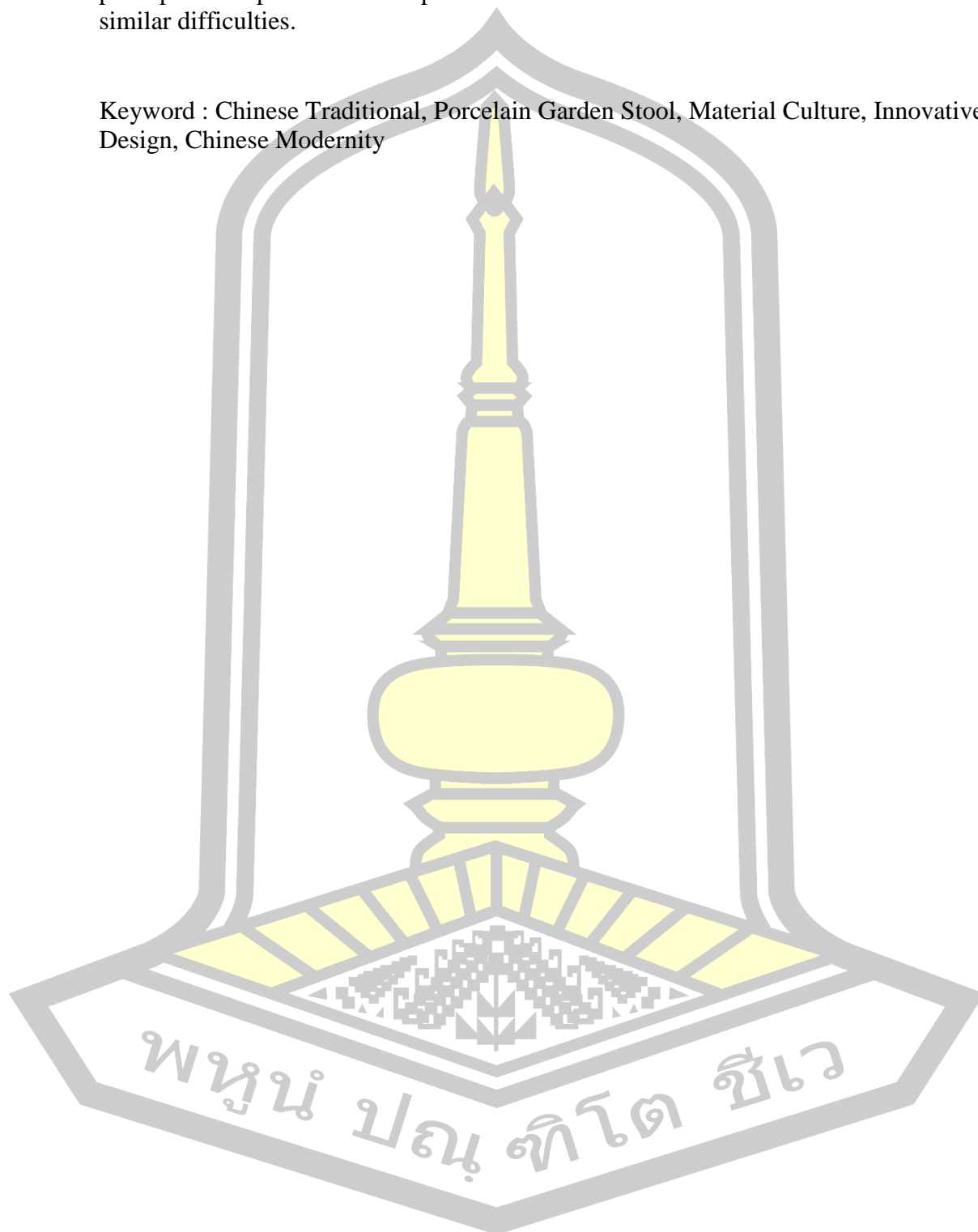
This research is using qualitative research and developmental research methods from the field phenomenon of "Chinese traditional porcelain garden stool", we study the material culture and innovative design in the process of Chinese modernity. There are four research objectives: 1) To study the historical development and function of porcelain garden stool in Chinese traditional life scene from the perspective of material culture; 2) To study The traditional identity and value of porcelain garden stool from the dimension of artwork; 3) To study the development process of innovative design of porcelain garden stool; 4) To create the innovative design of porcelain garden stool in the process of Chinese modernity.

The results of the study are as follows: The history and development of porcelain garden stool went through the early farming society's mat cushion, to Song Dynasty with the improvement of handicraft technology and aesthetic level, and then appeared porcelain garden stool, which was endowed with the ceremonial characteristics of the court nobility. In literati concentrated porcelain garden stool decoration elegant and beautiful. By discussing the traditional identity of porcelain garden stool and its aesthetic value as a work of art, we can get the pattern, shape, decoration technique, craft, function identity of porcelain garden stool as its identity. In the process of development, the identification of the traditional identity of the porcelain garden stool combined with the Source of inspiration for its innovative design, more than 20 creative sketches were invited to the evaluation of experts and consumers, and the final sketch was formed. Finally, the selected three sets of final creative designs are made into finished products, and after the final evaluation by experts and consumers, it is hoped that through the innovative design of the living heritage porcelain garden stool, the porcelain garden stool can get out of the decline stage, reshape the existence value of the porcelain garden stool, and make it integrate into people's modern daily life and become a part of the modern lifestyle.

It is suggested that cooperation between different fields jointly explore how to combine traditional cultural elements with modern design concepts to create products that both have traditional charm and meet modern aesthetic and functional needs, so that it can become a cultural industry. Meanwhile, China encourages the

inheritance and promotion of traditional Chinese culture., and this set of design principles also provides a new path for other traditional Chinese cultural artifacts with similar difficulties.

Keyword : Chinese Traditional, Porcelain Garden Stool, Material Culture, Innovative Design, Chinese Modernity



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Thanks to my parents for their ungrudging support, giving me unlimited love and warmth, so that I can see the wider world. Thanks to my husband and two children, it is their understanding and tolerance that gives me the strength to move forward.

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Finally, say thank you to myself, taste all the joys and sorrows of life, I can choose to continue to insist.

Danxi Luo

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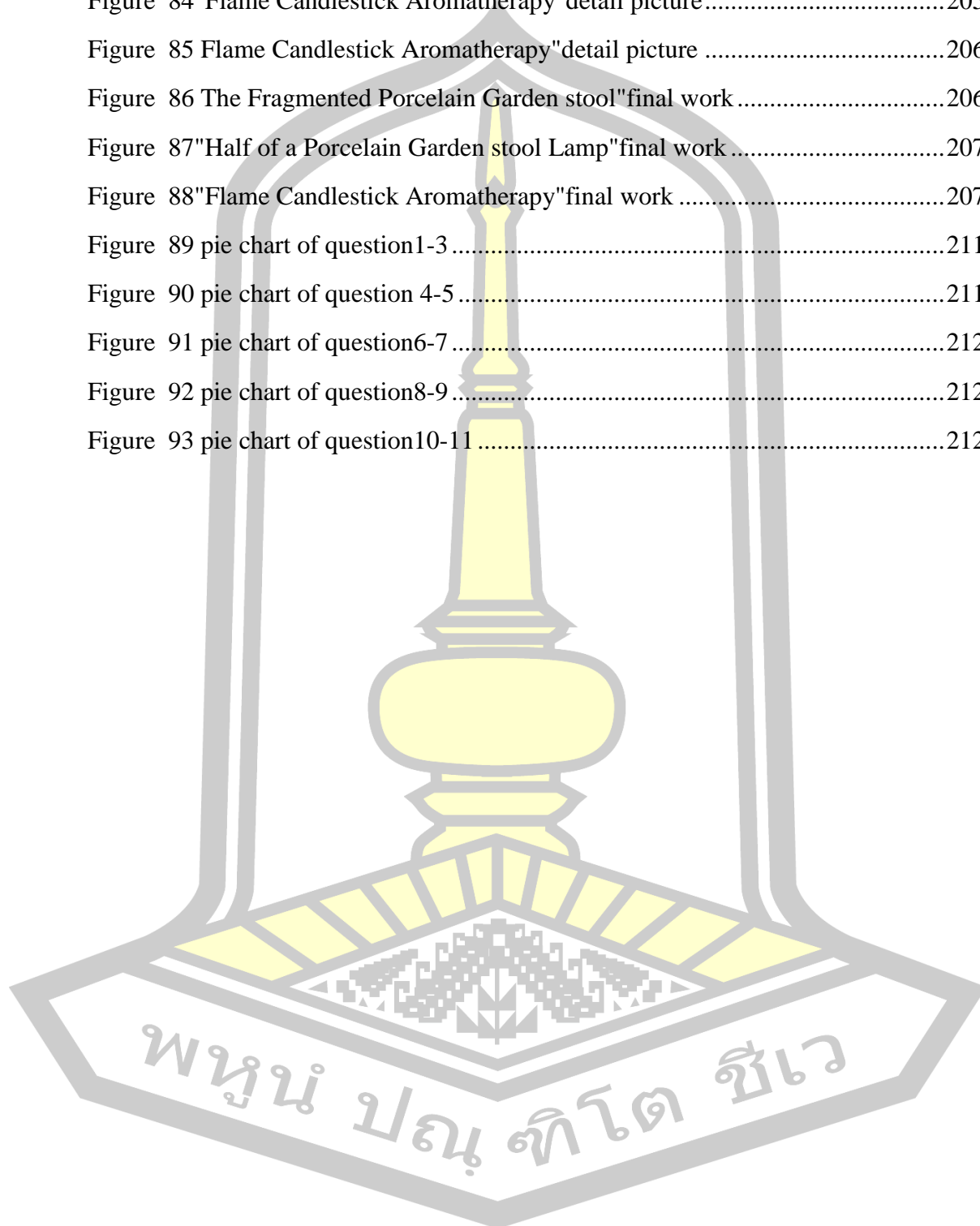
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CHAPTER I

Introduction

1. Background of Research

1.1 Importance of research

Porcelain garden stool is a kind of traditional furniture in ancient China, which has a history of nearly one thousand years. Porcelain garden stool originated in the Song Dynasty and developed and flourished in the Ming and Qing dynasties. It is a perfect combination of porcelain and furniture, which not only has the decorative and aesthetic function of porcelain, but also has the use function of sitting ware.

1.1.1 Due to its appearance, texture and decoration, various porcelain garden stools have strong aesthetic value behind them. The particularity of its material is the most prominent. Porcelain, as a kind of high-temperature ceramic, has the characteristics of dense texture, abrasion resistance, acid and alkali resistance, easy cleaning, etc. This material is not only practical and beautiful, but also reflects the exquisite skills and cultural value of Chinese ceramic technology. In the production process, the traditional porcelain garden stools need to go through multiple processes. The glaze and decorative patterns used also have strong traditional Chinese characteristics.

1.1.2 Chinese ceramics have a history of thousands of years. Porcelain garden stool not only has the artistic value of porcelain, but also has the value that it does not have compared with other porcelain, such as the use value. It appeared in ancient application and different scenes, not only in living Spaces such as halls and courtyards, but also in public Spaces such as pavilions and pavilions in mountains and wild gardens. Porcelain garden stools can often be seen in the life scenes of banquets and entertainment, as well as in some ritual scenes of court and elegance. At the same time, the different decorative patterns of the porcelain garden stool represent the symbol of different status, revealing the aesthetic differences of different groups and so on. Therefore, the porcelain garden stool not only has the value of porcelain, it also has a set of cultural value, functional value and so on.

1.1.3 Porcelain garden stool was used as a summer seat due to its porcelain nature and hollow and airy shape during the ancient summer heat. However, due to the change of current technology, materials and lifestyle requirements, the function of porcelain garden stool as a seat is no longer retained, but its cultural function, social function and material culture value still exist. More importantly, we should find a new way to carry it forward and inherit it, such as innovation in new materials, forms, new processes, etc., so that people can accept its remaining functions in other aspects.

1.1.4 Policy support. At present, various policies in China encourage the inheritance and development of traditional Chinese culture, and restore the traditional cultural identity. At the same time, it is a phenomenon that the culture is exchanged with other countries and used in the construction of China's cultural power, which highlights the significance of my small place and big topic. Instead, a set of innovative methods will be applied to other Chinese traditional objects in similar predicament at the same time, which has reference significance for them.

1.2 The development of the seat

From ancient times to today, the way Chinese people sit has undergone great changes, early China was an agrarian society. Farmers worked in the fields and had a relatively simple lifestyle. They usually sat on the ground or rested on straw MATS. This led to the original sitting position.

Later, with the development of agriculture and handicraft industry, the traditional Confucian culture and Buddhist culture intermingled, and there appeared Hu bed¹, couch² and other sitting utensils. However, due to the distinct social classes in China, the aristocracy generally only used them on special occasions, such as court meetings and sacrifices.

In the Song Dynasty, with the prosperity of culture, handicraft industry, commerce, etc., the types and uses of sitting ware further expanded, and then appeared to study and tea room as the main place of use, such as embroidery garden stool, porcelain garden stool, etc. Among them, the most representative is the porcelain garden stool, which is endowed with the ceremonial characteristics of the upper and lower ranks in the royal aristocracy.

In literati porcelain garden stool decoration and elegant show, is affected by the literati aesthetic culture; porcelain garden stool used by the common people is simple and simple. Whether it is material selection or decoration, it mainly focuses on practicality.

In the modern period, China began to vigorously develop its modernization, and great changes took place in Chinese culture and way of life. People pay more attention to health and comfort, and many people choose furniture such as sofas.

1.3 History and development of porcelain garden stool

The embryonic period of porcelain garden stool appeared in Song Dynasty. At that time, the ruling class valued literature over martial arts, which improved the handicraft technology and aesthetic level, thus creating the elegant and simple

1.hu bed is a traditional bed in ancient China. It is usually made of wood, with two supports and a number of crossbars, and is covered with a bed and bedding. Hu bed is characterized by low, simple, good air permeability, suitable for summer use. In ancient China, Hu bed was a common sleeping tool, especially in rural areas in southern China, until modern beds gradually replaced it.

2.A couch (ta) is a traditional piece of furniture, usually made of wood. It is similar to but lower than a bed, usually only one or two feet high, and has no legs. The bed is covered with a bed, quilt and pillow on which people can lie to sleep or rest.

decorative side of porcelain garden stool. And because of the development of commerce in Song Dynasty, porcelain garden stool also appeared in the court noble, literati elegant gathering and market life. At that time, the royal family advocated the creation concept of advocating simplicity and opposing luxury, so the porcelain garden stool rarely saw flamboyant decoration. The garden stool decorative elements are using abstract geometric patterns, such as circle, back pattern, lotus pattern, etc., the main decorative techniques have relief decoration.

During the Ming and Qing Dynasties, porcelain garden stool ushered in a new stage of development and prosperity. In addition to the improvement of domestic social productivity, foreign trade activities became more frequent, ceramics played a stronger role in the cultural exchange between China and foreign countries, and the porcelain industry in Jingdezhen area gathered. In the early Ming Dynasty, Zudan only distinguished crown prince, prince and prime minister by color and embroidery decoration, and expanded to include more than three civil servants and four military officials during banquet." It can be seen from it that it is a kind of seat with grade distinction. Different positions sit on different garden stools because of different status, to show the grade distinction. In the late Qing Dynasty, due to its widespread use, various boundaries blurred and disappeared, porcelain dun was widely used in the upper society such as the court, bureaucrats, literati and merchants, and ordinary people sometimes used porcelain dun as a seat. In addition to being a seat, it also serves as a primary function of furniture, widely popular in social strata and various scenes. This period of techniques according to the color can be divided into blue and white³, five or more color⁴, pastel⁵; According to the process, can be divided into Mosaic, engraving, hollow, pile plastic, opening light⁶, etc.; According to the subject matter, it can be divided into plants, animals, customs, customs and so on.

The period of the Republic⁷ of China was a period of decline in porcelain garden stool production. Due to the war in China at that time, kiln factories were

³Blue and white decoration usually uses cobalt oxide as the pigment, which is applied to the surface of porcelain and then fired at high temperature to combine it into a blue color. Because of the transparency of the glaze and cobalt material of different shades, blue and white tones also have shades.

⁴Five or more colors are used for painting, mainly red, yellow, green, blue, purple and so on. The technology emerged in the Tang Dynasty, and the Song and Yuan Dynasties saw the heyday of colorful porcelain.

⁵Pastels, also known as "foreign colors", are painted with powdery pigments on porcelain. The main feature of pastel porcelain is the use of elegant colors, soft and delicate picture, with a strong feminine atmosphere. Painting techniques often use the combination of "dot method" and "line carving method", with dipping in paint pen dots or carved fine lines to depict flowers, birds and insects, Figures, landscapes and other patterns.

⁶In ceramic production, "opening light" can also refer to a surface decoration technique. Its basic principle is to draw a border on some specific positions on the surface of porcelain, and then fill the border with pigments. After firing, the surface of porcelain will appear a flash and transparent effect, increasing the decorative effect and artistic value.

⁷The term "founding period" usually refers to the period after the founding of the People's Republic of China, from 1949 to 1976. This period was an important one in Chinese history, which saw many major political, economic and social changes. During this period, China carried out a series of policies and movements such as

destroyed. Although domestic kiln factories began to rebuild in the later period, the products were mainly made of daily porcelain. Traditional culture and art forms have been impacted and challenged unprecedentedly. In the new era, porcelain garden stool production is mostly mechanized, and the processes such as blank drawing and color filling are completed by machines, which cannot be reflected in some traditional manual techniques. The usage and market demand of porcelain garden stool are gradually decreasing. On the one hand, porcelain garden stool can only be treasured as cultural relics by some collectors, museums and cultural institutions, or in some niche markets. Such as personal collections, antique markets are sold and traded. In the recovery stage, although there are some innovations on porcelain garden stool, it is only a change in the form, indicating that his predicament is also being paid attention to by the current time.

1.4 Innovative design to solve the declining situation of porcelain garden stool

The specific reasons for the decline of porcelain garden stool are as follows:

1.4.1 Changes in social background: External causes: porcelain making technology is spread, foreign competitors master mature porcelain making techniques, such as Germany, Britain, Japan and other countries master mature color porcelain making technology, and the products are closer to the market and more popular in the local market; In addition, foreign investors use machinery to manufacture porcelain, especially the use of mold, grouting molding and other advanced large-scale production technology, greatly improve the production efficiency and production level; The successful development of chemical pigments, used to replace real gold and mineral pigments, greatly reducing the cost of raw material production; Foreign porcelain production mainly uses coal burning, using ship transport, lower cost into China, low tariff advantages, so a large number of western porcelain into China, dumping impact on the domestic market. Internal reasons: Jingdezhen handmade porcelain cost is high, many links, low efficiency, relatively backward mechanization level, low competitiveness, resulting in foreign goods occupy the domestic market, but also lost the international market, can only produce crude porcelain or antique crafts porcelain income; Moreover, in the late Qing Dynasty, the authorities restricted the mining of high-quality kaolin⁸ in Jingdezhen, and the raw materials came from low quality porcelain clay in other places, with low quality and high price. At a time of domestic political instability, there are many tax cards. In addition, in the late Qing Dynasty, due to frequent wars, the royal kiln factory was destroyed, the civilian kiln suffered a blow, and the porcelain industry suffered a heavy blow. The decline of

land reform, industrialization, and the Great Ideological and Cultural Revolution. These events had a profound impact on the development of China's modernization.

8.Kaolin is a fine powder containing kaolinite, which is one of the commonly used ceramic materials. Kaolinite is a silicate mineral, mainly composed of silicon dioxide and aluminum oxide, with high melting point and thermal stability, so it is widely used in ceramic manufacturing

porcelain garden stool, due to the destruction of the kiln, the loss of excellent ceramic workers, the production of exquisite large pieces is difficult to continue, leading to the decline in quality, and no price advantage, resulting in market demand shrink, porcelain garden stool production gradually decreased, large production is difficult, high price, until the Republic of China. Porcelain garden stool production number began to decline. After the founding of the People's Republic of China, although Jingdezhen Kiln factory was restored in the period of foreign exchange learning, porcelain dun began to turn into modern furniture because it did not meet the market demand and was difficult to meet the market taste. Obviously, porcelain dun could not adapt to the modern social development and gradually became a minority furniture variety people.

1.4.2 Changes in consumption behavior and aesthetics: At present, the traditional porcelain garden stool with single function is no longer applicable in modern home decoration. The porcelain garden stool has achieved good development and performance in the traditional Chinese society because of the organic combination of decorative aesthetic and practical function, but the modern society's aesthetic is quite different from the traditional society. On the one hand, the diversified aesthetic, Chinese people in the process of facing modernization and globalization, On the other hand, the fast pace of modern life makes it difficult to adapt the decorative techniques in traditional culture, and the design concepts and products are constantly renovated. People's aesthetic appreciation and consumption are closely related, so it is difficult for traditional decorative techniques and elements to keep people interested for a long time. Therefore, in the face of the world of consumerism, the fast pace of life and the rapid change of aesthetic taste, porcelain garden stool becomes old and boring and loses people's love. While porcelain garden stool is rarely seen in today's real life, it is also rare to see new design and decoration techniques, without breaking through the limitations of tradition and without a fresh and refreshing feeling. It is difficult to arouse the public's interest and consumer desire, and people are more inclined to buy products with stronger functions and more modern shapes to meet the diversified purchase needs of modern people. Due to the relatively fragile material, large weight, porcelain garden stool is not easy to handle and use, so its application scope in modern life is relatively narrow. Therefore, the use value of porcelain garden stool as a traditional seat has not been retained and applied in modern society.

Therefore, my innovative design is based on the concept of material culture, studying the value existing in the traditional identity of porcelain garden stool, combining it with the new needs of modern new consumer groups, trying to carry out various innovative ideas from the aspects of new materials and new forms, looking for a new way to carry forward and inherit it, and finally producing products that can meet the new needs of new consumer groups.

2. Purpose of Research /Objective

2.1 To study the historical development and function of porcelain garden stool in Chinese traditional life scene from the perspective of material culture.

2.2 To study the traditional identity and value of porcelain garden stool from the dimension of artwork.

2.3 To study the development process of innovative design of porcelain garden stool.

2.4 To create the innovative design of porcelain garden stool in the process of Chinese modernity.

3.Research Question

3.1 How did the change of times and environment influence the development of this special porcelain garden stool?

3.2 In ancient China, as a kind of material culture in traditional society, porcelain stool has what traditional identity and value?

3.3 In the development of innovative design of porcelain garden stool, which traditional identity of porcelain garden stool is combined with modern needs?

3.4 How to carry out innovative decorative design of porcelain garden stool in the aspects of scene application, artistic expression, function upgrading and technology application, so as to integrate porcelain garden stool into the modern daily life of Chinese people.

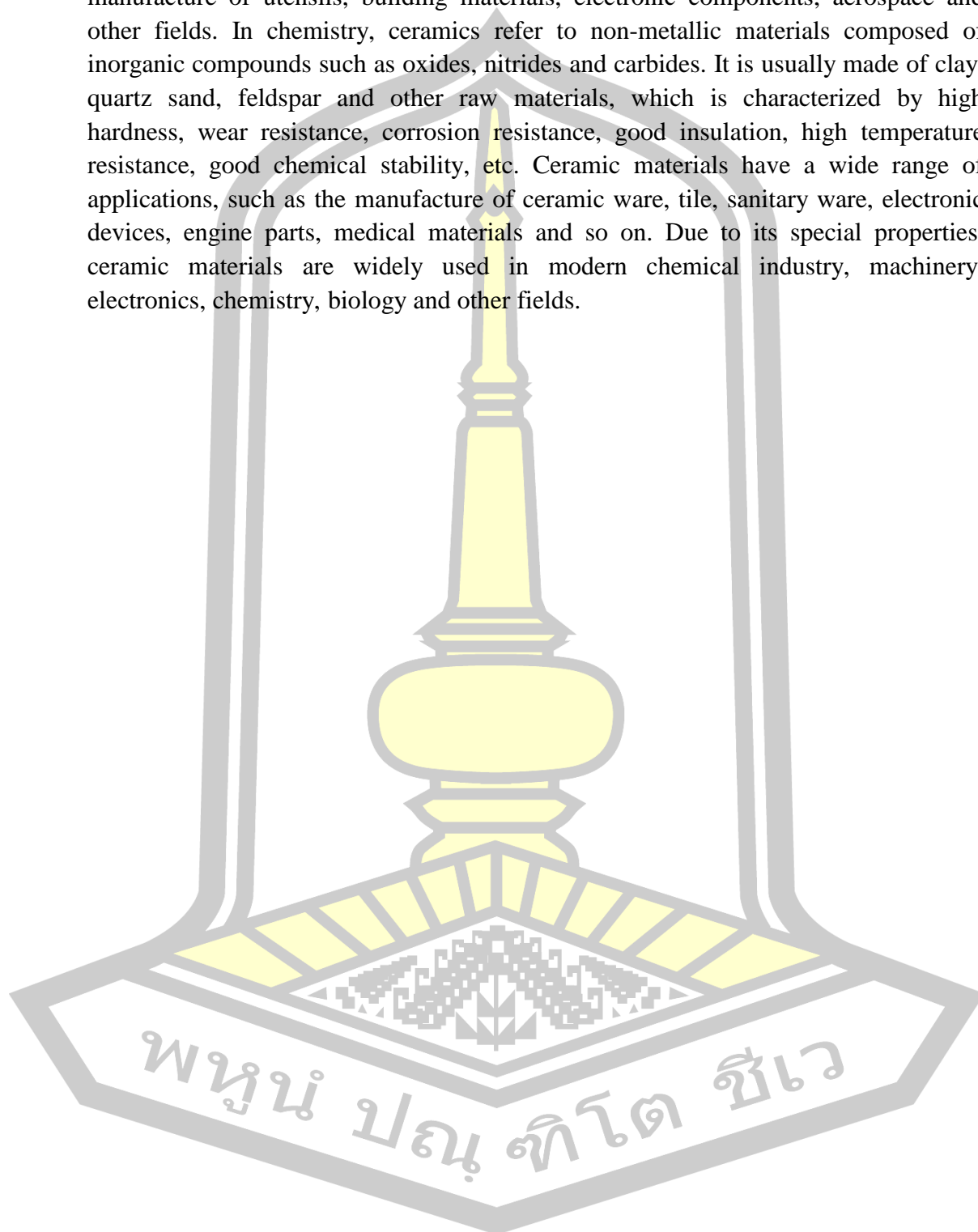
4.Definition of Terms

4.1 Culture identity

Cultural identity refers to a person's identification and sense of belonging to his cultural identity. It is the embodiment of people's understanding, acceptance and identification of their own culture. Cultural identity usually includes factors related to race, ethnicity, region, gender, sexual orientation, religious belief, language, customs, historical traditions and so on. Cultural identity has an important impact on individual identity, emotion, value and behavior. It can have an impact on a person's lifestyle, social circle, marriage choices and more. At the same time, cultural identity can also shape the collective consciousness of a community or country, bringing social cohesion and sense of identity. Nowadays, with the acceleration of cross-cultural communication and internationalization, the problem of cultural identity has been paid more and more attention. How-to live-in harmony with other cultures while maintaining their own cultural characteristics has become a global topic.

4.2 Ceramic material

Ceramic is a kind of inorganic non-metallic material widely used in the manufacture of utensils, building materials, electronic components, aerospace and other fields. In chemistry, ceramics refer to non-metallic materials composed of inorganic compounds such as oxides, nitrides and carbides. It is usually made of clay, quartz sand, feldspar and other raw materials, which is characterized by high hardness, wear resistance, corrosion resistance, good insulation, high temperature resistance, good chemical stability, etc. Ceramic materials have a wide range of applications, such as the manufacture of ceramic ware, tile, sanitary ware, electronic devices, engine parts, medical materials and so on. Due to its special properties, ceramic materials are widely used in modern chemical industry, machinery, electronics, chemistry, biology and other fields.



4.3 Chinese traditional

Chinese traditional refers to Chinese traditional utensils. The porcelain garden stool in the text of this paper is one of the traditional Chinese utensils. Traditional Chinese utensils refer to those widely used or regarded as having cultural or historical value in Chinese historical and cultural traditions. They have rich cultural connotation and historical significance, is an indispensable part of the treasure house of Chinese culture.

5. Innovative design

As a traditional Chinese utensil, porcelain garden stool has become obsolete and gradually withdrawn from people's daily life in the face of rapid changes in lifestyle. The transformation is necessary. Therefore, activating innovation has become a possible path. The key point of activating the innovative concept is to revitalize it through innovation. Daily life and its way of life are both the research basis and the research background of porcelain garden stool. Porcelain garden stool is created and developed from daily life. Therefore, through the innovative application of materials, technology and other aspects in porcelain garden stool design, in order to integrate porcelain garden stool into modern daily life and as a part of lifestyle, It is the possible path and specific method to achieve this goal.

5.1 Material culture

Material culture refers to the cultural activities of human production, use and consumption of material products, which is one of the important aspects of the development of human civilization. Material culture includes a series of material products and tools such as material cultural relics, architecture, handicrafts, clothing, food, transportation and communication equipment, as well as the non-material culture related to them, such as beliefs, values and aesthetics. It reflects the characteristics of people's social and economic life style, technical level, cultural tradition and historical evolution. Different cultural backgrounds and regional environments have produced distinctive material culture. By studying material culture, we can understand the development process of human society and cultural inheritance, and also find the value of cultural diversity and cultural exchange.

5.2 Porcelain garden stool

Also known as embroidered garden stool and cool stool. Because it is mostly drum-shaped, it was also called drum stool and porcelain drum in the old days. Porcelain garden stool. Have a long history. The porcelain garden stool production flourished in the Jiajing⁹ and Wanli¹⁰ dynasties of the Ming Dynasty, with a variety of

⁹The Jiajing Period is a historical period of the Ming Dynasty, from 1521 to 1567, a total of 47 years, is one of the important periods in the middle of the Ming Dynasty

¹⁰Wanli Period is a historical period of the Ming Dynasty, which lasted for 48 years from 1572 to 1620. It is an important period in the middle and late Ming Dynasty.

varieties and different decorations. It is the most personalized seat in the ancient Chinese stool family.

5.4 The process of Chinese modernity

This article refers to the modernization process of traditional ware porcelain garden stool, including the modernization of ideas and policies. The concept of modernization refers to that ceramics have played an important role in the modern economy. The traditional handmade ceramic production has been replaced by mechanized and automated production methods. With the progress of science and technology and the improvement of manufacturing process, modern ceramics have higher quality, richer types and wider applications. For example, ceramic materials are widely used in aviation, aerospace, automobiles, electronics and other high-tech fields, with good insulation, high temperature resistance, corrosion resistance and other advantages. The applications of modern ceramics extend far beyond traditional tableware, vases and other ornaments. Its design is more diverse, focusing on innovation and personalization. Designers have created a variety of novel shapes, patterns and colors to make ceramic products more fashionable and artistic. Policy modernization refers to the process of a country or region gradually realizing modernization through the efforts of economy, politics, culture, science and technology and other aspects.

6.Scope of Research

6.1 Research area

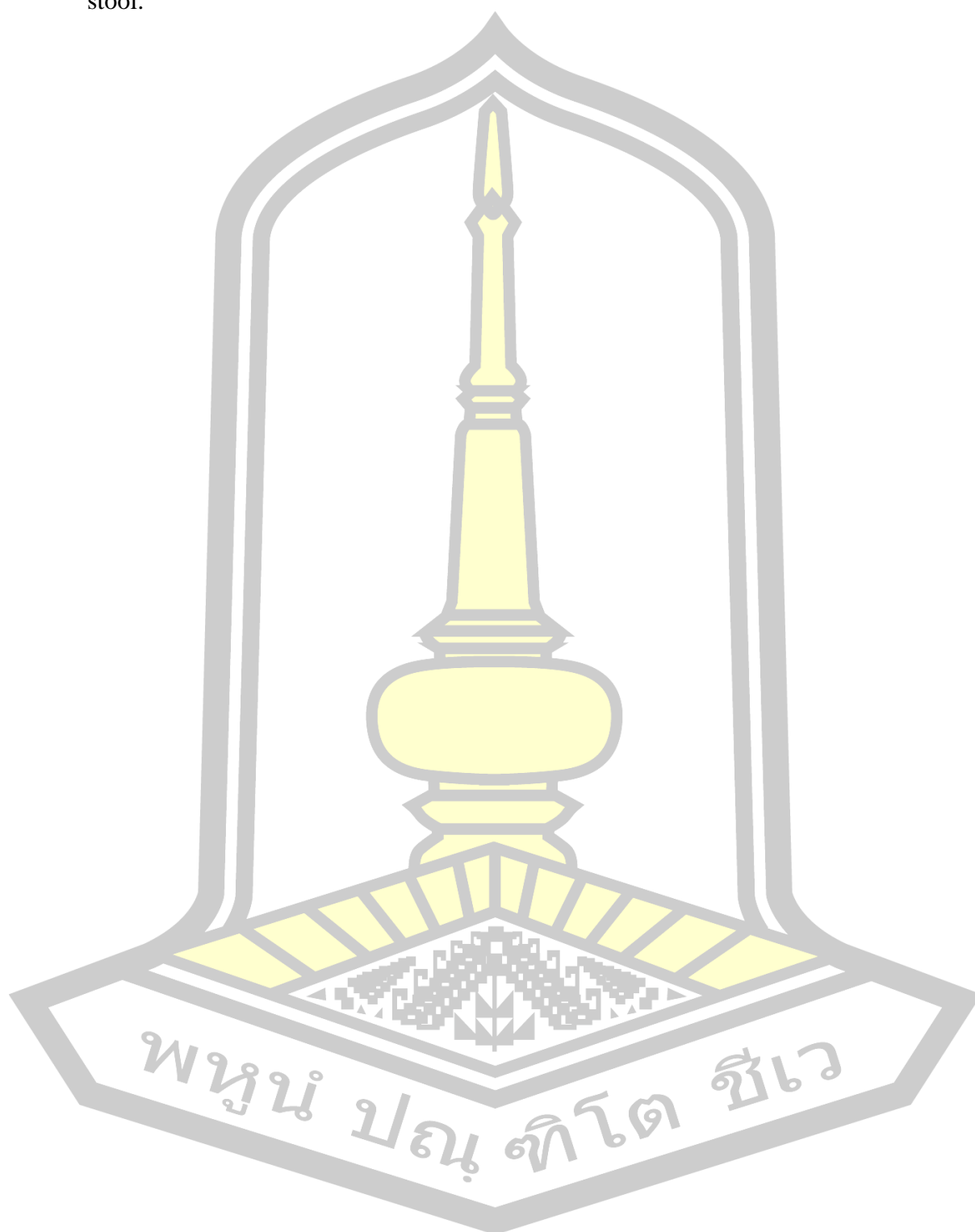
The activated innovative design in the context of modern China's daily life. Under the background and conditions of modern life, science and technology, and aesthetics, the research area of this paper is to absorb and integrate the decoration and design methods and techniques of traditional porcelain garden stool by applying the theories and methods of art and applied art, and to innovate the decoration and design of porcelain garden stool. From the cultural dimension:

6.1.1 The current situation of porcelain garden stool: as a traditional Chinese utensil, porcelain garden stool has faced the transformation of life style and the development dilemma since modern times. The main reason is the change of context that porcelain garden stool faces, namely, the modern life style;

6.1.2 Design direction: Modern daily life is the environment and background of innovative design research on porcelain garden stool. The problem to be solved in this study is to make porcelain garden stool. Acceptable to people again through innovative design, enter and integrate into people's daily life;

6.1.3 Innovative methods: through in-depth observation and analysis of modern daily life, provide the basic data and original information required for design, observe and summarize the existence value of porcelain garden stool from the cultural

dimension, and find the correct method for the innovative design of porcelain garden stool.



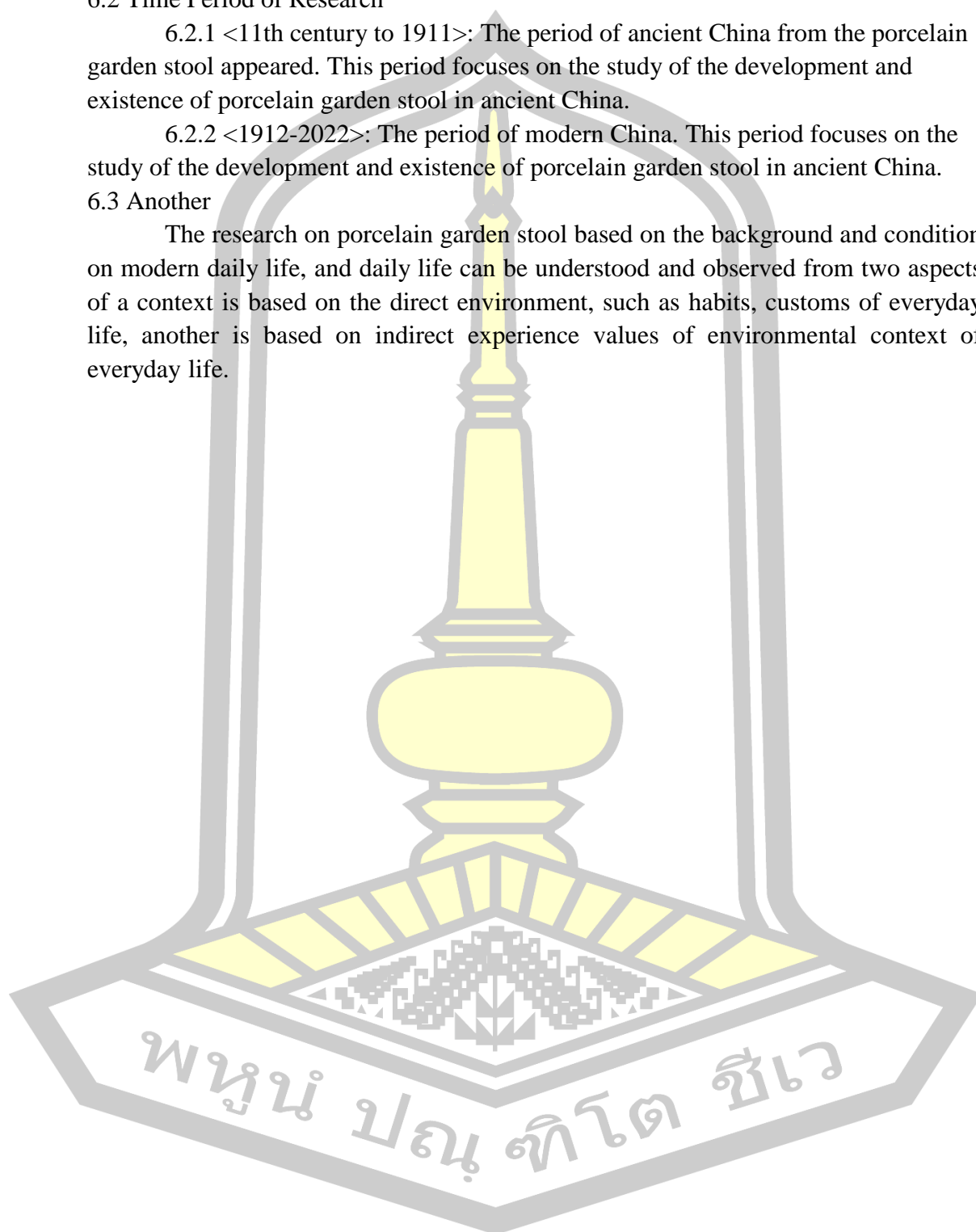
6.2 Time Period of Research

6.2.1 <11th century to 1911>: The period of ancient China from the porcelain garden stool appeared. This period focuses on the study of the development and existence of porcelain garden stool in ancient China.

6.2.2 <1912-2022>: The period of modern China. This period focuses on the study of the development and existence of porcelain garden stool in ancient China.

6.3 Another

The research on porcelain garden stool based on the background and condition on modern daily life, and daily life can be understood and observed from two aspects of a context is based on the direct environment, such as habits, customs of everyday life, another is based on indirect experience values of environmental context of everyday life.



7. Research Methods (Summary)

7.2 Population and Sample

Table 1 : Population and Sample Source: Drawn by Danxi Luo, 2024

Type	Ceramic artists and traditional culture experts	Master of arts and crafts, potter	Product Designer	Customer Group
Information collection	<p>1. Research on porcelain embroidered Garden stool in Ming and Qing Dynasties;</p> <p>2. History of Chinese Ceramics;</p> <p>3. Aesthetic connotation of porcelain garden stool;</p> <p>4. Reasons for the gradual disappearance of porcelain garden stool in social life;</p> <p>5. The origin of embroidery garden stool;</p>	<p>1. How to innovate Jingdezhen traditional ceramic garden stool in terms of technology and material application;</p> <p>2. Innovative technology application of traditional ceramic materials;</p> <p>3. How did ceramic materials transform in the process of modernization in China? How are synthetic materials applied in ceramic art creation?</p>	<p>1. Functions of modern furniture, such as the use of chairs, ergonomic factors, comfort and so on.</p> <p>2. The material selection of the chair is important to the appearance and service life of the chair</p> <p>3. Use 3D models and renderings to help you better understand the appearance and dimensions of the chair and to optimize the design.</p>	<p>1. Comfort, long travel and fatigue may make them need a product that can relax and rest;</p> <p>2. Beauty: Usually like beautiful, tasteful products, therefore, the design should be attractive, in line with the fashion trend.</p> <p>3. Size and height: It's also important to fit the size and weight of a chair that fits the body of a tourist, who is usually slightly smaller than a Westerner.</p> <p>4. Materials and quality: Tourists are willing to pay more for durable and high-quality products.</p> <p>5. Brand and cultural significance: pay attention to the brand and cultural significance represented by the product, therefore, Chinese cultural elements need to be added.</p> <p>6. Price: Chinese tourists may consider price, but it is not the most critical factor. They may be more willing to pay more for high-quality and culturally significant products.</p>

7.2 Instrument

7.2.1 Record book for fieldwork, drawing, measurement, etc...

7.2.2 Interview questionnaire

7.2.3 Tools for recording audio and video, namely cameras and camcorders.

7.3 Data Collection

7.3.1 Field survey data collection

This study mainly collects data through interviews, field visits, surveys and group discussions.

Interview method: Through interviews with traditional culture researchers, consumers, pottery workers, product designers, etc., and furniture factory workers, through them to understand the historical origin of traditional history, the cultural significance and class expression of each historical period represented by porcelain garden stool, understand the production process of lamps and seats, and think about how to combine ceramic materials with modern materials. To innovate the function and shape of traditional ceramic garden stool, and to understand consumers' cognition of traditional porcelain garden stool, as well as their views on modern furniture in terms of function, appearance, price, etc., and to collect suggestions on the design of function and shape of porcelain garden stool through sample display.

Field investigation method: By going to furniture factories, museums, exhibitions, ceramic workshops, field investigation of the manufacturing process of Jingdezhen antique embroidery garden stool, explore the manufacturing process and process of porcelain garden stool in Ming and Qing dynasties, search for new design elements in various exhibitions, understand the materials required by the furniture production process, and make sure whether it can be combined with ceramic raw materials.

Method of investigation: By investigating the users who currently use porcelain garden stool, we can understand their satisfaction with the user experience, performance, appearance and other aspects of the product, as well as the direction and demand they hope to improve the product, understand the types, characteristics, sales, prices and other information of existing porcelain garden stool products on the market, and find the breakthrough point of innovation. To understand the existing technical level and problems in the manufacturing process of porcelain garden stool, explore new materials, new technologies and new processes to improve product performance and reduce cost. The production process of porcelain garden stool has an impact on product performance, appearance and cost, understand the limitations and problems of the existing production process, and explore new processes and improvement measures.

Group discussion method: Invite production factories, designers, ceramic workers and cultural researchers to discuss the usage scenarios, target users and functions that the product should have, such as product comfort, stability, adjust ability, load-bearing capacity, etc. Discuss the design style from the perspective of market demand, brand style and target users, and discuss the use environment and

target users of the product. Select suitable materials, such as wood, metal, plastic, etc., and discuss the cost, sustainability and service life of the materials. Discuss the manufacturing process and production technology, including mold manufacturing, raw material procurement, processing, assembly and quality control. Discuss cost, profit and pricing strategies, including raw material costs, manufacturing costs, labor costs, transportation costs, market positioning, etc. User feedback and market trends can be shared and discussed to better understand market and user needs.

Literature collection data

Collection of documentary data at libraries on porcelain garden stool, reference to textbooks, book libraries, e-libraries, individual studies and articles on porcelain garden stool.

Data Analysis

Through the collected information, the combination of modern scientific and technological means and ceramic raw materials can be obtained from the information given by the ceramic craftsman, what will be the benefits and what will be the problems. From the hands of consumers, we can learn whether the innovative products can meet the needs of the current era. We can learn from furniture designers what improvements can be made in the function of porcelain garden stool as furniture.

7.4 Research presentation

7.4.1 Full paper of research: To present by descriptive analysis writing and combined the pictures and diagram.

7.4.2 Design a set of products

7.5 Literature Review

The research on porcelain garden stool, first of all, has not attracted much attention. Porcelain garden stool is relatively small among traditional Chinese artifacts, and more often appear in gardens or courtyards. Its material also determines its characteristics of heat relief, and climate has become its limiting condition. At present, most of the research on porcelain garden stool focuses on the tracing, decoration, and style of porcelain garden stool. Secondly, the research on porcelain garden stool focuses on the background of modern life, especially the innovative design and application of porcelain garden stool are almost nonexistent.

According to the collection and arrangement of existing documents, the documents related to this study can be divided into four categories:

7.6 History and decoration of porcelain garden stool

As one of the traditional Chinese porcelain and furniture, porcelain garden stool appeared in the Song and Yuan Dynasties and flourished in the Ming and Qing Dynasties. It is a special utensil with both decoration and utility. In modern times, the development of porcelain garden stool has gradually stagnated, with no significant innovation in decoration design and still stuck in the traditional rut. In practical application, it has also been impacted by modern life and gradually separated from people's daily life. The application scenes and realistic demands highlight the

development dilemma of porcelain garden stool. This reflects that porcelain garden stool have not developed in step with modern aesthetic technology, but the development history of porcelain garden stool has proved its good adaptability and space for expression (porcelain garden stool are not absent from every innovation and progress in decorative design of porcelain). Therefore, to reflect on the modern and modern development of porcelain garden stool, on the one hand, we need to think deeply about the reasons for its stagnation, and on the other hand, it just shows that porcelain garden stool, as traditional utensils, have a huge space for innovation and expression in modern life, which is worth exploring. Under the background and conditions of modern life, science and technology, and aesthetics, it is of great significance to absorb and integrate the decoration and design methods and techniques of traditional porcelain garden stool, and conduct innovative research on the decoration and design of porcelain garden stool.

From the perspective of history. Chen Pengnian, Qiu Yongzheng's *Guangyun*, Ding Du's *Jiyun*, Dai Dong's *Six Books of the Southern Song Dynasty* and Li Jie's *Creating a French Style*, Lu You's *Notes on the Laoxue Temple* and other historical books recorded different woodworking tools and production processes in the Song Dynasty, providing technical support for the production of the sitting block in the Song Dynasty. In the Song Dynasty, Chen Yu wrote the *Records of the Southern Song Dynasty Pavilion*, (Yuan) Tuotuo's *History of the Song Dynasty*, (Yuan) Ding Wei's *Biography of the Song Dynasty*, (Yuan) Gou Tao's *Biography of the Song Dynasty*, (Song) Fan Chengda's *Official Records of the Song Dynasty*, (Song) Fan Chengda's *Hengzhi of Guihai Yu*, and (Song) Da Song Xuanhe's *Legacy Collection*, which objectively recorded the users, use scenes, and decorative features of the sitting garden stools in the Song Dynasty from the perspective of history, providing an objective basis for tracing the origin of the porcelain garden stool from the perspective of history.

From the perspective of painting in the Song Dynasty. When studying the decoration of sitting garden stools in the Song Dynasty, the written materials have great limitations. The overall style of painting in the Song Dynasty is more realistic, which provides an important Source of information for the research. The shape, structure, material and decoration of the sitting garden stool in the Song Dynasty are clearly shown in the paintings of the Song Dynasty, such as the "Bamboo Forest Qinghua Painting", Liu Songnian's "Eighteen Scholar Painting", "Tea Chasing Painting", "Sitting Painting", "Filial Piety Sutra Painting", "Moon Night Viewing the Tide Painting", "Wen Hui Painting", "Autumn Court Baby Play Painting", which provides a basis for the study of the sitting garden stool decoration in the Song Dynasty.

From the perspective of archaeological relics. The Song Dynasty has a long history, and it is difficult to retain the physical objects. The lacquer ware unearthed from the Southern Song Tomb in Changzhou, Jiangsu Province, has a sitting garden stool painted on its cover, and its manufacturing materials, shape and structure are

clearly visible. A sitting garden stool is painted on the southwest wall of the rear chamber of Han Shixun's tomb in the Liao Dynasty in Xiabali, Xuanhua, Hebei Province. The decoration is not clear, but its shape is roughly visible. During the archaeological investigation and trial excavation of Jizhou kiln, Jiangxi Provincial Institute of Cultural Relics and Archaeology found fragments of green glazed porcelain garden stool. Of the Song Dynasty, decorated with drum nails. Although the archaeological relics are incomplete, they provide support and evidence for the study of the origin of porcelain garden stool decoration from the perspective of "picture text history".

Zhu Liang analyzed the reasons for the rapid rise of porcelain embroidery garden stools in the Ming and Qing dynasties in the article "Analysis of the Origin, Classification and Aesthetic Connotation of Porcelain Drum Garden stools": "There are three reasons: first, the furniture technology of the Ming Dynasty was further developed and innovated on the basis of inheriting the Song and Yuan dynasties. Second, after the middle of the Ming Dynasty, capitalism sprouted, and porcelain was exported in large quantities, which stimulated the rapid maturity of porcelain making technology and made the integration of porcelain and furniture more closely. Third, the status of drum garden stools increased a lot during the Ming and Qing dynasties. The specification of drum garden stools in the Song Dynasty was lower than that of the bench... 'embroidery garden stools in the Ming Dynasty were also widely used by the upper class' (Li Zongshan, *The History of Chinese Civilization, The History of Furniture*). Porcelain garden stool. Can be gradually popularized because of their bright and clean materials and elegant glaze tone, which make them show a strong and elegant temperament and meet the aesthetic tastes of scholars and scholars. " There are two representative points of view in the research paper on the function of embroidery.

Wu Meifeng analyzed in "The emperor is as high as the sky, and the minister is as low as the earth -- the rising and sitting room in the Ming Dynasty palace" and "The classification of small seats -- embroidered garden stool and bench": the Ming Dynasty crown prince, prime minister and officials of more than one grade are given embroidered garden stool to sit, but the decoration is different. The use of sitting garden stool during the banquet given by the great court meeting extends to the third grade of civil officials and the fourth grade of five features in the Ming Dynasty palace. The Song Dynasty's literary officials, military officials, and royal families can only be distinguished from each other by their seats: the prime minister and the envoy sit on the embroidered garden stool, while the rest sit on the Pudun.

Wu Meifeng believes that embroidered garden stool is a kind of seat with hierarchical distinction. The garden stool for different official positions is also different, and the decorative patterns of the same seat are also different. The position of embroidery garden stool is also different in different periods.

Wang Xiaotang and Wu Zhizhi believed in "The Evolution and Form of Embroidery Garden stool and Its Relationship with Ancient Women" that

"Embroidery Garden stool is a seat exclusively for women", and "The decorative patterns of Embroidery Garden stool indirectly transmit ethical education and ethical norms to women. This makes women understand their social position, understand their responsibilities, and be content to be bound by feudal ethics."

What are the differences in the functions of embroidered garden stool in different periods? It needs to be further explored in combination with historical conditions.

As one of Chinese traditional porcelain types, porcelain garden stool is a niche, and in research materials in Chinese ancient times, its appearance is rare than other types, even though in modern research material, it is also gradually exits in modern life. It is worth noting that most of the researches on porcelain garden stool have taken place in China, which is closely related to its special application scenarios. In addition, the research on porcelain garden stool itself is rare, and is more concerned and mentioned as part of the research on utensils and porcelain.

Throughout the research on porcelain garden stool, most of them focus on the perspective of their origin, decoration and historical development. For example, Li Lunpeng conducted a comprehensive combing and research on the Ming and Qing dynasties porcelain garden stool (2020, Master's thesis of Zhengzhou University), and Yang Wenbo conducted comprehensive research on the Song Dynasty sitting garden stool. There are many researches on porcelain garden stool from the perspective of Traditional Chinese furniture. For example, Tian Jiaqing introduced and analyzed embroidery garden stool, the predecessor of porcelain garden stool (1990, furniture). Jiang Meining analyzed the artistic characteristics and cultural connotation of Chinese traditional garden stool (2013, Youth Years); porcelain garden stool and their predecessors often appear in ancient Chinese paintings. Therefore, the porcelain garden stool in the paintings are decorated, shaped, and analyzed in terms of their development and changes. For example, Lin Xiuyuan and Yan Xiaoxing analyzed the embroidery garden stool from the analysis of the furniture decoration modeling in Han Xitai's Banquet picture (2020, Art Education Research). Due to the porcelain characteristics, porcelain garden stool can be preserved for a long time, so they can often be discovered and studied in archaeology and cultural relics. For example, Du Xiaojun analyzed imperial porcelain garden stool of the Southern Song Dynasty through celadon specimens in archaeology (2020, Collectors). It is worth noting that the research on modern design innovation of porcelain garden stool is very rare, which also shows the objective fact that people pay little attention to it. When porcelain garden stool appears as traditional furniture, its function and shape are mentioned and applied. For example, Wang Hui (2015, Design) summarized and applied the unique modeling characteristics of porcelain garden stool from the application of Ming style furniture design elements in modern product design. In addition, porcelain garden stool appears in a large number of cultural relics atlas, collection album, archaeological data, etc., which are important historical data for the

study of their decoration and shape, and constitute the image literature for the study of porcelain garden stool.

As a unique type of Chinese traditional furniture and porcelain, the research and attention on porcelain garden stool is not enough, but it is daily utensils in the life of Chinese people in history, as the research content, analysis of porcelain garden stool block out of the research has not yet found the Chinese daily life, but the demand for modern daily life scenes are more in the field of theory and design research, and to deepen and expand the scope of cultural studies.

Research on design theory and design innovation

The progress of society has gradually improved people's living standards. The progress of industrial technology and the change of lifestyle have accelerated the design and production of products. Therefore, people have put forward higher requirements for the products they use. The design theory and design innovation are also constantly pushing out new ideas, and the design concept is also constantly changing to adapt to diverse and changing needs. Therefore, this study seeks the design direction and ideas from the design theory and design innovation methods that have a good combination with porcelain garden stools. Some design theories and design innovation methods are summarized as follows:

7.2.1 "Redesign" theory and method of products: "Redesign" is the theme of a cross-cultural design innovation and promotion activity initiated and hosted by the famous Japanese designer Mr. Harahara. "Design for environment a method for formulating product end-of-life strategies" mainly uses the environmental design method to develop product life cycle strategies and analyze the current product scrapping practices. "Design, design, and design an overview of Standard's center for design research" is about the design, current practice, development of emerging technologies, and graphic design education courses that span a wide range of topics. In the article "Make in China", it is difficult for Chinese design to enter their vision as a theoretical form. They usually regard China's product design as a potential huge market and a rapidly developing industry, that is, they look at it with a more "practical" attitude, but are not interested in China's design theory. The reason may be that China's design theory research has no reference for them, or that the theoretical system and evaluation criteria of foreign design art theory and Chinese design art theory are not the same.

Relevant research in China, such as "Research on Product Redesign of Living Room Modular Cabinet Furniture", "Furniture Design: Product Innovation Redesign Based on User Experience", "Perfect Combination of Artistic Form and Function - About Product Redesign", "Re-recognition of Product Design", "Thinking of Humanistic Environment in Design Life - Fashion and Aesthetics of Design Products", The first three papers mainly focus on the redesign of the influence of appearance on users. The latter two are mainly about the discussion of China's current design ideas. Redesign, written by Wang Shaoqiang, leads us to discuss what is "new", what is "new design", and how to make "new design" from the perspective of

creativity and perspective, from the aspects of product design, graphic design, and dialogue design masters.

7.2.2 Function-oriented innovative conceptual design: Function-oriented innovative conceptual design is carried out around functions, and in the process of conceptual design, it is aimed at solving functions. The foundation of product innovation design is creativity, which is an ability contained in the human brain. The understanding of product innovative design has gone through three stages of development: the traditional innovative design focusing on description and description in the 1960s, the computer innovative design focusing on building mathematical models and using computers in the 1960s and 1990s, the knowledge-based information technology innovation stage in the late 1990s and the early 20th century, and the modern network collaborative innovative design stage based on virtual reality technology. Innovative conceptual design originates from two ways: one is user's needs. When users have a demand for a certain function but the actual product cannot meet it, it will make designers design new functions. Assumption refers to subjective judgment and deduction. Users or designers themselves do not put forward a certain demand, but in ordinary life, a certain idea for a certain product suddenly comes into being. Based on this idea, the assumption that prompted the emergence of new products and new functions can be divided into two kinds of purposeful assumptions, that is, when making this assumption, they hope to achieve a certain purpose without purpose, that is, when making this assumption, there is no clear purpose, Maybe just want to see what happens. However, no matter whether the proposed assumption has its purpose or not, it can be regarded as a design requirement. It is a purposeful activity of human beings, and the final result of this activity can be attributed to function. Therefore, the design starting point of conceptual design is function. Although the innovative conceptual design includes a series of design processes such as functional design, the principal design, structural design, etc., in the design process, functional design inevitably involves principle and structure, and the required functions can be obtained only through the determination of principle and general structure. Therefore, functional design is at the core and is the driving force driving the engineering design stage of the whole conceptual design.

7.2.3 Chinese traditional design thinking: the research of Chinese traditional design thinking in the field of design and creation is still in its infancy in China, especially in the field of design theory, the discussion of traditional design thinking has just begun , Many aspects are not mature enough, let alone the systematic nature of theoretical construction. Therefore, there are few existing achievements and materials on the research of traditional design thinking. Gao Chenyang's Research on Chinese Traditional Thinking Mode, published by Shandong University Press in, systematically explains the traditional thinking mode, but does not discuss it in combination with specific creation activities. Liu Changlin, Social Science Literature Publishing House, conducted an in-depth study of China's most important system thinking in the book "Chinese System Thinking - Cultural Gene Exploration" (2008),

and discussed it in combination with traditional Chinese medicine, agronomy, military science, art, science and technology, etc., but the relationship between traditional creation activities and traditional ways of thinking was rarely discussed.

Jin Danyuan's "History of Chinese Art Thinking" (2005), published by Shanghai Culture Publishing House, systematically studied Chinese traditional art from a multi-dimensional perspective, such as literary theory, poetry, folk art, novel painting, calligraphy, music, etc., but there was less discussion on design and creation. And the only paper that involves the traditional Chinese design thinking mode is the doctoral thesis completed by Hu Fei of the Academy of Fine Arts of Tsinghua University, "Smart adaptation of things - exploring the design thinking mode of ancient China from" gold ". This paper is based on Mr. Liu Guanzhong's" theory of things "as the basis of theoretical research, and carries out systematic research on the shape, structure, evolution process, etc. Of traditional Chinese metal objects, as well as the internal creation thought, its theoretical structure is worthy of reference; Li Congqin published "Chinese Character Thinking and Chinese Design Thinking" (2006.09) in the decorative magazine table. This article has carried out certain research on the generation and structure of Chinese image thinking and Chinese characters, and expanded it to introduce it into design creation. In addition, there are basically no more research documents and data.

7.2.4 Product aesthetic design: At present, scholars divide the main content of product aesthetic design into external beauty and internal beauty. External beauty constitutes the main part of product aesthetic value, including product shape, color, texture, packaging and sensory effect, while internal beauty mainly includes product functional beauty combined with technology, brand image, and intangible beauty bearing spiritual culture. Luo Junyun (1995) explained the application of aesthetics in industrial production and its products, clothing, interior design, furniture and other production, life and products, and believed that the practical, cognitive and aesthetic functions of products occupy different proportions in different products. Huang Jiangying (1998) believed that aesthetic products can be divided into products that give people pure spiritual enjoyment and practical products with aesthetic value.

Veryze (1993) believes that symmetry and contrast will be used more and more in design. Borjademozota (2003) believed that product aesthetics or design modeling does not exist independently, but is the result of design and closely linked with other attributes of the product. Berkowitz (1987) believed that the beauty of products comes from the harmony of many factors, such as proportion, rhythm, consistency, molecularity, order and imbalance. Jean Baudrillard, a French scholar, believes that consumption is no longer consumption of the use value of goods, but a symbol of identity and status. The structure, form, color, brand and other factors of goods become the carrier of social significance and status. Xu Hengchun (1995) divided the aesthetic forms of products into technical beauty, formal aesthetics and artistic beauty. Luo Junyun (1995) believed that the aesthetic value of a product, in addition to the beauty of the product's appearance and visual effect, is the functional

beauty directly reflected in the use value. The use value of the product precedes the aesthetic value, but the two are internally unified in the functional beauty, and the use value depends on the aesthetic value.

Hekkert (2006) put forward four basic principles of aesthetic pleasure in design: least deal with the maximum effect、 Diversity and unity、 The most advanced but acceptable、 Maximum match. Zhao Zuda (1998) believed that three issues should be paid attention to in the aesthetic design of commodities: the unity of aesthetic function and practical function, and the psychological acceptance ability under the cultural concept of consumers must be considered; The regional nature of commodity beauty: and traditions, customs and concepts; The popularity of commodity beauty is to constantly change and bring forth the new. Fan Zhengmei (2004) believed that there are four bases for practical aesthetic design: the need for practical aesthetic design, the nature of products and their adaptation, the formation of industrial product forms, and the possibility of consumption. "It should be noted that practicality is the basis, and aesthetics is the service of practicality. At the same time, aesthetics should not be understood as appearance unilaterally, but should run through the practical functions and structural performance of products."

7.2.5 Globalization and localization of design: with the process of economic globalization, the globalization of design also bears the brunt. Li Yali (2006) believes that design should have a "clear understanding" of the "curse of globalization" and "dangerous relationship", and the key to "solving the curse" is local culture and localization design. Li Yanzu (2006) believed that "globalization is a trend, and can also be used as a strategy and a tool for countries, industries and groups". Design "is faced with the major task of establishing a global design concept and establishing its own design principles and image". Ji Tie (2012) believed that "design can maintain the balance between local characteristics and globalization, and also contribute to the inheritance and development of regional culture". For Chinese design, the global perspective is an international perspective that should be possessed. Globalization and localization are both a pair of simultaneous contradictions, as well as two sides of the overall ecological symbiosis, and a dialectic of unity and difference. Globalization has moved global resource to local areas. Design knowledge, design dissemination and global cooperation have both promoted and impacted local design and local culture. Local design has moved from local to global through globalization, which not only makes design face a larger market, but also makes local culture prominent in global culture. Therefore, globalization should become a strategy of Chinese design, and the way to make globalization play a positive role is localization design.

"The change of contemporary design concepts, the redefinition of design, the cross-regional exchange of design, and the introduction of the concept of localized design are all related to the trend of globalization". Globalization is a kind of "de-regionization", and also promotes the emergence of "re-regionization", which is a counterweight to the "de-regionization" of globalization. "The critical regionalism represented by Mumford is a counterweight to the globalization of architecture"

design localization, which is essentially a means of intervention rather than a purpose. Ji Tie (2012) proposed a local design strategy that includes two aspects: "global localization" design to adapt to local consumption needs and cultural preferences, and "local globalization" to create a design that has both national and local characteristics and can participate in global market competition based on local cultural resource.

7.2.6 Reference for innovative design of porcelain garden stool:

The evolution history of ceramic style is not only a history of technology, but also a history of social culture, and so is porcelain garden stool. In the context of modern China, porcelain garden stool needs to be innovated and changed to meet the aesthetic and functional needs of modern China, especially to find the value of existence in the market of consumerism. The innovative design of porcelain garden stool can also need to actively seek reference from other designs. This study lists some meaningful innovative design ideas and possibilities as follows:

Porcelain garden stool as furniture: porcelain garden stool evolved from embroidery garden stool, and furniture is the most important symbol and function of porcelain garden stool. Therefore, in innovative design, porcelain garden stool as furniture can find inspiration and ideas from other modern furniture, and find new design ideas for the modern design of porcelain garden stool to adapt to modern China and modern lifestyle.

Porcelain garden stool as art or handicraft: The material of porcelain garden stool is porcelain. On the one hand, it has almost all the decoration methods of porcelain, and on the other hand, it may also be limited by the porcelain itself. However, with the progress of modern technology and material technology, porcelain garden stool can find space and possibility from modern art and modern craft in artistic expression and craft production, and expand space for the artistic and craft expression of porcelain garden stool.

Porcelain garden stool as platform: The shape of the porcelain garden stool is like a drum, with space in the middle, which provides a lot of possibilities for the innovative design of the porcelain garden stool. The porcelain garden stool is regarded as a platform, not just a seat or a work of art. For example, it can be turned into a sound, a lamp, or even a variety of equipment. It can become an interesting design platform. It will be a huge space for design innovation to give it the electrification and intelligence brought by modern society and technology.

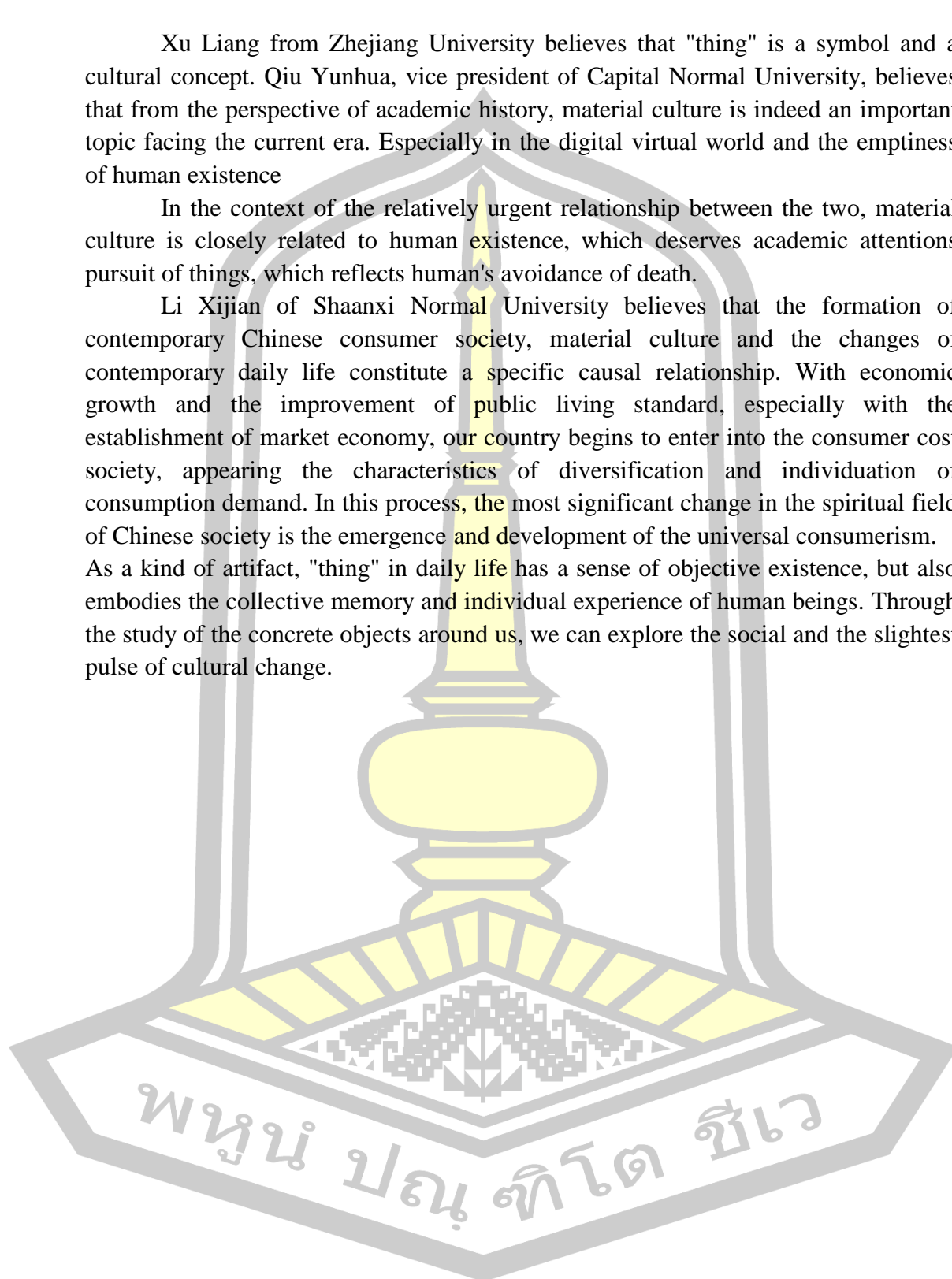
Reference of The Definition of Material culture

Material culture research is a new research of Western culture research the field. A particular object or thing is political, economic, cultural and social will be the result of the interaction of many forces, and also the construction of daily life mode, social form and the important carrier of its historical process. Based on this understanding, "Material Culture and Changes in Contemporary Daily Life" academic seminar. The politics of daily life in China is discussed in depth from the perspective of matter on.

Xu Liang from Zhejiang University believes that "thing" is a symbol and a cultural concept. Qiu Yunhua, vice president of Capital Normal University, believes that from the perspective of academic history, material culture is indeed an important topic facing the current era. Especially in the digital virtual world and the emptiness of human existence

In the context of the relatively urgent relationship between the two, material culture is closely related to human existence, which deserves academic attentions pursuit of things, which reflects human's avoidance of death.

Li Xijian of Shaanxi Normal University believes that the formation of contemporary Chinese consumer society, material culture and the changes of contemporary daily life constitute a specific causal relationship. With economic growth and the improvement of public living standard, especially with the establishment of market economy, our country begins to enter into the consumer cost society, appearing the characteristics of diversification and individuation of consumption demand. In this process, the most significant change in the spiritual field of Chinese society is the emergence and development of the universal consumerism. As a kind of artifact, "thing" in daily life has a sense of objective existence, but also embodies the collective memory and individual experience of human beings. Through the study of the concrete objects around us, we can explore the social and the slightest pulse of cultural change.



In the Process of Chinese Modernity

The exploration of China's modernization can be investigated from three perspectives: the transformation from surface material culture learning to institutional culture learning, from surface institutional culture learning to middle-level behavioral culture reform; From the middle level system culture to the spiritual culture thorough renewal reform; From spiritual and cultural enlightenment to practice and development. Based on such historical events as the Opium War, the Hundred Days' Reform and the May 4th Movement, this paper analyzes the cost of social ethics and moral degradation, and the loss of theme value of survival significance in the cultural transformation of China in the process of modernization exploration.

No matter what kind of social stage human beings are in, social and economic development is a complex gradual process of social culture in terms of the value they pursue. Social material culture is in urgent need of development, and people's concept world and spiritual field have also undergone great changes, which is cultural transformation. To experience modernization transformation is to experience cultural transformation. The essence of the transition from traditional culture to modern culture is the change and transformation of the original traditional ideas. Generally speaking, the needs of The Times of cultural transformation are the only way to change the social economy and politics. The strong conflicts and contradictions generated in the process of cultural transformation, including the spiritual and material aspects of human beings, have more or less caused to people and society.

The negative effects are mainly reflected in three aspects: moral decline cost, meaning loss cost and cultural alienation cost. In the process of China's modernization exploration, the material and cultural needs are constantly increasing. In the integration process of the capitalist economic operation mode and the socialist cultural carrying mode, there have been in adaption, conflict and counterbalance, resulting in drastic changes in all aspects of the whole society.

Reference of Ceramic material

Ceramic is an important inorganic non-metallic material, it has high temperature stability, high hardness, corrosion resistance, insulation and bio compatibility and other excellent properties. There are many kinds of ceramic materials, which can be divided into traditional ceramics and advanced ceramics. Traditional ceramics mainly include porcelain, pottery, brick and so on. These ceramic materials are characterized by firing from natural minerals and have a certain degree of strength and toughness, but relatively low strength and toughness. In the traditional ceramic production process, the main use is handmade and low temperature sintering technology. Advanced ceramics mainly refer to high-performance ceramics, such as alumina, silicon nitride, silicon carbide, etc. These ceramic materials have high strength, high hardness, high wear resistance, high temperature stability and good chemical stability. In the preparation process of advanced ceramics, powder metallurgy, chemical vapor deposition, plasma spraying

and other advanced technologies are mainly used. The following is a literature review on ceramic materials:

Zhang Yalin wrote in the Formal Law of the Intervention of Comprehensive materials in Ceramic Art that he used the law of formal beauty combined with the intervention of comprehensive materials in the creation of ceramic art to analyze and study, and revealed the artistic law of the intervention of comprehensive materials in ceramic art. Wang Xiangyang wrote in Research on the Universality of Materials in Contemporary Ceramic Art that the new context formed by the new visual form of ceramics is not only the exploration of the possibility of formal expression, but also the expression of contemporary humanistic spirit demands. On the Artistic Expression of Comprehensive Materials in Ceramic Design by Zhu Xinlong I. Concept and extension of ceramic design II. Application and Artistic expression of comprehensive materials in the field of Art III. Artistic expression of comprehensive materials in Ceramic Design IV. Application of comprehensive materials in ceramic design. Zhu Shasha wrote in "Experimental Research on Comprehensive Materials in Chinese Contemporary Art Creation Media" that "comprehensive materials" art has a unique way of expression and occupies an important position in contemporary art. Its unique artistic charm, as well as a variety of expression techniques are welcomed by many artists. All kinds of new ideas, new visual aesthetics, free forms of expression. But with the continuous development of comprehensive material art, an endless stream of problems has emerged. The first is that she should not be affected by the development of market economy, as well as the international market speculation; so it has to constantly cater to the needs of the public according to the fashion, while its own development has stalled and lost its original intention. Secondly, the creation of the new generation of young artists is constantly changing with the international wave, and the study and inheritance of local culture is far from enough. Chinese culture is extensive and profound, up and down five thousand years of culture, any aspect can be independent, so many young artists now lack content, superficial works. Chen Lu wrote in Material, Concept and Art Language: "With the gradual strengthening of human rational thinking, human's understanding of nature, society and human self continues to be profound and complete, and new ideas and theories emerge endlessly, which promote human's gradual deepening of conceptual understanding of materials. Such deepening brings constant impact to art, so artists begin to resist the bondage and dilemma of the concept of "central discourse ". After World War II, the artistic thinking mode of "multi-discourse co-existence" emphasizing individual words was publicized and spread rapidly in the creation of modern artists such as Picasso, and the concept of artistic "materials" was reshaped. In addition to those artistic materials in the traditional concept, All the things discovered by artists and intended to show their power of speech have entered the field of art and become artistic materials. Therefore, the deconstruction consciousness of artistic language creation overturns the traditional structural consciousness, and the "one language" and "central discourse" concepts that emphasize social language are disintegrated. All these are the best proof

that the deconstruction of the artistic language system under the new conceptual change is presented in materials."

In Language Research of Comprehensive Materials in Art Form, Ju Junwei said in his article: The classification and category of art in the past have become no longer important, and the expression of art has been broken and reorganized no matter from the material itself or the expression techniques. All kinds of new things appear in front of us, we have entered the age of technological media. All kinds of artistic practices test the unified aesthetic standard of art. The past single traditional painting and sculpture can no longer meet our aesthetic needs, so it is a historical necessity for art to be integrated.

The article "Material Analysis Based on Humanized Design Concept" expounds the "each beauty has its own beauty, and everything makes the best use of it" of materials. Lv Zhiqiang, the author of Research on the Phenomenon of Comprehensive Materials in Chinese Contemporary Art, wrote that first, it is in parallel with canvas, oil, bronze sculpture, screen prints, etc. Second, in some art articles for a class of art works, namely comprehensive material works of art, and comprehensive material painting, comprehensive material art, comprehensive art and other words have a certain equivalent meaning. This usage may be influenced by the former, but it is certainly understood by most practitioners of art and has a basic understanding of the type of work it refers to. In this usage, composite materials are juxtaposed with art types such as oil painting, engraving and sculpture. In this case, the use of such a statement reflects many problems, including the development of art itself in a specific regional environment. The study of art history can be started from this perspective. It is also a product of a specific cultural background and time, reflecting how people view art.

Reference of ceramic technology

Ceramic is a kind of handicraft with a long history and has played an important role since ancient times. As a kind of material with diversified functions and wide application fields, ceramic products have been widely used in construction, daily necessities, arts and crafts, industrial production and so on. With the development of The Times, ceramic technology is also in constant innovation and development, the combination of traditional technology and modern technology for the production and application of ceramics has brought new ideas and methods. Therefore, the in-depth study and exploration of ceramic craft is not only helpful to inherit and carry forward the traditional culture, but also can promote the development of ceramic products and meet people's demand for beauty. The following is a review of the literature on ceramic technology:

Chen Jing mentioned in "On the Innovation of Traditional Ceramic Technology and Modern Ceramic Technology" that the concept of traditional ceramic technology is an industrial product obtained by manual processing using inorganic non-metallic minerals such as clay as raw materials. The early pottery process was simple: clay or a mixture containing clay was mixed, shaped, and then calcined to

produce pottery in various shapes. With the progress and development of social productive forces, pottery making techniques became more and more complex, and finished pottery became more and more beautiful. During the Shang and Zhou Dynasties, there had been a special type of pottery production. By the Warring States Period, pottery makers had painted all kinds of beautiful and elegant flowers, birds and patterns on the pottery, and had begun to use the glazing process to make the surface of the pottery smoother and more colorful. The glazes used in this period were mainly lead glazes, and in the Western Han Dynasty, a variety of colorful glazes appeared. In the Tang Dynasty, there appeared a famous pottery variety - Tri-colored glazed pottery. Tri-glazed pottery of the Tang Dynasty is a kind of low-temperature glazed pottery with yellow, brown and green as the main colors, but also a small number of other colors. The appearance of Tri-colored pottery in the Tang Dynasty marked a richer variety and color of pottery, and it was also a peak period in the history of pottery making. The emergence of porcelain was based on the white pottery process. In the Shang Dynasty, people had learned to use Kaoling soil to calcinate white pottery, and the temperature at that time could reach more than 1000°C. With the continuous improvement of pottery making technology and the continuous improvement of calcination temperature, porcelain appeared in the Tang Dynasty and its quality was close to the standard of modern fine porcelain. In the Song Dynasty, porcelain developed rapidly and porcelain firing technology was fully mature, and there were some famous kilns, such as Longquan Kiln, Yue Kiln, Jingdezhen Kiln and Yaozhou Kiln. Among them, Ru kiln, Guan Kiln, Ge Kiln, Jun Kiln and Ding Kiln were collectively known as the five famous kilns. Among the numerous porcelains in Jingdezhen Kiln, blue and white, exquisite, pastel and color glaze are the most famous, which are collectively known as the four famous traditional porcelains in Jingdezhen. The development of blue and white porcelain in Jingdezhen reached a peak in the Yuan Dynasty. In the Ming Dynasty, blue and white became more exquisite on the basis of the Yuan Dynasty, and there were many dazzling works. Among them, the blue and white exquisite porcelain has become a unique masterpiece in the history of ancient and modern Chinese and foreign porcelain. In the Qing Dynasty, porcelain was influenced by the production process of enamel color, and a kind of glaze color was invented on the basis of the five colors, which made the tone of porcelain become elegant and soft, and the surface of porcelain had a pink luster. This was the pastel porcelain formed in the late Kangxi period. By this time, the development of ceramic technology had reached maturity, and the traditional ceramic technology reached its peak.

Nie Peng mentioned in "On the Innovation of Jingdezhen Modern Ceramic Comprehensive Decoration from the Use of Technology and Materials" that there are differences between Kaolin and red clay, field mud and mountain soil, purple mud and stagger soil, etc., in the thickness, color, plasticity and firing temperature of the mud, leading to the differences in the artistic language conveyed. Pottery quality gives a person with rough, thick, simple, dignified feeling; Fine white porcelain is gentle,

light. If it is molded with colored clay grouting, the porcelain carcass itself is pure and elegant in color. Combined with perfect painted decoration as ornament, it forms a pottery work with novel form, flowing with beautiful melody and emitting the breath of The Times. Because of the different techniques of glaze application, the combination of a variety of glazes and the kiln changes in the firing process, the artistic conception of the works has been sublimated. The innovative use of color glaze has brought vitality and vitality to the comprehensive decoration, opened people's new understanding and new application of glaze, and enhanced the artistic conception of the comprehensive decoration of modern ceramics. Blank body color mud decoration, color glaze decoration, painting decoration and other decorative forms are consciously integrated, resulting in texture comparison, texture contrast, luster contrast, greatly enriching the artistic expression and appeal of ceramic comprehensive decoration. If the decoration form of ceramic materials mixed with non-ceramic materials is used in modern ceramic comprehensive decoration, sometimes a refreshing and unexpected visual effect can be created to achieve the perfect fusion of emotional ideas and creative forms.

Reference of Innovative Design

Zheng Minglei mentioned in Analysis of "Mixing and Matching" Design and Innovative Ceramic Design that ceramics, as objects closely related to people's life, are more and more innovative and unconventional in their design, no matter artistic ceramics or practical ceramics. "Mixing and matching design" is a design concept. Through splicing, reconstruction, fragmentation, combination and other means of ceramic modeling, color, decoration, material and other aspects of the design, to achieve the integration of multiple elements, to achieve the tree of ceramic art luxuriating, promote the continuous innovation and development of ceramic industry. Li Yuxin said in the Innovative Application of Blue and White Porcelain Elements in the Design of Cultural Creative Products that art is constantly developing and its forms are also colorful. Blue and white porcelain elements are no longer limited to traditional porcelain, it is widely used in different design fields, such as graphic design, clothing design, architectural design, etc. The elements of blue and white porcelain, as excellent traditional cultural resource, have been developed and explored in cultural creative product design, and have provided abundant nutrients for the cultural innovation industry. However, there are also some problems in the design of cultural creative products, such as the degree of development needs to be strengthened, the culture and aesthetics need to be improved, the homogeneity is serious, the lack of regional characteristics, the practicability is not high, and the prevalence of luxury. Therefore, in the actual design of cultural creative products, we should pay attention to its innovative design principles. Taking blue and white porcelain element cultural creative product design as an example, try to sum up three traditional cultural elements in cultural creative product design of innovative design principles. First, the principle of cultural creativity. The popularization and publicity of culture is one of the initial purposes of the design of cultural creative products, and

the culture implied behind it is the most core essence. If there is no culture, cultural creative products will have no connotation. As for the design of cultural elements, it is not a simple copy, but a deep understanding of cultural connotation and transformation through creative design, so as to enhance the added value of cultural creative products with unique creativity. Second, the principle of aesthetic experience. With the changing context of The Times, the vitality of excellent traditional culture is bound to continue in the process of embracing the new and being inclusive. Only in line with the current aesthetic experience and emotional needs of the public, the cultural elements and connotations carried by the design of cultural creative products can be better integrated into life and recognized by the society and consumer groups. Third, practical purpose. In the era of consumer economy, cultural creative products should not only pay attention to the aesthetic art, but also pay attention to the practical function combined with daily life and the purpose of spreading cultural information and driving economic benefits with culture. In this way, the excellent traditional culture carried by cultural creative products can be closer to life and realize the dynamic inheritance and commercial value maximization.

In The Innovative Application of Plastic Materials in Product Design under the Background of Sustainable Development, Yin Haoying mentioned that plastic, as a kind of material widely used in modern social life, has brought many challenges to sustainable development. The research and development of new degradable plastic materials plays an important role in sustainable development. When using plastic materials for design, designers need to fully consider the basic requirements of sustainable development, consider the whole life cycle of products from production and processing to recycling and waste, and reduce the waste of resource and extend the life cycle of products by optimizing material selection, optimizing product structure, recycling and other methods, so as to promote sustainable development.



8. Concept, Theory and Conceptual framework

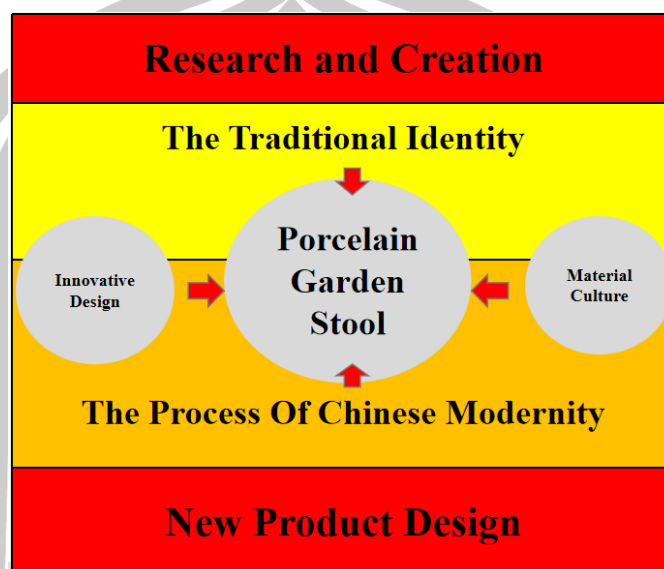


Figure 1 Framework
Source: Drawn by Danxi Luo, 2024



I will use the concept of material culture to look at the role and role of porcelain garden stools in social life in the past dynasties. As the needs of porcelain garden stools in each historical period are different from those at present, people's love degree and usage habits of porcelain garden stools have changed, but the value of the traditional identity of porcelain garden stools still exists.

This research is to try to dig the value of the traditional identity of porcelain garden stool and try various innovative ideas to make it regain the liking in the present.

9. Research plan

Table 2 Research plan Source: Drawn by Danxi Luo, 2024

content	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
1. Complete the research background, research objectives and other TS2 related content																	
2. visit ceramic craftsmen, ceramic culture experts and other groups, getting porcelain garden stools information.																	
3. Conduct a questionnaire survey on consumer groups to understand consumers' demands.																	
4. Visit and observe the porcelain making skills of Jingdezhen ceramic workers.																	
5. Investigate local policies, regulations, environmental standards and environmental performance of product																	
6. In the creative design stage, organize, analyze and deduce the design objectives through the investigation and collected data.																	
7. In the sketch development stage, try various design techniques, forms of expression design methods and multi-angle analysis to form preliminary design thinking.																	
8. Completed the preliminary graphic design scheme.																	
9. Evaluate the design scheme, listen to the opinions and suggestions of experts and consumer groups, and determine the final design scheme																	
10. Make the design into a finished product.																	
11. Communicate with the supervisor to write and revise the thesis content, and complete the graduation thesis.																	
12. Prepare defense PPT, and finish the graduation defense.																	

10. Chapter structure

Chapter 1: Introduction.

Chapter 2: The historical development and function of porcelain garden stool in Chinese traditional life scene from the perspective of material culture.

Chapter 3: The traditional identity and value of porcelain garden stool from the dimension of artwork.

Chapter 4: The development process of innovative design of porcelain garden stool.

Chapter 5: The innovative design of porcelain garden stool in the process of Chinese modernity

Chapter 6: Conclusion, Discussion and Suggestion

11. Benefit of Research

1. Throughout the research at home and abroad, many scholars and teams are studying porcelain garden stool. From the perspective of the research content, there is a wide range of research on porcelain garden stool, involving the history of porcelain garden stool production technology, decoration techniques, etc., but there are almost no studies on porcelain garden stool from the material culture and innovative design. This study discusses the porcelain garden stool as a symbol of material culture, redefines the multiple values of the porcelain garden stool, and re-organizes and refines it, combining traditional cultural elements with modern design concepts, so that the porcelain garden stool can realize the living cultural inheritance in the process of modernization.

2. This study is the first research report to study porcelain garden stool through the two main concepts of "material culture" and "innovative design", which helps to sort out the innovation and development of porcelain garden stool under the background of social and cultural changes and aesthetic development in the process of China's modernization, broaden the diversified perspectives of porcelain garden stool research, and thus provide rich information resource for future researchers.

3. In March 2017, Chinese government jointly launched the "Revitalization Plan for Chinese Traditional Crafts", and in the same year, issued the "Several Opinions on Promoting the Development of Cultural and creative Products", aiming to deal with the relationship between inheritance and development of traditional crafts, do a good job in creative transformation and innovative development, emphasizing the need to build cultural and creative brands. The cultural and creative products include some devices with both practical and decorative functions, such as porcelain garden stool. Therefore, the most important thing for the study of porcelain garden stool is to innovate a set of design principles, and also to provide a new path for other traditional Chinese cultural artifacts with similar difficulties.

4. This paper aims to encourage cooperation between different fields such as art design and engineering technology, and jointly explore how to combine traditional cultural elements with modern design concepts and advanced manufacturing technologies to create products that both have traditional charm and meet modern aesthetic and functional needs, so that it can become a representative cultural industry.

8. The historical development and the function of porcelain garden stool in China traditional life scene from the perspective of material culture

Introduction

As an important piece of furniture in traditional Chinese life, porcelain garden stool not only carries rich material and cultural connotation, but also reflects the difference of living customs, aesthetic taste and social class in ancient Chinese society. As a unique form of traditional Chinese ceramic art, it not only played an important practical role in the daily life of ancient China, but also reflected a rich cultural connotation and aesthetic pursuit as a work of art. From the simple style of the Song Dynasty to the complicated decoration of the Qing Dynasty, the development of porcelain garden stools shows the changes in the aesthetic concept of Chinese society and the constant pursuit of the aesthetics of nature and life.

The purpose of this chapter is to deeply analyze the functional transformation of porcelain garden stool in different historical periods, the evolution of decorative style and the impact on contemporary life, and then from the dimension of material culture, to explore how porcelain garden stool as a kind of art reflects the traditional Chinese identity and cultural value.

8.1 Historical background and social development

The origin of furniture (Paleolithic Age-Tang and Song Dynasties)

From ancient times to the present, the way people sit in China has undergone great changes. In the early days, China was a farming society. Farmers worked in the fields, and their lifestyle was relatively simple, usually sitting on the ground or lying on a straw¹¹ mat to rest. The book "Explaining the Name and Releasing the Bed Account" describes the basic usage of the mat. Similar to today's mat, it can be seen that the mat was first used as a bedding tool and developed for the longest time. (Li, 2020) There have been fur mats and grass mats for sitting and lying since the Paleolithic Age, which are the most primitive forms of mats. After entering the civilized era, the types of seats and their weaving techniques have become more abundant, which has established the dominant position of seats in furniture, and "sitting on the floor" has naturally become the main way of living in ancient China.

¹¹ A stalk or stem of various cereal plants, such as wheat, rice, or barley, after the grain has been removed. Historically, straw has been used for a variety of purposes, including as a building material, in crafting, and as bedding for animals. Its use extends beyond agricultural applications, serving as an inspiration for sustainable material research and environmental solutions.

During the Tang Dynasty, the economy and culture were highly developed, the inner squares of the city were arranged vertically and horizontally, the commodity circulation was unprecedentedly echoed, and the ruling class pursued pleasure and built large-scale buildings, which provided a prerequisite for the rapid change of furniture. Driven by the psychology of seeking novelty and difference, the upper class gradually accepted the new lifestyle, and "wearing Hu clothes", "sitting on a Hu bed" and "learning Hu music" became the fashions they pursued. In terms of the shape of the furniture, at this time, the whole presents a situation of coexistence of low-profile and high-profile, and the traditional furniture and foreign cultural furniture continue to ferment and evolve. In the early and middle period of the Tang Dynasty, although the way of sitting on the floor was accepted by a few people, sitting on the floor still occupied the life of the Tang people. It was not until the late Tang Dynasty and the Five Dynasties that this way gradually influenced more Han people, and the high-profile seating also showed the cultural characteristics of the Han people. In the Song Dynasty, with the prosperity of culture, handicraft industry and commerce, the types and uses of furniture were further expanded, and then the furniture mainly used in study and tea room, such as embroidered garden stools and porcelain garden stools, appeared.

To study porcelain embroidery garden stools, we should start with the basic problems related to embroidery garden stools¹². Porcelain garden stools are also embroidered garden stools, which contain porcelain garden stools, and porcelain garden stools are just embroidered garden stools made of special materials. Only by exploring the related problems of clearly defined embroidered garden stools and then analyzing and studying porcelain garden stools can we have more logical relevance and form a comprehensive understanding of porcelain garden stools.

The origin and development of embroidered garden stools (Tang and Song Dynasties)

12 These are decorative stools often used in garden settings, featuring intricate embroidery designs that incorporate various motifs, including floral, fauna, and traditional symbols. The embroidery, a traditional art form that involves decorating fabric with needle and thread, adds a unique aesthetic value to the stools, making them not just functional furniture pieces but also artistic expressions. These stools can be made from various materials, including wood, metal, or ceramic, and the embroidered designs are typically protected with a clear cover to withstand outdoor conditions. Embroidery garden stools blend functionality with cultural artistry, offering a touch of elegance and tradition to garden and outdoor spaces.



Figure 2 Painting of Reclining Smoke Cage by Chen Hongshou

Source: Downloaded from https://mp.weixin.qq.com/s/EC5FyFRIfh2O_Wod5DKag

There are many opinions about the origin and development of embroidered garden stool. Mr. Shen Congwen thinks that the development route of embroidered garden stool is: fumigation cage¹³ to hoof,¹⁴ hoof to embroidered garden stool. (Figure. 1) Mr. Shen Congwen explained in the book "Research on Ancient Chinese Costume": "Waist-drum type sitting garden stool is a special seat for women to burn incense and keep warm since the Warring States Period. (Figure. 2) Different sizes, because it is also used to fumigate clothes, quilts or towels. In recent years, there are many fumigation cages unearthed from Chu tombs in the Warring States period, such as chicken cages. In the Han and Jin Dynasties, it became a famous fumigating cage, and in the Southern and Northern Dynasties, it was turned into a special seat for Vimalaymen in Buddhism. Influenced by the Buddhist lotus platform, it was shaped like a lotus covered with lotus, and then it progressed to become a waist-drum style (Sheng, 2005)

¹³ A traditional wooden cage or basket used to hold coal for heating purposes. Made primarily from wood, these cages are designed to contain burning charcoal, providing warmth in a controlled manner. Often used in homes or outdoor settings where traditional heating is preferred, they embody a blend of functionality and rustic aesthetic. The design allows for ventilation while keeping the coal contained, minimizing the risk of sparks or ash spreading.

¹⁴ The hard protective covering found at the terminal part of a mammal's leg, specifically in animals such as horses, cows, deer, and pigs. Made primarily of keratin, the same material as human fingernails and hair, hooves serve multiple purposes including supporting the weight of the animal, providing traction on different terrains, and protection from environmental hazards. Hooves vary in shape and size across different species and even within the same species, depending on the animal's environment and evolutionary adaptations



Figure 3 Export paintings in the late Qing 1

Source: Downloaded from in

https://mp.weixin.qq.com/s/EC5FyFRIfh2O_Wod5DKag

Mr. Sun Ji cited literature to demonstrate that the stilts of garden stool-shaped seats originated in Southeast Asia and were later introduced to China. Mr. Sun Ji wrote in "Notes on the Carving of Ladies and Music and Dance Pictures on the Li Shoushi Line in the Tang Dynasty (I)": "The hoof is a garden stool-shaped seat. The round surface where people sit is small, and the round surface where they are grounded is large. The two round surfaces are linked by vertical lines, and the middle part is slightly waisted. This thing belongs to rattan products." (Sun, 1996) This explanation is similar to Mr. Shen Congwen's point of view, but Mr. Sun believes that the embroidered garden stool originated in Southeast Asia, and there is indeed a hoof in the image of Buddhist objects in Southeast Asia. After the hoof was introduced into China, it gradually evolved into an embroidered garden stool after being combined with domestic aesthetic usage habits. The Tang section of the highway "Beihulu" said: "... Xinzhou (now emerging in Guangdong) is a five-color rattan platform ..." ... And the hoof is also used for lifting (note on June 1 in Quanliangwen), moving and lifting first (both in xuanyingyinyi Volume 16). (Liu&Xiong, 2017)

Sitting on the garden stool is the product of localization and development on the basis of the hoof. There is a big difference between this kind of seat and garden stool in shape, and embroidered garden stool has a local development vein in China. It can be seen that the rattan hoof has been produced in China at this time. During the Sui and Tang Dynasties, the images of hooves in Tang Sancai and various paintings began to increase. The hoof came from ancient India, and after it was introduced into China as a tool for preaching, its use gradually began to be universal and secular. Compared

with the embroidered garden stool, it has an exotic flavor, and it is gradually drifting away from the traditional aesthetics. Because it does not meet the needs of social development, it gradually loses the necessity of survival. (Fan,2016)。

The rise of porcelain garden stools (Song Dynasty)

After the embroidery garden stool gradually became popular, the production materials were constantly enriched. It is recorded in *Drinking Liuzhai on Porcelain*: "Porcelain has flowers, which has gradually become popular in the Song Dynasty. Su Dongpo's poem 'Dingzhou Flower Porcelain Carves Ruby', Renzong summoned Wang Jue, a bachelor, and set up a purple flower to sit on the garden stool." (Xu,2010) It is speculated that carved porcelain garden stools have been produced in Ding Kiln in Song Dynasty, but no similar materials have been found in Ding Kiln. The earliest found porcelain garden stool material was a piece of green glazed drum garden stool in Song Dynasty when Jiangxi Institute of Cultural Relics and Archaeology excavated the kiln site in Song Jizhou¹⁵, indicating that the porcelain garden stool had been made and used at least in Song Dynasty. Chen Gongjie's *Official Documents in the Ming Dynasty* wrote: "The cool garden stools are exquisite, printed with earth and mud, and carved with a knife. The internal void situation is wide and large, and they are burned in the kiln, with concave collapse and fragmentation, and the labor force has been exhausted." There are also "cool garden stools and the like" in the "Great Records of Jiangxi Province". (Yu&Zhang,2017) According to historical records, the earliest porcelain cases and models of porcelain stools appeared in Zhang Sheng's tomb in Anyang in Sui and Tang Dynasties, which indicated that ceramic furniture had been widely produced at this time. It was rumored that this was the earliest porcelain garden stool, but it was a fallacy after looking at the picture.

Porcelain garden stools rose in the Song Dynasty, which was in the middle of China feudal society. The conservative national policy led to the weakness of the Song regime, but its economy, politics, culture and art developed at a high level. Chen Yinke once said in 'Preface to the Textual Research of Deng Guangming's *Official Records of Song History*': "The culture of the Chinese nation has evolved for thousands of years and reached its peak in the Zhao and Song Dynasties." (Cheng,1983) In *Neo-Confucianism and Art*, Mr. Qian Mu said: "As far as the Song Dynasty is concerned, the political economy has changed compared with the previous generation." The discussion in relevant literature and classics fully shows that the political system, economic form, cultural fashion and arts and crafts of the Song Dynasty have a unique character, and its social background has an impact on the decoration of porcelain garden stools in the Song Dynasty to a certain extent, giving

¹⁵ This name could refer to a person's name in a Chinese context. Given the structure, "Song" (宋) would be the family name, and "Jizhou" (吉州) would be the given name. Without additional context, it's difficult to provide a specific description or translation related to historical figures, contemporary individuals, or fictional characters. In historical or cultural studies, it might refer to an individual associated with a particular period, location, or achievement. In the absence of further details, it's important to note that this name could belong to any number of individuals or be used in various fictional narratives.

the decoration of porcelain garden stools a uniqueness different from that of previous generations.

Court nobles

In the court of the Song Dynasty, porcelain garden stools were mainly used by the emperor to give seats to ministers and the nobles to wait for the crowd. Both of them represented the hierarchy of court etiquette in the Song Dynasty. As a witness of the hierarchy of "giving a seat¹⁶" and "serving a seat¹⁷" in the Song Dynasty, Zuo Dun aims to maintain the feudal ethics through the different types and positions of furniture, so as to distinguish between the inside and outside. The so-called giving a seat means that the emperor gives a seat to a minister or a distinguished person in the imperial court. "If you give a seat, you can't shirk it," but you can't just sit all the time. "When you meet a consultant, you kneel right at first. Finish, sit down. If you have any questions, sit facing up and don't have to get up again." (Wang,2007)

What is recorded in the relevant literature is a typical example of the ancient emperor's giving a seat. When the court was in session, the ministers were mostly seated by sitting garden stools, which were also used in large-scale royal celebrations. It can be seen that sitting garden stools were widely used in the ancient court. There are grades for the types of seats given, which are given according to the level of official positions, and their grades are recorded in the documents of Song and Ming Dynasties. "Ming history? Biography of Cui Liang records: "Since the sacrifice in the suburban temple the ceremony of sitting on the garden stool and shooting a big military salute in the temple is at the discretion of the light." In the Southern Song Dynasty, there were two scenes in Ma Hezhi's "The Picture of the Filial Piety".

In Chapter 7 of Three Talents, the woman salutes her husband, who sits on the garden stool (Figure. 3), with simple decoration and simple shape. Taking "husband, heaven is also good" as a guide to the behavior of concubines in the palace reflects the significance of guiding "virtuous princess", aiming at expressing that there should be "virtuous princess" in an ideal dynasty structure, just as there is a harmonious "monarch and minister structure". The contents, scenes, and forms of characters expressed in The Picture of the Filial Piety by Anonymous in the Southern Song Dynasty (Figure. 4) are the same as those expressed in The Picture of the Filial Piety by Ma Hezhi in the Southern Song Dynasty (Figure. 5). As to which comes first, it needs further research. In the opening chapter of the Book of Filial Piety, which was painted by Anonymous in the Southern Song Dynasty, it was written: "Everyone in Cao lives in seclusion and the waitresses sit ..." It was pointed out that this scene described "sitting". According to the Song Dynasty, the garden stool should be

¹⁶ In many cultures, "giving a seat" is not only seen as a courteous behavior but also as a moral obligation, emphasizing the importance of empathy and community support in daily interactions.

¹⁷ this phrase emphasizes the action of making a seat available to someone else, particularly in a service-oriented context or when one has the responsibility or ability to allocate seating. It can apply to formal settings like events or restaurants where seating arrangements are managed. "Serving a seat" suggests an active role in ensuring someone has a place to sit, reflecting attentiveness and hospitality.

Pudun¹⁸, decorated with persimmon ornaments, and the monarch and the minister sit in a humble position. In this paper, the sitting garden stools are divided according to the production materials, which should be divided into embroidered garden stools. A typical painting in the Song Dynasty is "Sitting in a Sitting Room" (Figure.6). (Qi,1987)

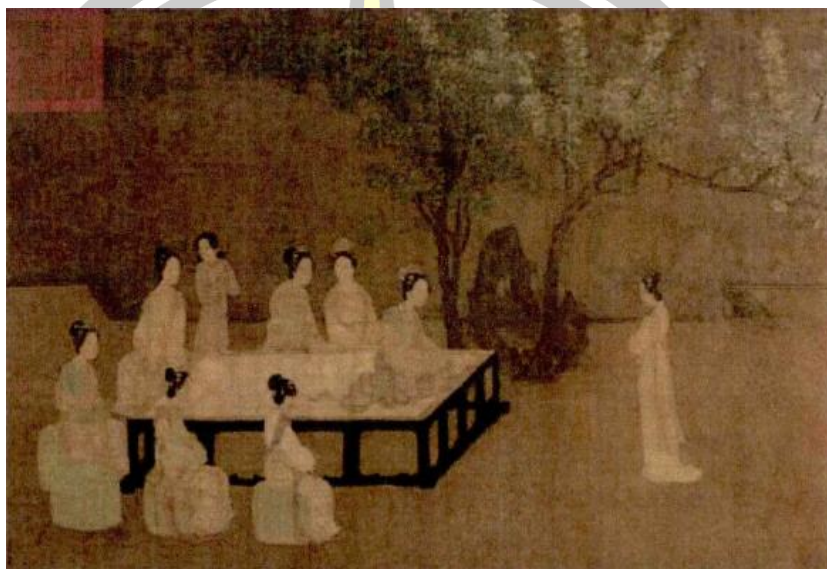


Figure 4 Female Filial Piety Sutra-Chapter
Source: Taipei National Palace Museum Provided

¹⁸ enhance the comfort of chairs, sofas, and beds, and can also serve as an aesthetic element to complement interior design themes.



Figure 5 women's filial piety sutra-chapter
Source: Palace Museum Provided



Figure 6 Female Filial Piety Sutra-Chapter
Source: Palace Museum Provided



Figure 7 While Sitting>
Source: Palace Museum Provided

Literati's Elegant Collection

When talking about the people who used the sitting garden stool in the Song Dynasty, we have to mention the use of the sitting garden stool in the literati of the Song Dynasty. In the Song Dynasty paintings, it is common to see that literati used sitting garden stools in the friendship of elegant collections. (Shao,2007). Elegant collection is one of the most important social activities of literati and officialdom in Song Dynasty. From the paintings of the Song Dynasty's literary collections handed down from ancient times, it can be seen that most of the Song Dynasty's literary collections have the appearance of sitting garden stool, and rattan garden stool is the most common, which is closely related to the characteristics of rattan garden stool, which is light in material, suitable for moving, but not formal and elegant, and has become the most commonly used seat for this group of literati. In addition to rattan garden stools, embroidered garden stools and porcelain garden stools can also be seen in the elegant collection of the Song Dynasty. (Xia, 2013)。

The choice of elegant gathering places for literati in Song Dynasty was very elegant and thoughtful, and it was mostly carried out in places such as mountains and gardens with various forms.

Mountain Forest Elegant Collection

"Under the east fence of picking chrysanthemums, you can see Nanshan." The mountain forest plays an important role in the ancient culture of China, and has a far-reaching influence on Yaji culture. It is an important part of the literati's Yaji activity place. The elegant collection between mountains and forests is very random and temporary, which is also reflected in furniture. Furniture that is convenient to carry is often selected for mountain forest elegant collections. Generally, a table or several sitting garden stools, plus a piano or a little tea set, form a mountain forest elegant collection. The Song Dynasty Liu Songnian's "Song Yin Ming Qin Tu" collected in the Cleveland Museum of Art is an elegant scene of mountains and forests. In the painting, Gu Song is thick, with a canopy and a quiet environment. There are three people under the tree, one playing the piano, one sitting and listening, and one boy standing on one side. The two people sit on the same garden stool, which is woven from rattan, and the seat of the garden stool is covered with cattail grass and has horns and feet under it. There is also the Southern Song Dynasty Bamboo Forest Qing Hua Tu, which is hidden in the National Palace Museum in Taipei. Two scholars are talking about classics and Taoism in the bamboo forest. They are sitting on a garden stool, round, with a slightly larger abdomen, decorated with drum nails and string patterns from top to bottom. In these paintings depicting the literati's elegant collection of mountains and forests, we can see that there are picturesque places of elegant collection of mountains and forests, such as green mountains and clear waters, hairy forests and bamboo, and clear springs. Therefore, this environment is highly respected by literati. There are many considerations in the selection of objects in the elegant collection of mountains and forests, just as the 'production department' of Volume 10 of Kanshan Pavilion wrote: "Confucian flavor, clear but not turbid, elegant but not vulgar. Although its system is hard-working, but it is randomly arranged, it is extravagant, not deliberately seeking novelty, and it is also decorated with market ingenuity. " In the elegant collection, the literati have a good taste. Although all kinds of furnishings seem to be arranged at will, they do not deliberately pursue kit kat, but they can be unconventional. The garden stool is elegant in shape, ingenious in workmanship, natural in material selection and elegant in decoration. (Figure.7) As the saying goes, it is elegant but not vulgar, and the market is clever and decorative, which conforms to the aesthetic taste of literati in the Song Dynasty.



Figure 8 Mountain Forest Elegant Collection Porcelain Garden stool
Source: Taipei National Palace Museum Provided

Garden Elegant Collection

"The land of leisure, the suburb of the south of the city, is the forest garden of Chiting, and during the period of making friends with the old " The court and the upper class are flashy and pay attention to pleasure. Zhou Mi once said: "Xing Wu has a flat landscape, and on weekdays, the literati live in " It can be seen that the Song people regarded the garden as a part of their life, and the literati and scholars have gradually become the main body of garden development. In the Song Dynasty, the "Southern Tang Wenhui Map" painted the scene of the elegant collection of four literati gardens¹⁹, with bamboo on the left and right from rockeries and ancient trees, lush trees, carved columns and flowing water, and the victory of the garden. (Zhang,2005). There are three kinds of seats in the painting, including two sitting garden stools with the same shape. The wall of the sitting garden stool is provided with a sash ring, which is convenient for carrying, and there is a circle of drum nails and a string pattern under it. One sitting garden stool is covered with cattail grass, and the other is covered with animal fur.

Common people

In the Song Dynasty, the common people often used the sitting garden stool. Through the analysis of the sitting garden stool, the shape and decoration of the sitting garden stool used by the common people are relatively simple, mainly based on practicality. Although the decoration of the sitting garden stool used in street life can't be compared with that used by court nobles and literati, it already has the most basic decoration of the sitting garden stool in Song Dynasty to a certain extent, which shows that the ordinary people in Song Dynasty have already had the consciousness of decoration.(Guo,2017). To sum up, the sitting garden stool was used by different people in the Song Dynasty, which reflected the adaptability of the sitting garden

¹⁹ refers to four famous classical Chinese gardens renowned for their association with literati - scholars, poets, painters, and government officials who were deeply immersed in the arts and culture. These gardens are celebrated for embodying the aesthetic principles and philosophical ideals of the literati, integrating natural beauty with artistic and architectural elegance. Each garden is a reflection of the personal taste and scholarly pursuits of its owner, featuring intricate designs, thoughtful landscaping, and cultural motifs.

stool to the users, which was unmatched by other furniture at the same time in the Song Dynasty. Different use groups mean different use scenes. In different life scenes, the garden stool decoration is different, and among the court nobles, the garden stool decoration is endowed with the ritual characteristics of hierarchy. (Figure.8)



Figure. 1 Pire for sitting in the market

Source: Downloaded from https://mp.weixin.qq.com/s/EC5FyFRIfh2O_Wod5DKag

In the elegant gathering of literati, the garden stool decoration is elegant and beautiful, influenced by the aesthetic culture of literati; The sitting garden stools used by ordinary people are simple and simple, and whether it is material selection or decoration, it is mainly practical. This shows that the sitting garden stool decoration in Song Dynasty was influenced by users and scenes to a certain extent, and the sitting garden stool decoration was related to the aesthetic thoughts of different groups.

Porcelain garden stools were widely used in the Song Dynasty, from the court nobles to the common people. The decoration of sitting garden stools in the Song Dynasty was influenced by the users to some extent. The decoration of porcelain garden stools was related to the aesthetic thoughts of different groups, and there were great differences in different periods.

The prosperity of porcelain garden stools (Ming and Qing Dynasties)

In the Qing Dynasty, Zhu Yan wrote in Tao Shuo: "Wang Jue, a scholar of Song Dynasty, called for a purple flower to sit on the garden stool in the Pearl Hall." (Zhu, 2010) From this record, we know that embroidered garden stools were also made in the Song Dynasty, and archaeological excavations also found fragments of green glazed drum-shaped garden stools in the Song Dynasty. Since the Ming Dynasty, porcelain garden stools have ushered in a new stage of development. In the Ming Dynasty, Gu Yingtai wrote "A Brief Introduction to Natural History", which recorded that Xuande²⁰ Chao ware was the most exquisite in the Ming Dynasty. And

²⁰ Xuande refers to the reign name of Emperor Xuande, who was the fifth emperor of the Ming Dynasty in China, ruling from 1425 to 1435. The Xuande period is often celebrated for its achievements in the arts and culture, particularly in the production of porcelain and bronze. Xuande porcelain is renowned for its high quality, exquisite craftsmanship, and beautiful blue-and-white as well as polychrome decorations. The imperial kilns during the Xuande reign reached a peak in porcelain artistry, producing pieces that are highly prized by collectors today.

filled with colorful patterns, dazzling and pleasing to the eye. Both of them are deep green. There are blue fields filled with colorful paintings, such as azurite picking flowers, blue and white fields, and ice cracks. All kinds of styles have not existed in the previous generation. " However, the porcelain garden stool of Xuande Dynasty has not been found yet.

By the Ming Dynasty, with the development of economic level, the production level of porcelain was greatly improved, and the varieties of porcelain garden stools were greatly enriched, and the number of surviving porcelain garden stools greatly exceeded that of the previous generation. In the Qing Dynasty, there were many producing areas, large output, rich varieties and high level of porcelain garden stools in China, and a large number of foreign trade porcelain garden stools were exported. It is widely used in daily life. Porcelain garden stools can often be found in various scenes, and their status has gradually improved. Their status has gradually blurred, and they have been completely integrated into daily production, becoming a kind of porcelain furniture with a particularly standardized shape. At this time, porcelain garden stools reached the peak of embroidery garden stool production in feudal period in terms of production variety, quantity and quality.

During the Ming and Qing Dynasties, furniture technology was further developed on the basis of inheriting the Song and Yuan Dynasties. After the middle of the Ming Dynasty, capitalism sprouted and a large number of porcelains were exported, which stimulated the rapid maturity of porcelain-making technology and made the integration of porcelain and furniture closer. (Cheng,2010) Due to the development of productive forces, China's porcelain garden stools have many producing areas, large output and are widely used in daily life. Porcelain garden stools often appear in various scenes, and their status has gradually improved, and their status has gradually blurred. They have been completely integrated into daily production and become a kind of porcelain furniture with particularly standardized shapes. During the Ming and Qing Dynasties, the users of porcelain garden stools were mainly divided into royal aristocrats and ordinary people, and there were obvious differences between them in usage and decoration techniques.

Royal nobility

For example, in Volume 54 (I) of A Record of Ming Taizu, it is said: "It is equal to Cui Liang, the minister of rites, to give the crown prince and his ministers a seat, and to sit on the garden stool (in the temple), and to consider the Song Dian. Its system: the crown prince, with green as the quality, embroidered cloud flowers as the decoration, so does the prince. Prime Minister and Yipin, with red as the quality, decorated with clouds and flowers. Below the second grade, Pudun has no decoration. Where the great court will give a banquet, those who go to the temple with three or more civil servants and four or more military officers will be given a garden stool. Where he retired from the court and was lucky, the officials of Zhongshu Province and Dadu Prefecture were two or more, and the officials of Taiwan were three or more, and those who were honored by the ministers of the past and the officials of

literature were still embroidered with velvet mats. " It shows the classification of those who sit on the embroidered garden stool above the court. (Wang,2007)

Wu Meifeng analyzed and expounded in "The monarch is as respectful as the sky, and the minister is as humble as the ground-between sitting in the court of the Ming Dynasty" and "The classification of small seats-embroidered garden stool and stool": "According to the Song system, civil servants, Wu Zhi, and imperial families²¹ can all sit only: the prime minister with one official rank and the equal envoy sit on embroidered garden stool, and the rest sit on Pudun." "In the Ming Dynasty, the garden stool was applied as a whole. Only the color and embroidery were used to distinguish the crown prince, the prince and the prime minister, and when the banquet was given, it was extended to the civilian three products and Wu Zhi four products or more." (Wu,2016)

General population

The practical function of porcelain garden stool's seat is its most basic function, and it is also its primary function as a kind of furniture. Practicality is its most essential outstanding feature. However, the porcelain garden stool is different from other square seats. It is round and delicate, or has smooth edges and corners, but it is easy to move and widely used. Porcelain garden stools have been widely popular in social classes and various scenes since their appearance. When in use, according to the feeling of cold and warm, directly sit on it or sit on the mat fabric. It is convenient to carry, small and convenient, and flexible. Compared with the transportation of square chairs and stools, the transportation of porcelain garden stools is more beautiful and calmer. Moreover, the porcelain garden stool is more convenient in daily life scenes, and the sitting posture does not need to be correct. You can sit on it from any angle in all directions or face other places, which is an incomparable advantage as other seats. Moreover, the porcelain garden stool can take the seat cover according to the cold and warm conditions, which is more convenient. Small sitting garden stools are mostly placed on both sides of wide chairs as supporting handrails. (Li,2020) Small embroidered garden stools can also be placed on both sides of the stool surface of a large stool to support elbows, or placed on a bed. Most of these small porcelain garden stools are small in size. Compared with a large embroidered garden stool of about 50 cm, the ratio of the diameter of the top surface to the height of the utensil is often large, and the utensils are sturdy and stocky. Considering practicality, these small porcelain garden stools are small and convenient utensils. Porcelain garden stool is originally a kind of furniture decorated with patterns, techniques and other ways to highlight the aesthetic feeling. It is not only practical but also has the functions of beautifying the interior and decorating the hall. The porcelain

²¹ Imperial families refer to the royal families that rule or have ruled empires, kingdoms, or other significant realms throughout history. These families are characterized by their hereditary succession to the throne, often governed by laws of primogeniture or other succession rules. Members of imperial families hold titles such as emperor, empress, king, queen, princes, and princesses, among others. Imperial families play significant roles in the governance, culture, and history of their nations, often embodying the state's sovereignty and unity.

garden stool body is decorated with exquisite patterns, which further beautifies the indoor environment. In the early days, the function of porcelain garden stool was mainly to sit on furniture. By the middle and late Qing Dynasty, porcelain garden stool began to appear as a kind of furniture, which could be used as a base for flowerpots or as a storage.

Decline of porcelain garden stools (late Qing Dynasty to present)

By the end of the Qing Dynasty, due to the destruction of war-torn kiln factories, the low level of domestic production and the competition of foreign porcelain, the domestic porcelain production industry began to wither. In the late Qing Dynasty, there were also innovative embroidered garden stool products such as new pastel porcelain garden stool, light crimson porcelain garden stool, Liling kiln porcelain garden stool and Shiwan kiln porcelain garden stool, and the export products of the thirteenth bank, such as Guangcai and other processing industries, also began to transfer to Hong Kong and other places. After the beginning of the late Qing Dynasty, many porcelains began to appear in English such as Hong Kong decorations, such as: Decorated in Hongkong.

During the period of the Republic of China²², domestic kiln factories began to rebuild, and the productivity of some famous kiln factories was restored to some extent, such as Jiangxi Porcelain Company, which mainly produced daily-use porcelain, and the number of porcelain garden stools dropped sharply. The number of embroidered garden stools in the Republic of China was relatively small in both collection institutions and the market. From the founding of the People's Republic of China to the period of earning foreign exchange, during this period, the theme of porcelain garden stools has been innovated, which is closer to production and life. The theme reflects revolutionary enthusiasm, antique pictures, flowers and birds, etc. Generally, one side is a picture, and the other side is poetry, which reflects the obvious characteristics of the times. (Li,2020)

After the founding of New China, the development goal of modernization and the change of social life style, the impact and influence of porcelain garden stools are even greater than before. Porcelain garden stools are introduced from people's daily life and are less and less used by people in real life. Although the industrialization level of porcelain making has been greatly improved after the founding of the People's Republic of China, porcelain garden stools are not within the focus of porcelain production.

In the new century, with the improvement of China's social and economic development level, people's living standards have been continuously improved, and their interest in traditional culture has gradually emerged. Some typical elements of traditional lifestyles have reappeared, such as China's traditional costumes, which have gradually moved from history and museums to reality, and have been shown in

²² The Republic of China (ROC) was established on January 1, 1912, following the Xinhai Revolution, which overthrew the Qing Dynasty, the last imperial dynasty of China.

people's daily lives. Some young people have begun to be keen on wearing traditional costumes, but the porcelain garden stools are limited by their living or using environment, which requires a high economic foundation and aesthetic taste, and their recovery is slow, so they have not escaped. Therefore, in order to restore the development of porcelain garden stools, efforts should be made in cost and innovation, on the one hand, to reduce its use cost, on the other hand, to expand its use scope through innovation, so as to better integrate into people's daily life.

The porcelain garden stool from the perspective of material culture

To study the material culture of porcelain garden stools, we must first make clear the research content and direction. Taking the porcelain garden stool as a specific area will be the visual dimension to establish the material and cultural research of the porcelain garden stool from the Song Dynasty.

The basic content of material culture of porcelain garden stools

According to the survival mode of porcelain garden stools in Jingdezhen (also known as "porcelain capital"), through the discussion of the functional ontology of objects, the production system of porcelain garden stools in the process of material production has been established since the Song Dynasty, in which the natural environment, production methods and tool technology are mutually adapted.(Zhong,1996) Because the material entity contains a lot of technical and cultural information, and the decorative patterns or folk arts attached to things are the visual presentation of culture, behind the various material exchanges of porcelain garden stools is the information flow and cultural communication through things. The acceptance of ceramic material culture by porcelain garden stools is actually the absorption of ceramic technology and the recognition of culture.

Production activities are the direct way for human beings to obtain material means of subsistence and the most basic labor practice in human society. Any cultural form is produced on the basis of production activities. The mode of material production determines the corresponding cultural form. Therefore, to clarify the internal law of the development and evolution of porcelain mound culture, we must start with its material production activities and related lifestyles.

Material Culture and Porcelain Garden stool

What is "thing"? At first, the concept of "material culture" appeared in the Oxford English Dictionary in the 19th century and matured in the field of anthropology and archaeology. In the definition of western scholars, "material culture" refers to ancient objects that are not western civilizations, that is, cultural relics; Second, it refers to some non-Western items in contemporary tribes that still exist today. These items bear the meaning of "culture" and are symbolic rather than functional. As a work of art, porcelain garden stools are placed in social situations. Because of their aesthetic value and functional value, they are widely used in traditional China society. They play multiple roles in different social occasions and

situations and have multiple cultural connotations behind them. They are unique material and cultural carriers with rich historical and social contents.

The "relationship" dimension of the research on the material culture of porcelain garden stools

This paper classifies porcelain garden stools as a kind of material and establishes the basic structure of material culture of porcelain garden stools, which is only the beginning of material culture research. Independent things have no cultural significance, and only when they are placed in the dimension of "relationship" can they have significance and research value. Whether from the perspective of anthropology or folklore, the relationship between things and society is the first problem to be faced. For ceramics, porcelain garden stools are the main body of ceramic culture, and Jingdezhen is the living environment of porcelain garden stools. As a research medium, things are behind a system of relationships, namely, the relationship between porcelain garden stools and the environment, and the relationship between porcelain garden stools and social development. Some scholars call the organic system composed of natural ecology, things, people and society "material relationship". (Meng,2017) The material relationship constructs a basic research dimension for the material culture of porcelain garden stools. Furthermore, because material culture belongs to the category of culture, we must pay attention to the methods and achievements of cultural research here. Chen Huawen listed eight main cultural schools in Introduction to Culturology: evolution school, communication school, history school, social school, functional school, cultural psychology school (ethnopsychology school, culture and personality school), new evolution school and structuralism school; Wang Yude listed seven almost identical schools of cult urology in his Cult urology: evolution, communication, history, society, structure, function and psychology. (Chen,2001) These schools constitute the main perspective of cultural research, combining the model of "material relationship" with the morphological structure and changing trend of the material culture of porcelain garden stools, and the three "relationship" dimensions of the material culture research.

1) Material production and natural environment

Material production is the foundation of material culture, and what kind of material production foundation will produce the material culture structure corresponding to it, which is vividly displayed in the production process of porcelain garden stools. Therefore, specific things can be used as traces of social culture in the process of environmental adaptation. Material production culture includes the process and result of material production, which includes workers, labor materials and labor objects. The production of porcelain garden stools completely depends on the natural environment, and a "second nature" or "humanized nature" with objective reality and artificial characteristics is constructed. Obviously, tools and technology are indispensable in the process of transforming nature, and material production is embodied in the culture of technology.

2) Symbol of things and social development

Thought in Things: An Introduction to the Theory and Method of Material Culture and Understanding Material Culture both mentioned that material culture not only pays attention to the material itself, but also emphasizes the spiritual level and the conceptual level. By studying the beliefs, values, concepts and attitudes of a specific community or society through artificial products, the decoration of porcelain garden stools often contains rich symbolic significance. For example, patterns such as lotus, dragon and phoenix often appear on traditional objects in China, which represent prosperity, auspiciousness and good wishes. Through these patterns and symbols, we convey the values and belief system in material culture. As a traditional utensil with aesthetic function and use function, porcelain garden stool has surpassed the phenomenon function of things. It exists in the form of symbol, which is the materialization of belief and integrates the binary relationship between matter and spirit. (Li&Wang,2015) In ancient times, class differentiation was the link to construct the internal relationship of porcelain garden stools, and the meaning of objects and their symbols played an important role in the process of social development.

3) Material Exchange and Cultural Change

Cultural change is an eternal law. Chen Jianxian's a Course in Culturology mentions that there are four ways of cultural change: discovery and invention, dissemination, cultural loss and acculturation. (Chen,2011) Material culture on the surface of culture is the most active factor in the cultural system and plays an important role in promoting cultural changes. It is true that the innovative development of new things is the internal driving force of cultural change. For the porcelain garden stools produced in the Song Dynasty, the main way to promote the cultural change of porcelain garden stools is to inherit and innovate the traditional China ceramic culture, retain the traditional design concept and historical memory, and emphasize the uniqueness and national characteristics of culture. This spread is characterized by the exchange of materials and technologies between porcelain garden stools. (Wang,1990) From the dialectical relationship between matter and consciousness in philosophy: "Matter determines consciousness and consciousness reacts on matter", we can know that matter is the result of consciousness reaction, that is, material culture embodies people's spiritual activities and is the externalization or materialization of ideology. In the vision of change, material culture is no longer just a record of porcelain garden stools adapting to society and passively reflecting the social and cultural system, but even plays an active role in the process of social and cultural reproduction, regeneration and change. The acceptance and use of China traditional cultural information by porcelain garden stools is the Source of power to promote the changes of ceramic culture. The reason why there are various dimensions of material relations is that nothing exists in isolation, but in the form of information carriers. (Lu&Li,1991) In the dimensions of the above two kinds of relations, there are both phenomenon and abstraction or symbol of things, which originated from the

foundation of material production culture and ended in the influence of cultural communication mediated by things on the cultural changes of porcelain garden stools.

Material production: natural environment and production technology

Material production culture, which is mainly manifested as "technical" culture, is a reflection of the relationship between man and nature. (Zhang,2018) This chapter mainly studies that in the same natural environment, porcelain garden stools adopt different production technologies respectively, and on this basis, a material and cultural system adapted to the habitat is formed.

Natural environment for making porcelain garden stools

The relationship between things and nature has been an important topic discussed by philosophers for thousands of years, and various theories have their own understanding of nature. "Harmony between man and nature" and "Taoism and nature" are the core concepts of eastern philosophy, and western scholars' research on the complex relationship between things and their natural environment mainly focuses on the field of ecological anthropology. (Liu&Shi,2005) Although environmental determinism has some limitations, it proves that the natural environment has an extremely important influence on material production. Understanding the influence of natural environment on the material culture of porcelain garden stools from the perspective of geographical environment has important research enlightenment.

Jingdezhen, located in the north of Jiangxi Province, China, is a famous porcelain making center in China. Its abundant water resources and natural conditions for ceramic production, such as raw materials for porcelain making, have become the necessary conditions for the development of porcelain garden stools. (Zhou,1989) For example, Jingdezhen is located in Poyang Lake (the largest freshwater lake in China), with abundant water resources and crisscrossing streams. The mainstream Changjiang River originates from Qimen, Anhui Province, passes through the city from north to south through the floating beam, and finally flows into Poyang Lake. There are more than 50 rivers flowing into Changjiang River around it, forming a convenient water transportation network, which brings a lot of convenience to Jingdezhen porcelain production. (Lin&Wang,1989) At the same time, Jingdezhen is located in the hilly area of southern Jiangxi, with undulating mountains, mountainous hills and river valleys. This geological structure provides convenience for collecting minerals needed for making ceramics, such as raw materials such as porcelain stone and porcelain clay commonly used in ceramics. The raw materials for the production of porcelain garden stools include porcelain stone, kaolin, etc. (Xiong, 2006) Porcelain stone is a kind of stone raw material, which is made into brick clods after crushing and elutriation. Jingdezhen is commonly known as "Bai Bu", which has certain plasticity and drying strength. It can be made into porcelain alone and is white after sintering. Jingdezhen Jinkeng, Hukeng, Niujialing, Jietian, Shou 'an and other places have been rich in porcelain stone since ancient times. Jiang Qi's "Tao Ji" records: "The exquisite stone and mud made in the pit are inferior to those produced in the lake pit, ridge back and boundary field." In addition to porcelain stone, kaolin is also an important raw

material for porcelain making (Figure. 9). Kaolin is a kind of soft clay with high alumina content. It is named because it is rich in Gaolingshan, Dongbu Village, Yaoli Town, east of Jingdezhen (Figure. 10). It is one of the three ancient kiln areas in Jingdezhen. The firing time was between the 1970s and the mid-16th century, and its production mode was mainly to produce ceramic raw materials. It is famous for its whiteness, delicacy and strong fire resistance, and it is one of the important raw materials for making porcelain blank tires. (He&Shao,2016) However, it can't make tires alone, and it can only be made into porcelain by mixing it with porcelain stones in proportion. Kaolin was first discovered in Macangshan, Yaoli, Yuan Dynasty. By the early years of Wanli in Ming Dynasty, the soil in Macang was exhausted, and it was replaced by kaolin from dongbugaoling²³. In the Ming Dynasty, Song Yingxing recorded in "Heavenly Creations and Tao Birthdays": "The soil comes from Wuyuan²⁴ Mountain and Qimen Mountain. A gaoliangshan, a japonica rice soil, is hard; A Kaihua mountain, a glutinous rice soil, is soft in nature. The two soils are in harmony, and porcelain is made. " (Xiong, 2006)Jingdezhen's unique natural environment gave birth to the porcelain mound culture, and the material culture as the surface of the culture, especially the material production culture closely related to the natural environment, is bound to be branded with the ecological environment.



Figure 9 Glaze raw materials

Source: Photography by Danxi Luo, 2023

²³ a specific area known for its elevated terrain or historical significance, possibly a site with ancient tombs or cultural heritage.

²⁴ Wuyuan is a county in Jiangxi Province, China, renowned for its well-preserved ancient architecture and natural beauty. Often referred to as "China's most beautiful countryside," Wuyuan's landscape is characterized by rolling hills, vibrant rapeseed fields in spring, and clusters of traditional Huizhou-style villages.



Figure 10 Yaoli Porcelain Kiln Site
Source: Photography by Danxi Luo, 2023

Production technology

Although the natural environment provides energy for the production of porcelain garden stools, the energy contained in nature is not easy to come by. Ceramics must transform the material information in the natural environment into the survival needs through tools and technical means. The process of developing nature is the process of the emergence and development of human culture. Therefore, the core meaning of technology to promote cultural development is the mechanical means to link the two material systems of man and the universe ... Human life and culture depend on it. The technical means of obtaining energy constitutes the main way of the development of porcelain garden stools. Ceramic technology, as a basic mode of material production, provides the necessary means of survival and subsistence for the development of Jingdezhen's ceramic industry. China's ceramic technology began in primitive society and lasted for ten thousand years. The ceramic technology of different regions permeated and influenced each other, interwoven with unique ceramic culture. During the period of the rapid development of ancient porcelain industry in China, Jingdezhen was undoubtedly one of the most prominent ones. Relying on the unique porcelain resources and the attention of the rulers in ancient dynasties, it gradually formed a relatively clear growth vein that needs further exploration: whether in materials, molding, decoration or firing system, around ceramic production, Jingdezhen was a masterpiece of ancient China porcelain industry, which grew rapidly in the historical ring and finally reached the position of "reaching the peak gradually"

Although the word "technology" has existed for many years, it is quite difficult to give an exact definition of technology, because technology itself is constantly developing. The French philosopher Diderot (1713-1784) defined "technology" earlier in history. In the Encyclopedia edited by him at the end of the

18th century, he thought that technology is a system of tools and rules composed of cooperation for a certain purpose. The Handbook of License Trade for Developing Countries published by WIPO in 1977 pointed out: "Technology refers to the systematic knowledge of manufacturing a product, a process adopted, or providing a service, regardless of whether this knowledge is reflected in an invention, a shape design, a practical form or a new plant variety, or in technical information or skills, or by experts for design and installation.

The definition of technology in "Introduction to Science and Technology" published in 1998 refers to: "The experience, knowledge and skills accumulated by human beings through innovation in the process of utilizing, transforming and protecting nature, and the system of tools and rules formed by cooperation for a certain purpose, which is constantly developing." Although the connotation of technology and its derivative concepts are constantly developing and changing, in purposeful social practice, technology is always a synthesis of empirical knowledge, tools, methods and processes. The production technology of porcelain garden stools not only includes the methods and means of ceramic production activities, but also involves the system and management of ceramic production activities.

From the early Neolithic pottery making such as the Fairy Cave in Wanxian, Jiangxi Province, pottery technology has been developing continuously in cultures of various periods and regions. After thousands of years of practice, it has accumulated technical experience, and hard pottery has been made in the late Neolithic period. From its birth to its development, the main technological links of pottery-making technology can be summarized into four aspects: raw material selection (Figure. 11), processing, molding technology (Figure.12), decoration technology and firing technology. Among them, the selection and refinement of raw materials, the formation and development of glaze in decoration technology, the improvement of kiln (Figure. 13) and the increase of firing temperature are undoubtedly the key to the transformation from printed hard pottery and primitive porcelain to mature porcelain, and also the color glaze since Tang and Song Dynasties.





Figure 11 Selection of raw materials and processing
Source: Photography by Danxi Luo, 2023



Figure 12 Molding process
Source: Photography by Danxi Luo, 2023



Figure 13 Kiln

Source: Photography by Danxi Luo, 2023

Production technology cannot be separated from people's collective cooperation and wisdom, but also subject to the ecological environment. As an important part of the material culture of traditional ceramic objects, the production technology of porcelain garden stools has gradually formed a material production mode with technology as the core and adapting to the natural environment in the long-term production practice.

Porcelain garden stool and belief: ceramic patterns and grade symbols

During the long historical period from Song Dynasty to Ming and Qing Dynasties, porcelain garden stools not only built a sustainable material production system, but also formed a unique spiritual belief and social structure. When material culture involves the spiritual or conceptual level, things have gone beyond their own ontological meaning, but exist in specific ceremonies in the form of symbols. This section focuses on the role of ceramic patterns in porcelain garden stool decoration in the construction of social hierarchy in ancient times.

In ancient times, in the royal life, because the use of porcelain garden stools was an important part of the system of royal utensils, in order to ensure the particularity of royal utensils, the court set up an imperial ware factory in Jingdezhen, specializing in the burning of royal porcelain, which was not allowed to be copied by the people. The shape and ornamentation of the upper porcelain garden stool naturally

reflect the royal will. In different periods of ancient times, due to the different requirements of the royal family for the styles of utensils, especially the ornamentation, we can get a glimpse of the royal court life and the will of imperial power in different periods from the changes of the ornamentation of imperial porcelain. (Liu,2021) Due to the uniqueness and supremacy of porcelain, its style often becomes a symbol of wealth, glory and luxurious life of the people, and its style has great appeal to the people. In the firing of folk kilns, it is common to violate the rules and make the decorative patterns of imperial wares become popular among the people. In the late Ming Dynasty, the production of official kilns declined, and the firing of imperial porcelain was undertaken by folk kilns, and the decorative patterns of porcelain reflecting folk customs were transplanted to the decorative patterns of imperial porcelain from bottom to top to varying degrees. In the last period of Ming Dynasty, the royal family had lost control of Jingdezhen porcelain, which affected Jingdezhen folk kiln porcelain to stand out from the rest of the world. In order to meet the needs of the market under the new situation, there have been great changes in porcelain decorative patterns, which have infiltrated more social contents. The social life reflected by Jingdezhen porcelain ornamentation reveals the social changes. (Zhang&Ren,2017)

The vulgarization of porcelain ornamentation is obviously based on the value judgment of traditional literati. People living in historical life will not have this kind of worry, because choosing a certain pattern to decorate their utensils in a certain way may be the way they use to express an ideal life. From today's point of view, the so-called popularization is also a process in which ideals are gradually lost and increasingly subordinated to the enjoyment of secular life, which contains two meanings. First, the simple political ideals and universal social values and beliefs established in the early stage were thrown away from society and lost their ideals in the late stage. Second, the royal family, scholars, businessmen and other social classes enjoy the luxurious life brought about by social status and wealth, and enjoy handicraft production and commercial services with a lifestyle that they regard as valuable. (Guo,2014)



Figure 14 Dragon pattern
Source: Palace Museum, Beijing Provided

Obviously, the sacred and prominent life and destiny of the Ming emperor should have a set of etiquette and standard treatment to show his identity. Then it is naturally the most reasonable choice to decorate the furniture, porcelain garden stools and other utensils of the Ming dynasty with dragon wind patterns, which are unrealistic and supernatural. (Yu,1981) In particular, the dragon pattern has become a common form of decorative patterns of royal items in the Ming Dynasty. As the porcelain garden stool of the royal seat, the decorative pattern is naturally indispensable with dragon and phoenix patterns. (Figure. 14) According to the records of porcelain garden stool firing in Jiajing Dynasty, there are quite a few porcelain garden stools with dragon and phoenix patterns. As a special dragon style decoration for the royal family, a large number of people offended and banned it. On the one hand, it reflected the decline of the central power in the Ming Dynasty, on the other hand, it showed the people's worship of power, wealth and status value.

It can be seen that the decorative patterns of porcelain garden stools have both internal material significance and external material symbols, and the decorative patterns have built a relatively complete social hierarchy for porcelain garden stools. The change of decorative patterns of porcelain garden stools evolved into logo symbols because of their hierarchical symbols.

Porcelain Garden stool and Exchange: Material-based Cultural Communication

From the perspective of philosophy of matter and spirit, Chen Zhong summarized these different definitions of information into six basic viewpoints: (1) Information is the universal attribute of matter; (2) Information is the characteristic of spiritual entity; (3) Information is the transformation from material to spirit; (4) Information is neither a substance nor a spirit, but an independent "third state"; (5) Information is not only material, but also spiritual sometimes; (6) Information is a possible state of matter. It is not equal to matter and energy, but it cannot be separated from matter and energy. Within the scope of philosophical epistemology, information is the third state besides matter and consciousness, and it is the intermediary between them. (Sheng,1924)

Chinese civilization has experienced the Stone Age, the Pottery Age, the Bronze Age and the Iron Age. With the evolution of creation technology, the decorative behavior has already moved from obscurity to cultural consciousness. While people enjoy the practical convenience brought by material culture, they also get spiritual comfort. Li Yanzu said in *The Way of Decoration*: "Decoration is not only understood as an art, but also as a culture. As a culture, decoration has its cultural and cultural significance as a way of human behavior and creation, and its cultural significance as an ornament." Therefore, the decorative patterns and patterns attached to buildings and objects can be used as independent cultural symbols and form their own systems, and can also be used as components of objects to strengthen their cultural functions and aesthetic temperament. This kind of things with both

material utility and spiritual aesthetic functions mostly belong to the category of folk art. Folk art, which exists in the form of material, gets rid of the constraints of language and the differences of race and region with the help of visual images such as words, colors and patterns attached to objects, and realizes cultural communication by visual presentation.

Visual Images and Cultural Implication

Decorative patterns on porcelain garden stools are not only a beautification art form, but also a visual image of cultural symbols, which even plays a leading role in the spread of culture. Pattern decoration is the main component of visual images. As a visual representation of culture, it is a process of spiritualization, presenting the contents and concepts of folk culture such as folklore, fairy tales, ballads and proverbs in a material form. (Fan,2019) Patterns, patterns and so on, as the media of cultural communication, must go through two stages: the first stage is the creation stage of pattern symbols, that is, "observing things and taking images" and expressing them in the form of textured patterns to form patterns and symbols ... The second stage is that the recipients accept and take care of the inherent information and significance based on textured scheme and patterns.

From the creative concept and expression content, the decorative pattern attached to ceramics aims at practical form and function, which embodies the basic concept of putting things to use in life. However, the traditional social environment and humanistic concepts constitute the value scale of material thought and the morphological characteristics of its substantive content. In the long historical period, the emergence, existence, development and continuation of material culture are inseparable from the production and life of the times. China was a farming society in its early days, and its life was simple, and then it was integrated into the social environment, which was the three demands of creation and its decoration: one was to pray for Naji; The second is to ward off evil spirits in the town house; The third is ethics education. (Ding,2016) This kind of life appeal is often implicitly expressed in the decoration of material. "Blessing Naji" is the most common decorative theme, which is summarized as: blessing, fortune, longevity (Figure. 15), happiness, wealth and so on. These themes are closely related to people's lives, expressing people's yearning for a better life in real and simple language forms. "Town house to ward off evil spirits" is the guarantee of happiness and well-being. Images such as auspicious birds, animals and mythical are often used to achieve the psychological appeal of avoiding disasters by painting spells, reflecting the so-called "magic height is one foot, Road height is one foot" in folk nature worship.



Figure 15 Life-pattern and Money porcelain garden stool
Source: Palace Museum, Beijing Provided




From the cultural concept of expression, on the basis of natural cognition and combined with their own subjective feelings, the predecessors pinned their emotions on objects, which made the Figurative graphics transcend the meaning of the ontology and have symbolic meanings, showing various decorative patterns with auspicious meanings, that is, the so-called "the picture must be intentional and the meaning must be auspicious". It can be seen that the decoration of porcelain garden stools has a distinctive utilitarian color. (Li,1998) Lvpintian thinks that the utilitarianism of ceramic decoration theme has three comprehensive tendencies: (1) I hope that the clan's name will be passed down and the family members will live longer; (2) I hope to have plenty of food and clothing in my daily life, and my family status is prominent and noble; (3) I hope that the farming in the country will be free from disasters and the family and livestock will be safe and sound. In terms of cultural concept, it can be understood as the cultural concept of survival, the cultural concept of seeking benefits and the cultural concept of avoiding harm.

From the way of expression, the traditional decorative theme of porcelain garden stools mainly turns cultural connotation into graphics through implicit means such as metonymy, analogy, symbol and homonym. For example, borrow "peach" to replace "longevity" and "peony" to replace "wealth"; Compare "the virtue of a gentleman" with "Mei Lan Zhu Ju"; "Lotus" symbolizes "incorruptible conduct"; Bat's homonym is full of happiness, butterfly's homonym is full of happiness, deer's homonym is Lu, and chicken's homonym is auspicious. After a long period of development and tempering, animals, plants and other graphic images molded on utensils have gradually evolved into symbols recognized by the public, which are deeply rooted in people's production, life and customs, and are an important part of Chinese traditional culture. (Ye,2006) From the above-mentioned pattern types and image themes, it can be seen that as a decorative pattern (Table 4) in a utensil, it is enough to prove the penetration and popularization of visual form as a cultural

communication medium. Visual image is a concentrated expression of the concept of ceramic culture and an important way to inherit and spread ceramic culture.

Table 3

Decorative Patterns	Image Theme
<p>Dragon pattern</p> 	<p>Dragon, unicorn, ichthyologist, unicorn dragon</p>
<p>Feng Huangwen and other bird patterns</p> 	<p>Phoenix, rooster, peacock</p>
<p>Celestial stria</p> 	<p>Water ripple, moiré, sun ripple and thunder ripple</p>
<p>Plant grain</p> 	<p>Peony, lotus, plum, orchid, hibiscus, camellia, pomegranate, chrysanthemum, peach, apricot, bergamot, pine, bamboo, honeysuckle pattern, aquatic plants, etc.</p>

<p>Animal grain</p> 	<p>Zodiac, butterfly, deer, bat, lion, swimming fish, toad, etc.</p>
<p>Bo Gu pattern and auspicious writing pattern.</p> 	<p>"Fu", "Lu", "Longevity" and "Happiness" etc.</p>
<p>Geometric grain</p> 	<p>Curves, broken lines, vortex lines, wavy lines, wavy lines, thunder lines, S lines, swastikas, longevity characters, cloud heads, cloud hooks, palindromes, Qian Wen, Fangsheng, Chinese knots, several stool lines, etc.</p>

Information Materialization and Social Culture

From the Song Dynasty, especially in the Qing Dynasty, China's material culture was highly developed. In particular, the porcelain industry flourished in the prosperous period of the Qing Dynasty (Kangxi Dynasty, Yongzheng Dynasty, Qianlong Dynasty). After more than 200 years of firing, the distinctive porcelain garden stools produced more than one million fine pieces. From the moment it appeared, it was destined to become the focus of future generations. Investigate its reason, its internal cause is the social development brought by political stability, which promotes the national strength and brings economic and cultural prosperity. On

the surface, Jingdezhen porcelain-making technology is the main reason, and the royal family attaches great importance to it, so it can undertake the difficult firing of official imperial porcelain-official kiln porcelain. In a word, the Qing dynasty porcelain garden stool is technically a collection of all the ancient porcelain-making techniques, and it has a certain performance on the culture and art of ancient and modern China and foreign countries from the decoration point of view. Porcelain garden stool decoration is rich in various cultural characteristics and is a microcosm of social culture. At the same time, its decorative features not only have an impact on the material and cultural development of the West and surrounding areas, but also have a far-reaching impact on the social culture at that time, the development of official kilns and the cultural content of later generations. The following will summarize the influence of the decoration and characteristics of porcelain garden stools on the porcelain firing and social culture of later generations from two main aspects: the general situation of collection and the promotion of the development of porcelain manufacturing technology.

1) Collection Overview

As a social and cultural phenomenon, collection has always existed since ancient times. Porcelain garden stools in Qing Dynasty were made by the emperor who participated in the decoration and ordered to burn. Therefore, they were not only beautifully decorated, but also became outstanding products in antique porcelain because of their scarce quantity. There are many records about the collection of Qing porcelain in the society at that time in the notes and essays of Qing literati. In fact, the biggest collector in Qing Dynasty should be Emperor Qianlong. (Liu,2005) It is recorded in the literature that "Qianlong actively arranged wooden boxes for the paintings of the Kang, Yong and Gan Dynasties and the foreign colors of Qianlong for three years, and collected them in the Ganqing Palace for collection. (Yu, 2012) It is precisely because of the proper collection method of Emperor Qianlong that today we can see some porcelain garden stools in this collection in the Palace Museum on both sides of the strait. Of course, during the historical transformation of the vicissitudes of the Qing Dynasty, especially when Eight-Nation Alliance invaded the royal family and palaces of the Qing Dynasty, some precious articles were plundered out of the country, and some porcelain in the Qing Palace was lost overseas. At that time, the "high-quality wares of official kilns" appeared in the China market, which were mostly given to courtiers by emperors in the past dynasties, and after the late Qianlong period²⁵, positive-colored porcelains changed their prices and entered the market, and some of them were imitations of folk kilns.

At the end of the Qing Dynasty, the trend of collecting ancient porcelain became more and more popular. In view of the lack of fine products of Qing Dynasty

²⁵ The late Qianlong period refers to the later years of the reign of Emperor Qianlong, who ruled China as the sixth emperor of the Qing Dynasty from 1735 to 1796. The late period of his rule, roughly from the 1770s to 1796, is often associated with both the zenith of Qing imperial power and the beginning signs of decline

porcelain garden stools in the market, collectors began to hire porcelain makers to imitate the porcelain of the official kiln of the previous dynasty. According to Mr. Geng Baochang's introduction in the book "Identification of Porcelain in Ming and Qing Dynasties", imitation-burning official kilns in the Qing Dynasty prevailed in Guang, Xuan and the Republic of China. At that time, there were a group of masters who imitated the porcelain of the former dynasty. For example, Mr. Geng mentioned in the "Introduction to Famous Antiques since the Republic of China": "Wang Ruiting ... Was good at imitating the colorful colors of the early Qing Dynasty"; "Zhang ... Is good at imitating the bronze color of Qianlong"; And "In the Republic of China, there were many people who were good at adding color to the original story: Zhan Yuanguang and Zhan Yuanbin in Jiangxi Province ... Liu Chunfeng and Hong Quanhua in Beijing ... Yue Huchen, etc.". (Ge,1993) It shows that imitation burning of famous porcelain such as Qing Dynasty porcelain garden stool at that time has become a main burning content of local cellar craftsmen during the Republic of China. It is no wonder that when Mr. Geng introduces the famous porcelain of official kilns in the Qing Dynasty, he always talks about the imitation situation in the late Qing Dynasty and the early Republic of China. Up to today, the collection craze has become a common practice under the national conditions of the great economic development of the motherland. With its excellent quality and unique decorative style, the porcelain garden stool will still bring the legend of collection and auction again and again to China and the world for a long time. (Figure. 16) is a blue-and-white lion ball-patterned porcelain garden stool collected in ceramics museum, the imperial kiln in Jingdezhen, China. The cultural attributes explained by the decorative features gathered on the porcelain garden stools have the characteristics of multi-ethnic and multi-cultural interweaving. Today, our academic circles pay so much attention to it and study it seriously, all because of a truth-seeking attitude towards ancient history, a respect for ancient cultural history, a search for the wisdom of China's ancient ancestors, and an admiration for China's ancient arts and crafts.

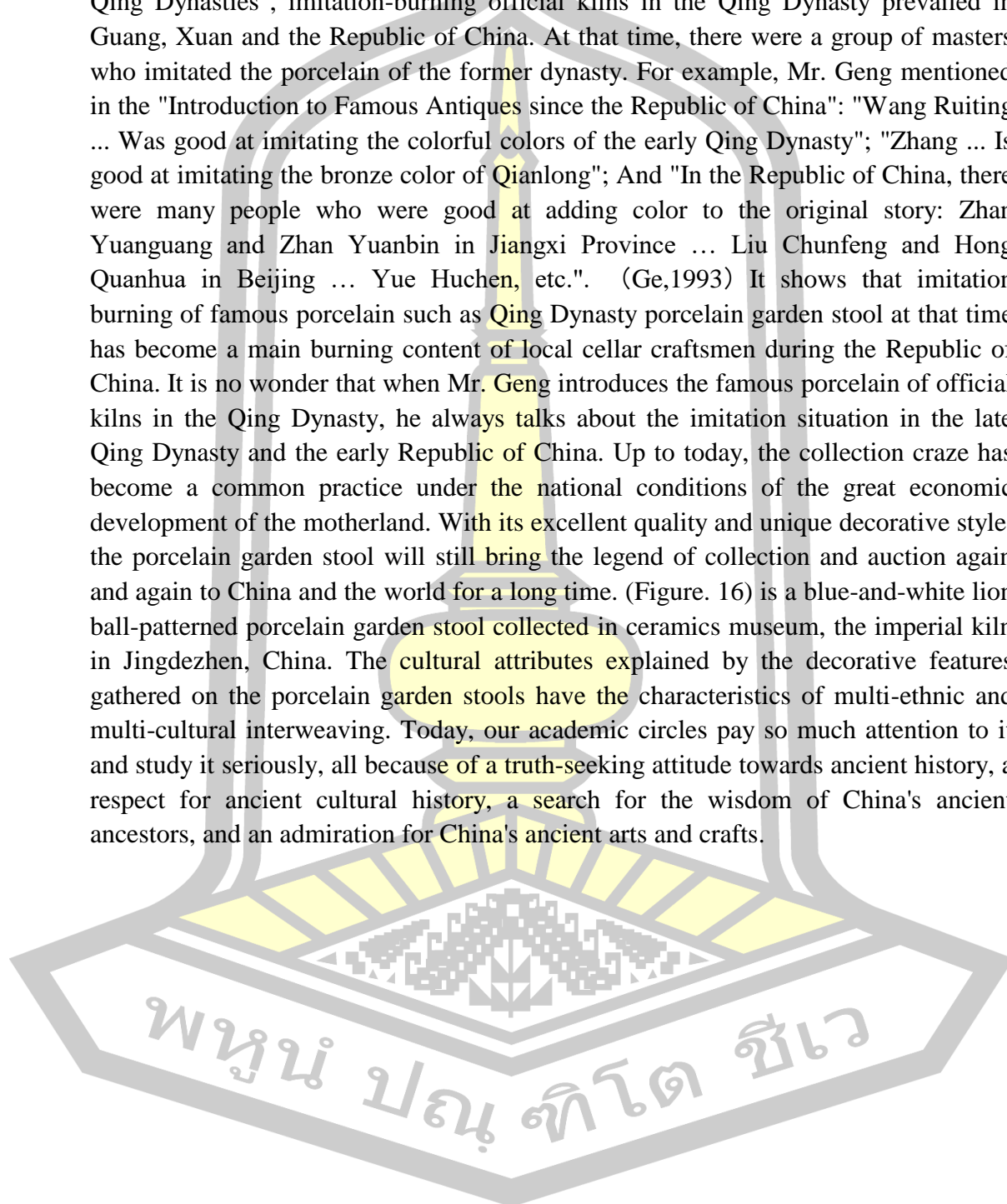




Figure 16 Blue-and-white lion playing ball garden stool
Source: Photography by Danxi Luo, 2023

2) Influence on later porcelain making technology

As far as decoration techniques are concerned, the porcelain color decoration style of "Eight Friends of Zhushan²⁶" (Figure. 17), which rose in Jingdezhen at the beginning of the Republic of China, borrowed and inherited some performance techniques of color decoration on porcelain garden stools in Qing Dynasty to some extent. "Eight Friends of Zhushan" is a group of painters who appeared in Jingdezhen in the 1920s and 1930s and were good at porcelain decoration. Because the activity place of these eight painters is the Wulong Temple in Longzhu Cabinet, Zhushan, in the former site of the Imperial Kiln Factory in Qing Dynasty, later generations called them "Eight Friends of Zhushan". They are: Wang Qi, Bi Botao, Wang Yeting, Deng Bishan, Cheng Yiting, Wang Dafan, Liu Yuzhuan and He Xu. They are all masters of painting porcelain, and their calligraphy and painting also have certain attainments. In the book *Jingdezhen Ceramic History Draft*, there is such an introduction: "The so-

²⁶ The Eight Friends of Zhushan (珠山八友) in Jingdezhen refers to a group of eight prominent porcelain artists in Jingdezhen, Jiangxi Province, China, during the late Qing Dynasty and early Republic of China period.

These artists collaborated and innovated within the realm of porcelain art, contributing to its development with their unique styles and techniques. They specialized in different aspects of porcelain decoration, including underglaze blue and white, famille rose, and overglaze enamels. The group's work is characterized by its artistic excellence and innovation, combining traditional Chinese elements with influences from Western art forms that were becoming more prevalent in China at the time. The members of the Eight Friends of Zhushan each left a lasting legacy in the world of Chinese porcelain art, and their works continue to be celebrated for their beauty and craftsmanship. The group's influence extended beyond their own generation, inspiring future artists and contributing to the enduring prestige of Jingdezhen porcelain both in China and internationally.

called eight friends of Zhushan: Wang Liu, a new person, painting characters; Deng Bishan, Yu Ganren, painted fish algae; Xu Zhongnan, from Nanchang, painted bamboo; Tian Hexian, a native of Zhejiang, painted plum; Wang Dafan, a native of Huoxian County, Anhui Province; Wang Yeting, a native of Leping, painted landscapes; Cheng Yiting, from Leping, painted flowers and birds; Liu Yuji, a native of Boyang, painted flowers and birds. "



Figure 17 Jingdezhen "Eight Friends of Zhushan"

Source: Downloaded from <https://digicol.dpm.org.cn/e>

"Eight Friends" is headed by Wang Please, who, together with Deng Bishan and other seven people, have always followed suit and commented on painting, and most people call them "eight famous artists". (Zhang, 2004) Although Bi Botao and who are not mentioned in the article, authoritative scholars later identified the Eight Friends of Zhushan. Including the eight painters mentioned above, Tian Hexian and Xu Zhongnan were added. According to Mr. Liu Xinyuan, "Eight Friends of Zhushan" was the name of a group of painters who were active in Jingdezhen at that time. These painters are all good at expressing decorative patterns on porcelain garden stools, with traditional landscapes, flowers, birds, fish and insects as the main themes, and fine paintings of Xiang Mao and animals. The painters in "Eight Friends of Zhushan" mainly use the techniques of "shallow luster" and "new powder". The king's chair, the painted characters are expressed by the technique of "new pastel", and the characters are vivid; Bi Botao painted flowers and birds with "new pastel", which is fresh and bright; Wang Yeting, on the other hand, uses the technique of light crimson color painting, and his landscape patterns are natural, with smooth brushwork and quite archaic.

In a word, some painters who were active in Jingdezhen ceramic workshops in the late Qing Dynasty and the early Republic of China broke the dominant position of porcelain painting that had been occupied for a long time since the Qing Dynasty, and made bold attempts to apply a variety of painting techniques to the performance of porcelain garden stool decoration, forming the "porcelain painting" style of folk kiln.

From this point of view, this new technique in the expression of porcelain garden stool decoration is still the continuation of the expression technique of official kiln decoration in Qing Dynasty, because the color expression of official kiln decoration mostly draws lessons from traditional Chinese paintings, such as the painting style of glass-colored porcelain decoration in Yongzheng period, especially the painting style of the four kings and Wu Yun in the early Qing Dynasty, with fresh and elegant pictures and detailed descriptions. If these Jingdezhen painters can see the decorative patterns on the fine products of Kang, Yong and Gan Guan kilns, I am afraid they will feel far behind. However, in any case, the painters of "Eight Friends of Zhushan" dared to break the dominant position of the traditional official kiln ornamentation expression techniques, boldly innovated, injected fresh air into the traditional material culture of the motherland, promoted the development of the porcelain garden stool ornamentation expression techniques, and developed this decorative content into the art of "porcelain painting". From this point of view, the appearance of the "Eight Friends of Zhushan" group is of great significance to the development of China's ceramic industry.

Summary

In Chinese culture, the seat has undergone the evolution from ancient times to the present, especially the porcelain block, as a kind of traditional ceramic ware, from the simple seat cushion in the Paleolithic Age to the embroidered block in the Song Dynasty, and then to the prosperity of the porcelain block in the Ming and Qing dynasties. It is not only a kind of sitting ware, but also a microcosm of Chinese ceramic culture. The development of porcelain garden stools reflects the economic, social and cultural changes, and shows the aesthetic preferences and practical needs in different times.

From the simple sitting on the ground in the early farming society, to the widespread use of porcelain garden stools in the court and literati in the Tang and Song dynasties, and then to the common items in the homes of ordinary people in the Ming and Qing Dynasties, the form and function of porcelain garden stools constantly adapted to and reflected social changes. Its decorative patterns and material choices reveal the living habits and aesthetic tastes of different social classes.

Porcelain garden stool reached the peak of production in the Ming and Qing dynasties, which was not only widely used in China, but also exported to overseas in large quantities. With the changes of modern society, especially the war and the decline of technology since the late Qing Dynasty, the production and use of porcelain garden stools have been affected. By the Republic of China and the New China period, although the porcelain process has been restored, but the porcelain garden stool is no longer the focus of life.

In the 21st century, with the revival of interest in traditional culture, porcelain garden stool has received renewed attention as a traditional art form, but its restoration and application in modern life still face the challenges of cost and

innovation. In order to make the porcelain garden stool return to People's Daily life, it is necessary to innovate in design, so that it not only retains the essence of traditional culture, but also meets the needs of modern life.

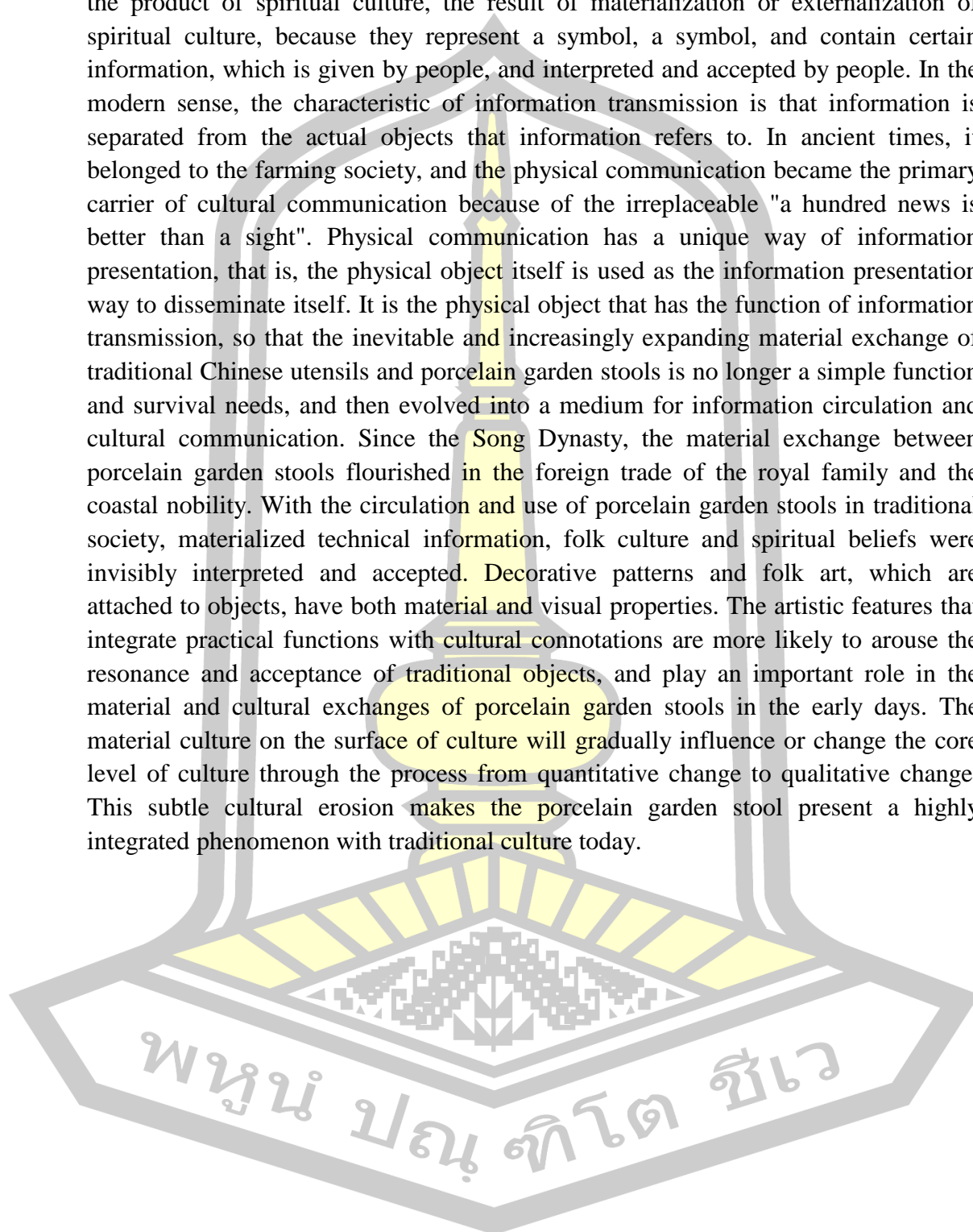
Through the investigation and analysis of objects, when the deep-seated relationship between porcelain garden stools and natural environment, social development and material exchange is further discussed, that is, the relationship of "society, objects and environment" reflected by objects, material culture as an object is sublimated into a methodology. Based on the dual attributes of material culture, this paper studies the material culture inheritance and change of porcelain garden stool in its unique geographical environment from the perspective of macroscopic social culture and microscopic object demonstration.

From classical evolution to new evolution, from cultural anthropology to ecological anthropology, all the theories on cultural evolution take things as important investigation objects, which are used to prove and explain the grand narrative of production technology and ecological environment adaptation. The natural environment of Jingdezhen gave birth to the ceramic culture, and the material production led by technology is the key link between the porcelain block as the subject and the habitat as the object. The natural environment provides the energy for the production of porcelain blocks to survive, but the energy contained in nature is not readily available, and ceramics must be transformed into material materials in the natural environment through tools and technical means. The production technology used in the production of porcelain garden stool reflects different degrees of development and adaptation to the natural environment. The continuous expansion of material production has made it possible to accumulate material wealth, resulting in a variety of forms of consumption. Material production determines the basic content and original form of the material culture of porcelain garden stool. Therefore, under the leadership of ceramic technology, the dynamic adaptation of porcelain garden stool to the environment is the internal driving force of its cultural change.

The main reason why the study of material culture exudes lasting charm is that the study of material culture is far more than the basic material elements such as the form, aesthetics and structure of artifacts, but also includes the creative concept of things, social customs, religious beliefs and other spiritual cultures. Therefore, material culture and spiritual culture are not completely opposed, but mutually permeate and interact. Pure material does not have culture. Only when people participate as the subject and put various factors into it, can they materialize into cultural forms. In ancient times, the ceramic pattern decoration of Jingdezhen showed the values between the royal family and the common people, and was expressed as an ideal way of life. Therefore, the choice of ceramic patterns is a way of identifying the body of the porcelain block, strengthening the hierarchy and status of the ancient society.

Since the manufacturing process of things cannot be separated from the participation of human spirit or consciousness, artificial creation is the unity of

tangible matter and intangible spirit. In a sense, material culture can be regarded as the product of spiritual culture, the result of materialization or externalization of spiritual culture, because they represent a symbol, a symbol, and contain certain information, which is given by people, and interpreted and accepted by people. In the modern sense, the characteristic of information transmission is that information is separated from the actual objects that information refers to. In ancient times, it belonged to the farming society, and the physical communication became the primary carrier of cultural communication because of the irreplaceable "a hundred news is better than a sight". Physical communication has a unique way of information presentation, that is, the physical object itself is used as the information presentation way to disseminate itself. It is the physical object that has the function of information transmission, so that the inevitable and increasingly expanding material exchange of traditional Chinese utensils and porcelain garden stools is no longer a simple function and survival needs, and then evolved into a medium for information circulation and cultural communication. Since the Song Dynasty, the material exchange between porcelain garden stools flourished in the foreign trade of the royal family and the coastal nobility. With the circulation and use of porcelain garden stools in traditional society, materialized technical information, folk culture and spiritual beliefs were invisibly interpreted and accepted. Decorative patterns and folk art, which are attached to objects, have both material and visual properties. The artistic features that integrate practical functions with cultural connotations are more likely to arouse the resonance and acceptance of traditional objects, and play an important role in the material and cultural exchanges of porcelain garden stools in the early days. The material culture on the surface of culture will gradually influence or change the core level of culture through the process from quantitative change to qualitative change. This subtle cultural erosion makes the porcelain garden stool present a highly integrated phenomenon with traditional culture today.



CHAPTER II

The traditional identity and modern value of porcelain garden stools from the dimension of art

Introduction

The performance of early porcelain garden stools mainly praised the practicality of functions, which were mostly used in common scenes in life, reflecting the lifestyle, aesthetic thought, cultural characteristics and technology of the users to some extent. In the early days, these porcelain garden stools were often used only by a small number of royal aristocrats, thus adding another cultural background that was particularly prominent in a certain period. (Li,2011) This performance has the same inheritance and universality in different stages and different social and cultural backgrounds, and at the same time has its own characteristics. In a hierarchical society, it is more reflected as a political class function. No matter the design theme or the production technology, it is also to show the will of the ruling class. With the development and opening up of society, literati and ordinary people can also see porcelain garden stools, and the performance of porcelain garden stools is more to cater to the aesthetic taste of modern people.

The traditional artistic expression of porcelain garden stool

The definition of "expression" in China Modern Chinese Dictionary is that it refers to external and observable phenomena. This phenomenon can show different effects through different expression techniques. People often say that there are literary expressions, artistic expressions, design expressions, architectural expressions, clothing expressions and even human expressions. (Bo,2002) Although each observed phenomenon is different, the expression techniques they use in the process of expression can be integrated.

Decoration techniques analysis

The decoration of porcelain garden stool is an artistic treatment of the surface of the ware by using different techniques and corresponding decorative materials. Its techniques are mainly divided into blank body decoration, glaze decoration, and painted decoration.

Body decoration

Affected by the unique conditions such as the type of porcelain garden stool and the use scene, the decoration of porcelain pier body includes hollowing, relief,

opening, opening, etc. This study mainly studies the opening of different periods. Opening decoration²⁷, also known as "Kaitangzi" in Jingdezhen, is one of the main decorative forms of traditional porcelain garden stools in China, which has the characteristics of highlighting the strong contrast between the main body and the static lining. This decorative technique originally evolved from the form of windows on a certain building in ancient times. The decorative decoration of porcelain garden stools has gone through thousands of years of development, appearing in the painted pottery period and growing up in the Song and Yuan Dynasties. The decorative decoration was also named at this time and was first proposed as a decorative method. Its meaning is that in order to make the decoration on the utensils varied, a space of a certain shape is often left in a certain part of the utensils, and then the space is decorated with patterns. (Tian,1985) In the painted pottery period thousands of years ago, the decoration of the opening ceremony began to sprout, and it was a long historical course from the Neolithic Age to the Yuan, Ming and Qing Dynasties. The opening decoration of porcelain garden stools has also experienced a process of continuous development, change and enrichment.

1)The opening of porcelain garden stools in Song and Yuan Dynasties

The Song and Yuan Dynasties were the glorious period of China porcelain garden stools, with stable social, economic and cultural development and good domestic handicraft industry development. At that time, the government attached great importance to foreign trade and turned overseas trade into government-run, and both government-run and private overseas trade were very developed. The increase in the demand for traded goods further promoted the production of various handicrafts, and the opening decoration of porcelain garden stools in the Song and Yuan Dynasties was developed under such social conditions. In the Song and Yuan Dynasties, the decorative form of "Kaiguang" was very mature and was widely used in the decoration of porcelain garden stools. (Luo&Huang,2004) At that time, Longquan Kiln, one of the five famous kilns in the Song Dynasty, produced a porcelain garden stool with green glaze and floral patterns, which was a good product at that time

The composition form of the opening decoration in Song Dynasty is "single", that is, one or two shapes are attached in an independent and complete opening form. If there are multiple shapes, they will be arranged at intervals at a certain distance, and then their unique aesthetic characteristics will be fully realized. (Tian,1985) Generally speaking, there are two kinds of light profile shapes of opening decoration in Song Dynasty: geometric shape and flower shape. Geometric shapes are round,

27 In the context of Chinese porcelain and traditional Chinese art, "opening decoration" refers to a specific decorative technique where a panel or a 'window' is left on the surface of an object, such as a vase or a plate, which is then filled with a detailed painting or design. This technique creates a visual effect similar to looking through a window, with the 'opened' panel contrasting with the surrounding decorative motifs or patterns. The decoration inside the panel often features landscapes, floral designs, figures, or narrative scenes, executed with meticulous detail and precision.

oval, diamond and rectangle; Flower shapes are rhombic, four-petalled and petal-shaped; In addition, there are door shapes and wishful head shapes.

In Song Dynasty, there are two kinds of decorative land: plain land and decorative land. Plain land, Kaiguangdizi is plain without any ornamentation, which is characterized by setting off the bright and prominent decorative image of Kaiguangdizi with plain land without grain. Decorative land, the decorative land is the main part of porcelain in Song Dynasty. According to the specific image of its auxiliary decoration, there are mainly branches, scattered places, rolling grassland, winding land, water pattern land, brocade land, corner land and so on. As shown in(Figure. 18), Longquan Kiln has a glazed porcelain garden stool with floral patterns, and the lawn is covered with cloth.



Figure 18 Longquan Kiln green glaze open
Source: Downloaded from <https://digicol.dpm.org.cn>

2) Porcelain garden stools were opened in Ming and Qing dynasties

Decorative Characteristics of Kaiguang In the Qing Dynasty, China's porcelain industry reached a stage of high development, and Jingdezhen porcelain garden stool production was still the national porcelain center. The varieties, types, decorative styles and performance contents of porcelain decorated by Kaiguang are more diverse, and it has entered its heyday. In the Qing Dynasty, porcelain garden stools of various varieties and glazes were decorated by opening the light, such as blue and white, pastel, enamel, multicolored, doo-choi, peacock blue glaze, blue glaze for offering sacrifices and red glaze. (Xiong, 1993) In this period, with the continuous improvement of porcelain-making technology and decoration techniques, the increase of decorative themes, the increasing demand of society and other factors, the opening decoration on porcelain became more common and mature, and entered its prosperous period.

In terms of techniques, the Kangxi, Yongzheng and Qianlong dynasties in the early Qing Dynasty reached the historical peak of China's porcelain-making technology. Most of the existing porcelain-making technologies and varieties in the Ming Dynasty have been improved or innovated in the Qing Dynasty. During this period, the continuous innovation of techniques and new varieties made the opening decoration more abundant and changeable and further improved. The opening of Jingdezhen porcelain garden stool in Qing Dynasty has its unique diversity and combination. In this period, the production of colored porcelain and monochromatic glazed porcelain reached a very high level in terms of quantity and quality. The achievement of porcelain industry is mainly the improvement and improvement of decoration. In addition to colored glaze, the most important part of the decoration of porcelain in Qing dynasty is painting, and the comprehensive opening decoration of various glaze colors plus painting has become a bright spot (Yang,2003) For example, the combination of blue and white flowers in bean green land, red flowers and blue flowers is decorated. In the Qing Dynasty, the opening process inherited and developed the techniques of carving, drawing, carving, stacking and carving in the Yuan and Ming Dynasties.



Figure 19 Pastel phoenix wearing peony porcelain garden stool

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In terms of composition, in the Qing Dynasty, it was common for porcelain garden stools to be decorated with single composition forms. As shown in (Figure. 19) the opening on the outer wall of the garden stool was decorated with single composition forms, which was generous as a whole and did not appear crowded. Dizi uses brocade as decoration, highlighting the image inside the opening ceremony, and the dense composition form is one of the advantages of the opening decoration of porcelain garden stools in Qing Dynasty. In the Qing Dynasty, the opening decoration of Jingdezhen porcelain garden stool was mostly composed in a single form, with certain intervals and prominent themes. There are fewer and fewer complicated composition forms in the Yuan Dynasty, and it is becoming more and more popular

into paint a decorative surface with a decorative pattern. The change of the demand for beauty is occasionally seen in the form of company, but the close and cumbersome form of borrowing and covering is gradually eliminated. The opening decoration of Jingdezhen porcelain garden stool in Qing Dynasty is representative in the history of opening decoration. Rich resources, superb skills, market demand and aesthetic development make the opening decoration develop rapidly, and it wins with fine painting and gorgeous colors. By the time of the Republic of China, people still liked the porcelain of the Qing Dynasty, and some artists specialized in imitating the porcelain of the late Qing Dynasty. Its beauty made future generations fondle admiringly the porcelain garden stool that opened in the Qing Dynasty. (Figure. 20) In the Qing Dynasty, the pastel phoenix wore a peony-patterned porcelain garden stool. The technology of the porcelain garden stool represents the peak of Jingdezhen porcelain-making technology in the Qing Dynasty. The vessel is drum-shaped, hollow in the arc, flat on the drum surface, with hollow money patterns in the middle, and the garden stool body is painted with pastel patterns as decoration. These complex techniques combined with painting are dense and delicate, and the concept is unique and novel. It makes the whole opening porcelain full of vitality, full of three-dimensional sense and authenticity, and it is really a treasure in the world.



Figure 20 Tongzhi Period - Powder enamel dragon Phoenix porcelain garden stool
Source: Downloaded from <https://mp.weixin.qq.com/s/Atdzj9Sqhg784uyrrZnsA>

In terms of the changes in the form of outer contour, Jingdezhen porcelain in Ming and Qing Dynasties has various forms of opening decoration contour, and even there are many layers of opening decoration in an object, and the forms of outer contour are varied, which constitutes a rich and colorful picture. The main decorative patterns in Qing Dynasty are: round, oval, diamond, four-petal flower, square, rectangle, rhombus, fan-shaped, trapezoidal, drop-shaped, heart-shaped, octagonal,

etc. The common auxiliary patterns are: leaf shape, pomegranate shape, wishful shape, cloud shoulder shape, cloud head shape, trapezoid shape, ellipse shape, etc., with rich and varied shapes. This is a new change in the basic form of the outer outline of enamel. Some of them are wrapped with graceful vines, some are painted with prominent lace, some are like golden ears and leaves, and some are connected by six blessings to form an outline. They are ingenious in conception, prosperous and expensive in decoration and have a strong charm of exotic decoration. During the Tongzhi period, the porcelain garden stool was decorated with pastel dragons and phoenixes, with dragon and phoenix patterns painted in the opening, with disk-shaped pink chrysanthemums on both sides, and the outer outline of the opening was decorated with diamond flowers and brocade fields as a circle. This concept was changed on the original basis. This change in the form of opening not only increased the new visual effect, but also better echoed and set off the image in the light. Make the whole utensil more novel, gorgeous and lively. This kind of opening contour was very popular at that time.



Figure 21 Qianlong eight years magnetic tire foreign color icing on the exquisite porcelain garden stool details

Source: Downloaded from <http://www.chizichina.com/shangxi/449309.html>

In terms of the changes of the earth²⁸, the earth where the porcelain garden stool was opened in the Ming and Qing Dynasties was ever-changing, and all flowers were in full bloom. Due to the breakthrough development of colored glaze and enamel color, the opening of porcelain garden stool has also begun a new chapter. Texture is

²⁸ refers to the background area on the surface of the porcelain, especially the part next to the opening decoration. The opening decoration refers to the practice of leaving one or more specific-shaped areas on the porcelain for detailed painting, while the (ground decoration) refers to the background decoration around the opening or across the surface of the porcelain. The ground decoration often employs more subdued patterns or motifs to complement the intricate scenes within the openings, achieving visual balance and aesthetic harmony. The styles of ground decoration are varied and can include various geometric patterns, natural elements like flowers, cloud patterns, or other traditional symbols. It not only fills the background of the porcelain but also enhances the artistic effect of the entire piece, making the scenes within the openings more prominent. Through carefully designed ground decorations, the porcelain exhibits a rich sense of layers and depth, reflecting the intricacy of the porcelain-making craft and the profundity of porcelain art.

also very common in the Qing dynasty, and its application methods include characterization, carving, hollowing out, stacking flowers, hollowing out painting and so on. The combination of these paintings and sculptures makes the whole shape more attractive. (Figure.21) The detailed picture of the exquisite porcelain garden stool, which is icing on the foreign colored brocade of the eight-year-old magnetic tire in Qianlong, uses the method of hollowing out and carving flowers, first carving the flat grain as the ground, and then coloring it with holly glaze. The craft is very precise and complicated, and this kind of delicate and unique land was widely loved in the Qing Dynasty. During the Qing Dynasty, the development of glaze pigments and glazes was stable. At that time, the official kiln porcelain industry used pigments to strike the ground as a foil to open the light, and there were also many gorgeous glazes as a foil to open the light. This effect is clear at a glance and highlights the role of the center.

3) Opening of porcelain garden stools in the Republic of China

The opening art of porcelain garden stools in the Republic of China is still developing slowly, which mainly continues the opening decoration style in the late Qing Dynasty, but it is still obviously different from porcelain in the late Qing Dynasty. Compared with porcelain in the late Qing Dynasty, its shape is simple and natural, and it is more common with simple and straight shapes. The change of modeling affects the outline form and composition of the opening light. It has a stable foundation in technology and pigments, but it is slightly inferior to the official kiln porcelain in Qing Dynasty.

In the early years of the Republic of China, the production of Jingdezhen porcelain industry still used the traditional handicraft workshop method since the Ming and Qing Dynasties. The technology was outdated, and the Jingdezhen porcelain industry suffered serious damage after years of war, so the production of porcelain garden stools was in trouble. However, in order to conform to the historical trend, catch up with the development of the times and change the backward situation of Jingdezhen porcelain industry, a group of social sages and people with lofty ideals have played a certain role in promoting the prosperity of Jingdezhen porcelain industry and continuing the burning of kiln fires in the porcelain capital for thousands of years. In the history of art development in China, art in any period should be an objective reflection of ideology and social concepts in this period. Porcelain in the Republic of China is an important link in the history of porcelain-making of the Chinese nation for thousands of years. Without this link, the development history of China porcelain is incomplete, and without this link, the development of new China porcelain cannot be in line with history. The Republic of China is a milestone for China porcelain garden stools, which is manifested in three aspects: science and technology, art and education.

In terms of techniques, the porcelain garden stools in Jingdezhen were influenced by the society during the Republic of China, but the kiln fire of the Millennium porcelain garden stools continued to burn. At this time, the potters and artists absorbed the meticulous work of the Qing Dynasty in the production process,

taking Kang, Yong and dry colored porcelain as the reference. Porcelain in the Republic of China can be roughly divided into two categories: under-glaze color and over-glaze color, especially the under-glaze color is the most abundant, including ancient color, pastel color, light crimson color, new color, applique, brush flower, spray flower and golden color, which not only continues the porcelain painting technology of the previous generation, but also develops the new technology of porcelain in the Republic of China. (Tie&Xi,2004) In the Republic of China, opening decoration became one of the widely used decorative techniques, whether it was over-glaze or under-glaze. Inherited the characteristics of colored glaze in the late Qing Dynasty, Kangxi, Yongzheng and Qianlong periods, and the process of firing high and low temperature colored glaze in the Republic of China made great progress. It is very difficult to restore the firing of sacrificial red and cowpea red, as well as the glaze colors of sacrificial blue glaze, azure glaze, bean green glaze, imitation Jun glaze and coral red, and some fine wares are made by imitating the famous products of the previous period. A large number of antique porcelain garden stools produced in the Republic of China represented the advanced porcelain-making technology at that time, and most of them were stereotyped objects in previous dynasties, and most of them were decorated with enamel. The imitation display porcelain is solemn and elegant, with aesthetic feeling and auspicious meaning at the same time. At this time, glaze color is often applied in coordination with modeling, and colored glaze often uses color to open the light to set off glaze painting.

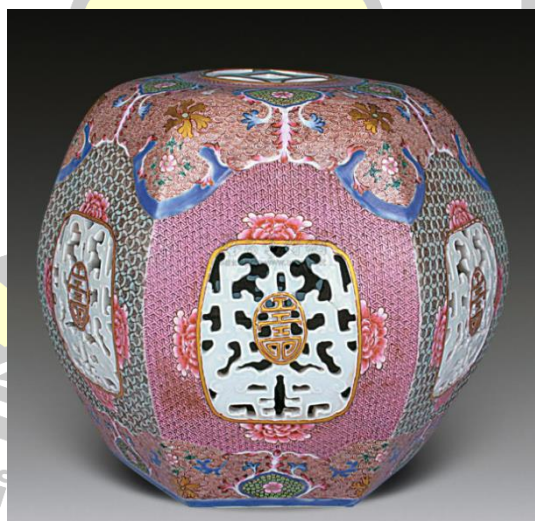


Figure 22 Republic of porcelain garden stool

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(Figure. 22) The pastel porcelain garden stool of the Republic of China is in Kangxi style, and the opening decoration is designed according to its shape. The belly of the garden stool is decorated with four rhombuses and the top is decorated with eight petals. Because the firing process of sacrificial blue glaze does not sag, the

outline of the opening glaze is clear, and the glaze color is quaint and quiet, which is in strong contrast with the white glaze inside the opening glaze. Therefore, many utensils use sacrificial blue glaze to contrast the image inside the opening, and then paint on the opening glaze to achieve novel and unique decorative effects. In addition, there are colored glaze, such as Red Sacrifice, Cowpea Red and Coral Red, as the opening places. Usually, gold decorative patterns are painted on the glazes of these colors, which makes them magnificent and golden. Gold color is one of the most popular painting and decoration methods in the Qing Dynasty. There are three kinds: gilding, tracing and brightening. Gilding, also known as gilding, is one of the traditional decoration methods. It was replaced by tracing gold in Qing Dynasty, and there were basically no gilding objects in the Republic of China. Gold tracing was called fine gold industry in the Republic of China, and its technology was extremely complicated. Generally speaking, a 10-weight gold bar needs to be processed for about 10 days through three processes, and finally made into gold powder, and then mixed with some fluxes and blending agents. Painted on the screen, it must be burned to a light yellow and dull thin layer at 700-800 degrees Celsius, and then polished with smooth agate stone to make it appear golden luster. The main reason is that the real gold has a high cost, but it never discolors. Bright gold was introduced to China in the late Qing Dynasty, and it is colored with golden water (golden water is a prepared chemical pigment). It can be directly painted on the glaze with a brush, and it is also fired at 700-800 degrees Celsius. After the color is fired, the golden light shines, which is relatively simple and fast, with low cost, but easy to colorize. (Hu,1989)

In the form of composition, the opening decoration of Jingdezhen porcelain garden stool in the Republic of China still continued the characteristics of the Qing Dynasty. The opening decoration of porcelain garden stool is common, with a certain interval between openings, highlighting the theme. There are basically no dense patterns of composition, and it is still popular to draw a pattern with a decorative surface. Aesthetics gradually changed to a simple and generous square. The close and tedious form of composition, such as linking, borrowing and setting, is basically eliminated. In the Republic of China, Jingdezhen porcelain garden stool was decorated with light, and its composition continued the characteristics of the Qing Dynasty. Sheets have been the main composition form of opening decoration in the Republic of China. At the same time, the production of Jingdezhen porcelain garden stool in the Republic of China imitated the decorative characteristics of the Qing Dynasty, and also imitated the Kang, Yong and Gan Dynasties in the opening decoration. Therefore, when studying the external outline of the opening decoration in the Republic of China, it is found that the characteristics are similar to those of the Qing Dynasty. (Tie&Xi,2004) In the Republic of China, the forms of the opening outline of Jingdezhen porcelain garden stool are also ever-changing, such as square, rectangle, trapezoid, fan-shaped, diamond-shaped, rhomboid, round, oval, four-petal, eight-petal and lotus-petal. In the Republic of China, the outline of the opening was

thin and thin, mainly depicted by a thin single line or two parallel thin lines, and there were a few carved lines, but the outline of the double line in the Ming and Qing dynasties was basically invisible. Unlike the Ming Dynasty, which used to draw a wide line in red or blue and white, and then draw a thin line on the left and right of the wide line; Unlike in the Qing Dynasty, when several thin gold wires were wound or painted with color between two wires, the outline was often drawn in a graceful and tedious way. During the Republic of China, the outline form was simple and the outline was thin. Influenced by the times, it lacks rich and elegant charm compared with the three generations of Qing Dynasty.

In terms of the changes in the land, Jingdezhen porcelain garden stools were decorated with lights, and pastel flowers were more common in the Republic of China. There were also some simple plain land, pastel-bound flowers, blue and white-bound branches, and painted gold fields, which were quite popular at that time. Goldwater, which became popular in the Republic of China, is often used by artists to paint patterns on colored ground, but it often falls off. With the maturity of blue-and-white technology and the popularity of glaze color, the comprehensive decoration combining the two is gradually loved by people. In the continuation of the internal image, the opening decoration of Jingdezhen porcelain garden stool in the Republic of China is rich in image themes, such as flowers and birds, landscapes, pattern decoration, dragon and phoenix patterns, etc., all of which have the style of Chinese painting. When comparing the arrangement of image forms in the opening ceremony of the Republic of China, it is found that two kinds of images with the same light and different light are used more. (Figure. 23) The drum-type pot with gold-painted flowers and birds on the red ground uses round and diamond-shaped lights, with different lights and different pictures. This form belongs to different light vision. Make the decorative surface of the whole porcelain more abundant and varied. During the period of the Republic of China, the decorative features of the opening decoration continued the decorative features of the Qing Dynasty. Compared with the previous generation, the opening porcelain garden stool in the Republic of China was simpler and looser on the whole. With the development of the times, aesthetics is constantly developing, and the dense decorative forms are gradually disappearing, paving the way for the opening decoration of modern porcelain garden stools.

พหุ ประยุกต์ สี



Figure 23 Red trace gold open light flower and bird porcelain garden stool

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http://m.haiwainet.cn/middle/3543158/2021/0331/content_32038116_1.html :

Colored decoration

The decoration of porcelain garden stool is divided into the glaze, the glaze in the middle and the underglaze. The underglaze is mainly blue and white, and the glaze is mainly famille rose.

1)Famille rose

Pastel porcelain is one of the four famous traditional porcelain in Jingdezhen, which occupies an important position in the history of China ceramics.

Pastel was first created in Kangxi period, and got unprecedented development in Yongzheng period. No matter from the aspects of shape, theme, color setting, structure drawing, painting skill, pigment, etc., its manufacturing technology and decorative patterns have reached a quite high level. In Xu Zhiheng's "Drinking Liuzhai on Porcelain", it was written that "Yongzheng is the most beautiful pastel porcelain garden stool." Similarly, in the book Tao Ya, Chen Liu also made a very high evaluation of Yongzheng pastel porcelain garden stool. "The pastel porcelain garden stool is the most beautiful in Yongzheng Dynasty, which has never been seen before, and it is bright and dazzling, and its work is extraordinary.

Yongzheng dynasty was the most prosperous period of pastel porcelain decoration. The pastel porcelain garden stool in Yongzheng period is exquisite and vivid in painting style. Paintings such as rocks, trees, people's stories, flowers, birds and animals are all-encompassing. Among these subjects, Hua Niaowen's attainments are the most remarkable. He skillfully uses pen and ink techniques such as boneless²⁹,

²⁹ In the context of Chinese ink painting, the "boneless" technique refers to a unique method of painting that does not use obvious lines to outline objects but instead employs variations in color saturation and moisture level

double-hook, flat painting, rendering, meticulous painting and freehand brushwork in China's traditional paintings. The pictures are rich in the charm of China's traditional paintings, and the decorative patterns are combined with light and dark, with rich levels, which has changed the previous colorful porcelain paints with strong colors, rigid brushwork and blunt painting. Its rigorous decorative painting technology, skillful painting skills, rich colors and clever division of labor in filling colors perfectly integrate decoration and painting on a piece of porcelain, which shows the unique aesthetic feeling and artistic characteristics of Chinese painting. During the Yongzheng Dynasty, pastel porcelain garden stools were mainly painted on white ground, and the common patterns were peony (Figure. 24), rose, Hua Die, begonia and flowers of the four seasons. (Liu&Tang, 2004) Its thin and light carcass, pure glaze juice and jade-like warmth can fully set off the elegance and elegance of pastel, which is the peak period of pastel porcelain development.



Figure 24 Powder enamel porcelain garden stool of Yongzheng period

Source: Downloaded from

http://m.haiwainet.cn/middle/3543158/2021/0331/content_32038116_1.htm

Yongzheng pastel porcelain garden stool has developed rapidly on the basis of Kangxi's initial creation. Besides the beautiful shape, the more important thing is the beautiful texture. This is a key factor that distinguishes it from other dynasties. The embodiment of the beauty of texture mainly depends on the smooth and beautiful coat

to convey form and texture. This technique emphasizes the use of ink density and water gradation to depict scenery, relying on contrasts between color blocks and shades to demonstrate the volume and spatial sense of objects, creating artworks with profound implications and a combination of form and spirit. The "boneless" method is often applied to subjects like flowers, birds, and landscapes, allowing artists to express their feelings and understanding of natural beauty more freely. This approach results in a style that transcends concrete imagery, focusing more on the overall atmosphere and emotional expression. It reflects the traditional Chinese painting's pursuit of conveying meaning through suggestion and the aesthetic principle of leaving space for deeper implication, emphasizing the mood and lively spirit of the painting.

on the surface of the porcelain garden stool, the brightness and thoroughness of the porcelain garden stool, and the gorgeous and colorful painted porcelain garden stool are all well displayed, and the magic clothes "glaze" of the porcelain garden stool is the embodiment of the beauty of texture. (Yang,2001) Glaze is actually not complicated. It is a glass-like layer made of minerals and clay by grinding, adding water and debugging, and then firing on the surface of the blank. By adding different metal components to mix a variety of colors to enhance the aesthetic feeling, the artistic effect of porcelain glaze can be better expressed. The whiteness of porcelain garden stools in Yongzheng period has reached 77.5% by expert appraisal, and the firing temperature is about 780 degrees, which is relatively easy to control. The tire of Yongzheng pastel porcelain garden stools is not only white but also thin. The tire of large-scale vessels is slightly thinner and lighter than that of Ming Dynasty and Kangxi, and the tire quality is delicate and white. There are also two kinds of glazes, which are thick and moist, and thin enough to be immediately exposed to light, which has reached the level of "fear that the wind will blow away". (Li, 2004) The carcass of Yongzheng pastel porcelain garden stool is exquisite, light and heavy, even if it is a big one, the carcass is symmetrical and consistent, and it is not heavy. The glaze is smooth and even, the enamel is bright and smooth, most of them are pure white, the tire is thin and light, and the tire glaze is as moist and delicate as jade, which can highlight the delicacy of pastel decoration and the color is soft, and it will present a jade-like elegant and magnificent color under strong light. (Zhang, 2007) According to "Tao Ya", "objects of the size of Yongzheng Imperial Kiln are light and firm with frost and snow in Bai Sheng" and "as thin as an egg curtain, you want to fly when you hiss, and you can tell the color of the front strokes on the back by reflecting the sun or lighting". Mr. Chen Wanli, a ceramic historian, said that "the further improvement of Yongzheng white glaze meets the requirements of applying soft colors on glaze, thus achieving the effect of mutual use and complementing each other". The glaze color of Yongzheng ware is generally pure white, some of which are white and blue, and the glaze color is uniform, and there are orange peel lines on the glaze surface. As shown in the (Figure.25), Yongzheng pastel Hua Die Folding Bowl is painted with white glaze, and the outer wall is painted with broken peach blossoms and dancing Hua Die patterns. The tire is thin and glazed, bright and bright, white and delicate, the glaze is rich and smooth, moist and jade-like, the lines are smooth, the shape is steady, dignified and practical. The beauty of Yongzheng pastel porcelain garden stool lies not only in fine painting, but also in the white and bright fetal quality, which is the basis of painting decoration.



Figure 25 Powder enamel lotus print porcelain garden stool

Source: Downloaded from <https://digicol.dpm.org.cn/>

Decoration technology refers to the craft skills in ceramic decoration art, which is different from painting and other art forms. Ceramic decoration is restricted by factors such as craft materials and technology to a certain extent. The innovation of ceramic decoration lies in that on the one hand, the existing decoration techniques and technologies are integrated into a new decoration form, which is the integration of various techniques; On the other hand, from ancient times to the present, people are constantly discovering and trying new materials and new technologies to increase the appeal of ceramic decorative works through various means.

Since ancient times, China has been a Yongzheng Dynasty, which was good at craftsmanship and stepped into the heyday of the Qing Dynasty. Although it lasted for 13 years, the porcelain-making technology has developed to a new level in history. The painting of pastel porcelain garden stools contains many unique technological skills, such as mastering and controlling the material and oiliness, filling techniques and techniques, and various technological treatments. An important feature of pastel porcelain garden stool decoration is its meticulous and complicated operation technology, diverse techniques and constant innovation. (Kong,2003) The pigments used in pastel porcelain garden stools are all made of minerals, so it is not easy to master the characteristics, and the coloring techniques are classified and varied. Therefore, it is often difficult to fill the colors at the beginning, and it is necessary to go through quite a period of exercise before you can become familiar with them and achieve proficiency in use. Pastel technology is a means to form pastel decorative materials into artistic products, and different technological techniques can express different artistic effects. Pastel decoration technology and techniques have a direct effect on the final completion of pastel decoration art.

During Yongzheng period, the porcelain garden stools were very strict in terms of shape, embryo quality and colored glaze, and they were famous for their exquisiteness. The official kilns were no exception. They all showed a spirit of depicting and seeking work. The manufacturing process was stricter, the porcelain clay was fine in material selection, and the technological requirements of grinding, slurry clarification and blank making were not sloppy (Figure.26) The sintering temperature was moderate, so the tires were firm, smooth and regular, and the tires were thin and light, which was its typical feature and achieved far-reaching achievements. (Shi,2001)



Figure 26 Pastel paint tool and Pastels fill pigments

Source: Photography by Danxi Luo, 2023

Pastel, also known as "soft color", is a new variety of colored porcelain in the development of hundreds of years, which is derived from the production method of enamel color on the basis of colorful Ming dynasty. In Yongzheng, due to the hobby and demand of feudal rulers, a large number of pastels were developed and burned on the basis of Kangxi pastel porcelain garden stool, and the technological level of pastel porcelain making was greatly improved by learning from others. (Tie,2004) By the Yongzheng period, pastel porcelain garden stools had developed into the mainstream of over-glaze painting. Because of the emperor's love, the production process of pastel porcelain garden stool became more rigorous and the drawing skills became more skilled. The painting method of Yongzheng pastel porcelain garden stool mostly adopts the method of painting the ground and mixing. The painting method is mostly used to express the three-dimensional sense of the picture to make it more vivid and realistic, and is mostly used to express the pleats of flowers and characters. After the glass white is used as the base, various colors are applied on it by the method of rendering, and various shades of different colors are rendered with a clean brush, which is very similar to the rendering in Chinese painting. The tragic entry method is to directly mix the glass white into the color material, and pulverize it to dilute its chromatically. This method can greatly expand the range required for preparing a

variety of different shades of color material. Although the same color material is mixed with glass white in different shades, it is elegant and soft, with a natural and smooth transition, and then directly paint, which makes the picture more attractive. The most important thing of the pastel porcelain garden stool is the gradual change of color, and there are subtle changes in the pleats of the (Figure. 27) The Yongzheng pastel porcelain garden stool is mixed with lead powder and glass white in the pigment, which consciously weakens the color concentration, and draws the layers of the garment pattern with thick and thin lines, with various color levels, warm and soft tones, highlighting the three-dimensional effect of thick and thin yin and yang. The technology of Yongzheng pastel porcelain garden stool is a concentrated expression of Yongzheng porcelain technology, which reflects the exquisite porcelain-making technology and superb painting technology, which makes people in later generations deeply aftertaste. (Zi&Yang,2006).

The color of Yongzheng pastel porcelain garden stool is fresh and elegant, pink and soft, thick and thick, gorgeous but not vulgar, which includes the general characteristics of Yongzheng pastel porcelain garden stool color. The colors are rich and changeable, and there are shades and shades in the same color. There are often colorful seven-color lights around the color. The color application method uses oil to adjust the color, and the glaze color is transparent and moist. Under the illumination, the oil is shiny and crystal clear. The pastel porcelain garden stool made in Kangxi's late period feels closer to enamel color in texture, and it is also very delicate and soft. The enamel color in the court began to burn in the fifty-first year of Kangxi. In fact, it became enamel by learning from the enamel process of copper tires and adding oil and different metal oxides, and it was painted on the burned porcelain tires with enamel color, and its color was gorgeous and charming. Pastel porcelain garden stool is also called soft colored porcelain garden stool. The secondary firing temperature of the color material is about 750 degrees Fahrenheit. Pastel is a low-temperature color material created by the official kiln craftsman under the inspiration and influence of enamel. The opaque white color material in the copper tire enamel is introduced, and arsenic is introduced into the white material, commonly known as "glass white"³⁰, as an pacifying element. Therefore, the introduction of glass white is the key to the production of pastel, and the glass white and multicolored color materials are fused. All kinds of colors have been "powdered", and most of them have become opaque light tones, and the shades are controlled by the amount of addition. At that time, the painted flowers were rich in color types, with clear layers and delicate color separation, and the intermediate color was boldly used in the colors, which shows the difficulty and superb skills of color matching. At that time, some paints were

³⁰ refers to a specific type of white pigment that has a translucent quality, resembling the clarity and brightness of glass. This pigment is used to add highlights, create a sense of depth, and enhance the luminosity of the painting. It can be particularly effective in depicting subjects like water droplets, reflective surfaces, or to add a glowing quality to certain elements of the artwork. The use of glass white can bring a lifelike vibrancy and realism to the painting, making the subjects appear more dynamic and three-dimensional.

imported. Under the relatively open political and economic environment at that time, pastel oil was mostly influenced by the West to draw rich colors and had a sense of transparency. Pastel is more conducive to the painting of porcelain surface, and its expressive force is more abundant. As Tao Ya said, "The famille rose is the most beautiful in Yongzheng Dynasty, which is unprecedented and dazzling." Yongzheng pastel porcelain garden stool is not only rich in color variety, but also rich in color variety. Apart from white ground painting, there are also various colors of painting, which are delicate and flat, and the colors are elegant and beautiful.



Figure 27 color beauty porcelain garden stool
Source: Photography by Danxi Luo, 2023

2) Blue and white decoration

"Blue-and-white" ceramics generally refers to using cobalt oxide as coloring agent, decorating the green body, and then covering the surface of the whole green body with transparent glaze color, and firing at a high temperature of 1,300 degrees with reducing flame at one time. It belongs to the under-glaze blue-and-white decorative art, with strong coloring, bright and stable, quiet and light, and the surface of blue-and-white porcelain is very bright and clean, which has been welcomed by many people since it appeared. During the Wei, Jin, Southern and Northern Dynasties, China was able to use the technology of under-glaze painting. Changsha Kiln in Hunan Province produced a lot of under-glaze painting porcelain in the Tang Dynasty, and cobalt was used as the colorant of ceramics. This is reflected in the decorative pattern art of ceramics in the Tang Dynasty, which is very proud. (Huang,2004) The evolution of decorative art of blue-and-white porcelain garden

stools has strong national characteristics and unique attraction in terms of production technology and object modeling. Thus, it created a new trend of colorful blue-and-white porcelain garden stools in the later Yuan, Ming and Qing dynasties. These generations of blue-and-white porcelain garden stools are mainly decorated with patterns, which is a natural decorative art. Blue-and-white porcelain garden stools were formed in the Yuan Dynasty, flourished in the Ming Dynasty and continued in the Qing Dynasty. After nearly a thousand years, the decorative art style of blue-and-white porcelain garden stools has been constantly updated, evolved and developed.

The Prosperity of Blue and White porcelain garden stool Decoration in Yuan Dynasty: Judging from the unearthed porcelain of Yuan Dynasty, the decoration of blue-and-white porcelain garden stools in this period is relatively mature. Jingdezhen was the main producing area of blue-and-white porcelain in Yuan Dynasty. It can be said that the blue-and-white craft gradually matured in the middle and late Yuan Dynasty. Its rapid development and Mongolian rulers once conquered Eurasia, and the border was open, and folk trade and cultural exchanges were frequent. The color of blue and white in Yuan Dynasty was generally gloomy, but most of its blue and white handicrafts were green and stunning, with strong colors, strong general coloring, and the decorative patterns were not easy to fall off. Moreover, the atmosphere in the kiln had little influence on the color of blue and white, and the fired blue and white porcelain was rich and colorful. Most of the blue-and-white materials used in the Yuan Dynasty are imported Sunibo blue materials (commonly known as Su Ma Li Qing) or mixed green materials from China and foreign countries, with rich colors and blue-black concentrated spots flashing in the meantime, which is Professionally called "tin light"(Luo&Chen,2009)

The decorative themes of Yuan blue and white flowers can generally be divided into two categories: theme decoration and auxiliary decoration. There are three kinds of theme decorations, one is the decoration with the whole picture as the theme, such as fish and algae, people's story (including three visits to the thatched cottage, Zhao Jun's departure from the fortress, General Meng Tian, Guiguzi going down the mountain, Xiao He chasing Han Xin under the moon, etc.), lotus pond and lotus pond waterfowl, banana and bamboo stone, etc. Second, the decoration is mainly animal patterns, and there are also dragon patterns, phoenix, peacock, lion, unicorn and so on; Third, the decoration is mainly based on flowers and plants, and the peony and lotus are the most commonly used. There are many kinds of auxiliary decorative patterns, most of which are branch-bound peony, lotus, chrysanthemum, lotus petal pattern, dragon grass, water wave, palindrome, banana leaf, etc. The decorative forms are branch-bound, branch-broken, light-opening, two-way continuous and so on. Although there are many levels of blue and white decoration, their priorities are clear; Although the decorative pattern layout of blue and white decoration is complicated, the structure is strict; Although the picture is dense, it doesn't give people the feeling of triviality and piling up because it is properly handled and integrated. (Cao,2008)

The appearance of the decorative art of blue-and-white porcelain garden stools in Yuan Dynasty is of epoch-making significance, which makes the combination of China's painting skills and porcelain-making techniques more mature. Some blue-and-white porcelain garden stools are decorated with red-and-white flowers or red in the interior glaze and painted with blue-and-white flowers on the outside, which is mysterious and artistic. At present, the collection of blue-and-white porcelain in the Yuan Dynasty is mostly in foreign museums. (Wang,2008) According to the needs of countries in the Middle East, a large number of blue-and-white porcelain wares are produced for export. At that time, the court advocated more economic exchanges with foreign countries, which made the blue-and-white porcelain garden stools of the Yuan Dynasty spread in foreign collectors and museums. Drawing on the blank of the porcelain garden stool according to the required blue and white decorative patterns, the lines are smooth and vivid, which embodies the highly skilled combination of China traditional calligraphy, painting technology and porcelain making technology. The decorative art of blue-and-white porcelain garden stools in the Yuan Dynasty shows a magnificent and charming charm, showing its own distinctive characteristics of the times (Chen,2004)

Prosperity of Blue and White Porcelain Garden Stool Decoration in Ming Dynasty: By the Ming Dynasty, the decorative art of blue-and-white porcelain garden stools had reached its peak and entered a colorful era in the history of ceramics, which was beyond the reach of blue-and-white porcelain in previous dynasties and became the mainstream of ceramic history. The decorative art of blue-and-white porcelain garden stools in Ming Dynasty has its own characteristics in different historical periods, and its firing almost runs through the whole history of Ming Dynasty and forms its own characteristics of the times. Jingdezhen made the highest achievement in blue and white porcelain in Ming Dynasty. Hongwu set up a royal kiln factory in Jingdezhen in the second year of Ming Dynasty, and the powerful policy of the Ming government also promoted the development of blue and white porcelain, which was exported to home and abroad in large quantities and enjoyed a good reputation all over the world. (Wan,2008) Looking at the blue-and-white porcelain garden stool in Ming Dynasty, it is fully mature in modeling, decoration and technology.

Due to the different cobalt materials used in the decorative art of blue-and-white porcelain garden stools and the different themes and brushwork of decorative painting, the blue-and-white porcelain garden stools in different periods of the Ming Dynasty have their own characteristics and charm, and each dynasty has its own style. From a macro point of view, the blue-and-white porcelain garden stools in the early Ming Dynasty still have the legacy of the blue-and-white porcelain garden stools in the Yuan Dynasty, which are dignified and rich in color and quite bold, represented by the blue-and-white porcelain garden stools in Yongle and Xuande periods, and this period is also the golden age for the decorative art development of the blue-and-white porcelain garden stools in the Ming Dynasty; In the middle period, the blue-and-white porcelain garden stool turned into a delicate and elegant decorative style, represented

by the blue-and-white porcelain in Chenghua period, which won people's love; In the late Ming Dynasty, the color of blue and white tended to be rich and purple, represented by the blue and white porcelain in Jiajing and Qin Long periods. At the end of the Ming Dynasty, the blue-and-white porcelain changed from rich to clear, represented by the blue-and-white porcelain decoration in the Apocalypse and Chongzhen periods. (Qin, 1992)

Most of the blue and white cobalt materials are imported from Persia, which is called "Su Ma Li Qing" in the literature. The blue and white cobalt materials are rich and easy to faint, and there are obvious crystalline iron spots. Blue-and-white decorative patterns in Yongle period not only retain traditional blue-and-white decorative patterns, but also have blue-and-white decorative patterns influenced from outside. (Xia, 2007) The most common traditional decorative patterns are bound branches, broken branches, flowers and fruits. There is lotus, peony, camellia, chrysanthemum, pomegranate, grape, peach, etc. There are many dragon and phoenix patterns in this period, and there are different combinations of Yunlong, Yunfeng and seawater dragon lanterns. Flower-and-bird, distant view, bamboo, stone and banana decorative patterns are integrated with realism and decoration, which has a great influence on the decorative art of blue-and-white ceramics in later generations. In this period, the side decorations included palindromes, rolling branches, sea water patterns, lotus petals, ruyi cloud patterns, ganoderma lucidum patterns, zigzag patterns, banana leaf patterns and leaf patterns. The overall characteristics of the blue-and-white decoration in Xuande kiln are dignified color, dense petal decoration, blue glaze color, increasing and aggravating shape, and prevailing inscription. There are two kinds of blue and white materials used in Xuande: one is imported "Su Ma Li Qing" with the same name as the green material in Yongle period, and its hair color is thick and smoky; The other is domestic cobalt material, which has no black spots. The decorative effect of blue and white is becoming more and more sparse, and the rules are full of changes. (Gao&Wang,2010) In terms of brushwork, small pens are used to render and fill colors. The decorative patterns in this period are very rich, and most of them are selected from nature.

The mid-Ming Dynasty was the decorative art of blue-and-white ceramics in Chenghua period, and the porcelain-making achievements in this period were represented by official kilns. (Figure.28) Among them, Chenghua blue-and-white porcelain was marked by elegant and beautiful hair color and jade-like bottom glaze, which formed another climax of ceramic decorative art in China history. During Chenghua, the firing of blue-and-white porcelain garden stools gradually became elegant, and there was a doodle. In the later period of Chenghua, the equal green material (Bitangqing) made in China was adopted, which replaced Suma's green material. After the green material was separated, the cyan color was elegant and relatively stable, and the color of the hair blue was grayish blue, which was unique. Therefore, the emperor admired the elegant blue and white in this period, and thought it was more attractive than the dark blue and dignified Xuande blue and white. People

also hoped to have a delicate and elegant blue and white porcelain to meet the various needs of aesthetic psychology. (Cao,2003)



Figure 28 Blue and white porcelain garden stool
Source: Palace Museum, Beijing Provided

At the end of Ming Dynasty, the decorative art of blue-and-white ceramics continued the way of the previous decorative style, some imitated and some copied. Due to the sharp social contradictions, peasant uprisings broke out from time to time, and political crises were everywhere. At this time, the official kiln in Jingdezhen was almost in a state of stopping burning, and fewer artifacts were unearthed. Relatively speaking, there were more porcelain in folk kilns. Blue and white in the Apocalypse period adopted the painting technique of single-line flat painting. Blue and white materials were made of Zhejiang materials. (Ji,2007)

The continuation of blue and white ceramic decoration in Qing Dynasty: In the early Qing Dynasty, the decorative art of blue-and-white porcelain garden stools basically followed the old decorative system of Ming Dynasty, but with the development of social stability and economic prosperity, the production of blue-and-white porcelain, which once declined at the end of Ming Dynasty, turned around. In the Kangxi period, the firing technology of blue-and-white porcelain garden stools made rapid progress. After Yide and Chenghua in the Ming Dynasty, it reached the peak of blue-and-white porcelain production and produced many fine products. At this time, the blue-and-white decorative color is more beautiful and carefree, and the layering of decorative patterns is extremely distinct, which brings elegant and unique aesthetic feeling. The outline of blue-and-white ceramic decorative patterns in the picture changes the weak lines in the late Ming Dynasty, and more strong lines are used to describe blue-and-white, and the pen pays attention to bright colors. The composition of blue-and-white decorative patterns is gradually replaced by the composition of traditional Chinese painting. Blue-and-white ceramics in the mid-Kangxi period were hard and white in color. Blue-and-white ceramics were mostly

made of superior domestic blue-and-white materials and glazes, so the glaze was bright, the color was green and stable, and the blue-and-white decorative patterns were elegant. Blue-and-white painting techniques mostly adopt the methods of "dividing water" and "dyeing" in China's meticulous painting, and are mixed with the perspective method of western oil painting, not just the simple "flat painting" method, which makes the picture layering of blue-and-white ceramic decoration extremely prominent, just like the effect of "dividing ink into five colors", and is endowed with the reputation of colorful blue-and-white porcelain. (Xue,2009)

The decorative pattern of blue-and-white decoration also uses long articles and character stories as decorative patterns of blue-and-white ceramics. In the late Kangxi period, the decorative art of blue-and-white porcelain garden stools reached the top of blue-and-white. In this period, the blue-and-white color was quiet and elegant, with light gray and stable glaze color. Compared with Kangxi's blue-and-white porcelain garden stool decoration pattern, Yongzheng and Qianlong's blue-and-white porcelain garden stool decoration is much inferior. Blue and white glaze red to Yongzheng period, it can be said that it entered another aesthetic realm, and the color tone became green and lush, red and calm, handsome and delicate. Yongzheng's blue-and-white porcelain garden stool decoration is mostly antique objects, and some blue-and-white ceramics are mostly decorated with Su Nibo cyan materials. Although they are not imported materials, the decoration effect is excellent. (Zhang&Li,2007) Blue-and-white ceramic decoration is mainly antique, and traditional blue-and-white decorative patterns are mostly used, such as Yunlong pattern, branch-bound flowers, Eight Immortals pattern, Babao pattern, Ji Xiangwen and so on. In Jiaqing and Daoguang periods, the blue-and-white ceramic technology gradually declined, while the blue-and-white in Guangxu period in the late Qing Dynasty was relatively refined, which continued some previous blue-and-white decorative styles and created its own unique decorative art. It can be said that the decorative style and evolution of blue-and-white porcelain are closely related to the politics, economy, culture, emperor's cultivation and interest at that time. In Kangxi period, the feudal kingdom was prosperous, so there were landmark artistic creations and historic variety development.

Transformation of Blue and White Decoration in the Republic of China: It can be said that taking the introduction of Jingdezhen porcelain industry as an example, it was in a dilemma at that time. The decorative art of blue-and-white porcelain garden stools, which once enjoyed a high reputation all over the world, was in a state of variety change and continuous evolution, and a fresh decorative art style of blue-and-white porcelain garden stools appeared. During this period, the fine blue-and-white painting patterns became less and less, and most of the blue-and-white porcelain garden stool decorations followed the painting style of the previous dynasty. In the method of outlining lines and ornamentation, the water division method was used to fill in thick and light blue-and-white materials respectively. The painting themes of the porcelain garden stool are: landscapes, flowers and birds, flowers bound with branches, peonies, the characters of "happiness, longevity and happiness", Yunlong,

Yunfeng, Songhe, willow Oriole, magpie's plum blossom, stone story, baby play picture, plum blossom, orchid, bamboo, chrysanthemum, eight treasures, eight immortals, good luck, the story of the Three Kingdoms, and seven bamboo forests. (Zhong,2008)

Later, during the Republic of China, in the development of the decorative art of blue-and-white porcelain garden stools, influenced by the over-glaze literati porcelain painting, the artistic style of blue-and-white porcelain painting by literati appeared, and the unique freehand brushwork of China's painting was combined with the traditional blue-and-white water separation technique, resulting in fresh and beautiful blue-and-white ceramic decorative art features. (Wang,2005)

During the 1950s and 1960s from the founding of the People's Republic of China to the Cultural Revolution, the traditional decorative art of blue-and-white porcelain garden stools in Jingdezhen began to resume the innovative period of combining development and inheritance, and innovative works of decorative art of blue-and-white porcelain garden stools appeared. The most outstanding artistic achievement is Wang Bu's traditional blue-and-white porcelain garden stool decorative art works in the style of literati painting. He has absorbed various nutrients from the works of freehand painters such as Badashanren and Qi Baishi, won its essence, created the freehand brushwork of dividing water, revealed the colorful meaning of ink and wash, and showed the exquisite meaning and texture of Jingdezhen porcelain. Therefore, Jingdezhen has never been called the "blue-and-white king". There are many of his representative works, most of which belong to the category of freehand brushwork, including melons and fruits, insects, fish and flowers and birds.

Process technology analysis

Porcelain garden stools in Song and Yuan Dynasties have various shapes, and they have their own characteristics in molding and firing technology. Due to the differences in the shapes of porcelain garden stools, the molding processes adopted are mainly model molding and blank drawing molding.

Model forming

The so-called model forming process refers to the use of model blank, also known as molding, blank printing or blank extension forming. (Feng,2001) In Lun Heng, there is a cloud that "if a man cultivates a tool at the beginning, he must be a model for the shape and pretend to be it", (Figure.29) and there is a document that "a craftsman first transports a tool into a tool by Jun, or a model is formed." When the mud is dry, dip it in oil and paint it, and put it in a mud cylinder". (Zhang,2011) Therefore, the model molding process has a long history. However, the above literature does not explain which is the model and what is the norm, and whether they are the same kind of artifacts is unknown. Some scholars have verified that "there are four things, namely, the soil type, Jin Yuerong, Mu Yuemo, Zhu Yuefan, and the materials are different", and there are also documents that "the scale of popular literature is called Yu, the soil type is called Yu, Jin Yuerong, Mu Yuemo and Zhu

Yue". (Wu,2021) Therefore, although the tools used in model forming have different names based on the difference of materials, they are often collectively referred to as modules and norms (Wu,2021)



Figure 29 Model forming

Source: Photography by Danxi Luo, 2023

In the actual operation process of model molding of porcelain garden stools, there are generally two kinds of model appliances with similar materials, but different uses and shapes. One is directly used for the final molding of porcelain garden stools, and the shape and ornamentation are opposite to the required porcelain garden stools; The other is used to copy the former, and the shape and decoration are the same as those of the porcelain garden stool. There are different names about these two kinds of tools in academic circles. Some scholars call the former "model" and the latter "mother model" and define it as the mother of "model". Some researchers call it "sub-model" and "master model" respectively, and think that the master model is used to copy the sub-model, or directly call the former "model" and the latter "model". (Yang,2004) Some commentators have divided the models directly used for the molding and decoration of utensils into inner mold and outer mold, with the inner mold used for the inner wall of utensils and the outer mold used for the outer wall of utensils. (Yang,2004) In modern metallurgical archaeology, the mold used to form the outline of the device is usually called "model", and the mold used to make the model is called "mold".

After the above procedures are completed, put the whole mold in a ventilated and dark place to dry overnight, so as to evaporate the water in the mud blank and enhance the hardness of the mud blank, so that the wall hardness of the mud blank is enough to support the machine body, and prevent the mud blank from exceeding the load-bearing limit during the process of taking off the mold or drying, resulting in collapse and deformation of the mud blank. At this time, the water content of the mud blank can still be felt by touching it with hands. After drying in the shade for one night, pry it up and down from the middle of the mold with a special small pry knife to separate the blank from the mold.(Figure.30)



Figure. 2 Model forming
Source: Photography by Danxi Luo, 2023

Then take out the upper part of the mold, trim it, cut off the unevenness and fill the gap. Paste the drum nails prepared in the early stage to the blank body. Drum nails are also made of impression, which are molded and dried for later use. Afterwards, measure appropriate positions and paste the drum nails with mud. Generally, the number of drum nails is symmetrical from top to bottom, and there are drum nails on each side of the square embroidered garden stool, which are symmetrically distributed at the top and bottom. The residual mud at the trimming nail can be rotated clockwise around the nail with a brush pen, so that the residual mud can better wrap the nail.

After the drum nails are pasted on the upper half, the embroidery garden stool is turned over, the mold in the lower half is taken out, and the remaining drum nails are pasted and filled. Drag one end of the embroidered garden stool with a wooden board, fix it with a rope skillfully, and then turn over the blank. Subsequently, the plastic transparent mold with holes is attached to the top of the embroidery garden stool blank, and the distribution position of dense holes coincides with the black frame in the figure. The template is coated with red pigment, and the red pigment seeps to the top of the blank. At the same time, the transparent mold is attached to the blank body to reveal the outline to be hollowed out. After hollowing out and trimming, the finished blank can be dried in the shade and wait for further processing. The decoration technology and details are similar to those of other utensils. After the initial processing of the blank is completed and dried, it needs to be polished, trimmed and smoothed later.

To sum up, generally speaking, porcelain garden stools made of model molding are assembled from top to bottom. The joints between the garden stool wall, the garden stool surface and the garden stool bottom are all in an arc angle, and there is a gap in the middle of the garden stool wall. Because the outer wall is often

trimmed, it is not obvious unless the gap cracks, but the inner wall joint is clearly visible.

Blank drawing forming

Drawing process, also known as wheel-making process, is divided into drawing and trimming. Drawing was called "pottery cart" or "Tao Jun" in ancient times. Drawing process plays an extremely important role in ceramic blank-making process. Its process is to drive the pulley manually or electrically to rotate by centrifugal force principle, and to make regular plastic utensils with the cooperation of hands inside and outside. (Lin,2009) Drawing process has gradually become one of the most important means in ceramic production. The appearance of drawing process makes the shape of ceramics more regular and the scale of products constantly expand, which has a far-reaching impact on the development of ceramic art. The development of ceramic blank-making technology is long.

During the Song, Ming and Qing Dynasties, porcelain garden stools were mostly made by manual drawing. The drawing methods were different with different times and different tools. At that time, the manufacturing process and firing process developed rapidly, and the appearance of primitive porcelain made ceramic materials span from pottery to porcelain, and the firing temperature was also increased, which improved the quality of ceramic products and enriched the categories and aesthetics of daily necessities in people's lives. After the Song Dynasty, the drawing process has made great progress. Because of the gradual improvement of the wheel-making installation, the blank maker can make better use of the wheel-making device to make the blank. In its gradual development, compared with before, it can be seen that the shape of the blank is regular, the volume is increased, the rotating speed of the wheel-making device is stable, the uniform time is longer, and it is very slow when it gradually slows down, which shows that the wheel-making device is also improved. During the Song, Ming and Qing Dynasties, the components of the wheel-making device were all changed, such as the top bowl, turntable and swinging hoop, with the aim of making the wheel-making technology more stable (Jin,2012)

Axle top caps: also known as "axle top bowls" are all made of porcelain. During the Han, Tang and Five Dynasties, it was an octagonal or short cylindrical structure, with a pot-shaped concave pit on the bottom and traces of glaze on the concave surface, and it was made regularly. After the Song Dynasty, the contact surface between the shaft top cap and the runner was small. The shaft top cap is fixed at the center of the back of the rotary wheel of the pottery car when it is inlaid, and the concave socket is buckled at the top of the straight shaft to play the role of bearing, which is a rotating part that makes the pottery car more stable (Yu&Liang,2004)

The turntable is the device on the top of the quick wheel system, and its function is to make the mud rotate after it is placed on the turntable to make the blank. Turntables are divided into porcelain and pottery according to their materials. The shapes are all round cakes. Most of the pottery materials have holes, while the

porcelain materials have no holes. The diameter of the turntable and the thickness of the turntable will change with the size of the diameter

The swinging hoop, also known as the "wheel ring" is a component of the pottery cart device, which is used in conjunction with the axle top bowl in the fast wheel device, and its function is to keep the vertical rotation without tilting when rotating, and to maintain a stable and uniform rotation. The swinging hoop is a flat and short ring, which looks like a bracelet. Some are glazed and some are not glazed, and their materials are divided into porcelain and iron.

The first step of blank drawing is righting. The blank puller holds a wooden stick against the boosting hole on the edge of the pulley turntable to drive the round shaft on the pulley, so that the turntable rotates at a high speed for about 1 minute, puts down the held wooden stick and continues to rotate with the inertia of the turntable, and the porcelain maker puts the mud into the center of the turntable for manual blank pulling operation. After the inertia disappears and the turntable slows down or stops, continue to stir the turntable with a wooden stick against the booster hole until the mud blank is felt in the middle of the turntable. Up righting is the premise of starting and formally drawing billet, otherwise even if the soil is opened smoothly, it will be thick and thin or high and low at the same time.

After the righting, the hole will be opened. Break the fixed soil, and press it in the center of the soil with your right hand to form a vessel shape. After controlling the thickness of the bottom of the vessel, you can start to pull up the wall. The main method is to squeeze the inner wall and the outer wall of the soil with your fingers at the same time. At this time, the blank will slowly rise under the combined action of rotating force and pulling force, and the wall of the device will become thinner when it is squeezed. When it is pulled up, it needs to be slow, and when it turns around, the hand will increase upwards with the rise of the wall. After such a rotary billet drawing method, the soil in all positions of the whole circle is subjected to the same pressure, and the thickness will be the same, which will not cause the situation that half of it rises and the thickness is uneven.

As the porcelain garden stool belongs to a large-scale object, it is necessary to divide the upper and lower parts equally from the middle, make them separately, draw them separately, finally assemble and form them, bond the joint with mud, dry them, and then trim them to form them. The manufacturing process of the drum nail is printed with a stamp and then glued with mud. The blank drawing method is basically the same as that of ordinary circular objects, and most of them are circular embroidered garden stools. However, the porcelain garden stools are formed by drawing blanks from the upper and lower parts respectively and then combining and bonding them from the middle. (Zhou,2012) This technology requires a higher level of skilled workers, but after the upper and lower parts are made, the rest of the production process is similar to that of the impression method.

Decorative pattern analysis

As an important part of decoration, the theme of porcelain garden stool patterns has been influenced by thoughts, politics, culture, religion, customs and aesthetics at that time, and has become the mainstream of the times because of its special additional form attached to the utensils themselves. The theme of ancient patterns is rich and colorful. Due to the improvement of technology and citizens' aesthetic ability at that time, the theme of decorative patterns of porcelain garden stools has been continuously developed. The theme of the pattern not only reflects the aesthetic taste of the literati dominated by the literati, but also creates the elegance of the decorative pattern of the porcelain garden stool, and also caters to the aesthetic needs of ordinary citizens, reflecting the life taste and social customs of the citizens at that time, showing the characteristics of secularization. Decorative patterns have penetrated into all aspects of people's lives from the court aristocrats. This secularization tendency leads to the development of decorative patterns in two aesthetic directions: elegance and vulgarity, elegance and vulgarity, showing an artistic appearance of both elegance and vulgarity.

Geometric patterns

Geometric patterns are graphic patterns composed of straight lines and curves, including circles, triangles, diamonds, etc. Geometric patterns have appeared in the period of painted pottery culture in China. Porcelain garden stools were produced in Song Dynasty, and geometric patterns were very popular in Song Dynasty, which was related to the rational logic and rational structure and characteristics of geometric patterns in Song Dynasty. Geometric patterns are flexible, smooth, regular and rational, showing a kind of regular beauty, which accords with the aesthetic taste of the Song Dynasty. (Figure..31) The geometric patterns in the decoration of porcelain garden stools in Song Dynasty mainly include the beaded pattern, tassel pattern, palindrome pattern, copper coin pattern and chain pattern.

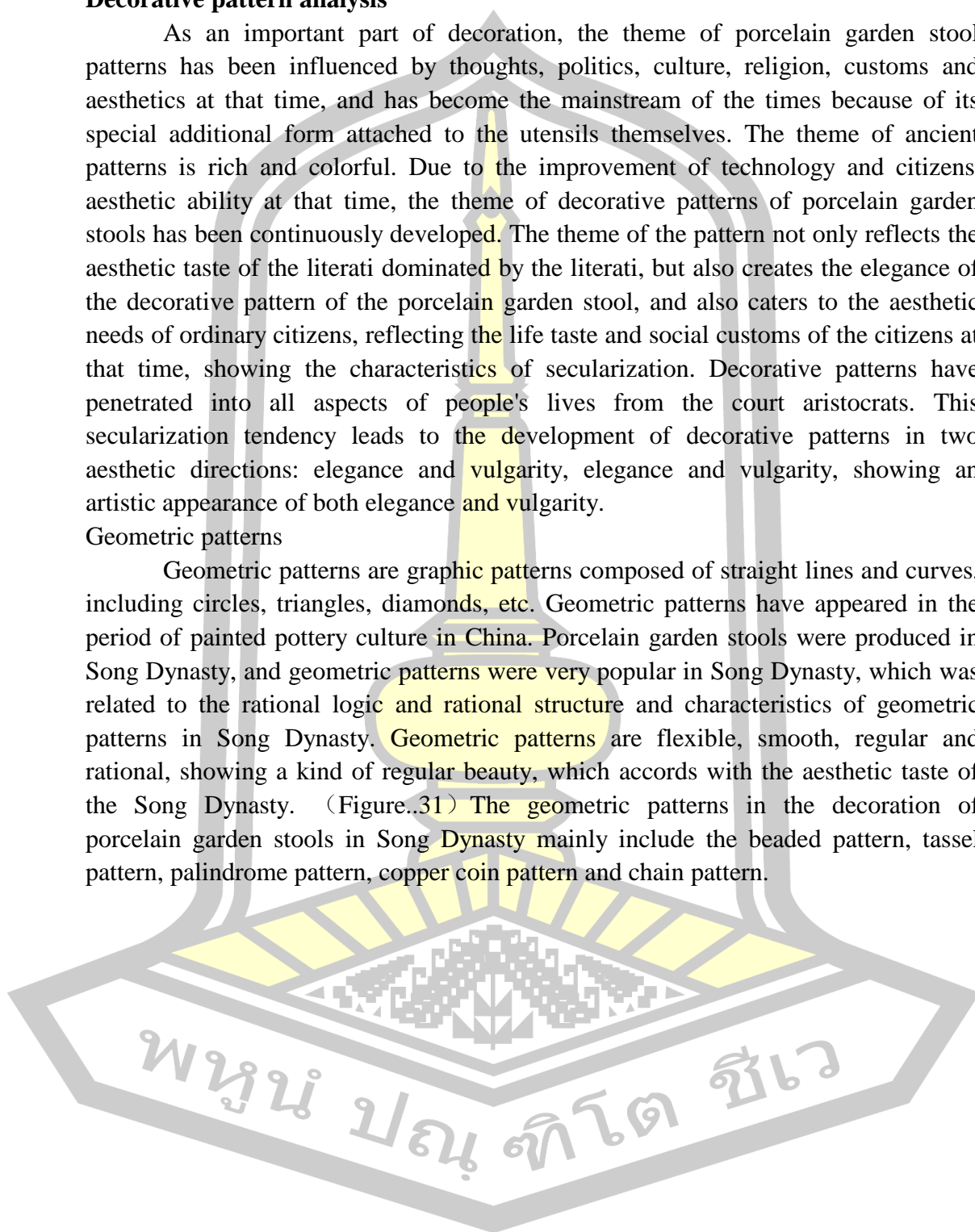




Figure 30 Geometric patterns
Source: Made by Danxi Luo, 2023

In the Song Dynasty, there were many different patterns on the embroidered garden stool of Quezuotu. At the top is a circle of beading, which is also called "beading". The China Pattern History defines the couplet bead pattern as "a pattern consisting of many small circles connected to form a big circle." (Tian&Wu, 2003) The word "Lianzhu" originated from "Hanshu" written by Ban Gu in the Eastern Han Dynasty. On the calendar: "The sun and the moon are like a combination, and the five stars are like beads I%." (Wang,2017) Volume 9 of the Song Dynasty's Map of Xuanhe and Bo Gu describes the bronze wares of the Zhou Dynasty as "the feet, abdomen and neck are all in the shape of dragons, with thunder in between." On both sides, it is decorated with lianzhuzhouzhi." Notes on shuowenjiezi: "People in Zhou Dynasty used conjunctions, Han people used conjunctions, and ancient and modern characters also." In other words, the words "Lian" and "Lian" can be used universally. The word "Lian" tends to be quantitative, and the word "Lian" has the meaning of

connection, so the word "Lian" is more in line with the research of this topic. There is a small circle between each series of circles at the top of the porcelain garden stool, which is simple in form and does not lose its aesthetic feeling.

The copper coin pattern is named after the intersection of four circles and looks like copper coins. It is actually a continuous pattern of four-leaf patterns from West Asian culture. For example, the celadon flower arranger of the Northern Song Dynasty in the Boston Art Museum in the United States is decorated with peony flowers in the upper part, hollowed out with copper money patterns in the middle, and carved with animal heads in four feet. The ornamentation is complicated and there is a good will to live and die together. Brocade chain pattern is a kind of decorative pattern commonly used in dyed fabrics. It looks complicated but very integrated, and has the logical characteristics of orderliness, calmness and stability. In the Song Dynasty, it was often painted outside the diamond pattern on ceramic flower devices, such as the shallow painting of plum and bamboo pattern bottles in Jizhou kiln, which formed a dynamic and static contrast as a whole, and a contrast between rules and irregularities.

Plant patterns

In Song Dynasty, the techniques of plant cultivation and grafting were highly developed, and all the people from the court nobles to the common people were keen on "flowers". "Dream of Liang Lu" Ceng Yun: "Burning incense, ordering tea, hanging pictures and arranging flowers, four things to do, should not be tired of home." The ancients regarded "flowers" as an interesting thing in daily life. According to records, there were more than 360 kinds of flowers in the Song Dynasty alone. The development of planting technology is enough to show the ancient people's love for flowers and plants. (Figure.32) The upsurge of flower development indirectly promoted the ingenious combination between plants and flower decoration. In the Song Dynasty, the plant patterns were endowed with multiple cultural connotations, which can reflect the social environment and public psychology in the Song Dynasty. Influenced by the prevailing patterns of plants and flowers in the Song Dynasty, persimmon, begonia, lotus and twig-bound patterns were mostly used as decorations in the Song Dynasty.



Figure 31 Plant patterns
Source: Made by Danxi Luo, 2023

Peony pattern

Peony pattern is the most widely used decorative pattern in Chinese arts and crafts. Peony, a plant of *Paeonia*. In Qin and Han dynasties, it was called wood peony. Peony flowers are grand, with straight stems, long stalks and feathery leaves, which are in full bloom in Grain Rain. During the Wei, Jin, Southern and Northern Dynasties, the description of peony as a herb was first mentioned in *Shennongbaicaojing* written by Wu Jin. In the Sui and Tang Dynasties, it was clearly recorded that peony was very popular as an ornamental. In the Song Dynasty, the relevant system was formulated for peony appreciation activities. (Tian&Wu,2003)

Therefore, "peony culture" has an important influence on ceramic decoration. Peony, as a decorative pattern, was widely used in porcelain in the Song Dynasty, and was known as the "flower of wealth", which won the hearts of the people. This kind of pattern is one of the most used patterns in the decoration of plant patterns of porcelain garden stools. Not only the Han nationality, but also the porcelain in Liao, Jin and Xia dynasties is good at decorating peony patterns. Because of the different peony varieties in the regions where the kilns are located and the different aesthetic needs of the public, the crowns of peony patterns are also different.

2) Persimmon Calyx Pattern

Persimmon pattern is one of the traditional auspicious plant patterns in China, and the typical persimmon pattern is depicted in the porcelain garden stool where the maid sits in "The Book of Filial Piety of Song Gaozong Ma Hezhi Supplementary Picture Volume". According to historical records, the pattern of persimmon stems evolved from the "square flower" in the Warring States Period. The "square flower" means fragrant flowers, and because of its long branches, it symbolizes the prosperity of future generations. Persimmon-stem lines show the characteristics of long branches and vines. Until the Song Dynasty, persimmon-stem lines have been transformed into geometric and stylized patterns. From the Warring States Period to the early Han Dynasty, persimmon-stalk patterns appeared in a large number of bronze mirrors in the Han Dynasty as the main theme decoration. In addition, Hong Hao mentioned in Song Dynasty's "The Story of the Songmo": "Honey cakes are square or round, or persimmon flowers." Song and Wu Zimu's Meng Liang Lu (Volume 18) mentioned "Ling persimmon". According to historical records, the pattern of persimmon stems appeared in the Warring States Period. Although it was used in bronze mirrors, fabrics and foods, it can be known from historical records that the pattern of persimmon stems was mainly used in fabrics, and its use in foods and other places only borrowed its shape, expressing a beautiful meaning and being easy to sell. (Zhang,1995)

3) Lotus design

Lotus pattern is one of the typical patterns in Buddhism. It originated from the ancestor's reproductive worship of the lotus, and the lotus has a lotus in its heart, which is in line with people's good wishes for reproduction and life extension. Lotus patterns are widely used plant patterns, and the aesthetic performance of lotus patterns in ancient times is characterized by elegance and simplicity. Its development process and the emergence and prosperity of the concept of Yin-Yang and Five Elements are almost at the same time. "Flower patterns have appeared at the latest in the Spring and Autumn Period and the Warring States Period, which is one of the earliest plant patterns developed in series in China." (Gu, 2009) During the Wei, Jin, Southern and Northern Dynasties, due to the intensification of ethnic conflicts and the continuous wars, the broad masses of people needed spiritual sustenance to save themselves from their dire straits. At this time, the application scope of lotus patterns was expanded and further developed and deepened. During the Sui and Tang Dynasties, Confucianism, Buddhism and Taoism began to combine, and the lotus

pattern was more beautiful and purer. But it is no longer the main decoration in life. (Cheng,2002) With the development of flower appreciation culture in Song Dynasty, the lotus pattern was endowed with new cultural connotation as the decoration of utensils and conveyed its own style. This is related to Zhou Dunyi's "Love Lotus Theory" in Song Dynasty. After entering the Song Dynasty, lotus patterns gradually became popular and developed in a diversified direction. Compared with the lotus patterns in the previous dynasties, the lotus patterns in the Song Dynasty showed the characteristics of delicacy, refinement, complexity and secularization. In the Song Dynasty, two of the porcelain garden stools drawn in "Eighteen Bachelor's Paintings" drew lotus patterns, but the lotus patterns they drew used symbolic expression techniques. The 18th Bachelor's Picture depicts the scene of the ancient literati's elegant gathering and making friends. The ancients often attached great importance to things, and the lotus was gradually affirmed and respected by the ancients. They hoped to express their faithful character through the lotus, so the lotus became a portrayal of the ancients' personality. (Hui,2009)

Branch-bound pattern

The wooden garden stool in the Autumn Court Baby Play Picture has a twig-bound pattern made of inlaid mother-of-pearl, which is a typical theme of traditional flower decoration patterns. This kind of pattern theme takes the branches, leaves, vines, vines, flowers or fruits of flowers and plants as the performance theme. The branches and stems are intertwined, showing a continuous spiral or wavy shape, or the curve is positive or anti-tangent. The smooth rhythm and realistic flower buds form the contrast between point and line, movement and stillness, which not only has a strong sense of movement, but also has a beautiful and auspicious meaning. (Zhang,1995) The pattern of begonia flowers in the porcelain garden stool of the 18th Bachelor of Song Dynasty is symmetrical in center and elegant in shape. In ancient China, begonia flowers were called "immortals in flowers", symbolizing nobility and elegance.

Animal Patterns

1) Animal grain

The animal patterns decorated with porcelain garden stools are mainly dragon patterns, which rise in the air, hold your head high and stand out, showing four claws and four feet, sharp claws and hooks, curly beard and wide eyes, which are very dignified. The dragon pattern is no longer monopolized by the emperor, but gradually secularized. As long as you don't wear clothes with dragon patterns, folk crafts can also paint and carve dragon patterns. (Zhang,1995) The dragon pattern in folk arts and crafts is not only majestic lost face, but also auspicious peace in majesty. For example, in the dragon pattern bottle in Table 7, the dragon pattern is wrapped around the bottle body, and this bottle is supplemented by the lotus pattern and the grass scroll pattern, which seems to be full of peace from the lotus. The foot is engraved with the words "vase made by Liu Jia". (Figure.33) According to the data, this kind of vase with large shape belongs to the vase of flower arrangement used in sacrifice, and

it is common in tomb murals. The dragon pattern on the floral organ is in contrast with the chrysanthemum pattern. The dragon mouth is wide and the dragon body is thick, playing among the chrysanthemum petals, which is a auspicious scene loved by the folk people to ward off evil spirits and pray for blessings. There are also scenes of animals such as deer and monkeys playing with each other in the pond. In the Southern Song Dynasty, a part of the white brown deer and monkey pattern bottle in Jizhou Kiln was painted with deer and monkeys on one side, and it was a scene of harmony. (Zhang,2000)



Figure 32 Animal grain Pattern
Source: Made by Danxi Luo, 2023

Bird grain

In Song Dynasty, the bird patterns decorated with ceramic flowerpots included geese, magpies, ducks, swimming fish and mandarin ducks. For example, the bird patterns in Table 7 are all combined with pond scenery and ecological aquatic plants, which is a scene representation of sketch. Birds have interesting and vivid patterns. For example, on the other side of the white brown deer monkey pattern bottle in

Jizhou kiln in the Southern Song Dynasty, a pair of geese are painted overlooking the rippling water surface, which seems to have fish in the water and is full of dynamic feeling. In addition, wild ducks are carved in the middle of plum bottles, and the mouth of wild seem to be sucking feathers, like a funny cartoon, which is the embodiment of civilian life. Song people are also good at the artistic expression with flowers and birds as the theme, which is a sketch form in the courtyard. The form of birds standing on branches also comes from natural scenes in real life. The beak of magpie stands slightly on the branches of plum blossoms, which seems to be a traditional folk decorative theme, with auspicious and beautiful meanings. For example, the layout of magpie's plum-patterned vase in Jizhou kiln in Song Dynasty is basically the same, which also reflects that Hua Niaowen on the vase in Song Dynasty is really influenced by silk flowers and birds. (Li,1996)

Insect pattern

Insects often see butterflies in the decorative patterns of ceramic flower devices in the Song Dynasty, and butterflies fly around the flowers. "Butterfly Love Flowers" is often mentioned in the poems of Song Dynasty, such as Su Shi's "Butterfly Love Flowers" series, "Butterfly lazy warbler is in the middle of spring ... It's hard to trip if you don't believe this ..." From the poem, we can know that "Butterfly Love Flowers" is used to express the mutual confession between men and women, or the unilateral love sickness between husband and wife. For example, the butterfly pattern bottle of white and black Hualien in Jincizhou Kiln, the butterfly pattern bottle of white glazed and black peony in Songcizhou Kiln and the butterfly pattern bottle of black and white disc in Songcizhou Kiln are shown in Table 7. Butterflies fly around flowers in pairs, which implies the spiritual outlook of Song people who are more devoted to natural scenery. (Tie, 2001)

In the Song Dynasty, the decorative theme of porcelain garden stools reached an unprecedented height of prosperity, and the pattern theme became richer and richer. Compared with the unrestrained richness of plant ornamentation in the Tang Dynasty, the decorative pattern theme in the Song Dynasty appeared restrained and exquisite, which was mainly reflected in the standardization of decorative structure and the connotation of decorative implication. The decorative theme patterns used in porcelain garden stool decoration not only serve as sitting garden stool decoration, but also have significant cultural symbolic significance. As the cultural carrier of the Song Dynasty, the cultural connotations expressed by the patterns in different times are different, and the decorative patterns of porcelain garden stools can also be used as an important carrier to study the social culture of the Song Dynasty. As can be seen from the theme of patterns used in porcelain garden stools, the decorative patterns are vivid, flexible and natural, and the colors are subtle and soft, showing a kind of elegant and subtle beauty.

In ancient China, patterns were the most concentrated decorative symbols, which had profound cultural connotations. The symbol patterns on utensils not only reflected the level of craftsmen, but also reflected the author's aesthetic interest to a certain

extent, which of course met the needs of the society at that time. As a utility, the porcelain garden stool also bears the function of decorating the home. Since the birth of porcelain, decorative patterns have followed suit. The same is true of porcelain garden stools. As a practical decorative object, most of the bodies are decorated with various decorative symbols. In ancient China, the cultural atmosphere in daily life was heavy. All kinds of utensils are decorated with plain colors or decorated with decorative patterns to increase their splendor and cultural sense. Every plan must be intentional, and every intention must be auspicious.

Discuss the identity of porcelain garden stool

"Identity" is a western concept. Identity derives from its root Source understanding has two meanings: first, itself and ontology are the pursuit of "who I am"; Second, identity and consistency are the cognition of things that are identical and consistent with themselves. As a kind of furniture, the concept of identity has an important identity function in ancient China society. It not only reflects the individual's position in the social hierarchy, but also conveys the individual's social status, cultural values and gender roles.

The meaning of identity

The narrow Chinese meaning of "identity" is birth, social status and so on. In sociological research, identity "is associated with concepts such as category and role, revealing the relationship between individuals living in society and society". For example, Calhoun wrote in his book *Social Theory and the Politics of Identity*: "Without name, language and culture, we wouldn't know that there are people who are different from ourselves, let alone the difference between ourselves and others, and between us and them." ② is a kind of cognition and description of the subject itself. The Chinese meaning of "identification" is recognition and approval. Identity occurs when different individuals are in contact and collision, and individuals face another different from their own existence, resulting in a reaction to maintain self-identity. "Identity can be self-selected or imposed." "Identity" shows the differences between individuals (ethnic groups), while "Identity" focuses on individuals (ethnic groups) seeking identity. The concept of identity is made in the porcelain mound, that is, the individual's search for "self" and the analysis of what kind of identity role was constructed in ancient China society. (Zhang,2006) Porcelain garden stool is not only a piece of furniture in ancient society, but also a symbol of culture and society. The image of porcelain garden stool presented by individuals in different social backgrounds has also changed from the perspective of "otherness" in history to the perspective of "otherization", and a new and true identity image has been constructed. Based on the above theory, let's analyze the reasons for the identity of porcelain garden stools. In the early days, as a piece of furniture, porcelain garden stools gradually gained attention, and individual identity images were also constructed in various ways. Different individuals raised by different cultures have the vision of "the

other" because of the "heterogeneous" culture, and the main factors for the formation of the vision of "the other" in porcelain mound come from the differences in social status, cultural values and gender roles. The social structure of ancient China was basically strictly hierarchical, including the official rank of feudal dynasty, aristocratic class, farmers and craftsmen. Sitting garden stool, as a kind of furniture, is used to reflect individual social status in different social occasions. The social background of its identity is the result of the interweaving of many complicated factors in ancient society.

Research on Identity of Porcelain Garden stool

Porcelain garden stool plays an important role in the social structure. It is not only a kind of seat, but also a symbol of identity. Porcelain garden stool also has unique identity and cultural symbolic significance. The definition of Identity in the literary dictionary is: the basic meaning of identity refers to the identity of an individual and a specific social culture, and it is an important concept in western cultural studies, which is particularly favored by the new left, feminism and post-colonialism. Theoretical research related to identity involves cult urology, sociology and psychology. Mr. Mou Zhongjian put forward the definition of nation with reference to the opinions of various schools: "A nation is a cultural community formed by people on the basis of common ancestral origins in history, and it is a stable social group that has a sense of identity and unity in comparison with other ethnic groups and realizes that it has a common Source and common destiny." Community culture based on ethnic identity is the core level of national culture. For individuals in a nation, identity is also identity recognition, that is, the process of seeking acceptance from the cultural community; At the same time, it is also a psychological cognition, that is, a cognitive process of the commonality of the group to which one belongs and the differences with other groups. From the social structure, cultural traditions and values, the identity of porcelain garden stools involves many aspects. Identity is a complex and dynamic process, which has both subjective will and objective form. Zhang Shuhua thinks that identity has five characteristics in A Summary of Identity Research, among which the first one is the first one, that is, identity is composed of subjective identity and objective identity, which includes some objective characteristics, identification codes and symbols that people are subjectively aware of, embody and show their social identity. From the above analysis, the identity of the porcelain garden stool has both objective material existence and subjective consciousness in concept, which has an inherent logical relationship with the characteristics of identity.

Therefore, as a cultural symbol, porcelain garden stool has become an important way to reflect and convey individual identity under the influence of major factors. In ancient society, people of different levels used different types and decorations to show their social identity and status, which made individuals form an independent identity and strengthened their identity. The appearance, material and decoration of the sitting garden stool usually reflect the aesthetic trend and values at

that time, and the participation of the porcelain garden stool builds the link between culture and identity. At the same time, the gender roles and social expectations in ancient China also played an important role in the use of porcelain garden stools. The female-only sitting garden stools usually paid attention to the exquisiteness and femininity of appearance, which reflected the society's aesthetic requirements and expectations of gender roles for women, and then realized self-identity.

The embodiment of "identity" in decorative patterns of porcelain garden stools-taking dragon patterns as an example.

The Song Dynasty is a dynasty with highly developed culture, and decorative patterns are the mainstream of the times. The whole social and cultural level has been improved, and the citizens' aesthetic appreciation ability is generally high. On the one hand, the decorative pattern embodies the aesthetic taste of literati dominated by literati, highlighting elegance, on the other hand, it caters to the aesthetic needs of ordinary citizens, reflects the life taste and social customs of the citizens at that time, and shows secularize. There is vulgarity in elegance and elegance in vulgarity, forming a decorative pattern artistic appearance that appeals to both elegance and vulgarity. Especially animal patterns are very popular in the decoration of porcelain garden stools, and dragon and phoenix patterns are the most common. Dragons are regarded as auspicious symbols in China culture, representing imperial power and majesty. (Yu,1981) The dragon patterns (Figure.34) appearing on the decoration of porcelain garden stools are usually related to royalty, court or noble family, so these patterns can convey the significance related to the identity of royalty or nobility.



Figure 33 Dragon Pattern

Source: Made by Danxi Luo, 2023

Dragons are actually creatures that do not exist in nature, but in ancient times, our ancestors worshipped dragons as totems. Dragons are endowed with many social attributes. In ancient Chinese mythology, the dragon is a god who flies in the clouds, flies into the sea and spreads rain. People built the Dragon King Temple to worship the dragon and went to the Dragon King Temple to beg for rain in times of drought. In class society, the dragon has become synonymous with the emperor, symbolizing the supreme power. According to archaeological data, the image of dragon appeared in

the Neolithic Age. With the development of history, influenced by different political, economic, religious, cultural and aesthetic concepts in different historical periods, the image of the dragon is also changing and enriching, and it has gone through a process from low to high, from simple to complex, from simple to gorgeous, from simple to flexible. (Zhang,1985) Even the dragon patterns of the same era are varied and varied because of the different materials and techniques. The emperor is convinced that the "son of heaven" is the historical concept of "dragon body" in Han culture. "Dragon" and "yellow" in the sense of color have become symbols for feudal monarchs to flaunt their supreme imperial power. The court nobles not only recognized the "dragon", but also obeyed the existence of the "dragon" and the dignity of the "yellow" in architecture, clothing and appliances. The Imperial Kiln Factory has produced a large number of porcelain garden stools with dragon pattern and yellow glaze, but as Tang Ying, the pottery official, said, no one dares to collect and use them without a reward. With the appearance of porcelain garden stools, their decorative patterns directly reflect social status and convey identity. The court and the royal family are the symbols of supreme power, and their sitting garden stools are all luxuriously decorated. Dragon patterns appear on the decoration of porcelain garden stools, and the shape of dragon patterns is not only further standardized, but also more gorgeous. These sitting garden stools are not only seats for emperors and queens, but also symbols of their authority. The social concept of dragon pattern has also changed, from the previous dragon to the embodiment and imperial pattern of feudal rulers' imperial power. The dragon pattern became a symbol of rule, and the emperor called it "the real dragon son of heaven". (Kong,2001) The regulations on dragon pattern as decoration became stricter and stricter, and there were more and more restrictions. In modeling, the dragon pattern in Song Dynasty represents imperial power, showing a dignified manner. The dragon pattern in Song Dynasty has the following characteristics: the dragon head has horns, hair and whiskers, the sharp lips protruding from the upper jaw gradually disappear, and the lower jaw begins to tilt upwards. The body evolved from the shape of an animal to the shape of a snake with a bold and thin tail, tapering from body to tail. (Li,2003) The dragon pattern is getting longer and stronger. The neck is thinner, the legs and feet become shorter and thicker, and some have feathers. The claws are sharp and hooked, with three or four claws, which can roll up and down. From the dragon picture painted by Zhou Rong in the Song Dynasty, we can see the characteristics of the dragon pattern in the Song Dynasty, which leaps in the changing situation, with wide eyes and dignified expression, and even shows lost face, holding his head high or looking back impressively, as if the wind were whistling and flying away.

Dragon patterns can be seen on porcelain garden stools in the Song Dynasty. There are more dragon patterns on porcelain, and the main decorative methods are carving, printing, painting, etc. There are many dragon patterns in Ding kiln and Cizhou kiln. Judging from the porcelain found now, in addition to the dragon patterns used by emperors, there are also many folk utensils decorated with dragon patterns.

Ding kiln, Cizhou kiln, Yaozhou kiln bottles, plates, bowls and other utensils are printed, painted and carved with dragon patterns of different postures. The difference is that the dragon-shaped porcelain garden stools used by the court are much more delicate than those used by the people.

In ancient times, a whole set of methods of painting dragons were summarized, and there was a saying of "three stops and nine similarities" in painting theory. The decorative patterns were influenced by painting, and the dragon patterns also had obvious patterns and standardized characteristics. The so-called "Nine Similarities" and "Three Stops" in the painting of dragons in the Song Dynasty were respectively expounded in Guo Ruoxu's book "Pictures and Experiences" in the Northern Song Dynasty and the method of painting dragons: "The dragon painter breaks out three stops and divides them into nine similitude, and the poor swimming is wonderful, so he can get back to the flat and rise and fall. It is better to have scales and elbows, strong strokes, and straight from the meat. The so-called flying in the sky, dark clouds; Down to the spring, deep into the bottomless. People can't get it and see it. Today's picture writing is hard to be likened, but it is full of strength and spirit. Richard Wu painted ghosts and gods. " That is to say, when drawing a dragon, the length of the head to the arm, the arm to the waist, and the waist to the tail should be equal. The nine similarities are that the horn is like a deer, the head is like a camel, the eyes are like a rabbit, the neck is like a snake, the abdomen is like a fish, the claws are like an eagle, the palm is like a tiger, and the body is like an ox. When drawing dragon's mane, scales and elbow hair, the strokes should be thick and fast, and it should look like they are born from meat. Dragonfly has a layer of clouds between heaven and earth, but after falling into the spring, it dives into the bottom of the water, so people can't see it, so it is difficult to draw a dragon shape, but the spirit of putting pen to paper and exerting strength should be in line with Wu Daozi's theory of painting ghosts and gods in Tang Dynasty. In the Southern Song Dynasty, Luo Yuan's Er Ya Yi is also called "the dragon has nine similarities": "The horn is a deer, the head is like a camel, the legs are like rabbits, the neck is like a snake, the abdomen is like lips, the scales are like fish, the claws are like eagles, the palms are like tigers, and the ears are like cows." It can be seen that the dragon pattern in the Song Dynasty has fully possessed the characteristics of many animals, so it is more magical and powerful.

Therefore, the dragon has always been regarded as an auspicious symbol in China culture, representing imperial power and majesty. In the feudal society of China, the emperor was regarded as the supreme ruler, known as the "real dragon emperor". The application of the dragon pattern on the garden stool not only reflected the symbol of imperial power in the feudal society of China in history, but also showed the important role of decorative arts in conveying identity. Dragon patterns are widely used in palace decoration, especially in palaces, palaces and royal temples, which can convey the significance related to the identity of the royal family or nobles. This application may appear more in palaces, palaces and places related to emperors

and officials, emphasizing the majesty and status of rulers. As a decorative pattern, the application of dragon pattern in sitting garden stool not only has profound cultural connotation, but also reflects the diversity of different social backgrounds and identity.

The embodiment of "identity" in the users of porcelain garden stools

The social structure of ancient China was based on strict hierarchy, including the official rank of feudal dynasty, aristocratic class, farmers and craftsmen, and it was born in the Song Dynasty. As a kind of seat, it reflected the clear changes of social hierarchy and role among users. In the court, it reflects the strict hierarchical system of the court society. Officials of different grades and the Crown Prince use different grades of garden stools, emphasizing the social status and identity of officials. At the same time, the shape of porcelain garden stool has also evolved in female roles, reflecting the different expectations and restrictions of society on women in different periods, the evolution of social values in different periods, and the expression of individual identity.

Classification of porcelain garden stools in court use

"Home is the world", home and country are closely linked, and the use of palace furniture is also the concrete embodiment of the country's social system, cultural inheritance and development, and economic development level. As a kind of ancient palace furniture, porcelain garden stool penetrated into a hierarchical court society during its use.

After Zhu Yuanzhang was founded in the Biography of Cui Liang in the Ming Dynasty, he recruited Cui Liang, the governor of Zhejiang Province in the previous dynasty (Yuan Dynasty), as the minister of rites, and discussed the etiquette system with Li Shanchang, Song Lian, Liu Ji and others. (Wu,2012) Almost all the ceremonies of the imperial court were agreed upon or drafted by them, which was decided in the third year of Hongwu: the system of sitting on the garden stool under the crown prince and the ministers were given to sit in the temple, and the Song Dynasty was taken into consideration, each of which was poor. Its system, the Crown Prince takes green as the quality, and embroidered cloud flowers for decoration. Prime minister and Yiping take red as the quality, and stop the clouds from blooming. Pu Dun below the second grade, without decoration. All those who attend the tin banquet in the Grand Court, civil servants with more than three grades and military officers with more than four grades, are given to sit on the garden stool. As for his retreat, his leisure and his good fortune, the officials of Zhongshu Province, Dadu Prefecture and Taiwan Province are above two grades, and those who are given seats by their ministers who honor the old and literary officials are still given velvet, so they are ordered to make it like a system (Wang&Wu,2018)

Cui Liang was customized by "Participating in the Song Dynasty Canon", and the Crown Prince, the Prime Minister and officials with more than one grade were given to sit on the garden stool, but the decoration was different. The use of the garden stool at the banquet given by the Grand Dynasty was extended to civil servants with three

grades and military officers with more than four grades. According to the Song system, the prime minister, envoy and other civil servants, our envoy and other Wu Zhi, as well as the imperial clan, can all sit in the temple, but there is a difference: the prime minister and envoy with the same rank sit on the embroidered garden stool, and the rest sit on the Pudun. (Ye,2011) However, it was otherwise stipulated in the Song Dynasty: prime ministers, envoys and emperors can use "shuttlecocks" when they are lucky.

In contrast, in the Ming Dynasty, the garden stool was applied in one, and only the color and embroidery were used to distinguish the crown prince, the pro-king and the prime minister, and when the banquet was given, it was extended to civilian officials with three products and Wu Zhi with four products, which seemed to be "simplifying the complex" and "being gracious and generous", but the prime minister and officials with more than one product did not have a high-ranking "shuttlecock" to sit on, which was a disguised demotion. The regulations on the use of porcelain garden stools in the Ming Dynasty defined the identity and status of officials in court occasions, and officials of different grades gave different grades of sitting garden stools. This regulation is embodied by means of color and embroidery, which makes the distinction between monarch and minister more distinct. For example, the Crown Prince gives a seat with a blue garden stool, the Prime Minister and officials with a grade above use a red garden stool, and other officials use a pudun. This clear identity is reflected in the choice of seats for officials in formal occasions such as the court and the court meeting, which highlights the hierarchical system of feudal society in Ming Dynasty.

Wen Zhenheng's Chronicle of the Long Story in the late Ming Dynasty said: "There are embroidered garden stools in the palace, which are shaped like small drums, and those whose corners flow down to the Soviet Union are also elegant and usable." (Wang,2007) There are many descriptions of palace activities in the works of Chou Ying, a painter in the middle Ming Dynasty. In a picture of the palace, the emperor in the pavilion is sitting in a chair with a backrest under the escort of a fan concubine, and an official outside the pavilion is stepping back on the steps to make a guide, while another official is moving forward and wants to bend over to pay his respects. There is a sitting garden stool at the left and right of the emperor, as if to be used for sitting. The fabric covered on it is embroidered with clouds, and the system of sitting in the palace only benefits the crown prince, prince, prime minister and so on. We know that this official status is at least one product. In addition, in the 18th year of Hongzhi (1505), Wu Kuan, the minister of rites, Li Jie, the assistant minister of rites, Chen Tang, the assistant minister of Nanjing, Wang Hong, the official assistant minister, and Wu Hong, the minister of Taibu Temple, and other five people met in a "public leisure time" because they happened to be fellow villagers, in the same dynasty, and had the same aspirations. The Ming Wanli blue-and-white drum embroidered garden stool with Yunlong pattern in the Palace Museum in Beijing is painted with Yunlong as four claws. (Zhao,1999) According to the Ming system, the

dragon used for one product to six products has four claws, so the garden stool should be used by officials under one product. It is true that the details of the sitting garden stool also reflect the identity. The design of the sitting garden stool in the Ming Dynasty is exquisite, the sitting surface is embedded with a light gray face, and the legs are bulging under the waist. These details show the advanced production technology of the sitting garden stool and further highlight the identity and status of officials.

It can be seen that the sitting garden stool in Ming Dynasty played an important role in court etiquette and official identity. The regulations and design details of sitting garden stool reflected the complexity of social hierarchy in Ming Dynasty, as well as the fine distinction between the status of monarch and minister. This regulation and design provided important reference and guidance for the etiquette and etiquette of officials in Ming Dynasty, and reflected the importance of hierarchy and etiquette in feudal society.

The Evolution of the Shape of Porcelain Garden stool in Female Roles

Compared with other dynasties, the Tang Dynasty is the dynasty with the highest social status of women, because it is an era with a relatively open atmosphere. It can be said that women in the Tang Dynasty have an important position in the history of the development of women in ancient China. Although they did not completely get rid of patriarchal clan system, the restrictions on women were reduced and their social status was improved. In the Tang Dynasty, fullness and roundness were the beauty, so sitting on garden stools was also loved by women at that time. Women express their aesthetic ideas by choosing this kind of sitting garden stool, and reflect their social status to some extent. At the same time, due to the introduction of Buddhism and the influence of its lotus platform, women often use the garden stool, which is called "abutment" or "full hoof". In the Five Dynasties, from the "Blowing" part of "Han Xizai's Night Banquet" and the circular sitting garden stool where six ladies sat on the couch in "A Supplement to the Book of Filial Piety by Ma Hezhi" painted by Gao Zong in the Song Dynasty, it can be seen that the use of sitting garden stools in the Five Dynasties and the Song Dynasty has become popular because of the improvement of social productivity and the change of people's concept. It can also be seen that porcelain garden stools have a special position in Buddhist culture and are related to Buddhist practice and meditation. Women may choose to use the garden stool not only for comfort, but also for spiritual peace and spiritual improvement. This shows that women's role identity in religion and spirituality in ancient society.

In the Song Dynasty, women's bondage was intensified, and they could only use women's exclusive seats such as porcelain garden stools. In Lu You's Notes on the Old Learning Temple in the Southern Song Dynasty, it was written: "Xu Dunli said, 'In the past, when a woman sat in a chair and held a child, everyone would laugh at her excessiveness'". (Er,2012) Therefore, due to the harsh political environment in the Ming Dynasty, scholars began to shift their focus from political career to themselves, among which the most famous is garden culture. Furniture has the function of creating

atmosphere and has attracted the attention of scholars. At the same time, the implementation of the policy of "replacing service with silver" made workers have certain freedom, which promoted the development of economy and handicraft industry. Scholars and craftsmen began to cooperate in manufacturing furniture, which made the furniture truly achieve the state of unity of appearance, decoration and function. (Wang,2004) Therefore, compared with the past, the sitting garden stool has different styles and shapes, appropriate proportions, pursues the beauty of flowing lines, and develops rapidly. (Figure.35) Because of its light shape and body shape, it is often placed in the courtyard. At this time, the practicality, aesthetics and firmness of the embroidered garden stool have also been greatly improved. (Fan,2010) But this is only for the literati to meet their own psychological needs, not for women, they just pour their thoughts into the garden stool.



Figure 34 Porcelain Garden stool in Female Roles
Source: Downloaded from <https://digicol.dpm.org.cn>

Yaji activity place. The elegant collection between mountains and forests is very random and temporary, which is also reflected in furniture. Furniture that is convenient to carry is often selected for mountain forest elegant collections. Generally, a table or several sitting garden stools, plus a piano or a little tea set, form a mountain forest elegant collection. The Song Dynasty Liu During the Qing Dynasty, with the rapid economic development and greatly improved material living conditions, people began to pay attention to furniture and interior decoration design, including porcelain garden stools. Porcelain garden stools were quite popular in the Qing Dynasty. A Dream of Red Mansions can be said to be an encyclopedia of the Qing Dynasty. In this book, it is described: For example, in the 38th episode, "(Wang,2015) Lin Daiyu made a embroidered garden stool because she didn't eat much wine or crabs, so she sat on the railing and fished with a fishing rod." It can be seen that the porcelain garden stool has no fixed placement position, and its shape is light and convenient to move. Porcelain garden stools in the Qing Dynasty reached its peak. At this time, porcelain garden stools were mostly decorated with abstract

hollowed-out money patterns, and various techniques such as carving, embedding, painting and painting were used, making embroidered garden stools a delicate handicraft, which ancient women could hardly resist.

From the paintings of Leng Mei, a great painter in the Qing Dynasty, it is found that almost all women's seats are porcelain garden stools and children's pictures often appear. The images of osmanthus trees, lotus flowers, lusheng and children mean that there are many children. For ancient women, reproduction is their greatest task, and their beautiful expectations can be seen from this picture. Liezi Tianrui said: "Men and women are different, and men are superior to women." Compared with men's seats, the porcelain garden stool is smaller in size and adopts soft line modeling, which reflects the elegant and elegant characteristics of women. This reveals the expectations of men for the appearance of women's behavior in society at that time, and reflects the restricted and subordinate position of women in society.

In ancient times, it was highly praised that "a woman without talent is a virtue", and women only need to be good at dealing with housework. Therefore, the poor are good at weaving and embroidering, and the rich take "boudoir embroidering" as their virginity. It can be said that needlework is an essential skill for women. One of the most important features of the porcelain garden stool is the embroidered handkerchief covering the garden stool surface. In order to make their seats more beautiful, ancient women would wrap the garden stool with gorgeous and precious splendid flowers. In this case, not only will you enjoy it visually, but your seat will feel a little more comfortable. At the same time, the exquisite degree of embroidered handkerchief can show her ability as a needlework, which is regarded as a kind of identity, and at the same time shows that women are influenced by ethical norms and accept their responsibilities and status in society. In addition, the embroidered garden stool is also equipped with some exquisite decorative patterns, but these decorative patterns indirectly transmit ethical education and ethical codes to women. Make women know their social status and responsibilities, and be content to be bound by feudal ethics.

During the Ming and Qing dynasties, women's social status was still low, and even if women worked for the family again, they would not get the respect they deserved. The seating surface of porcelain garden stools in Ming Dynasty was convex to varying degrees, while that of porcelain garden stools in Qing Dynasty was basically flat or even slightly concave. Porcelain garden stools in the Ming Dynasty were slender with soft lines, while those in the Qing Dynasty were exquisite and compact in the early stage and dignified in the late Qing Dynasty. During the feudal ethical code period, compared with comfort, it was more about the constraints of women's manners and postures. Because the embroidered garden stool had no backrest, it was easy to fall down. Therefore, when using it, you must sit upright, keep your back straight, and always pay attention not to relax, so that men can be satisfied visually. It can be said that embroidered garden stool is the embodiment of ethical code culture. At that time, aesthetic feelings and values were integrated into the production of

embroidered garden stool, which made the embroidered garden stool unique. It is precisely because of the exquisite appearance and elegant shape of the embroidered garden stool that ancient women accepted and loved it psychologically and were proud of it.

Porcelain garden stools played an important role in the identity of women in ancient China, reflecting their social status, religious beliefs, cultural values and skill traditions. Women express their identity and recognition in the social and cultural environment by choosing different types of sitting garden stools and decorations on the sitting garden stools, and are also influenced by these environments. This analysis highlights the multi-dimensional role of Zuo Dun as a cultural symbol in the female identity in ancient China.

Porcelain garden stool as a dimension of art value

Art is a valuable artistic carrier created by the labor of art workers, and under certain social relations, as long as it enters the circulation field for market exchange and finally exists without art workers, it is an art commodity and has the common characteristics of general commodities. Art can be divided into narrow sense and broad sense. The narrow sense refers to tangible art that conforms to the definition, which mainly includes painting, sculpture, porcelain and other substantive products. Works of art in a broad sense can be not only tangible works of art, but also intangible works of art, including creativity, image design, wall painting design and so on. The research object of this paper is porcelain garden stool, which belongs to the narrow sense of art. The use value of artworks is to create special effects that can meet people's spiritual and material needs. It is the natural attribute of artworks and reflects the relationship between people and things. The value of works of art is the cooperative energy consumed by the workers of art when creating value wealth, which is condensed in the works of art for exchange. It is the social attribute of works of art and reflects the relationship between people.

Porcelain garden stool shows the value of identity

As a kind of art, the special use value of porcelain garden stool is not accidental, nor is it stipulated by the public, but it is embodied through the creative process of special labor cooperation energy. It is the artistic achievement of creative labor by art workers using various painting tools and artistic materials according to the purpose of creation. Art derivatives, art CD reproduction, creative video recording, art book publishing, network platform communication, etc. Are all transformed into social materialized forms with special value in the process of creation and production, and also in order to further meet many aspects and multi-level life needs and consumption needs. In this way, artists not only cultivate their own artistic morality and simplicity, but also create works of art that convey a variety of comprehensive symbolic information, enhance the public's sense of spiritual ecology, enhance the public's understanding of artistic knowledge, enhance the public's aesthetic awareness level, and further arouse the public's interest in the

collection, investment or consumption of works of art, thus improving the public's taste and quality of life and promoting the prosperity and development of social civilization.

Artistic aesthetic function

Artistic value can not only refer to the physical and mental labor paid by artists for creation, but also refer to the value of art to society and mankind. Artistic value comes from artistic production, which has both material production and spiritual production, thus giving birth to artistic economic value, cognitive value, educational value and aesthetic value. In works of art, "tendentiousness is the soul, authenticity is the foundation, tendentiousness lies in authenticity to form the implication of aesthetic image, and aesthetic image depends on artistry to survive." Generally speaking, the higher the degree of unification, the greater the value of the work.

As a kind of furniture, porcelain garden stools should convey practicality and internal cultural beauty through an external form, and then extend their living and using space in daily life. Among them, for the needs of mass production and practicality, porcelain garden stools can be used as round, square and special-shaped. (Mi,2010) However, the harmonious thought of heaven and earth has always existed in the aesthetic feeling of ancient China people. Porcelain garden stools, which are round and square seats without backrest, mostly appear in life scenes, and compared with large chairs, it is more convenient and more beautiful to move small porcelain garden stools. Think that porcelain garden stools can be placed in essays regardless of direction, but the placement of chairs requires more thought. Chairs need to be square, and chairs generally need two chairs and a small coffee table to form a complete set. These conveniences make the demand for porcelain garden stools more and more great. With the strong demand and the increase of production quantity, in the Ming and Qing Dynasties, porcelain garden stools became more and more standardized, and their shapes became more and more unified, and their changes became smaller and smaller. (Li,2001) On the one hand, this reason is the demand response of the demand side, on the other hand, it is also determined by the production level and capacity of the production side. According to the common types of porcelain garden stools in Ming and Qing dynasties, they can be divided into square, round and irregular shapes. Round, square, special-shaped. These patterns seem to have no cultural connotation, but the appearance and existence of each pattern has rich cultural implications. The cultural connotation of each kind of device also needs us to explore constantly in the next research to improve our ability to solve problems.

Ceramic embroidered garden stools are generally tall and strong, and they are designed and used by a wide range of groups. They are not only suitable for petite women to sit on them, but also suitable for strong men to sit on them. The relatively thick embroidered garden stool not only improves the bearing capacity, but also improves the manufacturing difficulty. Under the condition of limited craftsmanship and production level, the model of embroidered garden stool is standardized to some extent. Square embroidered garden stools are mostly hexagonal and octagonal. There

is little difference in height and shape. It is also big in the middle and smaller at both ends. Circular embroidered garden stools include those with natural radian between the top surface and the garden stool wall, and those with rapid transition between the top surface and the garden stool wall. The common vessel type is the one described in the following with a flat top and a round belly, and slightly smaller up and down. The utility function of embroidered garden stool's seat is its most basic function, and it is also its primary function as a kind of furniture. Practicality is its most essential outstanding feature. However, the embroidered garden stool is different from other square seats. It is round and delicate, or has smooth edges and corners, but it is easy to move and has a wide range of applications. Embroidered garden stools have been widely popular in social strata and various scenes since their appearance. For example, embroidered garden stools often appear on porcelain, illustrations and photos in the late Qing Dynasty as common furniture for daily use, and a large number of existing embroidered garden stools provide strong evidence for the wide use of embroidered garden stools.

The emergence of aesthetic needs is formed with the development of human culture, which reflects the requirements for the harmony and richness of the relationship between man and the world; Aesthetics is also the emotionalization of people's self-consciousness, which takes the world as its own work to observe. " (Me,2001) Decoration often directly or indirectly records and carries some aspects of cultural fragments or certain concepts in a historical stage, and closely serves the material and spiritual life of a specific social class or ordinary people, including the aesthetic needs. From a certain point of view, the aesthetics of porcelain garden stool decoration itself represents the aesthetic taste and value orientation of the ancients to a certain extent, giving it different symbols of the society at that time. Porcelain garden stool decoration not only exists as decoration itself, but also endows porcelain garden stool decoration with spiritual connotation. People's ideas are contained in the garden stool decoration, forming a certain "decoration with aesthetic interest", which embodies the traditional aesthetic characteristics of attaching importance to spirit over material, blending sense with reason, and imagination over feeling. Content and form, spiritual requirements and material carriers are coordinated with each other. "The ancient aesthetic culture is the development and finalization period of the ancient aesthetic culture in China." (Li,2010) Especially since the Song Dynasty, after the Song people's aesthetic inheritance from the Tang Dynasty, such as the water of a big river, it became a lake, changing from dynamic to static, advocating natural ingenuity and meticulous work, and valuing elegance rather than richness. This aesthetic tendency of taking nature as beauty coincides with Zhuangzi's simple beauty of advocating nature and advocating no carvings, or inherits Zhuangzi's aesthetic thought, which remains to be proved.

Porcelain garden stools came into being in the Song Dynasty, and the simple aesthetic standards advocated by the decoration in the Song Dynasty have existed since the thought of Laozi and Zhuangzi in the pre-Qin period. Laozi's "return to the

original" and Zhuangzi's "simplicity and the world can't compete for beauty", "both carving and cutting, return to simplicity" Taking "simplicity" as the highest standard of decoration in China and the United States, the beauty of simplicity is considered as a high aesthetic style and artistic realm, from the realm of decoration to the realm of no decoration. Confucius advocated "gentleness", while Liu Xie advocated the combination of true temperament and literary grace, rather than the beauty of exquisite decoration. In the Tang Dynasty, Li Bai put forward: "Clear water produces hibiscus, and natural decoration." Nature, even if it is naive and halal, is manifested in the form of fake carvings and natural simplicity. The above discussion is not only the aesthetic measure of decoration, but also an aesthetic realm of decoration. The aesthetic standard of this kind of decoration is appropriateness.

The unique aesthetic culture in ancient times is reflected in the decoration of porcelain garden stools, which can be reflected in the selection of manufacturing materials. Ceramic materials are a natural substance, and porcelain garden stools pursue natural and natural understanding in the selection of materials, which embodies the aesthetic ideal of taking nature as beauty. Porcelain garden stools are simple in shape, reasonable in structure and simple, and simple in shape, emphasizing the changes of lines in various parts of the garden stool and treating decoration as an organic part of the whole. Most of the sitting garden stools are not carved, combined with the small area of modeling on some components, the plain beauty is brought into full play. Craftsmen respect the essence of materials and seldom use surface inlays, except in low-grade furniture that is not durable, which reveals the true feelings of craftsmen about the natural characteristics of ceramic materials. All kinds of beautification in the early days were combined with the exquisite and complex nature of the structure. This pursuit of pure natural and natural physical properties embodies its aesthetic ideal of simplicity and simplicity. In order to make the natural texture of some sitting garden stools better present the aesthetic feeling, these sitting garden stools are not painted, showing the most primitive natural color, fully showing the soft texture, beautiful texture and elegant color of the materials, expressing the respect for the essence of things and showing the beauty of nature.

Fashion artworks of ancient court culture

The imperial wares made by the official kilns in the Ming and Qing Dynasties achieved their characteristics under the emperor's desire for "appreciation". In short, the official kilns in Ming and Qing dynasties produced many kinds of characteristic porcelain with exquisite decoration, all of which were made by rewards. At the same time, some of these porcelain garden stools were given to princes and ministers by the emperor, so the emperor won the "loyalty" of many courtiers. When the porcelain garden stool was used by the emperor to reward the princes and nobles of Mongolia, Tibet and other ethnic minorities, as well as foreign envoys and priests, the "political" function of the porcelain garden stool was released, thus expanding the social influence generated by the "reward" of the porcelain garden stool. The exquisite porcelain in the imperial palace, as a reward, will be transferred to princes, ministers,

foreigners and foreign countries, and will attract the envy of people around them with its unique "royal temperament". The desire for possession drives the nobles to burn the imperial kiln "imperial wares" from their own pockets. The core of this topic can be understood as the emperor's "reward" lesson; , the emperor's "reward"; , the community and others are happy to "reward". It is because of these three aspects of "appreciation" that it has driven the trend of social pursuit and made it a fashionable work of art.

Since the Kangxi dynasty, the emperor did not take all the fine porcelain garden stools produced by the imperial kiln factory as his own, but constantly rewarded his lieutenants, vassals and foreign envoys. For example, Cai Meifen, a scholar in Taiwan Province, said: "In the whole development process, the research and development of the Qing Palace seems to be the most important. Therefore, on September 11th, Kangxi's fifty-fifth year, Chen Yuanlong, governor of Guangxi, gave four kinds of precious glasses: one made of royal glass with colorful red glass snuff bottles, one made of octagonal box inkstone, one made of water and one made of round incense boxes. He mentioned that this' was not made by craftsmen in the inner government, but was made by the sacred heart, which taught us the principle of learning from things and inferred the original fire.' It is a great gift that the emperor has never given to his servants. It is my emperor who, in his spare time, has been reasonable, aware of its origin, and given instructions personally, but refined into a device, brilliant and exquisite, which is far better than foreign methods. This is the most appropriate explanation of the meaning of the word "imperial system" in the Kangxi imperial system. (Wang,2000) From Kangxi's use of "Kangxi Imperial Porcelain" in Qing Dynasty to win important officials, from the inside out, to the use of porcelain garden stools rich in national decoration characteristics to draw closer the relationship between the princes and nobles of ethnic minorities and the Qing regime, it can be seen that the social recognition of Qing Imperial Porcelain at that time was deep and foreign. Otherwise, the official kiln porcelain garden stool will not be used to win over the Mongolian vassal Wang Gui. By the Qianlong period, it had become common to use imperial kiln porcelain as a reward. In his memorial, Tang Ying mentioned many times the "reward" function of Guan Dao porcelain. It can be seen that using inferior color as a "reward" item at that time has become a behavior habit of the imperial court.

Collection value

As a social and cultural phenomenon, collection has always existed since ancient times. Porcelain garden stools in Qing Dynasty were made by the emperor who participated in the decoration and ordered to burn. Therefore, they were not only beautifully decorated, but also became outstanding products in antique porcelain because of their scarce quantity. (Wang,2001) There are many records about the collection of Qing porcelain in the society at that time in the notes and essays of Qing literati.

At the end of the Qing Dynasty, the trend of collecting ancient porcelain became more and more popular. In view of the lack of fine products of Qing Dynasty porcelain garden stools in the market, collectors began to hire porcelain makers to imitate the porcelain of the official kiln of the previous dynasty. It shows that imitation burning of famous porcelain such as Qing Dynasty porcelain garden stool at that time has become a main burning content of local cellar craftsmen during the Republic of China. It is no wonder that when Mr. Geng introduces the famous porcelain of official kilns in the Qing Dynasty, he always talks about the imitation situation in the late Qing Dynasty and the early Republic of China. For example, comparing the difference between Kangxi blue-and-white porcelain garden stool and imitation products after Guangxu in his works, it can be seen that during Guangxu and the Republic of China, driven by the interests of collectors to buy famous Qing Dynasty kiln products at high prices, the imitation of Qing Dynasty porcelain was mainly for the increasingly prosperous collection boom. Up to today, the collection craze has become a common practice under the national conditions of the great economic development of the motherland. With its excellent quality and unique decorative style, the porcelain garden stool will still bring the legend of collection and auction again and again to China and the world for a long time. Is a blue-and-white lion ball-patterned porcelain garden stool collected in ceramics museum, the imperial kiln in Jingdezhen, China. The cultural attributes explained by the decorative features gathered on the porcelain garden stools have the characteristics of multi-ethnic and multi-cultural interweaving. Today, our academic circles pay so much attention to it and study it seriously, all because of a truth-seeking attitude towards ancient history, a respect for ancient cultural history, a search for the wisdom of China's ancient ancestors, and an admiration for China's ancient arts and crafts.

The modern aesthetic value of porcelain garden stools

The development history of porcelain is a cultural history, which reflects the level of economic development, social ideology, social organization structure, social multiculturalism, national aesthetic psychology, aesthetic fashion of the times, etc., and presents abstract culture as a concrete material appearance through the specific practical activities such as the processing of materials, modeling and decoration of utensils by craftsmen. Therefore, the study of porcelain should break the limitation of a single perspective and put it in a broader perspective for multi-dimensional, multi-dimensional and multi-level aesthetic photos. In the course of years' development, the porcelain garden stool has blended ethnic features, regional characteristics and multi-cultures. The characteristics of its utensils have gradually developed from the early emphasis on practicality and decorative simplicity to the diversity of modeling, unique craftsmanship and rich decoration, making it a practical and aesthetic daily necessity. Therefore, the study of porcelain garden stools should be promoted to a study of aesthetic culture.

Harmony and unity of material connotation and spiritual connotation

"The emergence of aesthetic needs is formed with the development of human culture, which reflects the requirements for the harmony and richness of the relationship between man and the world; Aesthetics is also the emotionalization of people's self-consciousness, which takes the world as its own work to observe. "(Lin&Xu,2000) Decoration often directly or indirectly records and carries some aspects of a cultural fragment or a certain concept in a historical stage, and closely serves the material and spiritual life of a specific social class or ordinary people, including aesthetic needs. Since the primitive society, porcelain garden stools have been designed and manufactured to meet people's daily needs. Their shapes, structures, components and even decorative patterns are the first to meet the practical requirements. Their own aesthetics represent the ancient aesthetic taste and value orientation to a certain extent, giving different symbols to the society at that time. It is precisely because of its extensive use value that porcelain garden stools can be spread, developed and even become immortal. Porcelain garden stool decoration not only exists as decoration itself, but also endows porcelain garden stool decoration with spiritual connotation, which contains people's ideas and forms a certain "decoration with aesthetic interest", which embodies traditional aesthetic characteristics such as attaching importance to spirit over matter, blending sense with reason, and imagination over feeling. Content and form, spiritual requirements and material carriers are coordinated with each other. "The aesthetic culture of scholars in Song Dynasty is the development and finalization period of ancient aesthetic culture in China." (Yu,2006)。 After the Song Dynasty's aesthetic inheritance from the Tang Dynasty, such as the water of a big river, it became a lake, changing from dynamic to static, advocating natural ingenuity and meticulous work, and valuing elegance rather than riches. (Huo,1997) This aesthetic tendency of taking nature as beauty coincides with Zhuangzi's simple beauty of advocating nature and advocating no carvings, or inherits Zhuangzi's aesthetic thought, which remains to be proved.

The simple aesthetic standard advocated by porcelain garden stool decoration has existed since the thought of Laozi and Zhuangzi in the pre-Qin period. Laozi's "return to the original" and Zhuangzi's "simplicity and the world can't compete for beauty", "both carving and cutting, return to simplicity" Taking "simplicity" as the highest standard of decoration in China and the United States, the beauty of simplicity is considered as a high aesthetic style and artistic realm, from the realm of decoration to the realm of no decoration. Confucius advocated "gentleness", while Liu Xie advocated the combination of true temperament and literary grace, rather than the beauty of exquisite decoration. In the Tang Dynasty, Li Bai put forward: "Clear water produces hibiscus, and natural decoration." Nature, even if it is naive and halal, is manifested in the form of fake carvings and natural simplicity. The above discussion is not only the aesthetic measure of decoration, but also an aesthetic realm of decoration. The aesthetic standard of this kind of decoration is appropriateness. Porcelain garden stools came into being in the Song Dynasty, and the unique aesthetic culture of the Song Dynasty was reflected in the sitting garden stool decoration in the

Song Dynasty. The sitting garden stool was simple in shape, reasonable in structure and simple, and the shape was simple but not simple. It emphasized the changes of lines in various parts of the sitting garden stool and regarded the decoration as an organic part of the whole. Most of the sitting garden stools are not carved, combined with the small area of modeling on some components, the plain beauty is brought into full play. The posture of modeling is mostly calm and peaceful, and the factors of stability play a leading role. The tone of modeling is square and dignified, with subtle but unexposed changes in line, surface and body, giving people a plain and quiet feeling. In this sense, the spiritual connotation of traditional ceramic art exceeds the material connotation, and the aesthetic value exceeds the functional value.

In a word, the porcelain garden stool is not only a necessary article to satisfy human material life, but also a work of art with certain aesthetic value, which beautifies people's living environment and enriches people's cultural life. This property of unity of material function and spiritual function forms its aesthetic purport of unity of literature and quality.

Multilevel user appeal and aesthetic taste

The development and evolution of porcelain garden stool utensils make us clearly see the close relationship between porcelain garden stool and many kiln factories at the same time. They inherit each other, influence each other, learn from each other's strong points, and together form the rich appearance of China porcelain modeling. The commonness and diversity of styles endowed by this era are extremely obvious in the modeling and decoration of porcelain garden stools.

Among the porcelain garden stool products, there are porcelain garden stools aimed at ordinary people, which are simple in shape, not refined in shape, simple and low-key; There are porcelain garden stools for the literati, which are full in shape, small and exquisite; There are also porcelain garden stools made for the court and the upper class of society. In order to cater to their aristocratic tastes, the utensils are usually molded by molds to make them regular and exquisite. The complexity of the objects used in porcelain garden stool products promotes the diversity of the shapes of the objects, thus forming a situation in which various interests coexist.

1) Noble taste: advocating the decoration of advocating simplicity and opposing luxury

Sitting garden stool was widely used in the aristocratic groups in the Song Dynasty. Whether the court gave it a seat or the nobles waited for it, sitting garden stool not only had practical functional attributes, but also was a witness to the etiquette system of the Song Dynasty, with hierarchical attributes. Sitting on the garden stool is a manifestation of the cultural form of the Song Dynasty. From the two ways of giving seats and sitting, we can learn about the etiquette system, ethics and aesthetic taste in the specific historical period of the Song Dynasty.

In the Song Dynasty, the royal family followed the tradition of living in luxury and pursuing frugality (Zhou,1985) Zhou Ye's "Qingbo Magazine" has recorded that Song Zhezong once talked with Prime Minister Lvda Fang about the "ancestral

family law" of the dynasty, and thought that the dynasty should pursue simple life traditions, such as stopping using red and white in the court, not playing well, not using jade articles, and not expensive food and odor. Different from other dynasties, the Song Dynasty adopted the method of "changing customs and legislating", that is, enacting laws to restrict the use of precious materials and advocating the concept of creation that advocates simplicity and opposes luxury, which was caused by the political environment of the Song Dynasty. The craft laws of an era often reflect the dominant concept of creation in that era, and play a directional guiding or limiting role in the development of creation and its aesthetic pursuit in an era. (Xu,2005). In Song Dynasty, more than 10 decrees were specifically promulgated against luxury decoration, and other officials put forward relevant ideas. It mainly involves different aspects, such as prohibiting the decoration of precious materials, advocating simplicity, etc., in order to limit the extravagant wind and shape the pursuit of frugality and simplicity. From the Song Dynasty government to the folk people, they all followed the laws and regulations to build and decorate. The decrees on decorative materials in the Song Dynasty contain the basic principles of creation advocated by the Song government: according to the weather, making the best use of the geographical position, and making an appointment with morality.(Zeng,1994).In the selection and decoration of creation, the Song Dynasty inherited and promoted the traditional concept of "preparing things for use", and of course this concept was also mapped to the decoration of sitting garden stools in the Song Dynasty.

Although the Song government restricted the use of precious materials, it advocated the use of cheap materials instead of precious materials to make daily necessities. The restrictive policy on precious materials in the Song Dynasty may promote the rapid development of ordinary decoration technology. Due to the advocacy of national policies, folk handicrafts have an advantage in making daily necessities with low-cost materials, especially those as local natural resource, which are relatively more convenient to obtain. It can be inferred that the materials used for sitting garden stools and decoration in Song Dynasty are obviously different from those used in previous dynasties and later generations. From the court to the folk people, the materials used are not mainly precious materials, but mostly low-cost materials, which is reflected in the paintings in Song Dynasty.

2) Scholar's taste: the elegance of literary play caused by leisure
Porcelain mound was produced in Song Dynasty, and Yaji was one of the most important social activities of literati and officialdom in Song Dynasty. Fan Zhen's Notes on Dongzhai in the Northern Song Dynasty recorded: "Benevolent emperors Could lay on couches and sit on garden stools in the hollow." (Fan,1987) Judging from the paintings of the Song Dynasty's elegant collections handed down from generation to generation, most of the Song Dynasty's elegant collections have the appearance of sitting garden stool, which is suitable for moving, but not formal and elegant, and has become the most commonly used seat for this group of literati. The choice of elegant

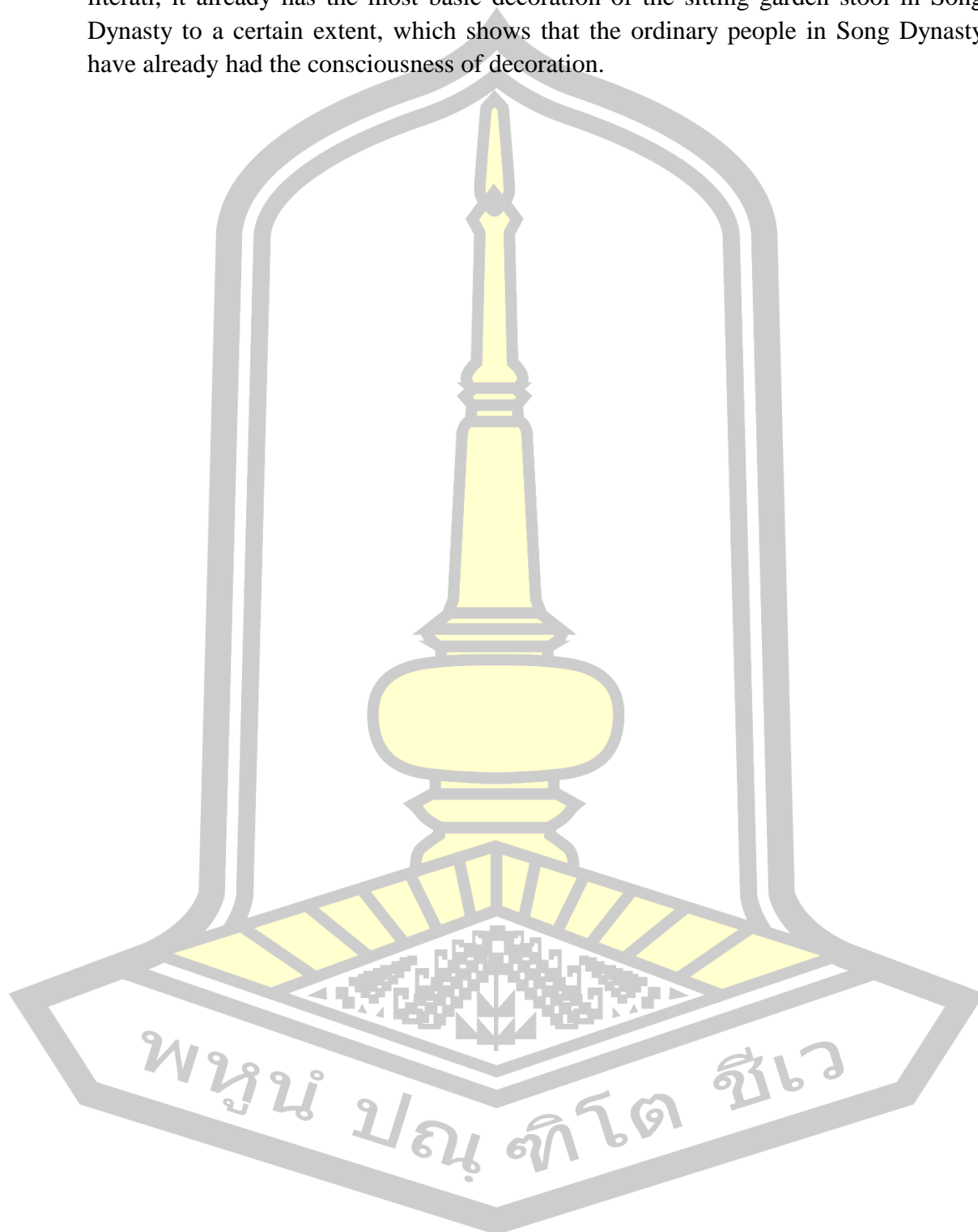
gathering places for literati in Song Dynasty was very elegant and thoughtful, and it was mostly carried out in places such as mountains and gardens with various forms.

"Under the east fence of picking chrysanthemums, you can see Nanshan." The mountain forest plays an important role in the ancient culture of China, and has a far-reaching influence on Yaji culture. It is an important part of the literati's Songnian's "Song Yin Ming Qin Tu" collected in the Cleveland Museum of Art is an elegant scene of mountains and forests. In the painting, Gu Song is thick, with a canopy and a quiet environment. There are three people under the tree, one playing the piano, one sitting and listening, and one boy standing on one side. The two people sit on the same garden stool, which is woven from rattan, and the seat of the garden stool is covered with cattail grass and has horns and feet under it. There is also the Southern Song Dynasty Bamboo Forest Qing Hua Tu, which is hidden in the National Palace Museum in Taipei. Two scholars are talking about classics and Taoism in the bamboo forest. They are sitting on a garden stool, round, with a slightly larger abdomen, decorated with drum nails and string patterns from top to bottom. In these paintings depicting the literati's elegant collection of mountains and forests, we can see that there are picturesque places of elegant collection of mountains and forests, such as green mountains and clear waters, hairy forests and bamboo, and clear springs. Therefore, this environment is highly respected by literati. There are many considerations in the selection of objects in the elegant collection of mountains and forests, just as the 'production department' of Volume 10 of Kanshan Pavilion wrote: "Confucian flavor, clear but not turbid, elegant but not vulgar. Although its system is hard-working, but it is randomly arranged, it is extravagant, not deliberately seeking novelty, and it is also decorated with market ingenuity. " In the elegant collection, the literati have a good taste. Although all kinds of furnishings seem to be arranged at will, they do not deliberately pursue kit kat, but they can be unconventional. The garden stool is elegant in shape, ingenious in workmanship and elegant in decoration. As the saying goes, it is elegant but not vulgar, and the market is clever and decorative, which conforms to the aesthetic taste of literati in the Song Dynasty.

3)Folk taste: free and simple secular fun

In the Song Dynasty, the common people often used the sitting garden stool. Through the analysis of the sitting garden stool, the shape and decoration of the sitting garden stool used by the common people are relatively simple, mainly based on practicality. In the Southern Song Dynasty, eight sitting garden stools with similar shapes were drawn in the picture of waiting for cranes in the deep mountains. Their shapes were simple, and the body was decorated with simple chords and drum nails. Similar paintings also appeared in Song Dynasty, such as Reading Yi Tu in Autumn Window, playing with the Moon in the Pine Shadows, Talking and Listening to the Mountain Residence, Dialing Ruan in the Moonlight Night and Watching Waterfall in the Cool. Different from the sitting garden stools drawn in The Deep Mountain Waiting for the Crane, the sitting garden stools in these paintings are all carved with lights, which are geometric or cloud-shaped. Although the decoration of the sitting

garden stool used in street life can't be compared with that used by court nobles and literati, it already has the most basic decoration of the sitting garden stool in Song Dynasty to a certain extent, which shows that the ordinary people in Song Dynasty have already had the consciousness of decoration.



Summary

The traditional identity of porcelain garden stool is mainly embodied in pattern identification, shape identification, decoration technique identification, process identification and function identification.

In the identification of patterns, by summarizing more than 50 patterns of porcelain garden stool, and sorting out the porcelain garden stool patterns used by the royal family, civil and military officials from one product to nine products, and ordinary people in 10 levels, the emperor gave a seat, according to the different arrangements of different decorative porcelain garden stool, representing different levels. The emperor and the crown prince commonly use the dragon and phoenix patterns, and the dragon is regarded as an auspicious symbol in the porcelain culture, representing imperial power and majesty. The decoration of civil officials is mainly craning pattern and peacock pattern, and the decoration of military officials is mainly tiger and lion pattern. The porcelain garden stool of the people in the city is mainly decorated with simple and simple, such as lotus pattern and peony pattern, which symbolize the good meaning. The flame pattern on the porcelain garden stool may be used to complement the dragon's dynamics and energy. The dragon pattern may be designed around the entire block, and the flame pattern may appear in the form of waves, clouds or abstract Figureure, surrounding the dragon body, giving people the visual impression of the dragon. Therefore, it can be seen that the dragon and phoenix pattern, as a representative of the porcelain garden stool decorative pattern, shows the upper and lower ranks, and can convey the significance of identity withtheroyalfamilyornobility.

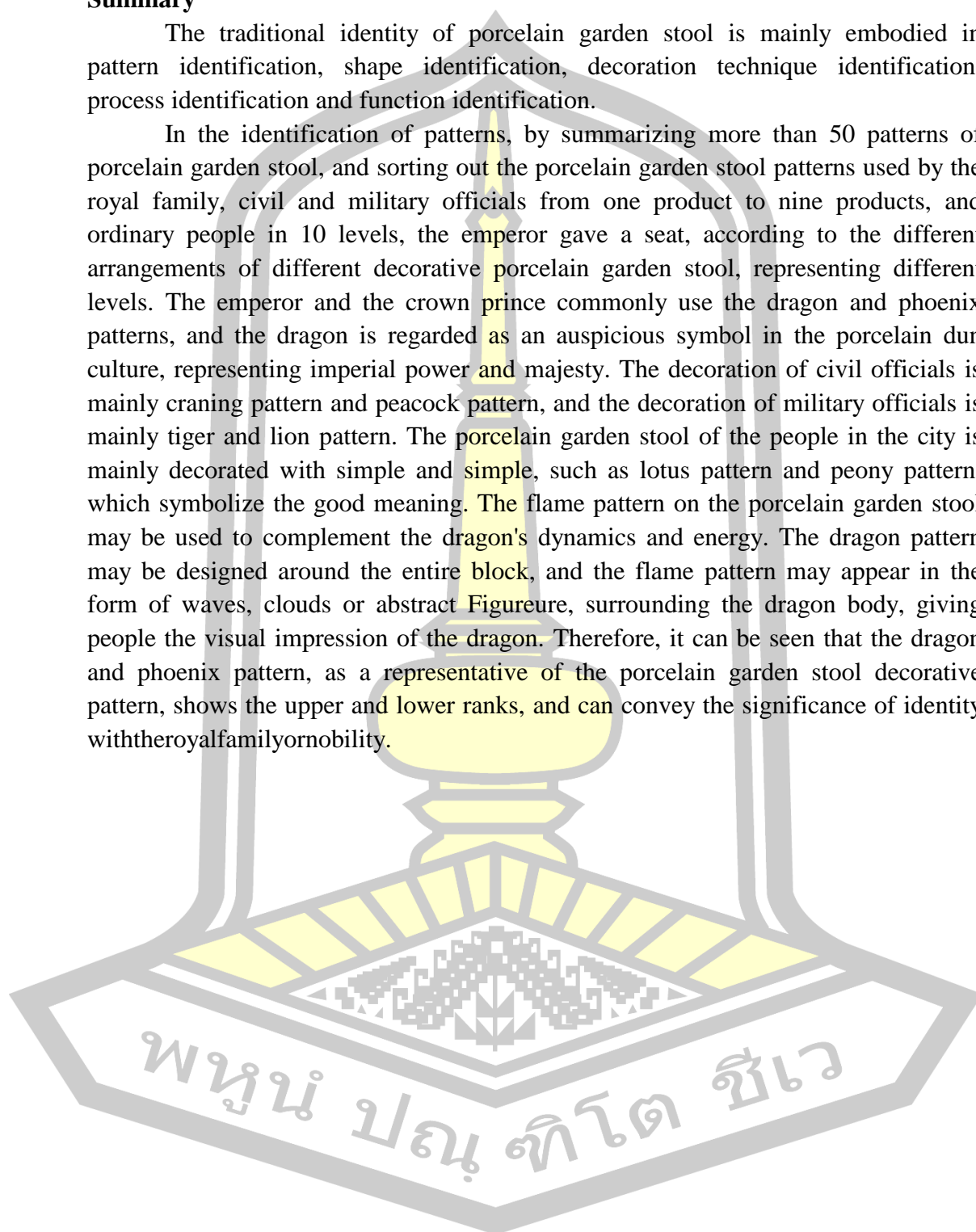

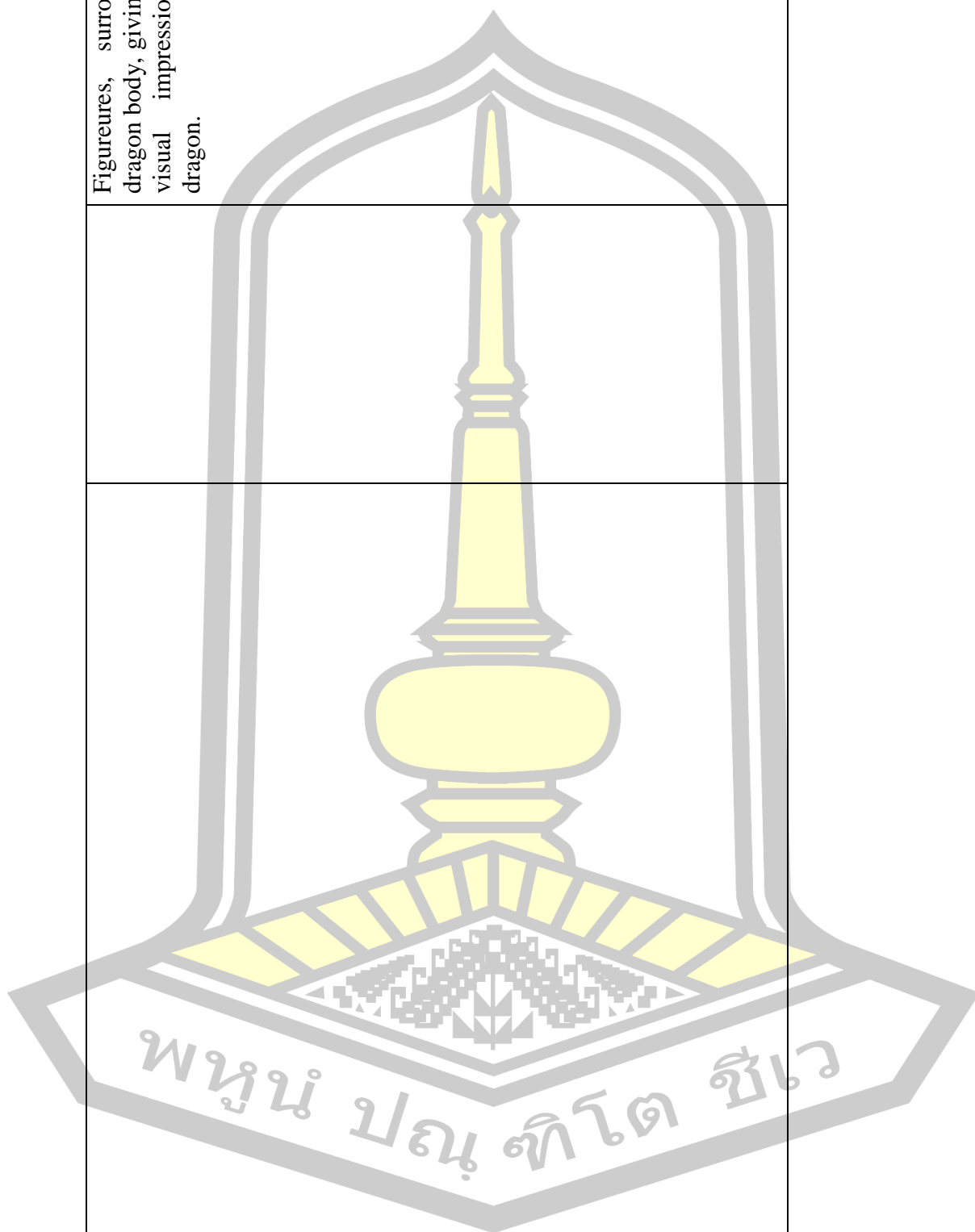


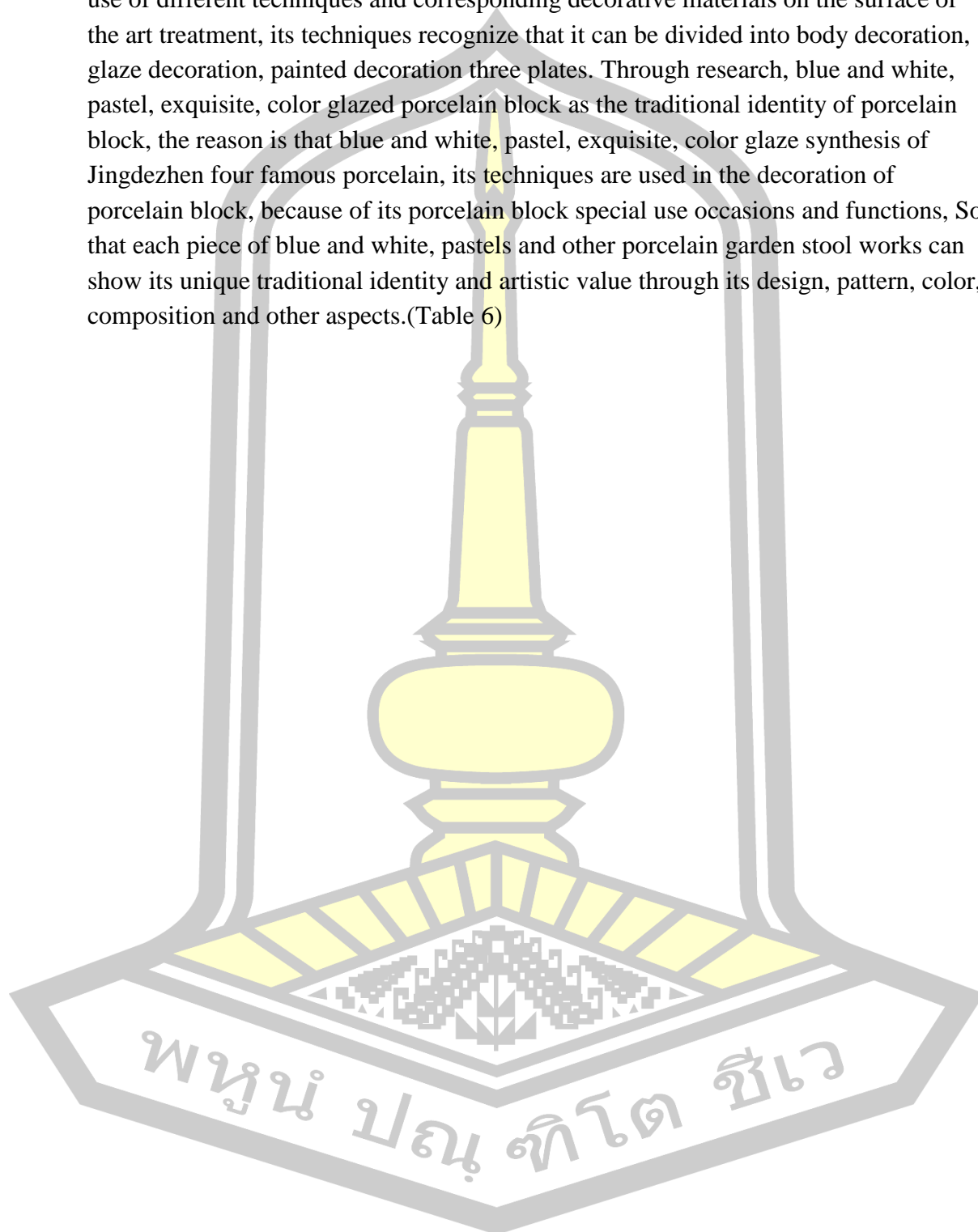
Table 4 Pattern Identity Source: Made by Danxi Luo, 2023

Traditional Pattern			Pattern Identity	Character
Emperor, crown prince, queen mother, concubine	Body pattern			<p>The emperor and the crown prince commonly use the dragon and phoenix patterns, and the dragon is regarded as an auspicious symbol in the porcelain garden stool culture, representing imperial power and majesty. The decoration of civil officials is mainly craning pattern and peacock pattern, and the decoration of military officials is mainly tiger and lion pattern. The porcelain garden stool of the people in the city is mainly decorated with simple and simple, such as lotus pattern and peony pattern, which symbolize the good meaning. The flame pattern on the porcelain pier may be used to complement the dragon's dynamics and energy. The dragon pattern may be designed around the entire block, and the flame pattern may appear in the form of waves, clouds or abstract</p>
	Auxiliary pattern			
	Civil official			
	Military official			
	Prime minister and First-grade official			
	Second-grade official			
	Third-grade official			
	Fourth-grade official			
	Fifth-grade official			
	Six-grade official			
	Seven-grade official			
	Eighth-grade official			
Ninth-grade official				
Common people				

Figures, surrounding the dragon body, giving people the visual impression of the dragon.



In the decoration technique identification, Porcelain garden stool decoration is the use of different techniques and corresponding decorative materials on the surface of the art treatment, its techniques recognize that it can be divided into body decoration, glaze decoration, painted decoration three plates. Through research, blue and white, pastel, exquisite, color glazed porcelain block as the traditional identity of porcelain block, the reason is that blue and white, pastel, exquisite, color glaze synthesis of Jingdezhen four famous porcelain, its techniques are used in the decoration of porcelain block, because of its porcelain block special use occasions and functions, So that each piece of blue and white, pastels and other porcelain garden stool works can show its unique traditional identity and artistic value through its design, pattern, color, composition and other aspects.(Table 6)



In terms of shape identity, the shape of porcelain garden stool also reflects the identity of different genders in the social and cultural environment to different degrees. In the Ming Dynasty, the harsh political environment made scholars shift their focus from political career to their own psychological needs. The porcelain pillars made by scholars and artisans had different styles and shapes, without considering the women who were subjected to feudal ethics at that time. In the Qing Dynasty, due to the feudal etiquette period, more constraints on female etiquette and posture to cater to the male aesthetic, at this time, the shape of the porcelain garden stool is slightly concave, and there is no backrest and because it is in the middle of the big two small, easy to fall, so it must be used when sitting upright, waist and back straight, it can be said that the porcelain garden stool is the embodiment of the etiquette culture. The use of porcelain garden stool is usually covered with a female silk embroidery on the pier surface, the exquisite degree of embroidery can show a woman's needlework ability, but also shows that women accept their own identity and identity in the social and cultural environment. (Table 7)

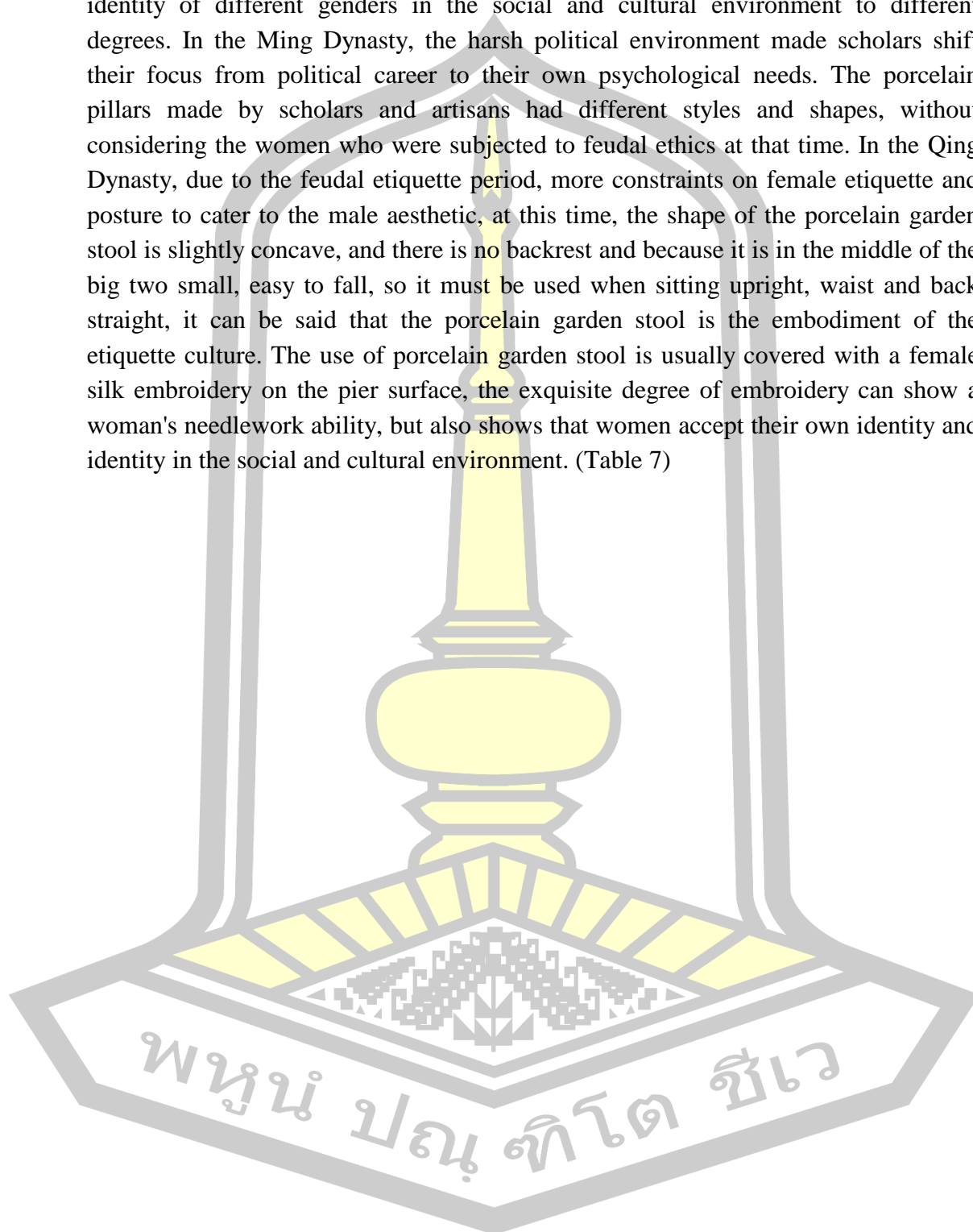




Table 6 Shape Identity
Source: Made by Danxi Luo, 2023

Traditional Shape	Shape Identity	Character
		<p>The shape of porcelain garden stool also reflects the identity of different genders in the social and cultural environment to different degrees.</p> <p>In the Ming Dynasty, the harsh political environment made literati begin to shift their focus from political career to their own psychological needs, without considering the women who were subjected to feudal ethics at that time.</p> <p>In the Qing Dynasty, due to the feudal etiquette period, more constraints on female etiquette and posture to cater to men's aesthetic, at this time, the shape of the porcelain garden stool is slightly concave, there is no backrest and because of its middle and two small ends, so the use of it must sit upright, the waist and back straight, it can be said that porcelain garden stool is the embodiment of the etiquette culture. It also shows that women accept their own identity and identity in the social and cultural environment.</p>

In terms of functional identification, the exquisite decoration of the porcelain garden stool body has the function of beautifying the interior and decorating the room, but the practical function as a seat is its most basic function, and it is also its primary function as a kind of furniture, and practicality is its most essential identity representative. It can be used both indoors and outdoors for people to sit while enjoying the garden. Since the pier is based on the shape of the square, the decoration around it is not primary or secondary, and there is no physical limitation; Because of the small size of the block, it is suitable for placement, does not affect the pattern of large furniture and furnishings, and is suitable for furnishings in small and delicate environments such as study, show pavilion, garden and inner room. (Table



Table 7 Function Identity
Source: Made by Danxi Luo ,2023

Traditional Function	Function Identity	Character
 	 	<p>The exquisite decoration of the porcelain garden stool has the function of beautifying the interior and decorating the room, but the practical function as a seat is its most basic function, and it is also its primary function as a kind of furniture, and practicality is its most essential identity. It can be used both indoors and outdoors for people to sit while enjoying the garden. Since the garden stool is based on the shape of the square, the decoration around it is not primary or secondary, and there is no physical limitation; Because of the small size of the garden stool, it is suitable for placement, does not affect the pattern of large furniture and furnishings, and is suitable for furnishings in small and delicate environments such as study, show pavilion, garden and inner room.</p>
 	 	<p>Practical Function</p>
 	 	<p>Practical Function</p>
 	 	<p>Practical Function</p>
 	 	<p>Practical Function</p>

CHAPTER III

The development process of innovative design of porcelain garden stool

Introduction

In the process of exploring the innovative design of porcelain garden stool, this study puts forward a series of systematic steps, in order to combine the cultural essence of traditional porcelain garden stool with modern design concept, and create a new product of porcelain garden stool that not only has the traditional charm but also meets the modern aesthetic and functional needs. The research in this chapter begins with 19 innovative design ideas, which not only come from the in-depth analysis of the form and decoration of traditional porcelain garden stools, but also draw inspiration from many aspects such as modern art and natural environment.

In order to ensure the innovation and practicality of the design scheme, this chapter adopts two key steps: expert³¹ evaluation and consumer evaluation. By inviting experts in design, art, culture and related fields to conduct an initial evaluation, the innovative, artistic and cultural value of design ideas is analyzed and screened in depth. According to the evaluation results of experts, the preliminary design scheme was adjusted and optimized to better meet the requirements of Professional aesthetic and cultural inheritance.

The optimized design is then presented to the target consumer group for evaluation to gather feedback on the product's usefulness, aesthetic preferences, and market acceptance. The evaluation results of consumers provide valuable market-oriented information for the further improvement of the design scheme. Finally, combined with expert evaluation and consumer feedback, the design scheme was ultimately optimized and the final design draft was formed. This process not only reflects the designer's spirit of exploring the integration of tradition and modernity, but also shows the art of balancing innovative design between meeting market needs and cultural inheritance.

Through this series of elaborate design process, this chapter aims to promote the innovation of porcelain garden stool design and provide a new path and methodology for the modern inheritance of traditional culture, hoping to provide useful reference and inspiration for the innovative design of traditional porcelain garden stool and the rediscovery of cultural value. (Figure,36)

31 Include: chenyuqian,lileiying,wufan,lixinhua,yuwanglong

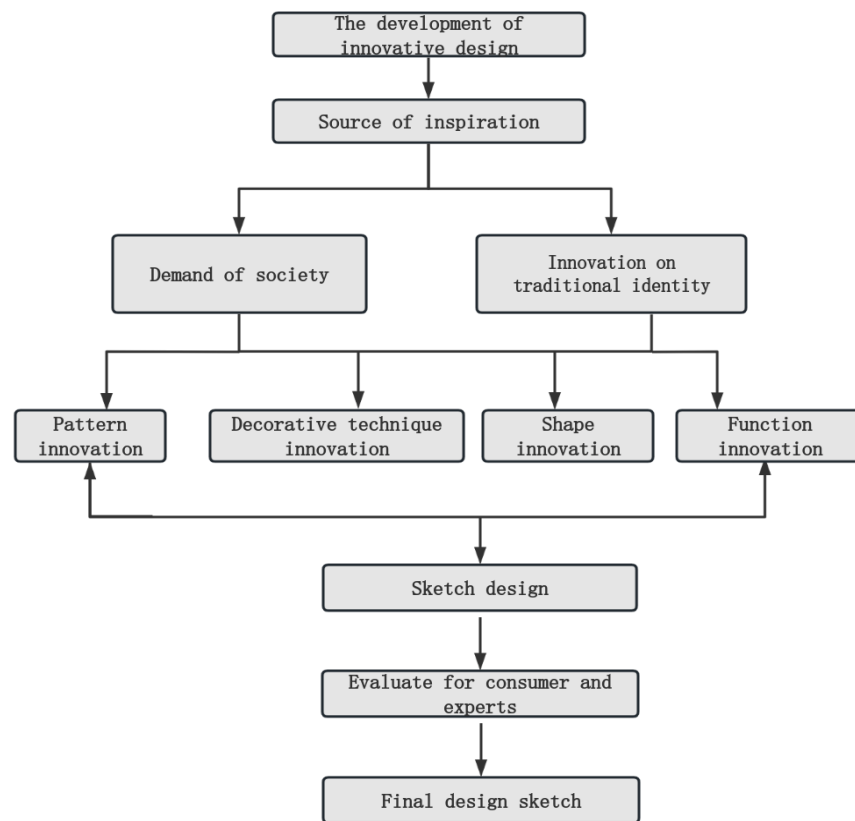


Figure 35 The development steps
Source: Drawn by Danxi Luo, 2024

2.Design principle

The innovative design of porcelain garden stool is the integration of the in-depth study of traditional porcelain garden stool culture and modern aesthetic needs, and strives to explore innovative design language and form while respecting the tradition, so that the traditional art can be rejuvenated in the modern society. The design not only pursues the beauty of the product, but also emphasizes practicality and functionality, aiming to create both beautiful and practical modern ceramic products to meet the needs of modern life. At the same time, taking into account the concept of environmental protection and sustainable development, through the use of environmentally friendly materials and technologies, such as the design idea of "fragmented porcelain garden stool", reflects the environmental concept of waste reuse. Emphasis on the emotional connection between users, through detailed design details and rich story design elements, such as "aroma candlestick" and "half of the porcelain garden stool lamp", enhance the user experience and the emotional value of the product identification. Combining aesthetic innovation with modern

manufacturing technology, we constantly explore new possibilities of ceramic materials and production processes, support the realization of design concepts with technological innovation, and enhance the artistic value and market competitiveness of products. These design principles reflect your respect for traditional culture, innovative pursuit of modern design and commitment to environmental responsibility, aiming to connect the past and the future through design, to achieve cultural inheritance and innovation.

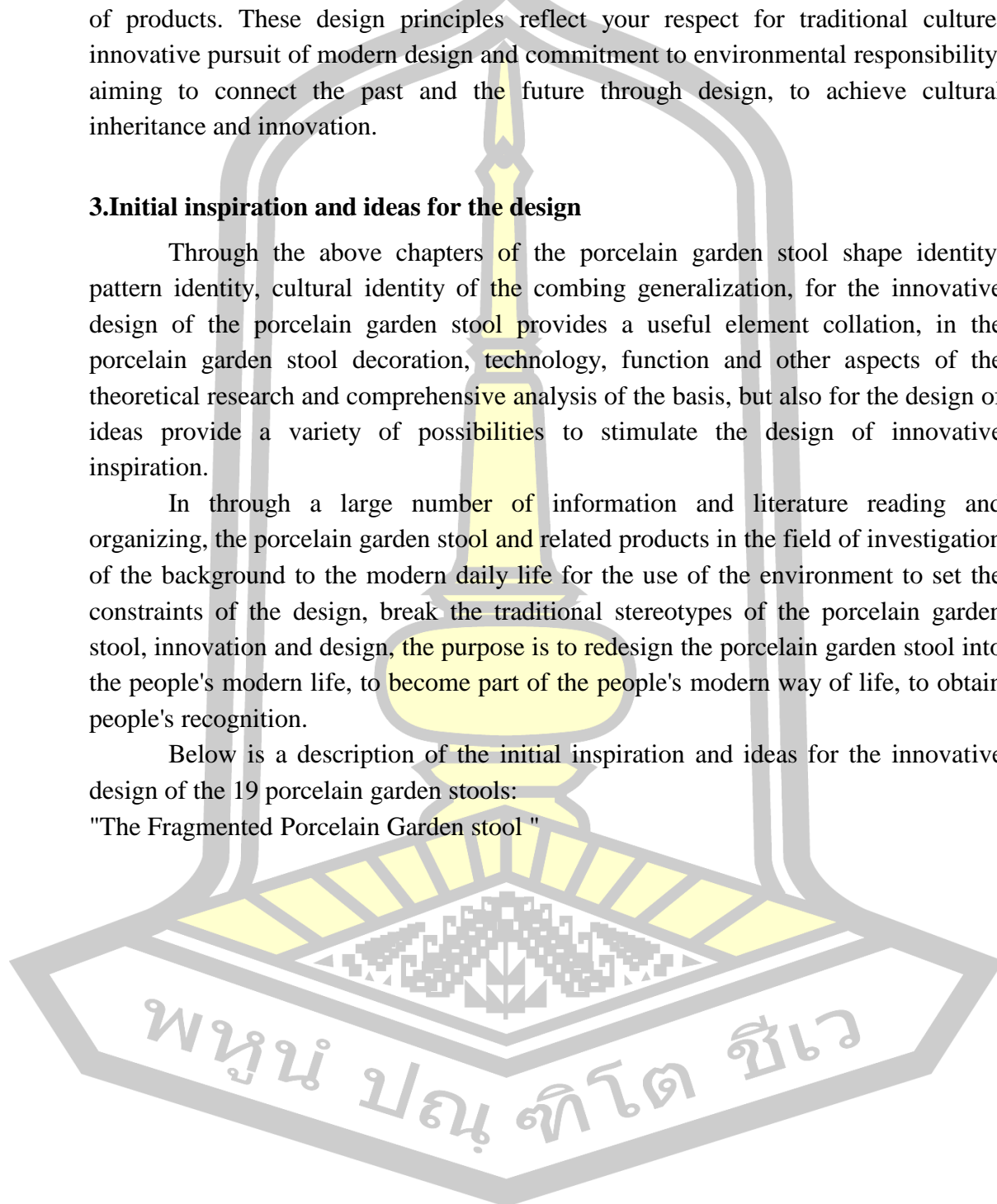
3.Initial inspiration and ideas for the design

Through the above chapters of the porcelain garden stool shape identity, pattern identity, cultural identity of the combing generalization, for the innovative design of the porcelain garden stool provides a useful element collation, in the porcelain garden stool decoration, technology, function and other aspects of the theoretical research and comprehensive analysis of the basis, but also for the design of ideas provide a variety of possibilities to stimulate the design of innovative inspiration.

In through a large number of information and literature reading and organizing, the porcelain garden stool and related products in the field of investigation of the background to the modern daily life for the use of the environment to set the constraints of the design, break the traditional stereotypes of the porcelain garden stool, innovation and design, the purpose is to redesign the porcelain garden stool into the people's modern life, to become part of the people's modern way of life, to obtain people's recognition.

Below is a description of the initial inspiration and ideas for the innovative design of the 19 porcelain garden stools:

"The Fragmented Porcelain Garden stool "



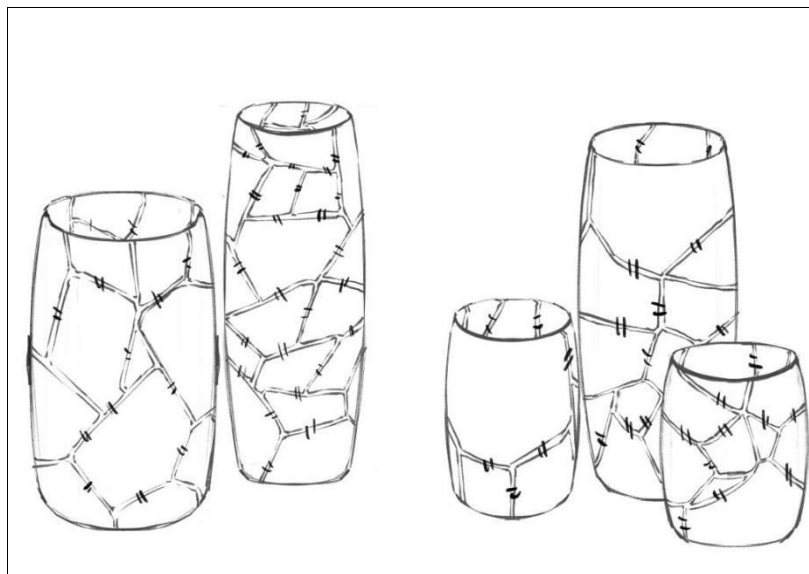


Figure 36 Rough sketch "The Fragmented Porcelain Garden stool"

Source: Drawn by Danxi Luo, 2024

The design (Figure.37) of "Fragmented Porcelain Garden stool" is inspired by the waste of porcelain and porcelain garden stools seen in the field research, which were discarded due to quality problems or outdated decorations, etc. These discarded garden stools were piled up in large quantities or smashed into fragments, which is saddening. Another Source of inspiration for the design is the concept of "rebirth" or "regeneration" from the discarded fragments, which has a strong value of inclusiveness and the power of life, and the decline of porcelain garden stools in the modern times in connection with the performance of thinking, but also hope that through the "rebirth" or "regeneration" or "regeneration" concept, we can realize that the design is not only a new concept, but also a new concept. It is also hoped that through the design innovation of "rebirth" or "regeneration" to rekindle the cultural identity of porcelain garden stool.

The design concept of the Fragmented Porcelain Garden stool also incorporates the following aspects of design philosophy:

Eastern philosophy and aesthetics. In Eastern cultures, there is an aesthetic notion that there is a harmony between perfection and imperfection. An example of this is the Japanese art of kintsugi (gold repair), which shows the beauty and history of broken objects by mending broken ceramic vessels with gold. This appreciation of the beauty of brokenness inspired the design of the fragmented porcelain garden stool.

Nature's Revelations. The processes of circulation and regeneration in nature are also a Source of inspiration. For example, the shedding and regeneration of leaves, or the weathering process of rocks, these natural phenomena symbolize the passage of

time and material change, inspiring the creation of new art forms through the restructuring of broken porcelain garden stools.

Reinterpretation of cultural heritage. A deep understanding of traditional porcelain craftsmanship and reinterpretation of cultural heritage are also important Sources of inspiration. While respecting the tradition, we give new life to porcelain duns through modern design techniques and think about cultural heritage and innovation.

Environmental protection and sustainable development concepts. The current society pays more and more attention to environmental protection and sustainable development, and the reuse of discarded items and their transformation into works of art meets the development needs of modern society.

The design of the fragmented porcelain garden stool is not only a re-creation of the porcelain form, but also an in-depth exploration and artistic expression of multiple themes such as tradition and modernity, nature and culture, integrity and fragmentation.

"The Scented Candlestick"



Figure 37 Rough sketch "The Scented Candlestick"

Source: Drawn by Danxi Luo, 2024

The design (Figure.38)of "Aroma Candle Holder" is inspired by the overall perception of porcelain garden stool and even porcelain, the production of porcelain garden stool is the art of fire, the fire is the last hurdle for the garden stool to be changed from clay to porcelain, therefore, the fire element is integrated into the innovative design of the garden stool, combined with the people's love for aromatherapy candles in the modern life, the deconstruction of the porcelain garden stool's shape, and the function is changed into a candle holder, which is able to intervene in the people's life.

The design idea of "Aroma Candle Holder" includes the following aspects: Cultural symbol. In many cultures, flames symbolize energy, passion, purification and transformation. By combining the flame motif on the porcelain garden stool with the actual flame shape of a candle flame, the design explores these symbolisms, particularly the concepts of transformation and regeneration.

Fusion of art and reality. The design was inspired by the idea of transforming elements from a work of art into a real object. In this case, the decorative motifs on the porcelain garden stool were reinterpreted and materialized to create a new product that is both functional and of artistic value. Imitation of natural forms. Flames in nature attract people with their unique forms and dynamics. Inspired by the beauty and power of flames in nature, the design hopes to capture and recreate this natural beauty in the design.

Function meets aesthetics in the design, the desire was to find a way to show aesthetic value and provide practical function at the same time. Making the porcelain garden stool into a candle scent, combined with the decoration of the flame element, not only enhances the visual aesthetics, but also adds practicality and the function of atmosphere creation.

A reinterpretation of tradition. porcelain garden stools and the patterns on them often carry a rich history and cultural tradition. A modern reinterpretation of these traditional elements in design thinking explores the integration of traditional art into modern life in a novel way.

Sometimes the spark of creativity comes from a simple instant idea or visual image. An instant flash of inspiration when seeing a flame pattern on a porcelain garden stool, the idea of turning it into an actual flame shape suddenly came to mind. With this design, the hope is not only to create a unique product, but also to tell a story about culture, art, nature and innovation. Such design ideas reflect a deep understanding of traditional elements and insight into modern lifestyles.

"The Tea Tray"

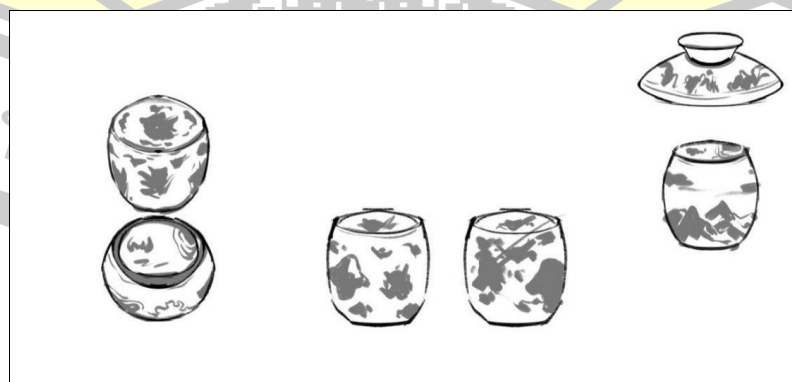


Figure 38 Rough sketch "The Tea Tray"

Source: Drawn by Danxi Luo, 2024

In the deep background of Chinese tea culture, tea is not just a beverage, it is an art of living, a way of meditation and reflection. Inspired by this tradition, the Porcelain Garden stool Tea Tray was born. It not only carries the teacup, but also carries the respect for the ancient Chinese tea ceremony and the exquisite attitude of modern life.

The design (Figure.39) of the tea tray³² is inspired by the decoration of the ancient porcelain garden stool, the function of the tea tray is to support the vessel to show the owner's honor and etiquette. The decorative technique of blue and white, as a treasure of Chinese porcelain, still shines charmingly after thousands of years. Its exquisite decorations and elegant colors symbolize purity and purity, similar to the spirit of tea. The use of blue and white decoration on tea trays aims to create a harmonious and elegant tea-tasting environment.

The tea trays are designed with classic elements of blue and white porcelain, such as the color of blue and white flowers and traditional patterns such as the cloud dragon pattern and plum blossom pattern, which not only decorate the trays, but also echo the state of mind and the environment when tasting tea. They are not only a tribute to history, but also the pursuit of contemporary aesthetics. Every tea tasting is not only an enjoyment of taste, but also a feast for the visual and tactile senses. In short, these porcelain garden stool tea trays are designed with the hope of not only reflecting the traditional aesthetics of Chinese tea culture, but also incorporating modern design concepts, aiming to add a touch of quiet traditional beauty to the modern tea life.

"Lotus"

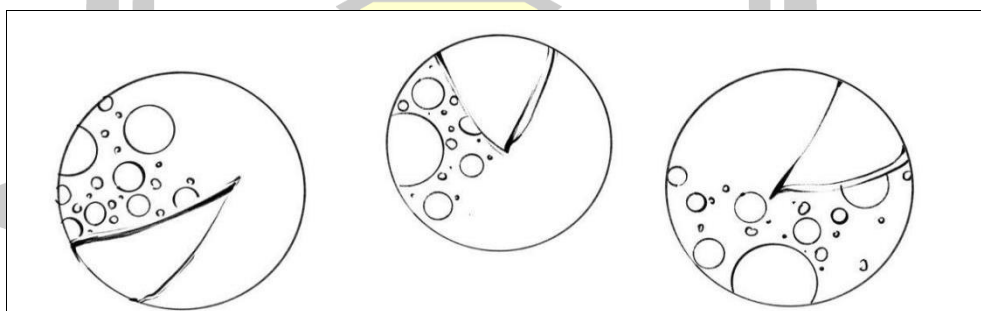


Figure 39 Rough sketch "Lotus"
Source: Drawn by Danxi Luo, 2024

³² A tea tray is an essential accessory in the art of tea making and serving, particularly in cultures with a strong tea tradition such as China. It serves as the foundation for preparing and presenting tea, providing a surface on which teapots, cups, and other tea utensils can be placed. Tea trays are designed to not only hold the tea set but also to collect any spilled water or tea during the tea brewing and serving process. They come in various sizes, shapes, and materials, including bamboo, wood, stone, and porcelain, each adding a different aesthetic and functional quality to the tea preparation and serving experience.

In the traditional porcelain garden stool pattern decoration, lotus pattern everywhere, extract the lotus pattern on the porcelain garden stool, break through the inherent shape of the porcelain garden stool, change its function of sitting, give it a new type of function of the lamp, innovative design provides a new design direction.

The lotus seedling, a part of the "lotus", is chosen for the design of "Lotus Thoughts". The texture of the dried lotus seedling is rich and varied, and its orderly and seemingly disordered arrangement increases the interest of the work. When combining the texture of the lotus seedling and the shape of the lamps, the original texture of the lotus seedling is retained and utilized for local decoration of the ceramic lamps, and the concave-convex texture is used for the expression, so as to make visual and tactile contrast with other planes, to increase the highlights, and to avoid the design from being too monotonous. This set of design works using white as the main color performance, good light transmission meets the lighting requirements as an internal light-emitting lamp, combined with the use of LED warm white light Source, to bring people a comfortable viewing experience and use of experience, so that when combined with the bumpy texture pattern is not complicated, rounded design combined with not a single texture pattern, to give people a soft, but not boring feeling.

The design (Figure.40) work of "Lotus" lamp takes texture as the main expression method and ceramics as the main material carrier for design. After understanding the form of texture, the unique emotional language of texture and the design elements of the lamps, the design combines the purpose of the design and the expression of its own emotions to explore the design of the porcelain garden stool. The combination of texture and ceramics has existed far away in ancient China, the traditional Chinese culture growing up in the farming environment makes people realize the sacred meaning and aesthetic value of man and nature, creating a view of people at that time to obey nature, respect for nature, advocating the unity of man and heaven, influenced by the spirit of this culture and the concept of ancient China's ceramic texture of the same thing I advocate, do not adhere to the compliance and emphasize the self-purpose of the texture view makes it full of human nature. The view of texture makes it full of the glory of human nature. In the information and the pace of life is so fast now, people's pursuit of material and spiritual life seems to be rapidly expanding, how to make people in such a high pressure of life to feel the beauty of life and cozy, how to stop to enjoy even a moment of pleasure may be the reason for the rapid expansion of material life, spiritual needs. Then, it may be a good choice for us to return to the original culture, spirit and concept, to experience the man and nature at that time, and to feel the same thing at that time. In the perhaps distant claims and contemporary aesthetic structure combined, feel different from the current everywhere "fast" life, appropriate slow down, feel belong to their own "life".

This series of ceramic lamps in the selection of texture through the understanding of texture patterns and search, and finally selected the "lotus" of different parts of the lotus, including the lotus, lotus leaf veins, the outer contour of the lotus leaf as the main texture patterns for the creation of the design. In ancient times, the lotus was often depicted by literati, such as the Tang poet Li Shangyin's "Gift to the Lotus", which reads, "The flowers and leaves of the world do not match each other, and when they enter the golden basin, the leaves become dust. There is a green lotus and a red Nymphaea, but it can open and close as it pleases. This flower and this leaf are always in harmony with each other, and the emerald green and the red are decreasing and the sorrow is killing people." The translation of the description of the lotus is that there are so many flowers and leaves in the world, but the lotus is the only one that has red flowers and green leaves that match each other, and the leaves roll up and down in an orderly manner, and the lotus blossom opens and closes, which is a natural and perfect contrast to each other. The poem shows that the lotus exists in the unique mutual contrast, the aesthetic expression of mutual contrast, so in the selection of design texture elements in the selection of the lotus, intended to return to the culture of nature to feel the spiritual life at that time, in the lotus itself in the spirit of mutual contrast to feel the significance of the natural life, so that people are immersed in nature, to feel the meaning of the elegant and calm, and try to "slow down" the pace of people's lives, so that people's lives are not so slow, so that people's lives are not so slow. It tries to "slow down" the pace of people's life, relaxing themselves and enjoying life as much as possible in the busy society. Combined with the design idea, the design emotion to be conveyed and the design purpose to be achieved, the name of the work is adopted as "Hoth", which is a clear and concise introduction to the work and conveys the design purpose intuitively. The texture of this series of ceramic lamps and lanterns is largely handmade texture for decoration, that is, the texture is designed and implemented in the production of molds and molds, so that after injection molding with the texture pattern made in advance, combined with the characteristics of thin porcelain thin and translucent, to show the texture as well as show changes in light and dark, to increase the contrast of the work as well as the sense of design.

" The Porcelain Garden stool Speaker "

พูน ปณ ทิโต ชีเว



Figure 40 Rough sketch "The Porcelain Garden stool Speaker"

Source: Drawn by Danxi Luo, 2024

Porcelain garden stool as a practical furniture, generally in pairs or sets of appearance, in different periods of porcelain garden stool function, status varies, it has two important uses: the first is the function of sitting, the second is the decorative function. Sitting is the porcelain garden stool as its initial form has the necessary function, porcelain garden stool since the birth of the beginning as a practical sitting, furnishing decorative function second. To the late generalization of the function of porcelain garden stool.

Porcelain garden stool seating practical function is its most basic function, but also its primary function as a kind of furniture, practicality is its most essential outstanding features. But the porcelain garden stool and other square sitting utensils are different, it's or rounded showy, or rounded corners, but it's easy to move, the use of a wide range of scenes. Porcelain garden stool since its emergence, widely popular in the social class and various scenes. For example, in the late Qing dynasty porcelain, illustrations, photos often appear on the porcelain garden stool as a common daily use of furniture, and a large number of existing porcelain garden stool for the extensive use of porcelain garden stool provides strong evidence. Cao Xueqin's "Dream of the Red Chamber" about the porcelain garden stool narrative: "Lin Daiyu because not big wine, since people pick up a porcelain garden stool, leaning against the railing to sit." In use, according to the feeling of warmth and cold, sitting directly on it or pad fabric sitting. It's easy to carry, compact and convenient, flexible and mobile, relative to the square class chair and stool handling, porcelain garden stool handling more beautiful, from the. And porcelain garden stool in the daily life of the scene is more convenient, do not have to sit upright, can be from all sides of any angle to sit on, or towards other places, which is difficult to compare the advantages of sitting as other. And porcelain garden stool can be taken according to the warm and cold situation sit cover, more convenient. Most of the small garden stool on both sides of a wide chair as a support armrest. Small porcelain garden stool can also be placed on both sides of a large stool as a support for the elbow, or on the bed, most of these small porcelain garden stool

size, compared to about 50 centimeters of the large porcelain garden stool, the diameter of the top surface and the proportion of the height of the device tends to be larger, the artifacts appear thick, solid, and taking into account the practicality of such a small garden stool as a small and convenient apparatus.

Porcelain garden stool is originally a decorative pattern, craftsmanship and other ways to highlight the beauty of a seating, not only practical and both beautify the interior, decorative function of the hall, porcelain garden stool body decorated with exquisite decorations, and more beautify the indoor environment. Porcelain garden stool early function is mainly to sit mainly to the Qing Dynasty in the late Qing Dynasty, the porcelain garden stool began to appear in the image of a piece of furniture, can be used as the base of the flower pot, or to place things.

However, at present, with the change of people's aesthetic concepts, as well as the continuous progress of science and technology, more multi-functional and decorative sitting tools, such as sofas, adjustable multi-functional seats, massage chairs, etc., so that the porcelain garden stool as a sitting function is not retained, as a seating tool, on the one hand, the porcelain garden stool as a ceramic fragile, as compared to the current movable chairs, the handling of inconvenient, so that people are more willing to use these fresh Stuff to replace the porcelain garden stool; on the other hand, the porcelain garden stool decorative function is also ignored by the public, more different materials, decorative wall paintings, the emergence of small fresh ornaments, so that the porcelain garden stool decorative function is also ignored by the people.

The design concept of "Porcelain Garden stool Speaker" (Figure.41) is that the porcelain garden stool as a traditional artifact, should be combined with the current demand, the functional requirements of the porcelain garden stool to innovate, so that it is more diversified, in line with or adapted to the current people's lifestyles and needs. Porcelain garden stool speaker" design inspiration comes from the shape of the porcelain garden stool like a drum, and now a lot of speakers are extremely similar to the shape, however, most of the design and decoration of the speakers are extremely modern, decorative elements, if combined with the porcelain garden stool may be able to create better products.

Design Ideas: Designed to retain the shape of the porcelain garden stool, the "porcelain garden stool" prototype as a reference, the creative design of a small and practical mini ceramic Bluetooth stereo, ceramic material, the use of handmade speaker's ceramic shell, the shell of kaolin ceramic by high temperature firing molding, from the garden stool body, garden stool surface and other basic structural design, the device type is exquisite and small.

" Half of a Porcelain Garden stool Lamp"

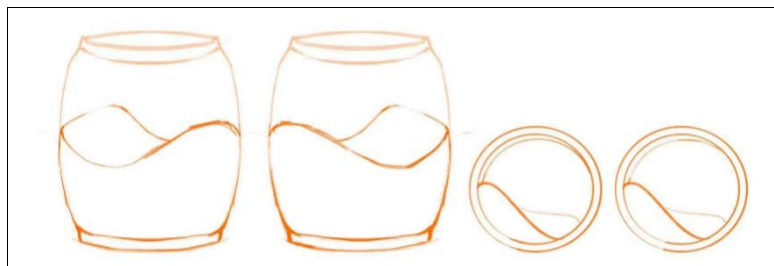


Figure 41 Rough sketch " Half of a Porcelain Garden stool Lamp"

Source: Drawn by Danxi Luo, 2024

The beauty of traditional porcelain garden stool often lies in its symmetrical and balanced shape, while modern design tends to break with tradition and explore the aesthetics of asymmetrical and organic forms. There are a lot of uncertainties in the firing process of porcelain. The whole process from clay to porcelain will encounter all kinds of difficulties, and it may be in the last part of the kiln opening, but also due to the change of temperature, resulting in the cracking of porcelain, at the same time, the cracking of porcelain is also random and not uniform. Therefore, through the use of broken and inferior porcelain garden stool for redesign, on the one hand, makes the irregular porcelain garden stool to create a combination of symmetrical and asymmetrical effect, but also can reflect the respect for the traditional porcelain craft and modern transformation. (Figure.42)

The use of traditional porcelain garden stools as modern lamps reflects the dialog between past and present, tradition and innovation.

"Fragments of the Buddha"

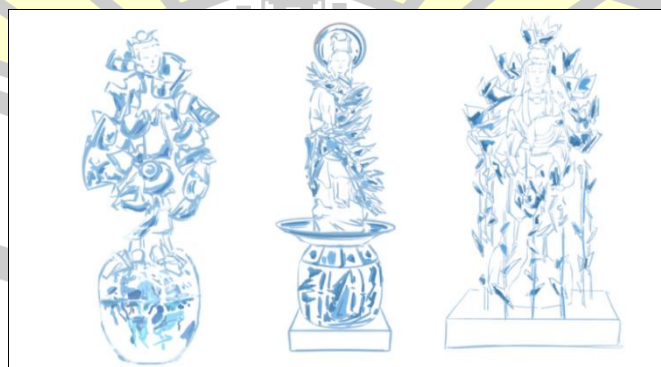


Figure 42 Rough sketch "Fragments of the Buddha"

Source: Drawn by Danxi Luo, 2024

The history of the porcelain garden stool does reflect the evolution of Chinese furniture use habits and the influence of religious culture in daily life. From the habit of sitting on the floor, to the Bodhi culture brought about by the introduction of Buddhism, to the emergence of embroidered garden stools in the Tang Dynasty, these are all signs of a gradual change in lifestyle. During the Tang Dynasty, with the popularization of Buddhism, the Bodhi on which the Buddha statue meditated began to be used in daily life, gradually evolving into the embroidered garden stool, and people began to add decorative elements to the cushion, making it not only practical but also ornamental.

By the Song Dynasty, with the development and improvement of porcelain manufacturing technology, the material of the embroidery garden stool began to change from fabric to porcelain, resulting in porcelain garden stool. Porcelain garden stool not only has the decorative and practicality of embroidery garden stool, but also because of the uniqueness of its material and has a longer service life and higher artistic value. Porcelain garden stools are usually flatter at the top, wider at the bottom, and stable in shape, making them suitable for placing objects or as cushions. With the passage of time, the shape and decoration of porcelain garden stools have become more and more refined, becoming a symbol reflecting the owner's status and taste.

The origin of the porcelain garden stool has a certain connection with the introduction of Buddhism into China, therefore, the inspiration of the design hopes to combine the porcelain garden stool with the Buddhist elements, realizing a new meaning of the return of the Source.

The design idea (Figure.43) of "Pieces of Buddha" is to form the figure. Of Buddha through the broken porcelain garden stool and then spliced together, at the same time, each piece has the decorative elements of the garden stool itself, which expresses the return and rebirth of life from the language of modeling and art, and is also in line with the religious belief of reincarnation in Buddhism.

This series is not only an artistic creation, but also a way of spreading and educating about traditional Chinese culture. The design stimulates viewers' interest in traditional culture and enhances their understanding of Chinese history, religion and art. Each individual Buddha statue shows the different decorative styles of porcelain duns with different artistic styles and decorative elements, composing the history and evolution of porcelain duns, and telling the story of the change of the decorative language of porcelain duns in Chinese culture from ancient times to modern times, as well as their status and significance in social life. Through this artistic expression, it not only shows the aesthetic and cultural history of the porcelain garden stool, but also its new life and diversity in contemporary design.

"Flaming Porcelain Garden stool Lamp"

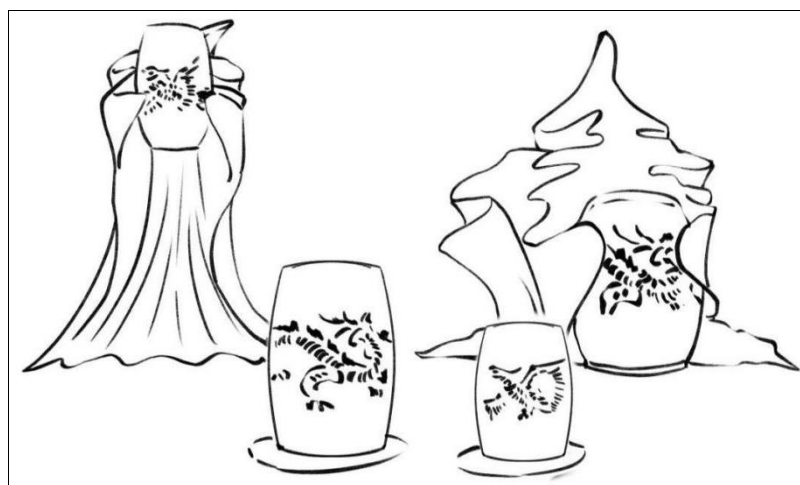


Figure 43 Rough sketch "Flaming Porcelain Garden stool Lamp"

Source: Drawn by Danxi Luo, 2024

Dragons are associated with power, majesty and weather phenomena in the Chinese mythological and symbolic system, therefore dragon motifs are the most common in the decoration of porcelain duns of traditional objects, and the dragon motifs are often depicted in the midst of soaring clouds, often accompanied by flames, and in the decorations the clouds around the dragon's body are sometimes in the form of flames in order to enhance the dragon's and sense of power and dynamism, and therefore flame motifs are used to emphasize the dragon's powerful energy and dynamism in the sky. In porcelain garden stool decoration, flame motifs may be used as a complement to dragon motifs to express the sanctity and power of the dragon. The use of flame motifs can provide a dynamic visual effect that makes the dragon motifs appear more vivid and lifelike. At the same time, the curves and fluidity of the flame motifs complement the sinuous form of the dragon's body, and the combination of the two creates a visually appealing combination of dynamic and static beauty.

The design(Figure.44)of "Flame Porcelain Garden stool Lamp" draws its inspiration from abstract art, extracting the thematic element of flame pattern, expressing the essence of flame through simplified lines and shapes, and, at the same time, considering the practicality of the porcelain garden stool, changing the function of the garden stool's seating furniture, and applying this decorative pattern to the garden stool's practical functions, such as a lamp, both as a light Source and as a decoration.

“ The Dragon and Phoenix Pattern”



Figure 44 Rough sketch "The Dragon and Phoenix Pattern"

Source: Drawn by Danxi Luo, 2024

Porcelain garden stool decoration pattern, the dragon pattern is the most common. Most of the decorative techniques appear in blue and white. The author found in the field survey, the market for large objects are also mostly decorated with the four famous porcelain³³ blue and white, pastel, color glaze, and lingerie decoration of large objects is very rare, the market lingerie ingredients are only suitable for the production of some small objects, such as cups, bowls, etc., because large objects need to be filled with lingerie glaze on a large scale, which will cause the glaze to blister, so I hope that through the innovative attempts to dragon and phoenix motifs, we can be able to try to add modern design elements and retain the traditional lingerie decorative effect, in the decoration of porcelain garden stool.

The decorative elements (Figure.45) mainly utilize dragons and phoenixes, which are often seen together in artistic and cultural traditions, representing the harmony of heaven and earth and the balance of yin and yang. Their combination is considered the most auspicious sign, especially in weddings and royal symbols. In design, the dragon and phoenix motifs are often used to represent wealth, prosperity and good fortune. Applying these motifs to the design of porcelain garden stool may be an attempt to incorporate these strong cultural symbols into the modern living space and to give a deeper meaning and beauty to everyday objects. Reinterpreting these traditional symbols through modern design techniques will be able to tell a story about the intertwining of tradition and modernity, history and art.

"The Alphabet Dragon Pattern"

33 Blue and White, Linglong, Colored Glaze, Famille Rose

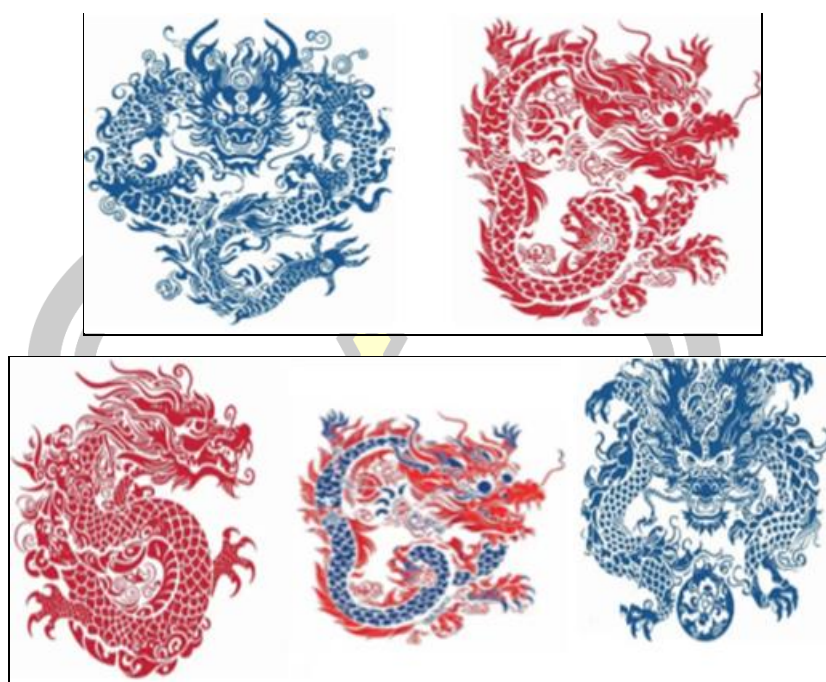


Figure 45 Rough sketch "The Alphabet Dragon Pattern"

Source: Drawn by Danxi Luo, 2024

In the Chinese tradition, the twelve signs of the Chinese zodiac³⁴ are very important cultural symbols, each corresponding to an animal and reincarnated every 12 years. 2024 is the Year of the Dragon in China, a very auspicious and meaningful year, symbolizing strength, courage and good luck. Incorporating the dragon element into the design, especially in the year of the dragon, is not only a celebration of the year, but also a way to bring good luck and positive energy with this auspicious symbol.

Dragon represents authority, dignity, strength, good luck, mysterious, the author of the dragon pattern design (Figure.46) into five symbolic significances of the English initials of the image, applied to the porcelain garden stool, so that the porcelain garden stool as a practicality and aesthetics and coexistence of artifacts. Through innovative pattern design, can be in the search for expression of personal creativity and a certain cultural identity, as a way to show unique personality and respect for cultural heritage.

" The Dragon Lantern"

³⁴ The twelve signs of the Chinese zodiac (Shí'èr Shēngxiào) are a cycle of animals associated with the Chinese lunar calendar. Each year in the 12-year cycle is related to a specific animal sign, and these signs are used in Chinese astrology to predict personality traits, fortunes, compatibility, and much more. The twelve animals in order are Rat, Ox, Tiger, Rabbit, Dragon, Snake, Horse, Goat, Monkey, Rooster, Dog, Pig. Each animal has its own set of characteristics and is believed to influence the personality and destiny of individuals born in its year. This zodiac system integrates with the five elements (Wood, Fire, Earth, Metal, and Water) and the Yin-Yang theory, creating a comprehensive 60-year cycle (12 animals × 5 elements)



Figure 46 Rough sketch "The Dragon Lantern"

Source: Drawn by Danxi Luo, 2024

Porcelain garden stool in the dragon pattern is the most common, in ancient China, different periods of the dragon pattern, different forms, the New Age Hongshan culture jade dragon³⁵, vivid shape, also known as "China's first dragon", the author through the extraction of jade dragon pattern, from the abstract art of extracting inspiration, at the same time, the use of ceramic garden stool ceramic material, produced ceramic jade dragon, at the same time, the In order to make this decorative pattern on ceramic objects to highlight its practicality, such as lamps, I thought of in Chinese mythology and traditional culture, the dragon pearl is usually closely associated with the Chinese dragon, is considered to be a symbol of the dragon and the Source of power. Dragon beads are sometimes depicted as ornaments for dragons, and sometimes as treasures they seek or guard. Therefore, this set of dragon lamps (Figure.47) is designed to be both a Source of light and decoration. "The White Mud Lamp"

³⁵ The New Age Hongshan culture jade dragon refers to modern reproductions or artistic interpretations of jade dragons that originate from the ancient Hongshan culture. The Hongshan culture (红山文化 Hóngshān Wénhuà), dating from approximately 4700 to 2900 BCE, was a Neolithic culture located in what is now the northeastern part of China. This culture is known for its sophisticated jade carvings, among which the jade dragon (玉龙 Yùlóng) is one of the most iconic artifacts.

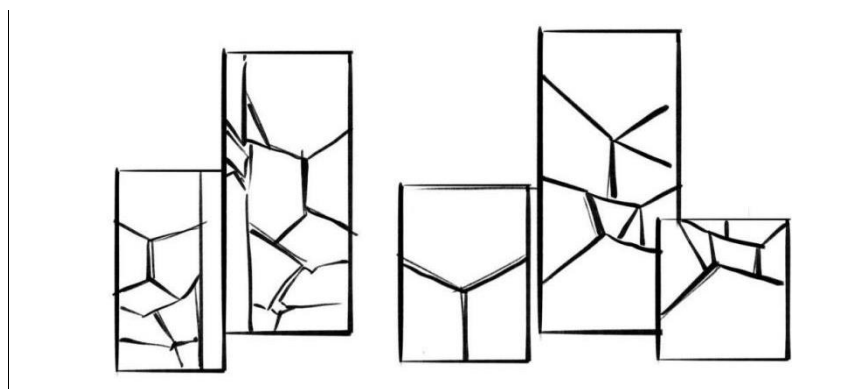


Figure 47 Rough sketch "The White Mud Lamp"

Source: Drawn by Danxi Luo, 2024

Traditional ceramic objects porcelain garden stool using ceramic raw material high white clay firing. Kaobai clay³⁶ is a high-quality ceramic raw material that plays a particularly important role in Chinese ceramics production. It contains a high amount of kaolin³⁷, a very pure white clay, which has a high temperature resistance and strength after firing, giving the finished ceramics a good whiteness and translucency, making it an ideal material for making high-grade porcelain. In order to highlight the traditional porcelain garden stool to add modern elements, to create both traditional flavor and in line with modern aesthetic works, the author by trying to mix paper into the clay (Figure.48), the curiosity and experimentation of different material properties, the lightness of paper and ceramic solid in the texture of the formation of a contrast, the use of materials fusion and other creative techniques, in the process of making the addition of fiber materials, newspapers, toilet paper and some waste paper broken up with water made of Paper pulp is added to the clay to increase the toughness of the clay. Will be made after the clay piece of 1280 degrees high temperature firing, with a cutting machine to re-cut into pieces of different forms, and spliced together to form a new shape, in the final firing process after the paper burned out not only to reduce the weight of the blank, the residual traces and texture have the same flavor, light and soft paper and hard ceramic materials combined together very well to show the ceramic art of the inclusive texture.

³⁶ refers to "Kaolin clay" in English, a type of white clay used primarily in the production of porcelain and other types of ceramics. Kaolin clay is known for its high purity, whiteness, and fine texture, making it an essential material in the manufacture of high-quality porcelain, particularly in famous porcelain production areas such as Jingdezhen in China. This clay is valued for its ability to achieve a high degree of vitrification during the firing process, resulting in finished products with a translucent, glass-like quality.

³⁷ Kaolin, also known as kaolinite, is a type of white clay primarily composed of the mineral kaolinite.

"The Irregular Vase"

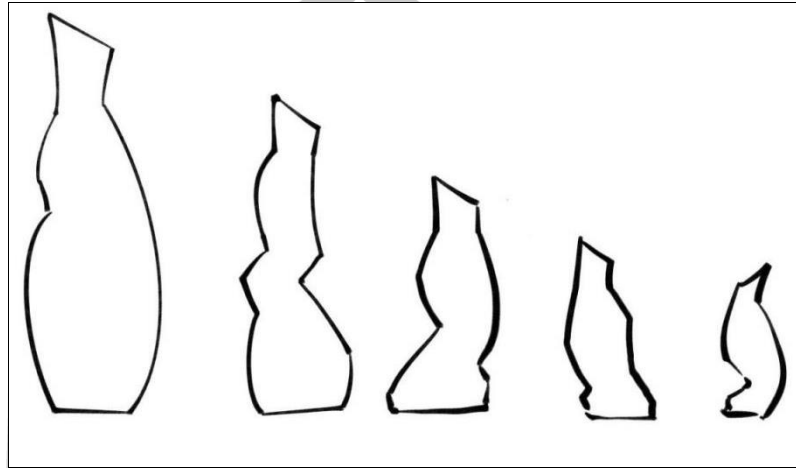


Figure 48 Rough sketch "The Irregular Vase"

Source: Drawn by Danxi Luo, 2024

This is a series of irregular flower arrangement (Figure.49) in which the shape of the porcelain garden stool is distorted. This innovative design skillfully utilizes the natural deformation of ceramics during the firing process. Under the action of high temperatures, ceramics may distort and change shape due to material properties, gravity, or the way the firing support is arranged. Normally, such distortion would be considered a defect, but in this design the distortion is seen as a unique aesthetic element. Instead of trying to control or prevent this distortion, the author allows it to occur naturally and uses the result as part of the design. This design thinking emphasizes a deep understanding and respect for the properties of materials and embraces the role of nature and chance in the creative process. This not only provides a fresh perspective on traditional ceramic craftsmanship, but also adds an organic and dynamic feel to the design. The design may also be influenced by the Eastern philosophy of "letting nature take its course," which allows objects to form and exist according to their natural tendencies, rather than imposing external shapes or structures. In this way, each piece is unique and its beauty lies in its irregularity and uniqueness. In terms of use, it changes the function of the artifact porcelain garden stool sitter, making it a niche accessory flower arrangement, which is more popular in the market.

"Lotus Leaf Outline Lamps"

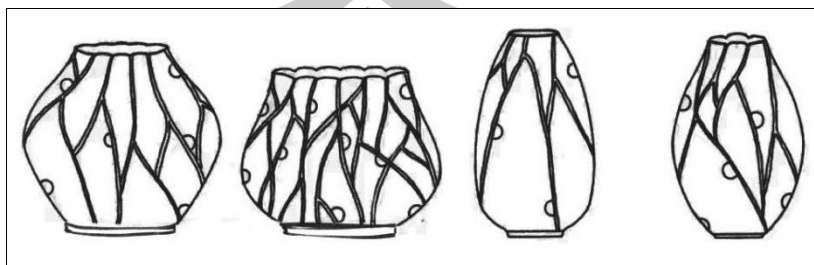


Figure 49 Rough sketch "Lotus Leaf Outline Lamps"

Source: Drawn by Danxi Luo, 2024

Among the decorative patterns of porcelain garden stool, the lotus leaf pattern is the most common. Lotus leaves and flowers often grow in silt, but are able to remain clean and unsullied by sludge, and are therefore often seen as symbols of purity and innocence. The water droplets on the lotus leaves do not stick and roll down cleanly, a characteristic that symbolizes the ability to maintain inner purity and not be moved by temptation in the face of worldly difficulties. The lotus leaf as a design element is rich in cultural symbolism and aesthetic value, which may be one of the reasons why the designer chose to use the lotus leaf pattern.

From a design (Figure.50) point of view, the shape of lotus leaves has a unique aesthetic appeal, with their simple and symmetrical contour lines, producing a natural and harmonious visual effect. The shape of the lotus leaf lends itself to a variety of design variations and creative play, which makes them an attractive element in lighting design. In addition, the shape of the lotus leaf also has a unique effect in light transmission and shadow creation, which can create a layered and dynamic sense of light and shadow effects.

In summary, the lotus leaf pattern is not only used as a design element because of its profound cultural connotation and natural beauty, but also its morphological characteristics in practicality and aesthetics are in line with the needs of lamp design.

"The Flower Group"

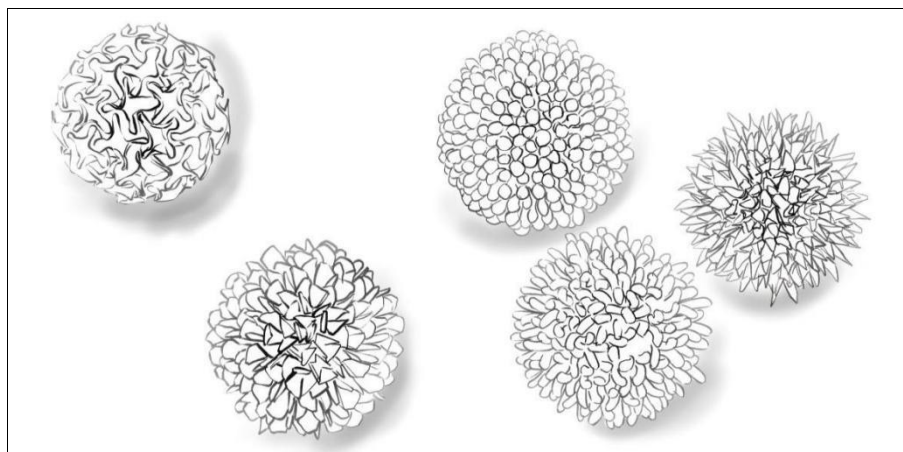


Figure 50 Rough sketch "The Flower Group"

Source: Drawn by Danxi Luo, 2024

Traditional porcelain garden stool decoration in the group of flowers pattern is more common, because of its beautiful symbolism and image received everyone's favorite, but the traditional group of flowers pattern planarization show makes its decorative by a certain limitation, if the three-dimensional display of the group of flowers in the form, may be able to break through its limitations, enriching the application of the porcelain garden stool decorative elements of the possibilities.

The design (Figure.51) of "Group of Flowers" is inspired by the traditional decoration of the group of flowers on the porcelain dun, and is expressed in three dimensions on the configuration of the group of flowers in the plane painting. In the design of the idea of three-dimensional group of flowers, the expression method breaks through the group of flowers pattern of the flat expression, presenting the image of vivid flowers, and through a series of group of flowers composition combinations, the formation of art of the sea of flowers associative effect. The design completely breaks through the porcelain garden stool, but the innovative elements are derived from the porcelain garden stool, completely breaking the limitations of the porcelain garden stool and the existing links, is an abstract artistic association.

"The Flowering Cloud Lantern"

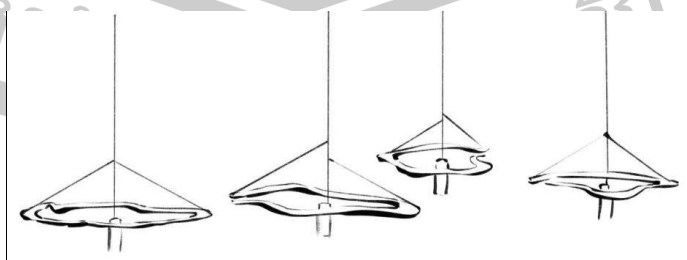


Figure 51 Rough sketch "The Flowering Cloud Lantern"

Source: Drawn by Danxi Luo, 2024

In the porcelain garden stool pattern decoration, flower pattern (Figure.52) is the most common. Cloud as an atmospheric physical phenomenon, and human beings do not have close contact with the relationship but also affect people's lives all the time. In ancient times, people know little about the natural phenomenon, that the cloud movement process is related to the growth and development of all things in the world. This process of movement implies the "Four Seasons"³⁸ view of time and space in the "One Year Scene" pattern. The Eastern Han Dynasty, "on the balance" book has "the spirit of the gods, clouds and rain and so on" records, can be seen for the ancients of the cloud of reverence and worship feelings. In addition, in our culture, cloud also represents the spiritual temperament of following the nature, is a kind of conformity to the laws of nature, and natural integration of the state of life portrayal. Thus, the use of the cloud element is beneficial to the interpretation of the "Four Seasons" in the "One Year Scene" pattern and the exploration of the relationship between man and nature.

A flower is different from a cloud and is not ethereal. It is deeply rooted in the soil, absorbing the nutrients of the earth, and behind its blooming splendor, it is well prepared to give birth to new life.

Porcelain garden stool in the rise of the Song Dynasty, when there is a "one year scene" known as the pattern, but also reflects the Song people based on nature, the self's own philosophical thinking. By expressing the concept on ceramic decoration and combining it with contemporary aesthetic features, we find a way to connect tradition and modernity.

Flowers, as the main decorative theme in the "One Year Scene" pattern, are one of the plants in nature that have the closest contact with human beings, enriching the material life of human beings and satisfying people's spiritual thinking at the same time.

In the author's creativity, through the reasonable combination of cloud and flower elements, it is intended to reflect the concept of "one up, one down" and "one high, one low" cycle of the same natural things. The addition of humanoid design enriches the decorative language of the work, and at the same time reflects the dialectical relationship between man and nature.

The work is modeled on clouds. Clouds have beautiful lines in themselves, and have a rich connotation based on traditional culture. The ancients believed that clouds were the foundation of heaven and earth, and the two blurred figure's standing in the "high above" clouds are a metaphor for the pursuit of a worldly realm that transcends all things. The four seasons of flowers growing in the clouds represent the

³⁸ It could refer to the various natural scenes or landscapes that unfold over the course of a year, highlighting the changing seasons from spring blossoms to winter snows. This interpretation focuses on the beauty and diversity of nature as it cycles through its annual rhythms

cycle of seasons controlled by nature, the Figure's look down, thinking that they are out of the mortal world is a place of right and wrong, but in the blink of an eye the flowers bloom all over, "do not know the true face of Mount Lushan, but only to be in this mountain". In the sketch design, the clouds in nature are combined with the traditional pattern cloud pattern, after refining and generalizing, the symmetrical programmed cloud pattern form in the traditional pattern is simplified, and four cloud shapes of different shapes and sizes are drawn.

The most distinctive feature of the "One Year Scenery" pattern is the combination of the four seasons of flowers, "One Year Scenery" pattern is often used in the decoration of porcelain garden stool (Figure. 4-19). Flower pattern modeling fresh and elegant, flower head is generally small, through the division of the four seasons after the decoration of folded flowers, using clockwise rotation of the program layout, reflecting the cycle of the four seasons of the reincarnation of the state. Therefore, in the design of the work, the four seasons' flowers are chosen as spring, summer hydrangea, autumn daisy, winter plum blossom, which are small flower heads, and are balanced and distributed on top of the four cloud-like shapes by pinching and piling up the flowers to achieve the desired effect.

"Wildflowers in Bloom"



Figure 52 Rough sketch "Wildflowers in Bloom"

Source: Drawn by Danxi Luo, 2024

In the pattern decoration of porcelain garden stool, flower pattern (Figure.53) is the most common, traditional flower pattern is very popular, they are not only visual decoration, but also carry rich symbolism and cultural connotation. Peony is known as the king of flowers, symbolizing wealth, prosperity and good fortune. Peonies appear frequently in ceramic art, especially on porcelain garden stools from the Ming and Qing dynasties. The lotus flower grows untainted in the mud, symbolizing purity and ease. It is also an important symbol in Buddhism, representing cleanliness and spiritual awakening. The plum blossom, which blossoms in the cold, symbolizes resilience and purity, and is also one of the symbols of good fortune in Chinese culture. Chrysanthemums represent longevity and permanence, often appearing in the fall, and symbolize moderation and purity. Orchids symbolize

chastity, friendship and grace. In Chinese literature and art, orchids are often associated with noble qualities. The popularity of these motifs reflects Chinese society's appreciation of the beauty of nature and the pursuit of auspicious imagery.

In modern design, the author's inspiration comes from the small yellow flowers that can be seen everywhere on the roadside. In the spring when wild grasses and flowers grow vigorously, small flowers can always be seen on the roadside, without rich fragrance, but the rounded petals are very fresh and lovely. Wildflowers are not modified, their natural beauty gives people a primitive, untouched impression, this beauty is real and unadorned, and the traditional horticultural flowers are carefully cultivated and perfect form a sharp contrast, this contrast provides a new perspective and creative space for modern design, but also breaks the boundaries of the traditional aesthetics, to show a unique style and spirit of innovation.

In terms of modeling, the shape of the porcelain garden stool is continued, but to show the curves of the petals, the mouth rim is cut to make the flat rim undulating. A simplified outline of the flower is drawn on the body and filled in with color as the main decoration of the piece. In terms of color, the use of contrasting and complementary colors for the body and decorative parts of the piece, namely blue, purple, and yellow, was chosen to create a strong contrast between the surface and the face. At the same time, a matte frosted glaze is used for the body, while the yellow part of the piece is glazed with a glossy golden flower CC series under-glaze, which also creates a contrast between the texture and the texture of the piece. Of course, in order to grasp the totality of the work and avoid too strong a color conflict, the author tried a variety of different shades of blue and purple in the preliminary experimental process, and finally selected a high-purity blue and low-purity purple to match with the yellow, so that the work achieves the effect of both contrast and harmony in the use of color.

" Flower Modeling"

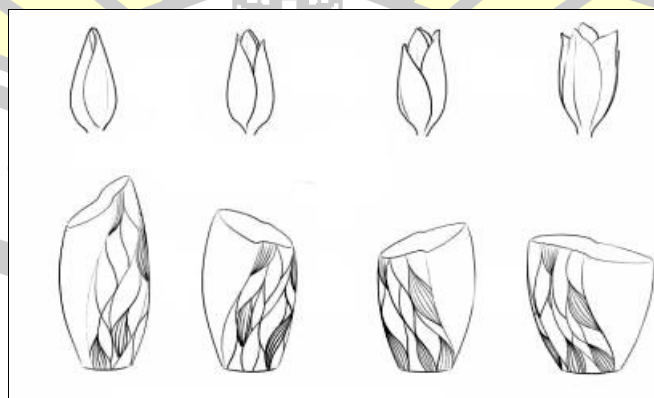


Figure 53 Rough sketch "Flower Modeling"

Source: Drawn by Danxi Luo, 2024

In the porcelain garden stool pattern decoration, floral pattern (Figure.54) is the most common, but generally in the composition, are painted the entire shape of the flowers to show that the design of this set of works inspired by the state of the flowers will be open yet open. Whenever I see a flower in bud, the petals are folded in layers, and although I can't see the center of the flower, I always feel as if I smell the fragrance. Therefore, I simplified the form of the blossoming flower as the basic outline of the vessel, and made four shapes with different sizes and degrees of opening according to the different states of the petals closing up. In order to incorporate the petal decoration into the body of the vessel and to add a contrasting effect, the body is divided into two areas by a curve, one smooth and the other covered with petal-like texture. The mouth of the piece is also curved and has an overall beveled shape. In terms of color, the author chose a glossy black glaze with matte and glossy transparent glazes, with a glossy glaze on the exterior of the vessel and a matte glaze on the interior. On the one hand, the low-key color scheme of black and white corresponds to the theme of the work "Dark Fragrance"; on the other hand, it enhances the contrast in color, and at the same time, the black part of the smooth surface and the light part covered with texture also achieve a balanced visual effect. In the matte transparent glaze, the curves of the veins of the petals are outlined in black over glaze, echoing the black glaze and making the overall color scheme more harmonious. Local lines are outlined with gold water, adding a touch of brightness to the overall black and white color scheme.

" The Melted Porcelain Garden stool"

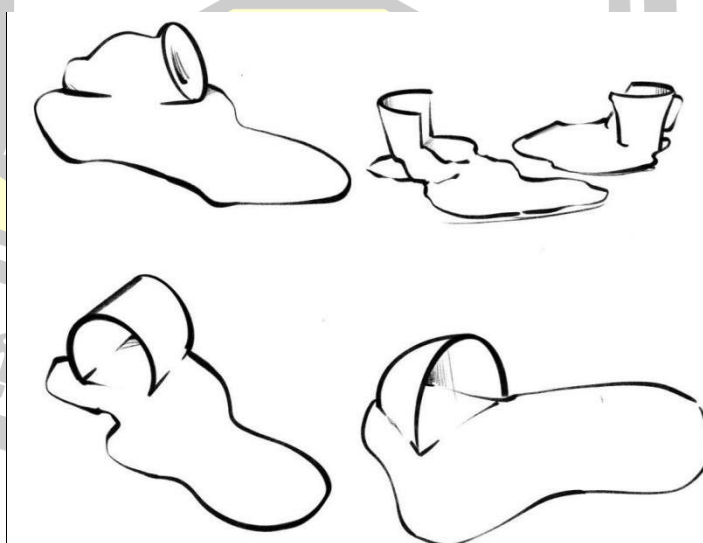


Figure 54 Rough sketch "The Melted Porcelain Garden stool"

Source: Drawn by Danxi Luo, 2024

Porcelain garden stool is the art of clay and fire, in the firing process, often due to the high temperature in the kiln, resulting in the distortion and collapse of the embryo body of the garden stool, creating a melting feeling. Therefore, the design (Figure.55) of "melting porcelain garden stool" is inspired by this phenomenon, in the design of this melting visual effect to amplify the full expression of the softness of the clay of porcelain garden stool, as if melting chocolate, in the case of high temperatures make the form of porcelain garden stool melted into a puddle, but did not melt, making the performance of a part of the melting, and the other part of the garden stool form of the work of art is still present.

The purpose of the design is to deconstruct the porcelain garden stool artistically, to release the language connotation of the garden stool at the same time, but also expresses the language of emptiness in extreme conditions, but also want to use this form to express the powerlessness of the porcelain garden stool in the stage of decline, hope that the melting of the modeling language can convey an idea, that is, the porcelain garden stool should be integrated into the new modern way of life, towards a new form of expression, to change the destiny of its own decline.

Evaluation of Innovative Design of Porcelain Garden stool

Based on the evaluations of the five experts, each selected five pieces for detailed assessment, providing feedback and suggestions, and assigned scores to each piece. From a comprehensive analysis of these evaluations, the top three scoring artworks were identified. Below are the expert opinions and scores for these top three works.

"Aroma Candle" (Figure.56)



Figure 55 Rough sketch "Aroma Candle"

Source: Drawn by Danxi Luo, 2024

"Fragmented porcelain garden stool" (Figure.57)

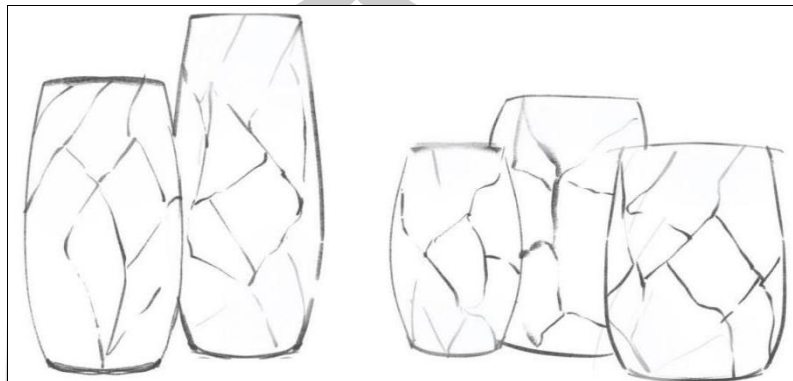


Figure 56 Rough sketch "Fragmented porcelain garden stool"
Source: Drawn by Danxi Luo, 2024

"Half of a porcelain garden stool" (Figure.58)

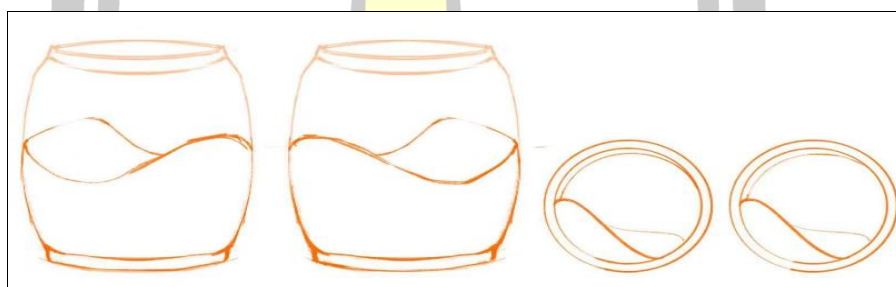


Figure 57 Rough sketch "Half of a porcelain garden stool"
Source: Drawn by Danxi Luo, 2024

Synthesis of views (Table 9)



Table 8 Experts Comments
Source: Made by Danxi Luo ,2023

Question	Reflects Identity of Porcelain Stool	Reflects Value of Porcelain	Meets Consumer Needs	Market Feasibility
Suggestions	<p>1.Suggest incorporating more traditional elements in innovation, or reflecting respect for traditional craftsmanship in the design.</p> <p>2.Suggest maintaining traditional elements while adding more modern design elements and innovative thinking.</p>	<p>1.Suggest more delicate visual design, considering the harmony of light Source with ceramic texture and color.</p> <p>2.Suggest conducting in-depth research on the historical and cultural significance of flame patterns in traditional ceramics to ensure the design accurately and respectfully reflects these elements.</p> <p>3.Integrate more traditional details in modern design to maintain cultural continuity.</p> <p>Suggest exploring and showcasing the cultural significance of ceramics to ensure the design not only references the appearance but truly embodies cultural values.</p>	<p>1.Suggest considering a more diverse aesthetic style to attract a broader consumer group. Explore deeper artistic expressions, such as conveying richer emotions and meanings through the combination of colors, shapes, and textures.</p> <p>2.Suggest exploring more cost-effective production techniques or materials to reduce costs and make the product more attractive to a wider consumer base.</p> <p>3.Conduct market research to understand different consumer perceptions of traditional cultural elements in modern design, and adjust the design accordingly to meet market demand.</p> <p>Suggest conducting more in-depth cultural research to ensure the design accurately and sensitively reflects cultural elements.</p>	<p>1.Question the practicality and functionality of the product, such as heat resistance, stability, and safety, and suggest making corresponding improvements.</p> <p>2. Suggest using stronger adhesives or structural supports, or designing an internal framework to enhance overall stability.</p> <p>3. Suggest finding a balance in the design that showcases the uniqueness of each piece while maintaining overall harmony and unity. Suggest exploring more cost-effective production methods, such as modular design or simplified decoration.</p>

"Fragmented porcelain garden stool" (Figure.59)



Figure 58 Rough sketch "Fragmented porcelain garden stool"

Source: Drawn by Danxi Luo, 2024

"Aroma Candle Holder "



Figure 59 Rough sketch "Aroma Candle Holder"

Source: Drawn by Danxi Luo, 2024

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"Half of the porcelain garden stool lamp"



Figure 60 Rough sketch "Half of the porcelain garden stool lamp"

Source: Drawn by Danxi Luo, 2024

Consumer survey

In the next step, the author administered a questionnaire to 100 consumers. Lamps and lanterns product research and analysis

On the basis of the previous theoretical research as well as expert opinions, the market research and analysis of porcelain garden stool lamps and lanterns was conducted, and the feasibility of porcelain garden stool lamps and lanterns was derived from the research and analysis. Variables and statistics are conducted to analyze the depth of the existing group and create a basic framework for the survey by investigating the crowd's life preferences and needs, as well as the opinions of the surveyed crowd. In addition, the physical and spiritual needs of the population for porcelain dun lamps and lanterns are understood through the social environment and the expression of the sense of self-worth. In addition, the research was directed towards determining the appropriate parameters of porcelain dun lamps and lanterns in order to obtain a clearer direction for the design of the lamps and lanterns.

Actual research analysis and summary

In the design of the user-oriented needs of the design is the focus of the design, but also the starting point for the design of porcelain garden stool lamps and lanterns. Obtaining and analyzing data on users' needs is one of the tasks that designers must perform. The questionnaire survey "on the innovative design of porcelain garden stool questionnaire survey"³⁹ received a total of 100 valid questionnaires, the results are shown below, cross-tabulation analysis is the main way of this questionnaire analysis.

1) Crowd data analysis

³⁹It is a research tool used to collect information from respondents about a particular subject or topic. Survey questionnaires are designed with a series of questions aimed at gathering data on individuals' opinions, behaviors, preferences, or factual information.

1.Dender?

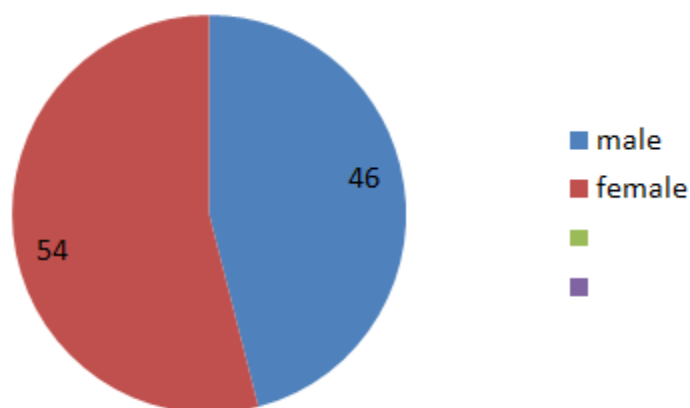


Figure 61Pie chart on gender
Source: Made by Danxi Luo, 2024

As shown in Figure.62 for different genders for the porcelain garden stool innovative design attitude, to understand the market for innovative design of different gender preferences, through cross-analysis, the largest proportion of 34% of male preferred dragon series porcelain garden stool lamps and lanterns; 46% of women like dragon series porcelain garden stool lamps and lanterns, which concludes that women for the dragon series porcelain garden stool lamps and lanterns higher than the demand for men.

Through the purchase of different age groups needs and preferences, cross-analysis, (Figure.63)18 ~ 25 years old group of people in the largest proportion of 45.45% of people like porcelain garden stool sound; 25 ~ 30 years old group of people in the largest proportion of 46.67% of people like the dragon series of porcelain garden stool lamps and lanterns; 31 ~ 40 years old group of people in the largest proportion of 37.10% of people like the dragon series of porcelain garden stool lamps and lanterns; 41 ~ 50 years old crowd in the 48.84% of people like dragon series porcelain garden stool lamps and lanterns; 33.33% of people over 50 years old like flower series lamps and lanterns and 33.33% like other lamps and lanterns. In summary, it can be seen that 25~50 years old people are the audience of Dragon series porcelain garden stool lamps and lanterns.

2.how old are you ?

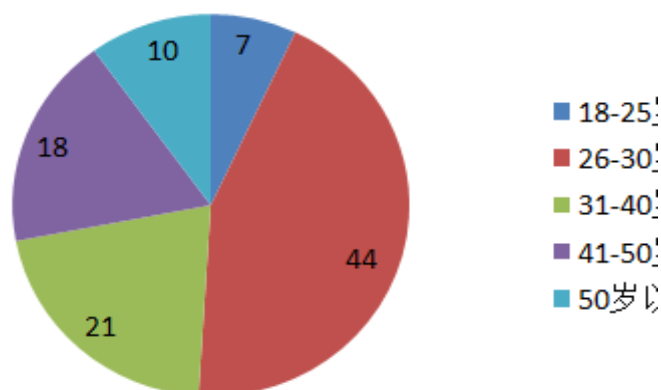


Figure 62 Pie chart on age
Source: Made by Danxi Luo, 2024

3.What is your job?

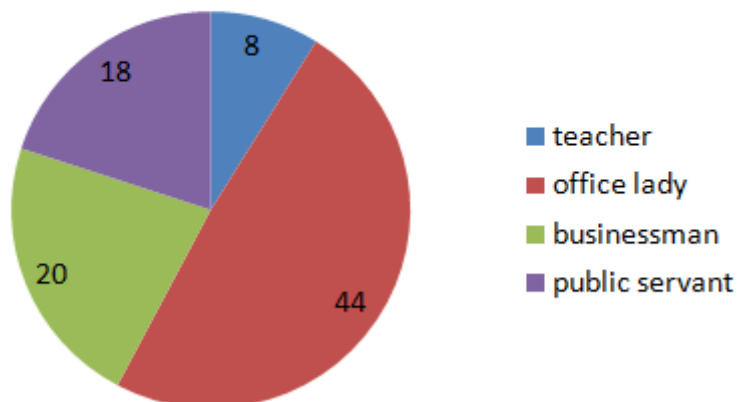


Figure 63 Pie chart on occupation
Source: Made by Danxi Luo, 2024

Table 9 Cross-tabulation of occupation and age
Source: Made by Danxi Luo, 2024

x/y	porcelain garden stool	dragon series porcelain garden stool	flowers texture series lamp	broken lamp	total
teacher	14(29.17%)	20 (41.67%)	8 (16.67%)	6 (12.5%)	48
office lady	72(27.48%)	98(37.40%)	50(19.08%)	41(16.03%)	261
business man	24(19.35%)	52(41.94%)	24(19.35%)	24(19.35%)	124
public servant	14(12.96%)	54(50%)	28(25.93%)	12(11.11%)	108
others	6(10.34%)	20(34.48%)	2(3.45%)	29(51.72%)	57

As shown in Figure.64 and Table 10 of the different occupations for the innovative design preferences are also different, teachers 46.67% like the Dragon Series Porcelain Garden stool lamps and lanterns accounted for the largest; company staff 37.40% like the Dragon Series Porcelain Garden stool lamps and lanterns accounted for the largest; commercial, self-employed people 41.94% like the Dragon Series Porcelain Garden stool lamps and lanterns accounted for the largest of the many lamps and lanterns; civil servants or public institutions in the crowd like Dragon Series Porcelain garden stool lamps and lanterns accounted for 50%, the largest proportion of all lamps and lanterns. It is concluded that most of the occupations for the Dragon Series porcelain garden stool lamps and lanterns like a high degree.

2) Market Research

4.Which one do you like best?

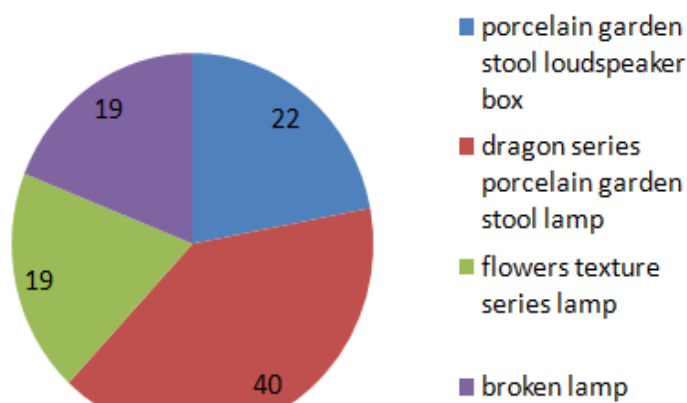


Figure 64 Types of design preferences

Source: Made by Danxi Luo, 2024

Table 10 Cross-analysis of innovative design and decoration types

Source: Made by Danxi Luo, 2024

x/y	simple	flower	dragon	others	total
porcelain garden stool loudspeaker box	39(30.77%)	27(21.54%)	63(47.69%)	0(0.00%)	129
dragon series porcelain garden stool lamp	60(24.59%)	41(17.21%)	140(57.38%)	2(0.82%)	243
flowers texture series lamp	32(28.57%)	36(32.14%)	44(39.29%)	0(0.00%)	112
broken lamp	40(35.09%)	50(43.86%)	24(21.05%)	0(0.00%)	114

Figure. 64 for the questionnaire lamps and lanterns types of preferences, like the dragon series porcelain garden stool lamps and lanterns accounted for 40% of the largest, so the dragon series porcelain garden stool lamps and lanterns have a certain market demand. Through the cross analysis of decorative patterns can be obtained as Table 11, the dragon decorative design elements are liked by people accounted for 57.38% of the dragon series of porcelain garden stool lamps and lanterns.

5.What is your expression about porcelain light?

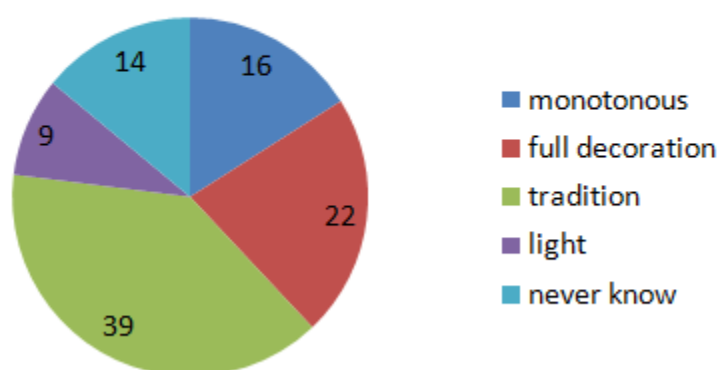


Figure 65 Pie Chart of Impressions of Ceramic Luminaries
Source: Made by Danxi Luo, 2024

design porcelain garden stool lamps and lanterns need to understand the impression of people for ceramic lamps and lanterns, that monotonous antique accounted for 20%; decorative is too strong accounted for 21%; and modern decoration does not match the largest accounted for 37%; only with the illumination function accounted for 9%; do not understand accounted for 13%, it can be seen that the above needs to be resolved is to adjust the impression of traditional ceramic lamps and lanterns monotonous antique, in line with the public aesthetics.

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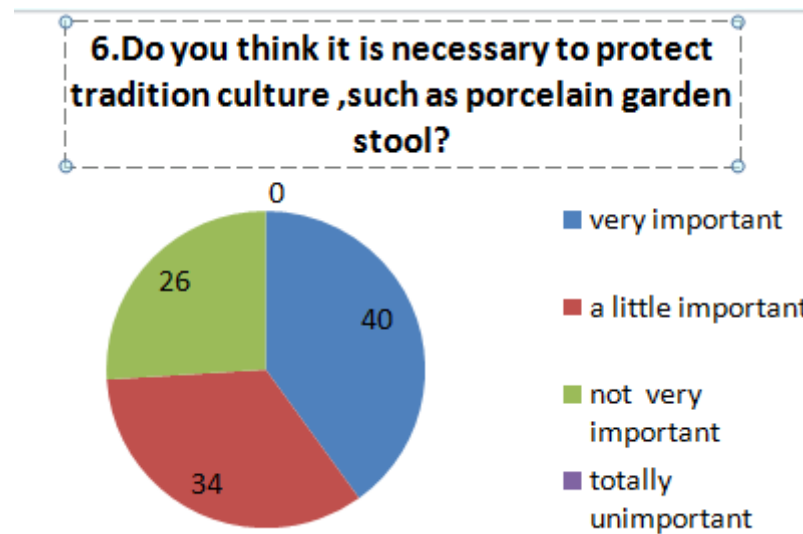


Figure 66 Pie chart of the protection and transmission of traditional culture and its analysis

Source: Made by Danxi Luo, 2024

Figure. 66 People have great guidance for the innovative design of porcelain garden stool for the inheritance and protection of traditional culture, as can be seen from the data, 40% of people think that it is very important; 34% of people think that it is somewhat important; 26% of people think that it is not too important, thus, at the present time, the protection and inheritance of traditional culture, in the case of the porcelain garden stool, is very necessary.

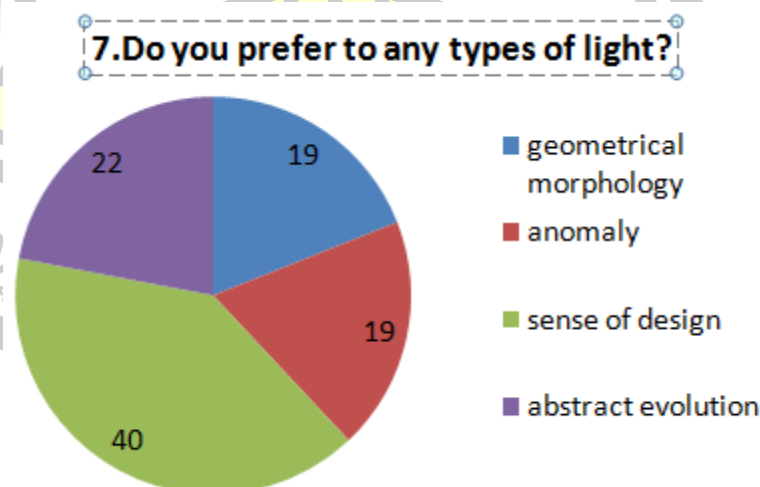


Figure 67 Pie chart of lamp form preferences and its analysis

Source: Made by Danxi Luo, 2024

As can be seen in Figure 68 from the data, 40% of people like to have a sense of design of the lamp; 22% of people like the design of the abstract extraction; 19% of people like geometric shapes and irregular design, respectively, like to have a sense of design of the people accounted for the largest proportion of the appearance of the porcelain garden stool can be designed from the sense of design of the lamps and lanterns modeling to start.

8. Do you prefer to series light or simple light?

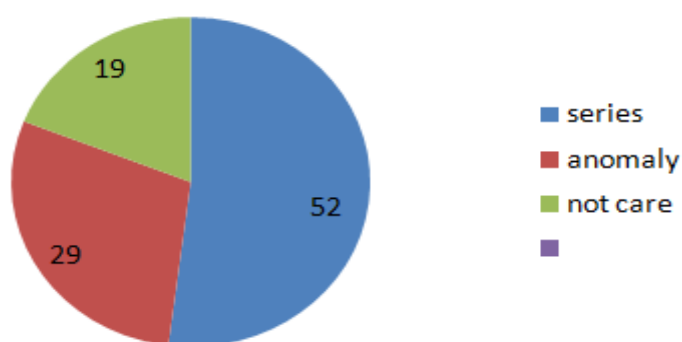


Figure 68 Pie charts and analysis of grouped and individual luminance preferences.

Source: Made by Danxi Luo, 2024

As shown in Figure. 69 to understand people's questionnaire about the set works, 52% of people preferred the design in groups; 22% preferred the individual design; 14% felt indifferent, and it was concluded from the data analysis that the set fixtures were favored by the people.

Summary of questionnaire results

By analyzing the results of the questionnaire, the following conclusions can be drawn:

1. Different age groups have different preferences for porcelain garden stool lamps and lanterns, from the data can be seen from 25 to 50 years old people like modern ceramic lamps and lanterns, so the dragon series porcelain garden stool lamps and lanterns are designed to face the 25 to 50 years old people.
2. The design of ceramic lingerie lamps and lanterns needs to consider the degree of liking of different occupations for lingerie lamps and lanterns. Through the analysis of the data, it can be seen that most of the occupations are liking the attitude of the modern ceramic lamps and lanterns.
3. Through the investigation and analysis can be seen in like modern ceramic lamps and lanterns, decorative design dragon decorative elements more popular

among the public, the most important element is that 2024 is the year of the Chinese dragon.

4. Most people think that the Dragon series porcelain garden stool lamps and lanterns shortcomings and modern decoration does not match, so the Dragon series porcelain garden stool lamps and lanterns design to be more in line with the design of the current decoration.

5. In the visual language of light and shadow for the work after the emotional impact is great, in the questionnaire survey most people like warm and warm light and shadow atmosphere, so in the design of the consideration of warm warm yellow light.

6. In the lamps and lanterns modeling, consider the geometric design to the group, and from the functional consideration of decorative and modeling aspects of the innovative design.

Therefore, the author combined the expert assessment opinions and the consumer questionnaire to form the final design sample.

Summery

The final design of the product is a successful case that combines the traditional cultural spirit with the modern design concept. In terms of customer needs and market adaptability, the design process takes into account the preferences of people of different ages and occupations for modern ceramic lamps, especially the age group of 25 to 50 years old, showing a preference for modern design lamps. This is reflected in the final product, through the adoption of design elements that conform to the modern aesthetic and finishing style, such as clean lines and modern geometric shapes. In terms of cultural values and traditional elements, respect for traditional ceramic craftsmanship is fully reflected in the final design, especially in the selection of flame patterns and dragon year elements as the main design motivation. The design is not just a formal tribute, but a deep integration of these traditional elements both in function and form. In terms of aesthetic and functional balance, the final product is designed to show a good sense of aesthetics and practicality, such as the use of warm yellow lighting, in line with most consumers' pursuit of a warm home atmosphere. In addition, taking into account the geometric shape of the group design, both increase the visual appeal, but also enhance the functionality of the product. In terms of design innovation, the author adopted the advice of experts and carried out the necessary innovation and improvement, such as improving the coordination of light Source and ceramic texture, and adding modern design elements and thinking while maintaining traditional elements. In terms of artistic expression and emotional transmission, the design focuses on deeper artistic expression, and conveys rich emotions and meanings through the collocation of colors, shapes and textures. The final products are not just lighting tools, they are works of art, with the ability to convey beauty and emotion. Each piece not only shows the traditional aesthetics of porcelain, but also conforms to

the actual needs and aesthetic tastes of modern consumers, reflecting the designer's deep understanding and respect for materials, culture and consumer needs. The following is the final sketch that the author combined with all the comments Figure.70. Figure.71. Figure.72



Figure 69 Rough sketch1
Source: Photography by Danxi Luo, 2024



Figure 70 Rough sketch2
Source: Photography by Danxi Luo, 2024



Figure 71 Rough sketch3
Source: Photography by Danxi Luo, 2024

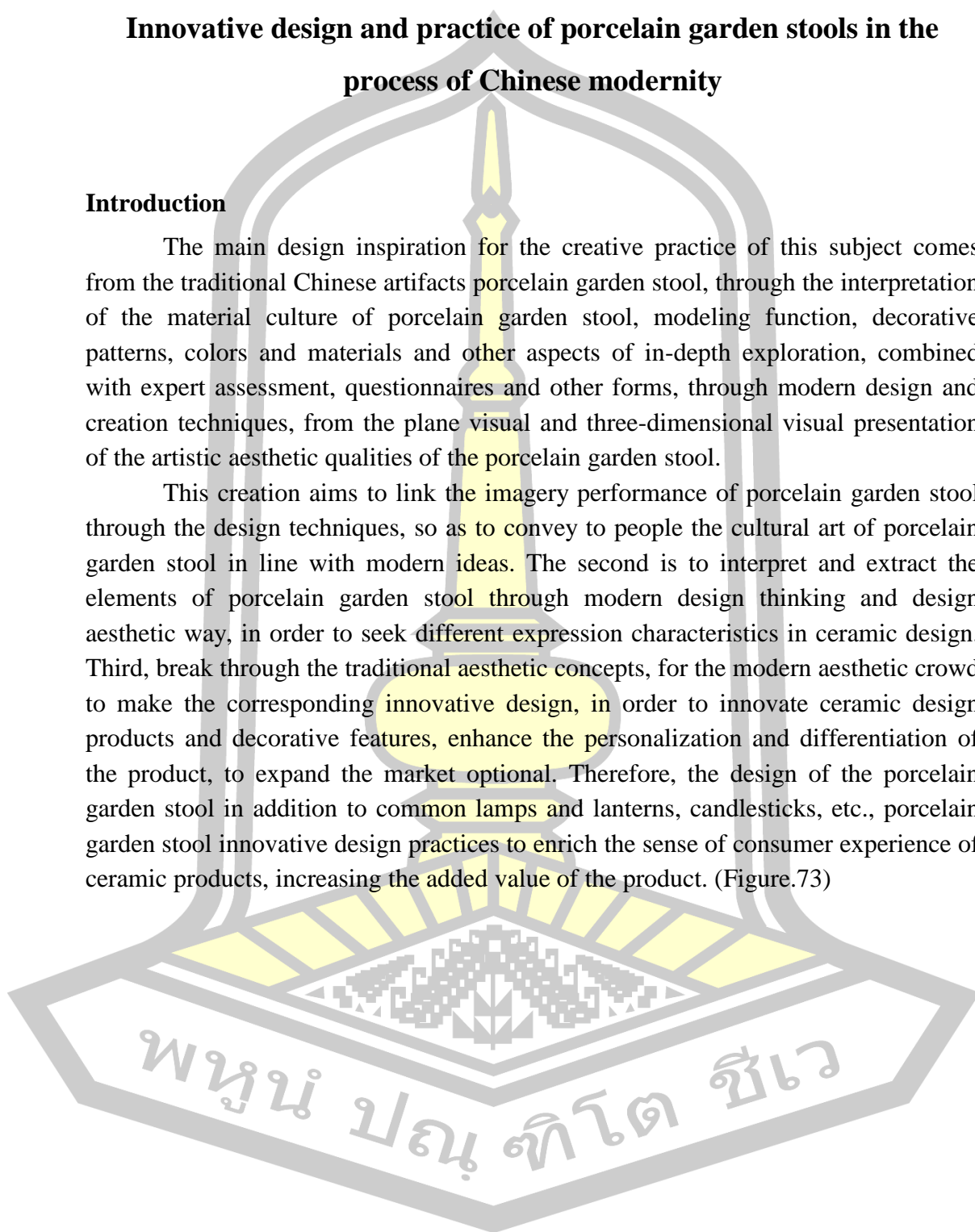
Chapter IV

Innovative design and practice of porcelain garden stools in the process of Chinese modernity

Introduction

The main design inspiration for the creative practice of this subject comes from the traditional Chinese artifacts porcelain garden stool, through the interpretation of the material culture of porcelain garden stool, modeling function, decorative patterns, colors and materials and other aspects of in-depth exploration, combined with expert assessment, questionnaires and other forms, through modern design and creation techniques, from the plane visual and three-dimensional visual presentation of the artistic aesthetic qualities of the porcelain garden stool.

This creation aims to link the imagery performance of porcelain garden stool through the design techniques, so as to convey to people the cultural art of porcelain garden stool in line with modern ideas. The second is to interpret and extract the elements of porcelain garden stool through modern design thinking and design aesthetic way, in order to seek different expression characteristics in ceramic design. Third, break through the traditional aesthetic concepts, for the modern aesthetic crowd to make the corresponding innovative design, in order to innovate ceramic design products and decorative features, enhance the personalization and differentiation of the product, to expand the market optional. Therefore, the design of the porcelain garden stool in addition to common lamps and lanterns, candlesticks, etc., porcelain garden stool innovative design practices to enrich the sense of consumer experience of ceramic products, increasing the added value of the product. (Figure.73)



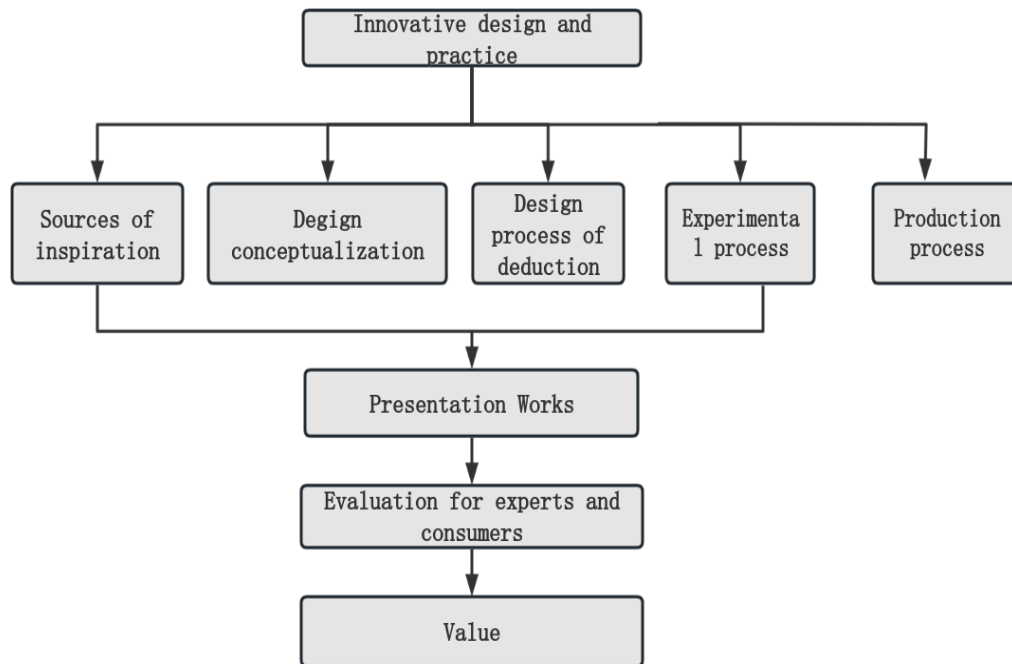


Figure 72 The process of innovation
Source: Photography by Danxi Luo, 2024

1.Series of works "The Fragmented Porcelain Garden stool"

Sources of inspiration

In today's society, with the modern people's aesthetics and values of the changes in the appreciation of art is gradually improved, so that the contemporary artists on the study of art, better than in any previous era, especially on the traditional arts in the discovery of the beauty of the technology to enhance the new perspective of the ceramic dun, like an undeveloped diamond, waiting for people to polish and carve out a scene of its stunning. In the current design trend, we can see that if a work with traditional cultural design traces, then it will inevitably attract the attention of most people, and familiar with the traditional elements of the group's favor, at the same time there will be a good publicity effect of traditional culture, which is in most of the world's markets have cases, not to name a few. But it is worth noting that, in the eyes of people in different countries and regions, the significance of some traditional culture is not the same, for example, the crow is an inauspicious symbol in China, but in Japan is considered to be a good-luck bird, so in the traditional culture, looking for a good meaning of the culture that all people can accept, is a big project, and the porcelain garden stool is the same, it is a symbol of traditional ceramic culture that meets the general public's aesthetics, and at the same time, it represents the Chinese culture. It is a symbol of traditional Chinese ceramic culture.

In this era of pursuing innovation and individual expression, the design concept of Fragmented Porcelain Garden stool is a profound embodiment of the fusion of traditional and modern aesthetics. This design is not only an attempt to revolutionize the material, but also a reinterpretation and creation of the meaning of traditional culture. Just as the modern society's ability to appreciate art improves, people are eager to find new ideas in traditional art, the fragmented porcelain garden stool is like a diamond that has been re-sculpted, waiting to be re-recognized by the world with a new perspective.

In designing such a porcelain garden stool, we are not only innovating in physical form, but also searching for a resonance that can transcend culture and time. By making fragmentation the core of the design, we not only express philosophical reflections on the fragility of life, but also map the breaks and rebuilds in life experiences. Each fragment carries a unique story and emotion, and when they are put back together, they not only reshape the form of the garden stool, but also give it a whole new life and meaning.

The design of the fragmented ceramic garden stool also reflects the deep respect and cherishing of traditional culture. When selecting the patterns and colors of the fragments, we studied the essence of traditional Chinese ceramic art in depth, drew inspiration from it, and chose those elements that can represent the aesthetics of Chinese culture, such as landscapes, birds and flowers, dragons and phoenixes, and other traditional patterns, and then re-deconstructed and combined them by means of modern design techniques, so that each piece of artwork can become a bridge of cross-cultural communication, and be not only loved by the Chinese audience, but also be understood and appreciated by people from all over the world. And appreciated by people all over the world.

In addition, by utilizing modern technology and new materials, we are able to achieve a perfect balance between practicality and artistry with our fragmented porcelain garden stools. The use of high strength bonding technology ensures that the combination between the fragments is both strong and beautiful, and at the same time, through the unique treatment of light, the porcelain garden stool is not only a lighting tool, but also a piece of art that can change the atmosphere of the space.

In the context of globalization, the design concept of fragmented porcelain garden stool echoes the modern society's demand for cultural diversity and individual expression, which is not only an innovative exploration of traditional ceramic art, but also a profound reflection on modern design concepts. Through this design, we can not only let the world see the modern charm of traditional Chinese culture, but also inspire people's infinite imagination for the possibility of fusion of tradition and modernity.

Design conceptualization

In design, products with simple shapes tend to be more appealing to the human eye. This is due to the fact that when human vision comes into contact with an object, it will habitually divide the object into roughly several pieces according to its structure first, and then pay attention to the details later. On the other hand, simplified shapes will have more containment, symbolism and meaning, which can give people more space for imagination. The more abstract the shape, the more diversified, can resonate with a wider range of people, but also more likely to stimulate people's thinking and emotional echo. So in the design of the series of ceramic lamps, first of all, the shape of porcelain garden stool generalization, simplification. Mainly retain its soft curved features, to fragmentation of splicing way to be expressed. The main part of the lamp along the curve of the body towards the irregular gaps, to strengthen the sense of the curve of the lamp, increase the texture of the virtual space decorative. These gaps not only play a decorative role but also increase the light diffusion of the lamps, the light through these gaps presents a scattered fan light spot surface, increasing the luminosity of the lamps. When the light Source is not turned on, these gaps give the lamps an inward-looking sense of depth, arousing people's desire to explore the inside and evoking a sense of yearning for closeness to the heart, while when the light Source is turned on, the warm light is dispersed outward through the gaps, bringing more warmth to the people. In the decorative color of the pattern, bright warm colors are used to strengthen the visual warmth and closeness, and the color texture is kept clear to cater for the lightness of the lampshade body.

In terms of production, the molding method using billet molding method, this molding method can ensure that the lamps and lanterns shape of the regularity, the later through the billet makes the production of the blank can also be lighter and thinner, lighter transmittance, to increase the overall light of the lampshade of the aesthetic level. In terms of material selection, the clay is made of high white porcelain clay with relatively high light transmittance, and the firing is done in a medium temperature kiln at 1260°C, so that the finished porcelain is warm and white in color, which is more in line with the warmth of the design direction. The main body of the lamp is decorated with under-glaze blue and under-glaze pastel, the color is more translucent and softer, the visual feeling is fresher and brighter and the color is soft. In the pattern design, the dragon pattern also represents the pattern identity of the porcelain garden stool. The design of the fragmented porcelain garden stool with the dragon pattern as the Source of inspiration has a special significance of the era. The dragon, as a traditional symbol of strength, dignity, mystery, authority and good luck in Chinese culture. The image of the dragon is reconstructed through the technique of fragmentation and irregular splicing. Through irregular splicing, the letters of the alphabet can be creatively rendered, each with a unique symbolic meaning: a for

Authority, m for Mysterious, d for Dignity, s for Strength, and l for Lucky. This innovative design technique makes the traditional dragon pattern more dynamic and vivid, and the integration of each letter further enriches its connotation. By skillfully breaking down and reorganizing the dragon's form, each letter of the alphabet can be designed to relate to one of the dragon's characteristics. These letters are not only expressions of words, they are also a bridge connecting ancient wisdom and modern creativity. The fragmented patchwork allows the traditional dragon pattern to be presented in a new visual language, and they represent respect for traditional Chinese culture and hope for the future. This design method not only injects modern meaning into the traditional object of porcelain garden stool, but also gives it a deep humanistic concern. It is not only a tool for lighting, but also a carrier for personalized expression and cultural transmission, telling stories and conveying emotions through design, and becoming a bridge linking tradition and modernity. Each luminaire not only represents an enjoyment of beauty, but also becomes a meaningful dialog in personal space, they are interpreters of culture and products of modern design thinking. Through this design, each Porcelain Garden stool Lamp is no longer just a Source of light, but becomes an artifact that tells a story, conveying strength, dignity, mystery, authority and good fortune. While they illuminate the space, they also illuminate an understanding of cultural heritage and future outlook. This design not only appeals to those groups familiar with traditional elements, but also stimulates the interest of a wider audience, serving as a medium of cross-cultural exchange and allowing Chinese dragon culture to shine on the world stage in a new light.

The application scenario of this luminaire is defined on a table in a home environment with a height of between 60cm and 80cm, so that the height of the luminaire placement is basically equal to the perspective of a person sitting. Such a luminaire can be used in a home environment as a unique decorative piece, placed in the center of the living room or study angle, not only to provide warm light, but also to add the artistic atmosphere of the home. Or in hotel lobbies, fine restaurants, boutiques or corporate reception areas, this beautifully designed porcelain garden stool can serve as an elegant focal point, demonstrating the company's emphasis on traditional culture and modern aesthetics. Or for traditional festivals such as Chinese New Year, Dragon Boat Festival, or when organizing events with a traditional Chinese theme, such porcelain garden stools can be used as part of the venue decoration to enhance the cultural atmosphere of the festival or event. In these different scenarios, its own shape, color combined with the use of other materials, color and texture, so that it gives the user to a great extent to create a pleasant atmosphere, so that the user in its role to relax themselves and return to life. Fragmented porcelain garden stool is not only a physical existence, it is also a cultural symbol, a storyteller, and a bridge connecting the past, present and future.

This series of works adopts the technique of grouting molding. The whole series of lamps includes 5 pieces, the dimensions of which are respectively 20cm in diameter and 20cm in height, 19cm* 22cm in diameter, 20cm* 18cm in diameter, 20cm* 22cm in diameter and 20cm* 20cm in diameter.

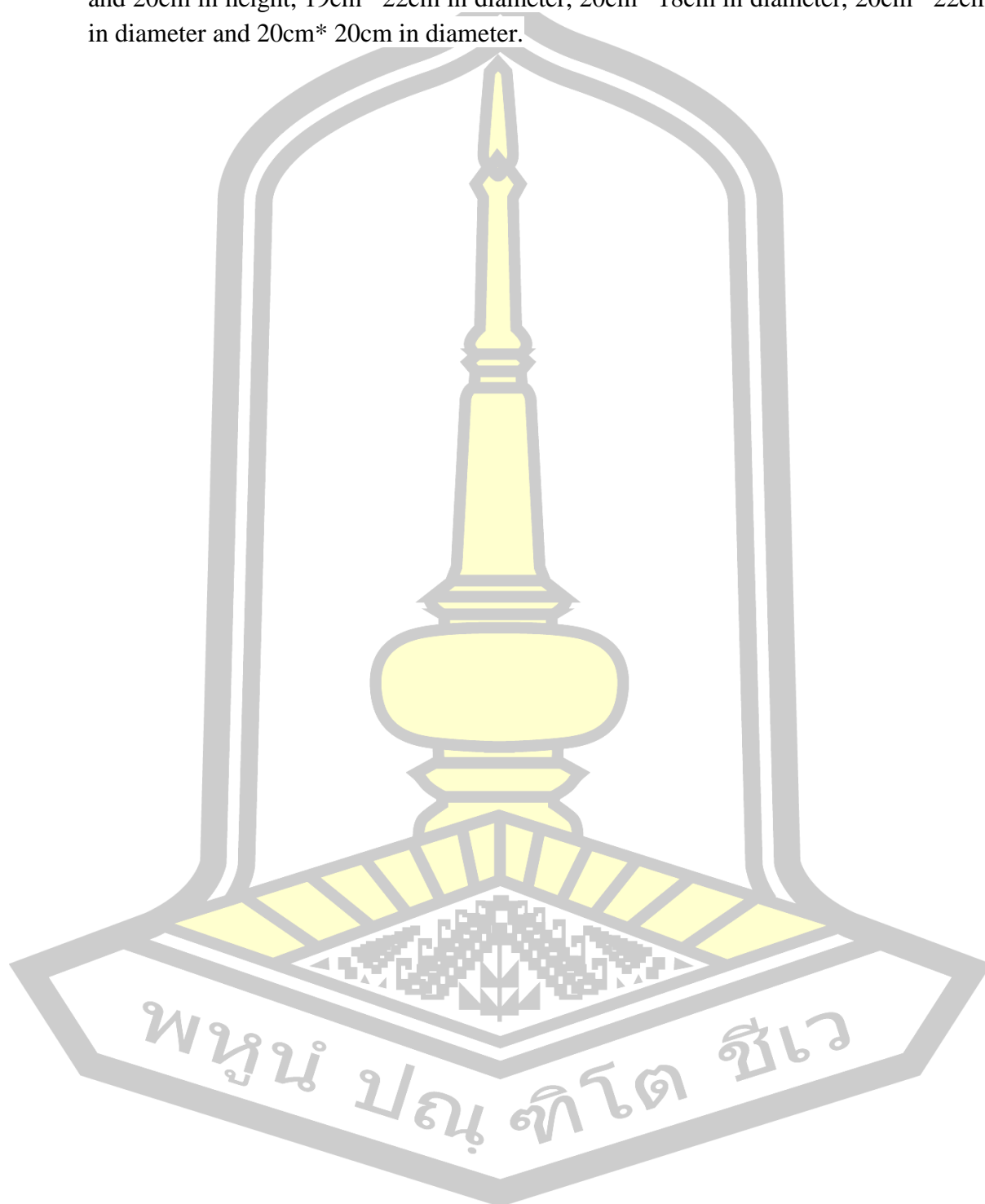


Table 11 Design Process Deduction
Source: *Photography by Danxi Luo, 2024*





	Traditional Identity	Innovation Identity
Pattern	<div><p>Dragon Pattern</p></div>	<div><p>Through the innovative design of the pattern decoration in the traditional identity of the porcelain garden stool, the traditional pattern of the porcelain garden stool is extracted and designed as an English character representing the symbolic meaning of the dragon, and the pattern of my five lamps is formed: A stands for Authority, D for Dignity, L for Lucky, S for Strength, M for Mysterious.</p></div>
Technique	<div><p>Grouting technology</p></div>	<div><p>The original production process of porcelain garden stool is changed, but the modern splicing process is used to combine the original shattered body through high strength bonding technology.</p></div>



Figure 73 Material innovation experiment
Source: Photography by Danxi Luo, 2024

In order to highlight the addition of modern elements in the traditional porcelain garden stool, the author by trying to mix the paper into the clay(Figure. 74, the curiosity and experimentation of different material properties, the lightness of the paper and ceramic solid in the texture of the formation of a contrast, the use of materials fusion and other creative techniques, in the process of making the fiber materials, newspapers, toilet paper and some waste paper broken up and made of pulp with water and add it to the mud inside the mud can increase the toughness of the mud. Will make a good piece of clay after 1280 degrees high temperature firing, with a cutting machine to re-cut into pieces of different forms, and spliced together to form a new shape, in the final firing process after the paper burned out not only to reduce the weight of the blank, the residual traces and texture of the same wonder, light and soft paper and hard ceramic materials are combined together to very well demonstrate the ceramic art of the compatible and inclusive texture. Texture. However, because the effect envisioned is a patchwork of fragments, and the addition of Paarden stool-mâché would be easily broken and unsupportable, other considerations are being made.

Experiments on fragmentation effects




Figure 74 Fragmentation attempt
Source: Photography by Danxi Luo, 2024



At first, I wanted to collect ceramic fragments (Figure. 75) in the ceramic waste ground for splicing, and then found that the fundamental three-dimensional shape of the garden stool, small fragments are difficult to fix, especially the drum body has a curvature of the place, only suitable for flat fragments of splicing, so gave up the idea. I thought of the billet broken, and then spliced, but after the billet, more powder, in the firing process, most of the deformation will occur. Production process (Table 13)



Process Consideration Stage: When the design is finalized, we will discuss with the tutor, the mold master, and the mold master to determine the feasibility of the process and then proceed with the production. We will make new discussions and changes on the problems that appear in the post-production process, so as to make the design successfully present the final design effect.



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Figure 75 Production process
Source: Photography by Danxi Luo, 2024

Production process		Step description
Mold making		Mark the highest point on the mold to avoid the situation that the mold cannot be taken out later, and then fix it by filling mud and smooth the surface to facilitate the later turning. After filling mud, use a glass plate or smooth template to shield the surrounding area, fix it with a belt or binding, and then apply release agent to the surface of the mold. After the gypsum slurry is roughly formed, the baffle and mud are removed, and the mold surface and mud contact surface are trimmed.
Slip casting		Before grouting, the inside of the mold is cleaned by air gun, and then the mold is grouting on the spinning machine. In the process of grouting molding, the mud should be supplemented in time to observe the slurry suction of the gypsum mold and judge the thickness of the billet. After the thickness is suitable, the excess mud in the mold is poured out, and then the mold is inverted to make the excess mud in the body flow out. To avoid the situation of too thick at the bottom, after the mud is poured out and the mold is placed for a period of time, the blank will appear natural shrinkage and detachment, at this time the mold will be disassembled, you can take out the blank body.

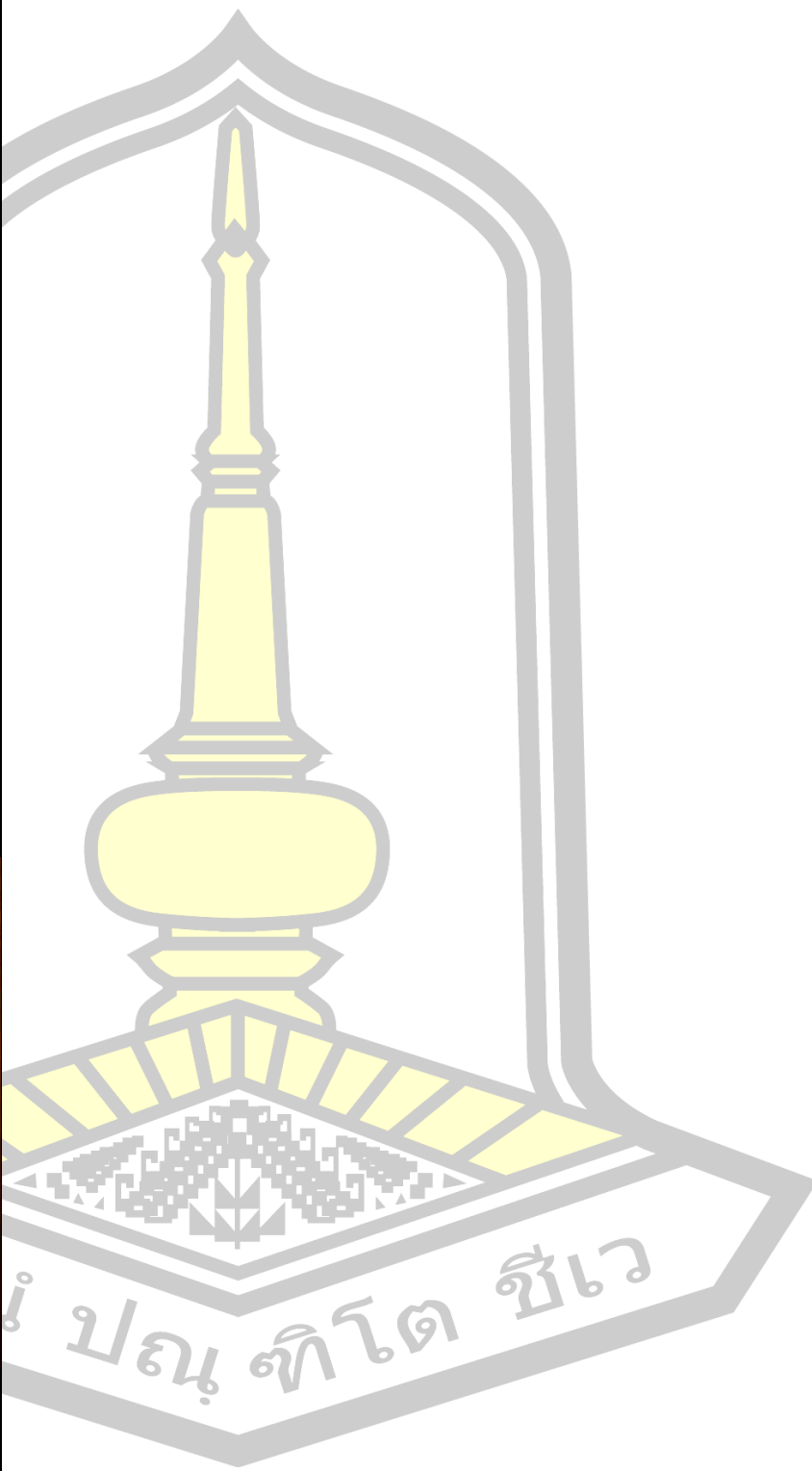
Trimming			<p>After the blank body is taken out by grouting molding, the grouting mouth is cut or the shape of the blank body is predetermined cut in the semi-dry state, and then the surface details are trimmed, such as the mud gaps left in the mold grouting, etc., to complete the repair of the blank.</p>
Engrave			<p>The effect of light transmission can be achieved by carving a gap in the blank body. However, because the lamp production is a thin tire, there will be the possibility of fragmentation in the process of engraving and firing.</p>

<p>Fire</p>		<p>At the end of the glaze spraying, the first half of the design is completed, and the rest is left to the kiln to decide. It should be noted that due to the use of new materials, it is also predictable that there will be fragmentation. Sure enough, at the high temperature of 1280 degrees, when the items were finally removed, the cooling was too fast when leaving the kiln, resulting in the body cracking.</p>	<p>After the kiln is opened, the works are broken, which is also echoing the original intention of fragmentation. The author tries to splice the broken porcelain and has achieved the decorative effect.</p>
<p>Splice</p>			

<p>Colored drawing</p>			<p>The works adopt the decorative techniques of over-glaze and under-glaze painting. Since the fragmented porcelain garden stool lamps are broken after they are made into porcelain, this series of works adopts the process of decal on glaze.</p>
<p>Base making</p>			<p>The base consists of one large and one small shaped acrylic sheet stack into the acrylic sheet. The ground surface of the stick round ball, easy light go line, can also increase the bottom level of sea.</p>



The finished
product



Presentation of works (Figure. 76、Figure. 77、Figure. 78、Figure. 79)



Figure 76 "The Fragmented Porcelain Garden stool" final work
Source: Photography by Danxi Luo, 2024

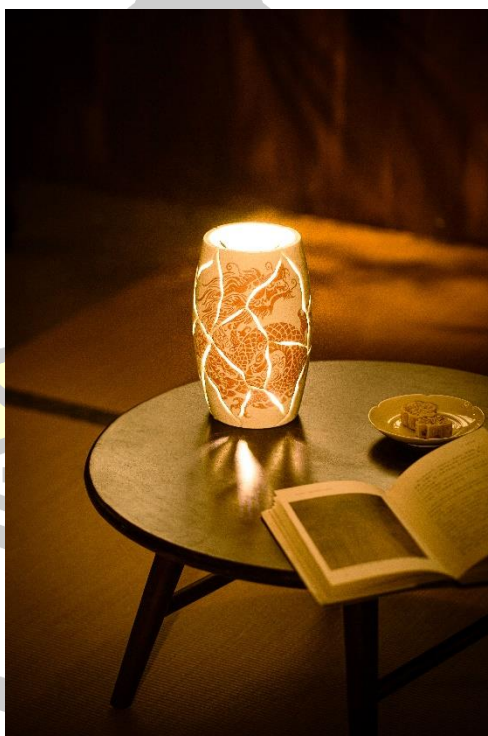


Figure 77 "The Fragmented Porcelain Garden stool" detail picture
Source: Photography by Danxi Luo, 2024



Figure 78 "The Fragmented Porcelain Garden stool" detail picture
Source: Photography by Danxi Luo, 2024



Figure 79 "The Fragmented Porcelain Garden stool" detail picture
Source: Photography by Danxi Luo, 2024

2.Series of works "Half of a Porcelain Garden stool Lamp"

Sources of inspiration

When potters make large ceramic objects, they use the process of half-grouting, after which the two halves are bonded together to form a complete porcelain vessel. And the work because of the small size, can be made by pulling the billet, however, this creation is not in the porcelain garden stool for bonding, but will be designed into two independent half, the purpose is to make the traditional grouting process through the design of the two halves of the part of the visual, the user can intuitively see and appreciate each detail, and will be divided into two halves of the garden stool, each half of the part of the independent of the decorative and functional. The internal space can be utilized to place lamps and other devices, not only as lighting equipment, but also as interior decoration to add artistic flavor, thus giving new functions and life to traditional objects. Through a deep understanding of this traditional technology, it is transformed into a creative design approach, combining traditional techniques with modern design concepts, giving new life to old craftsmanship, and creating lamps with a traditional flavor without losing a sense of modernity. The whole design aims to break through the boundaries between tradition and modernity, creating an object that is both practical and able to touch the emotions. Through this design, every user will be able to feel the charm of traditional craftsmanship and appreciate the sophistication of modern design in their daily use.

Design conceptualization

In designing the piece, the classic shape of the porcelain garden stool was used, retaining its iconic curves and silhouette, a design that not only pays homage to tradition, but also adds a touch of classical beauty to the modern home. While retaining the traditional look of the porcelain garden stool, it has been modernized for functionality. The fixture's built-in lighting is designed to provide a warm and soft light, creating a serene and comfortable home environment.

In terms of production, the molding method adopts billet molding, which can ensure the regularity of the shape of the work, and later on, through the vertical billet makes the blanks produced lighter and thinner, with stronger light transmittance, which increases the overall light of the lampshade aesthetic level. In terms of material selection, we choose high white porcelain clay with relatively high light transmittance, and use medium temperature kiln⁴⁰ at 1260°C for firing, so that the finished porcelain is warm white in color, which is more suitable for the design of warmth.

⁴⁰ A medium temperature kiln is a type of kiln used in ceramics and pottery to fire objects at medium temperature ranges, typically between 1100°C to 1200°C (2012°F to 2192°F). This temperature range is often associated with the firing of earthenware and some types of stoneware, as well as certain glazes that mature at these temperatures.

In terms of pattern design, it still follows the dragon pattern in the pattern identity of the porcelain garden stool, on the one hand, in the mouth edge of the garden stool, carved with the flame pattern, and in the body of the garden stool using the technique of relief carving, carved with the dragon and phoenix pattern. The dragon usually represents yang (male, strength, good luck), while the phoenix represents yin (female, beauty, nobility). This design can symbolize the balance and unity of the two. The flame is a symbol of change and regeneration, while the dragon and phoenix represent vitality and reproduction. The design of this lamp may symbolize continuous vitality and new beginnings. The dynamic form of the flame and the mysterious fusion of the dragon and phoenix may be inspired by the power of the elements in nature, especially the dual nature of fire to destroy and create. By transforming traditional symbols and shapes into contemporary lamps with a modern twist, this design not only pays homage to traditional culture, but also brings the traditional art form into the modern home.

In terms of decorative techniques, the use of the Linglong craft⁴¹, the purpose is to make the dragon and phoenix pattern from the plane "jump out"⁴², giving it a sense of three-dimensionality and depth, creating a more vivid visual effect. Compared with other decorative techniques, such as painting or appliqué, relief carving in ceramics is more durable, because the pattern is molded with the porcelain, not easy to fall off or wear. The use of relief techniques to show the dragon and phoenix pattern can enhance the artistry, cultural value and practicality of the work, making it not only a practical product, but also a work of art that can pass on culture and touch people's hearts.

In the color scheme, yellow and green lights were used respectively. Yellow has traditionally been regarded as the color of royalty and nobility, and is closely linked to the dragon as a symbol of power and empire. The yellow lighting reflects the dragon's honorable status and connection to royalty, while yellow is also a symbol of noble status, power and wisdom. The color green is often associated with nature, harmony and balance, and echoes the beauty, grace and feminine power represented by the phoenix. Green lighting may be used to emphasize the vibrancy and resilience of the phoenix motif, as well as its harmonious symbiosis with nature. The use of this color may also be intended to enhance the contemporary feel of the design, emphasizing the uniqueness of each porcelain garden stool through color contrast, while providing a unique visual experience and emotional expression.

41 Linglong craft is a traditional Chinese ceramic making technique characterized by the creation of fine hollowed-out effects on ceramic objects to create a visual impression of transparency or translucency. This process requires extremely high manual skills and precise temperature control to ensure the precision and integrity of the ceramics during the production process.

42 Divergence from Norms:

Application scenarios for this luminaire can be used as a decorative fixture in a living room, bedroom or den, providing warm ambient lighting while becoming a focal point for conversation. Meanwhile, in meditation and yoga centers, where green and yellow light is believed to aid in relaxation and meditation, these fixtures can be used to create a serene and calm environment. Designed to be more than just a lighting fixture, this fixture is a medium of cultural communication that can be used in a variety of environments and add unique style and ambiance.



This series of works adopts the technique of drawing forming. The whole series of lamps includes 2 pieces, the dimensions of which are respectively 20cm in diameter and 22cm in height.

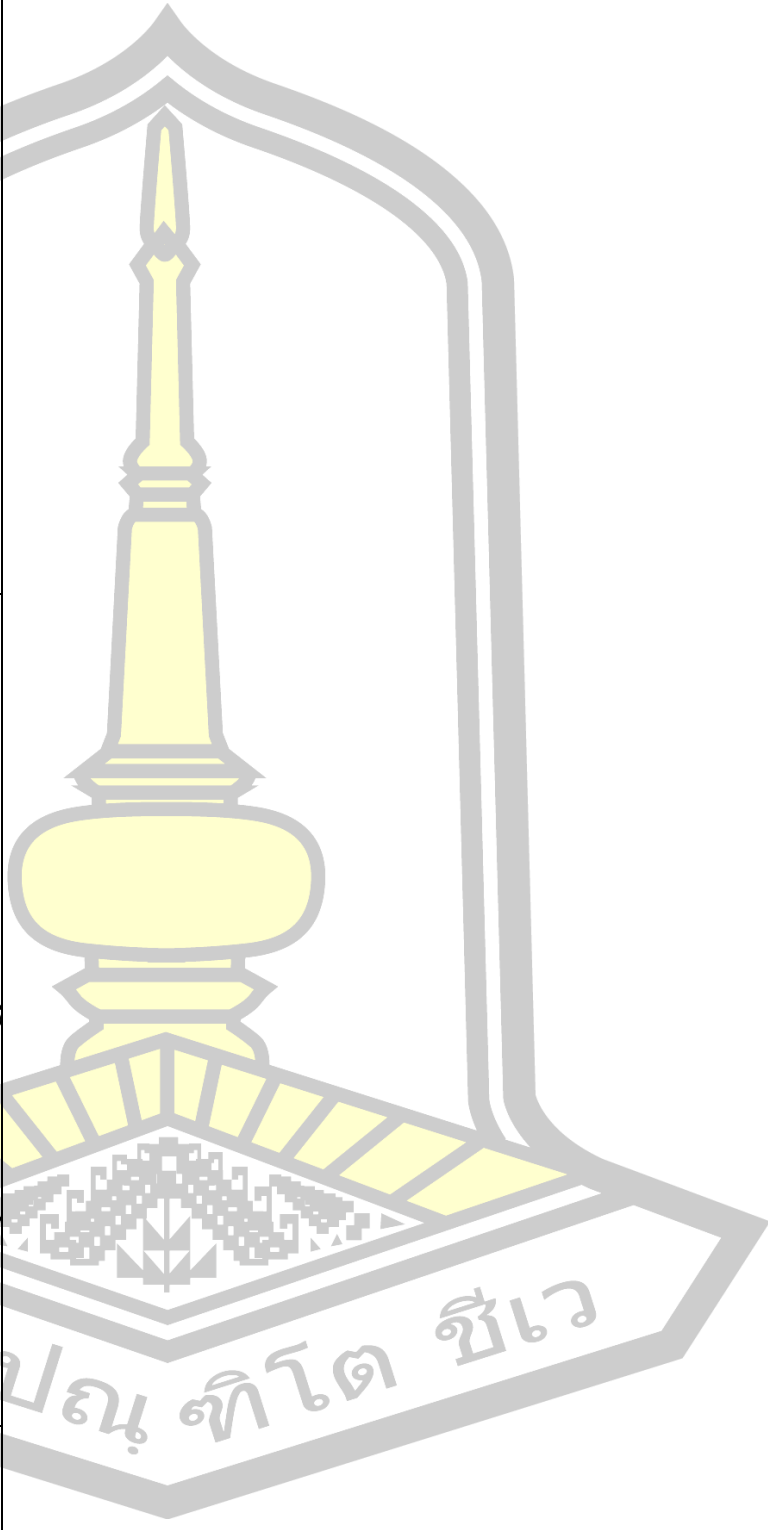


Design Process Deduction (Table 14)

Table 12 Design Process Deduction
Source: Photography by Danxi Luo, 2024

	Traditional	Innovation
Technique	 <p>Split grouting</p>	 <p>Through the design of the two halves, the traditional grouting process becomes a visible part, and the user can intuitively appreciate every detail, and the porcelain garden stool is divided into two halves, each half is independently decorative and functional, and the internal space can be used to place lamps and other devices.</p>
Pattern	 <p>Dragon and phoenix pattern</p>	 <p>In the pattern, dragon and phoenix pattern for simple and modern design.</p>


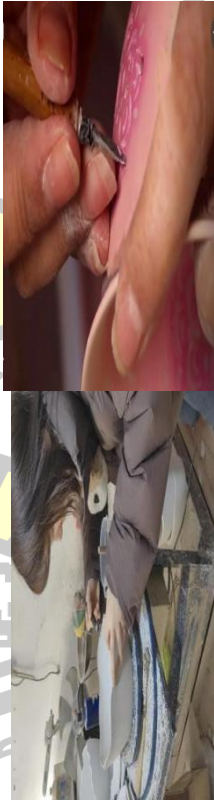
<p>Decoration</p>		<p>Traditional exquisite technology</p>	 <p>In the light body using modern exquisite technology, through the light to give its three-dimensional sense and depth.</p>
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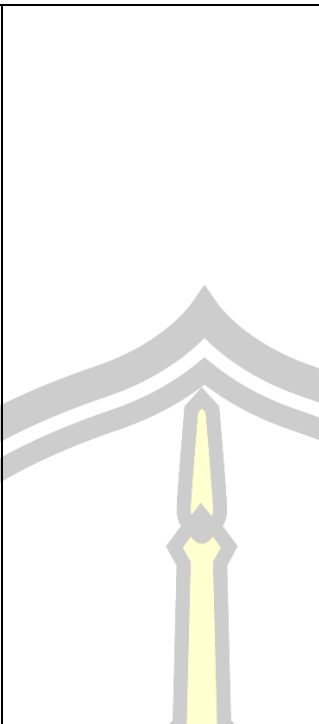


Production process (Table 14)

Table 13 Production process

Source: Photography by Danxi Luo, 2024

Production process		Step description
Drawing		<p>Pull the blank on the turntable according to the designed size, and the shape and size should be as consistent as possible with the design. When pulling the billet, the proportional shrinkage after firing should be taken into account.</p>
Engrave		<p>Wait for the blank to dry slightly before carving. First lightly sketch an outline, and then begin to carve the dragon and phoenix pattern. Since the billets used are already dried, the billets are relatively hard and difficult to carve details. At the same time, we should also pay attention to the strength of engraving, improper force will lead to damage to the body.</p>

Glazing			With a special Linglong glaze.
The finished product			

Presentation of works



Figure 80 "Half of a Porcelain Garden stool Lamp" final work

Source: Photography by Danxi Luo, 2024



Figure 81 "Half of a Porcelain Garden stool Lamp" detail picture

Source: Photography by Danxi Luo, 2024



Figure 82 "Half of a Porcelain Garden stool Lamp" detail picture

Source: Photography by Danxi Luo, 2024

3. Series of Works "Flame Candlestick Aromatherapy"

Sources of inspiration

The design takes elements from the traditional porcelain garden stool and applies its flame pattern to the design of the candlestick. This is an innovative way of combining traditional craftsmanship with modern home decoration. In this way, the traditional pattern of the porcelain garden stool is given a new life and function.

In each of these candlesticks, the flame-like pattern and the use of warm colors, coupled with the light Source, creates an effect that resembles a real flame. The flame pattern is not only visually decorative, but also combines with the actual flame (candle light) to create a dynamic visual effect. This design makes full use of the translucent nature of the material, and when the candles are lit inside, the pattern of the candlestick becomes even more vivid, as if the flames are jumping. This effect is enhanced by the choice of colors and the arrangement of the patterns, making each candlestick unique and expressive.

This design is not only a lighting tool, but also a piece of art that can inspire people's emotions, providing visual enjoyment while illuminating and provoking associations and thoughts about the natural element of flame. The design allows the

candlestick to be used as a decorative object to add warmth to the interior even when the candle is not lit. By innovative incorporating traditional elements, it has successfully found a new way of expression and practical scenario for the ancient porcelain garden stool culture. This design is innovative on the basis of traditional porcelain and adapts it to the needs of modern homes, which not only inherits the traditional culture, but also reflects modern aesthetics.

Design conceptualization

Based on the rich history and cultural significance of the porcelain garden stool, the author conceived a flame candle holder design that pays homage to the classical and embraces the modern. In this design, the form and pattern of the candlestick are deeply rooted in the classic elements of the porcelain garden stool, and the most iconic flame pattern is extracted, reinterpreted and integrated into the shape of the candlestick.

The base of the candlestick has the rounded form of a porcelain garden stool, the texture of which is made of delicate ceramic, and the surface is painted with traditional flame motifs. These motifs not only decorate the candlestick, but also symbolize light and warmth.

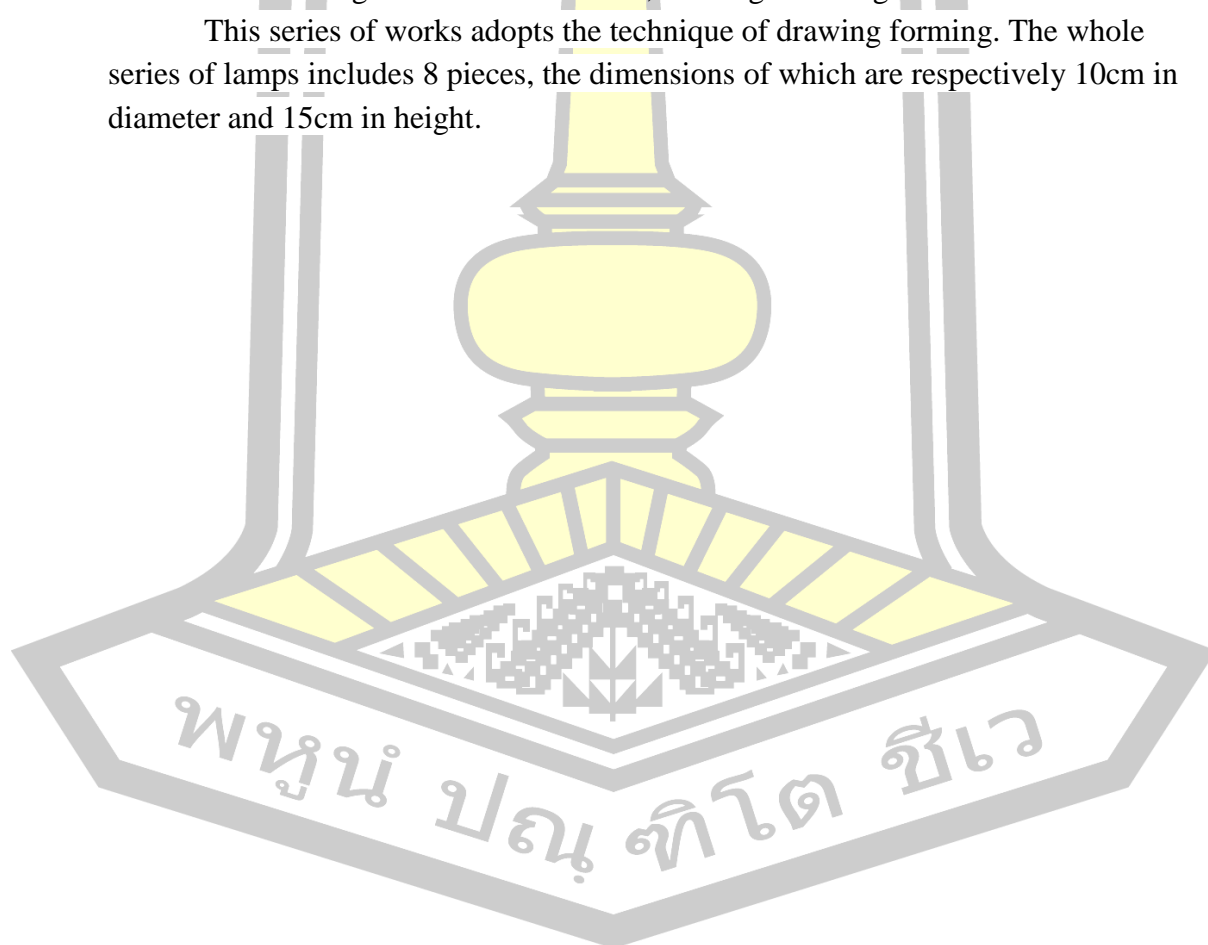
In this design, I paid special attention to retaining the original charm and spiritual core of the porcelain garden stool, while giving it a new function and modern aesthetic. For the color selection, I used a gradient from dark to light to mimic the color change of the flame from the base to the tip, which not only enhances the visual layering, but also further emphasizes the warm atmosphere of the design. With this design, every ordinary and free night becomes less ordinary as it is illuminated by the light of this candlestick. The candle at the top not only provides a clean Source of light, but also visually restores the pulsating effect of a real flame, creating an atmosphere where classic meets modern. This design is not just for illumination, but also for users to find a touch of classical solace in their busy modern lives, so that everyone's home can be lit with a traditional warmth.

In the choice of production materials, the choice of medium white porcelain clay, this clay in the medium temperature kiln in the firing of the texture of the warm and delicate, glazed into the surface of the porcelain is fine particles to the touch, reminiscent of the light and hazy moonlight. In the molding method, take the mold molding method. This ensures that the ceramic base has a regular shape, while also making the base lighter and easier to use on a daily basis. The decorative color of the ceramic base adopts low saturation, low brightness, with high-grade gray tone as the main color presentation of the Morandi color system, mainly selected pink, green, blue, yellow, purple five color elements. Different colors can convey different emotional experience and psychological feeling to people, and can also be reconciled with each other to create a different color atmosphere. Such as fresh and elegant light green, rich in natural vitality of the healing atmosphere; calm and quiet light blue,

give people a peaceful and comfortable refreshing; rubber pink warm, approachable; fog yellow bright and energetic; gray purple calm, quiet. These colors harmonize with each other, making the overall color scheme of the work present a peaceful, comfortable and warm atmosphere, visually giving people a soft and friendly effect.


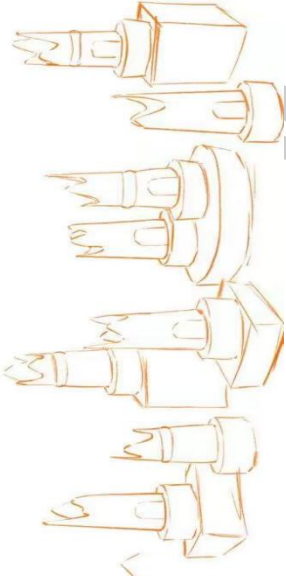
Lamp scene positioning in the bedside table or desk, it is both a toy and a lamp, the user can play with it in their leisure time, light and shadow changes, so that the spirit can be slow to relax. This interactive approach on the one hand can increase the fun of the lamps and the user's participation in the experience; on the other hand, this dynamic behavior is like home has been a lovely pet in the back and forth, to give the user a sense of companionship, such as pets, to help dissolve the loneliness of the lonely feeling when you're alone. Users control the subjective initiative of the lamps and lanterns, but also to meet the human desire to control, so that people feel solid and at ease. During the rolling process of the ceramic base, the lamp ball and the ceramic base collide with each other to make a crisp tinkling sound, like a dynamic wind chime or an evening bell in the mountains, creating a healing sense of sound.

This series of works adopts the technique of drawing forming. The whole series of lamps includes 8 pieces, the dimensions of which are respectively 10cm in diameter and 15cm in height.



Design Process Deduction (Table 16)

Table 14 Design Process Deduction
Source: Photography by Danxi Luo, 2024




Traditional		Innovation
Shape		
	<p>The flame pattern is used to complement the dragon's dynamics and energy. The dragon pattern may be designed around the entire object, while the flame pattern may appear in the form of waves, clouds or abstract figures.</p>	<p>By innovating the shape decoration in the traditional identity of the porcelain garden stool, the flame pattern of the porcelain garden stool is extracted and transformed into the flame shape with dynamic effect.</p>

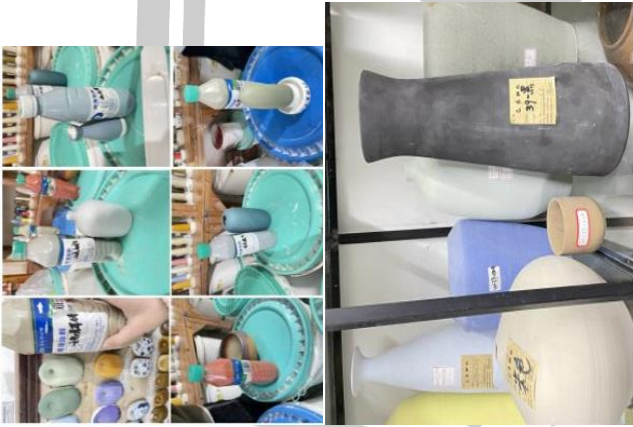

<p>Glaze Decoration</p>	<div> </div> <p>Traditional glazes include monochromatic glazes and multi-colored glazes.</p>	<div> </div> <p>The color of the glaze mimics the color change of the flame from the base to the top, from deep to light gradient, respectively trying the matte texture of dark brown, gray, bean green, mint green and other medium temperature glaze.</p>
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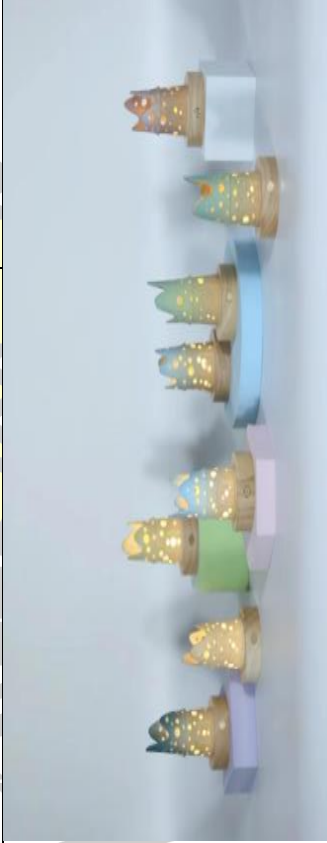
Production process

Table 15 Production process

Source: Photography by Danxi Luo, 2024

Production process		Step description
Drawing forming		Pull the blank on the turntable according to the designed size.
Trimming		After pulling the blank is completed, use the tool to fill in the imperfect place.
Punching		In order to reflect the characteristics of the dragon ball and reveal the effect of light and shadow, the holes in the main body of the flame are punched by hand.

Color test		<p>In order to pursue the multi-level effect of the final product, as well as meet the needs of a variety of groups for color. On the basis of the original design draft, the design changed and adjusted the original setting of a single-color expectation, considering that the work should try to conform to the simple and quiet characteristics of rice as a plant, the selection of matte texture of dark brown, cinnamon, gray, white, black and other medium temperature glaze as a series. And bean green, moss, stone gray, mint green, white and other medium temperature glaze for another series. Two sets of colors, giving a different visual experience.</p>
Glazing spray		<p>After the repair is completed, the body is replenished, and then it can be sprayed with glaze. The role of water is to erase the surface of the body float and sink, to facilitate the adhesion of the glaze. it was decided to use frosted glaze for spraying to increase light transmission and highlight the display effect of texture patterns. When spraying the glaze, pay attention to the amount of the bottom glaze and the fluidity of the glaze, to avoid the situation of flowing glaze or adhesion with the kiln plate in the subsequent firing process.</p>

<p>Fired into porcelain</p>		<p>At the end of the glaze spray, the first half of the design is completed, and the rest is left to the kiln to decide. It should be noted that in the process of burning to control the temperature, time and other issues, to avoid problems such as explosion, color difference and so on.</p>
<p>The finished product</p>		

Presentation of works



Figure 83 Flame Candlestick Aromatherapy"final work
Source: Photography by Danxi Luo, 2024



Figure 84"Flame Candlestick Aromatherapy"detail picture
Source: Photography by Danxi Luo, 2024



Figure 85 Flame Candlestick Aromatherapy"detail picture
Source: Photography by Danxi Luo, 2024

Show the final effect



Figure 86 The Fragmented Porcelain Garden stool"final work
Source: Photography by Danxi Luo, 2024



Figure 87 "Half of a Porcelain Garden stool Lamp" final work
Source: Photography by Danxi Luo, 2024



Figure 88 "Flame Candlestick Aromatherapy" final work
Source: Photography by Danxi Luo, 2024

The final evaluation of experts and consumers

Table 16 Product design expert

Source: Made by Danxi Luo, 2024

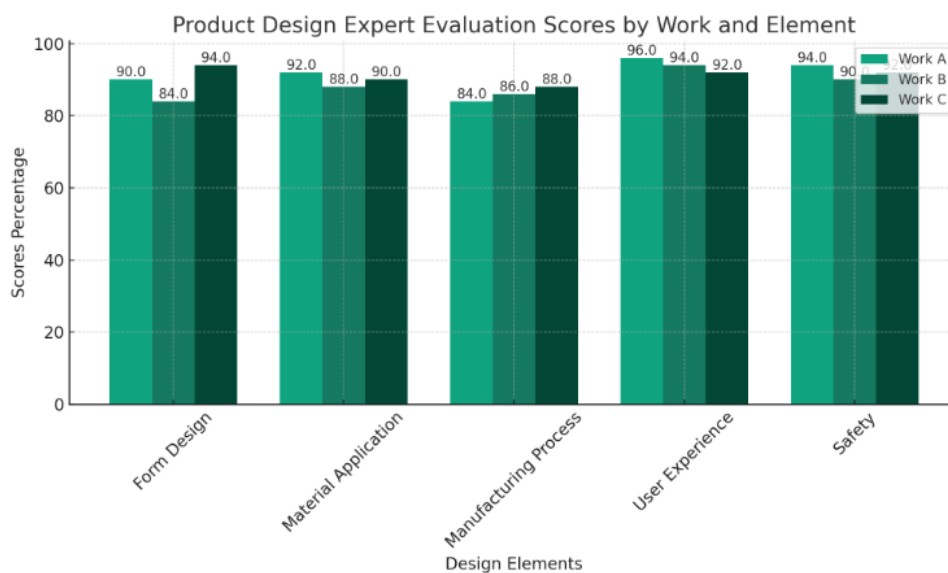


Table 17 Market Analysis Expert

Source: Made by Danxi Luo, 2024

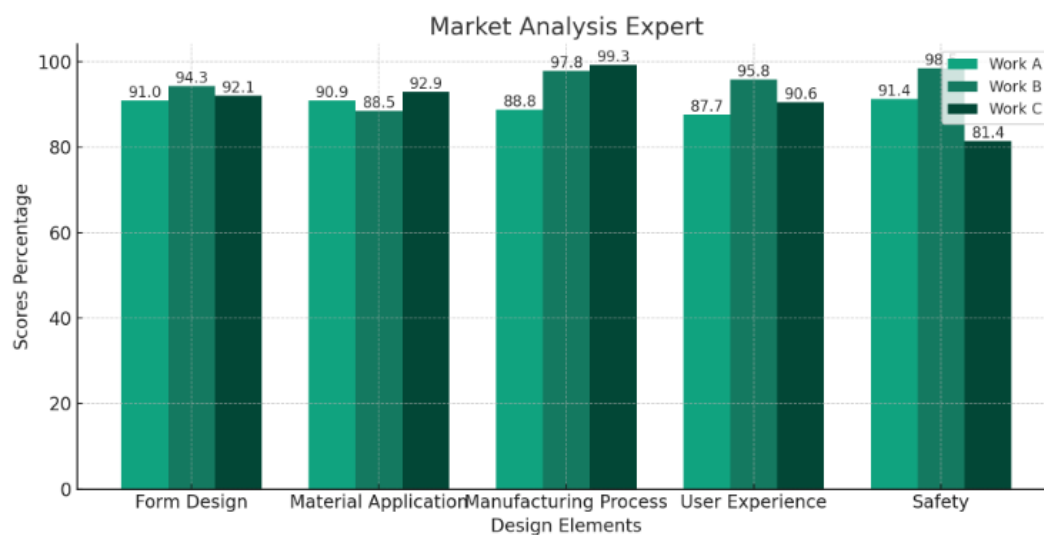


Table 18 Ceramics Design Expert

Source: Made by Danxi Luo, 2024

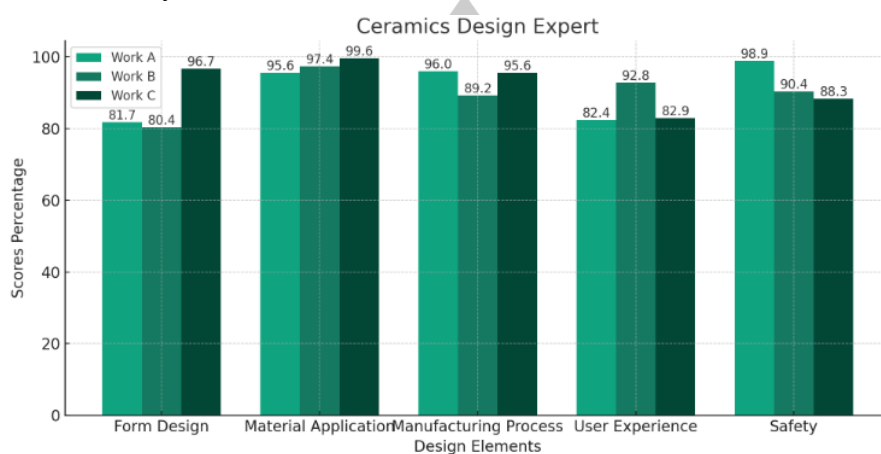


Table 19 Cultural Value Expert

Source: Made by Danxi Luo, 2024

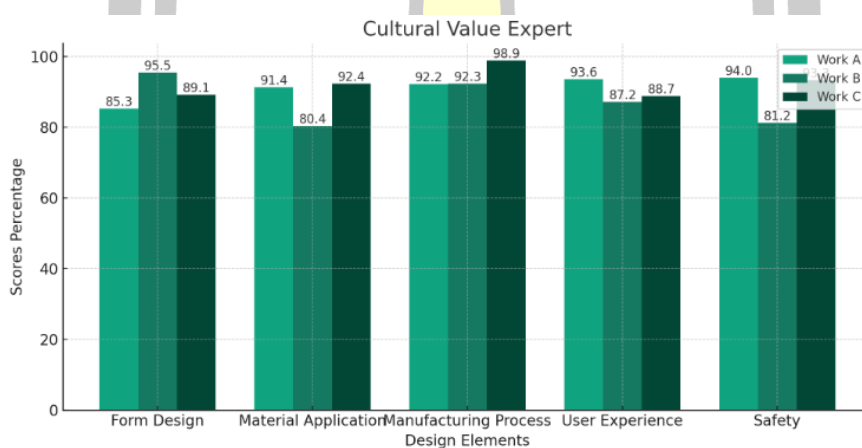


Table 20 Aesthetic Expert

Source: Made by Danxi Luo, 2024



This report synthesizes the evaluation data from five experts, who analyzed three creative works⁴³ from the perspectives of market analysis, ceramic design, cultural value, and aesthetics. The evaluation results highlight the distinct excellence of each work in different professional fields.

Market Analysis Expert: Work A received the highest ratings in user experience and safety, indicating a strong competitive advantage in the market. Work B scored highest in material application, which may reflect its use of innovative materials or technology, appealing to the market. Work C scored lower in form design, suggesting a need for further optimization to enhance market acceptance.

Ceramics Design Expert: Work A obtained high marks in the manufacturing process, which might mean that its design is easily realizable and cost-effective to produced, and it can show the shape and technique identity of porcelain garden stool, and Work C excelled in material application and safety, showing a design that balances practicality with safety, and it can be seen the pattern identity of porcelain garden stool.

Cultural Value Expert: All works received relatively balanced high scores in cultural value, showing the designers' success in integrating cultural elements. Work B's high score in material application may indicate a successful blend of tradition with modernity.

Aesthetic Expert: Work A and Work C achieved high aesthetic design scores, indicating their visual appeal. Work B, while performing well in other areas, scored slightly lower in form design and may need further aesthetic enhancement.

Product design expert: Work A demonstrates a deep understanding of a specific consumer segment, with its design and functionality meeting the specific needs of this market segment. Work B appears to have a broader positioning, which may need further refinement to more effectively attract its potential users. Work C is positioned in a niche but rapidly growing market segment, showing clear market opportunities. Work A and Work C face intense competition in their target markets, but their unique design and innovative features have given them a competitive edge. The competitive analysis of Work B indicates that, despite many similar products in the market, there is potential to differentiate itself by emphasizing its unique material application and aesthetic design.

All works are considered to have significant market potential. It also show the market value and also demonstrate the identity of porcelain garden stool. Especially Work C, which targets a fast-growing niche market, thereby having substantial room

43 "The Fragmented Porcelain Garden stool""Half of a Porcelain Garden stool Lamp""Flame Candlestick Aromatherapy"

for expansion. Work A and Work B need to utilize their market potential fully through clear marketing strategies and brand positioning. The analysis of consumer trends shows that Work A and Work C align well with current market demands and trends, such as sustainability, personalization, and high-tech integration. Work B needs to more prominently feature its unique cultural and aesthetic values in marketing and promotion to attract consumers seeking individuality and novelty. For all works, a multi-channel marketing strategy is recommended, combining online and offline activities, as well as social media marketing, to increase market coverage and brand awareness. Especially for Work B, storytelling and in-depth exploration of its cultural background can better establish emotional connections with target consumers. Evaluation of consumers (Figure. 89-Figureue. 93)

The survey was conducted among 100 consumers to assess their views on the functionality, demand satisfaction, cultural value and price acceptability of ceramic lamps. The results of the survey will guide our product development and marketing strategies.

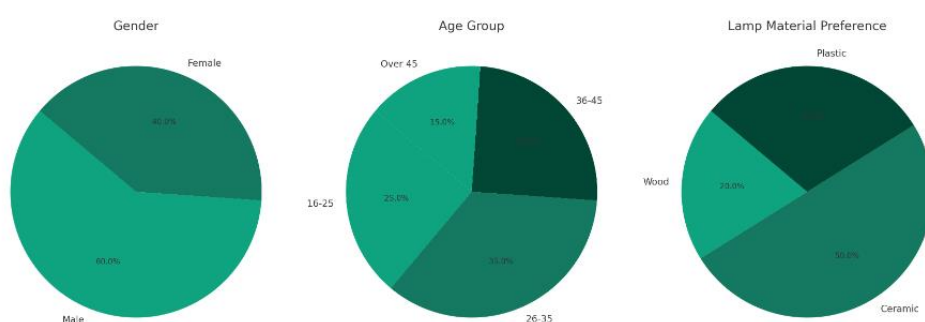


Figure 89 pie chart of question1-3
Source: Made by Danxi Luo, 2024

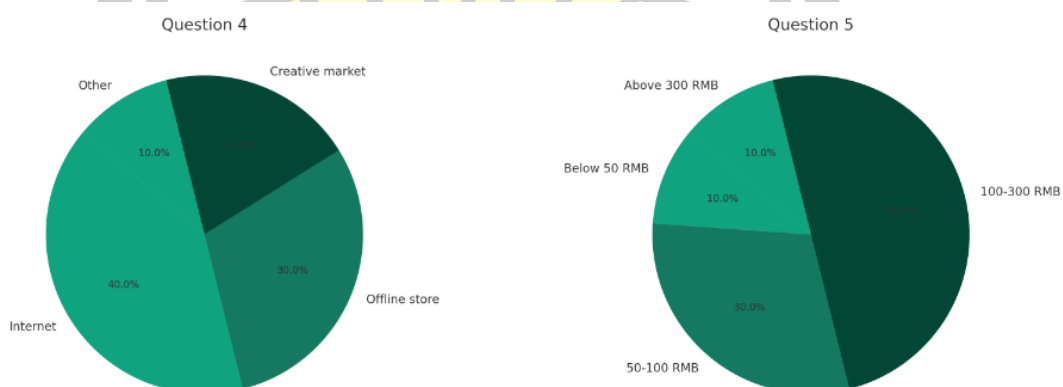


Figure 90 pie chart of question 4-5
Source: Made by Danxi Luo, 2024

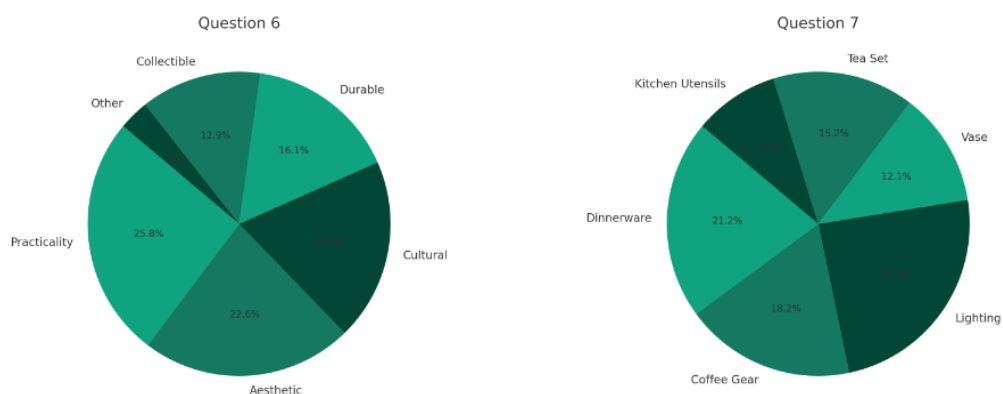


Figure 91 pie chart of question6-7
Source: Made by Danxi Luo, 2024

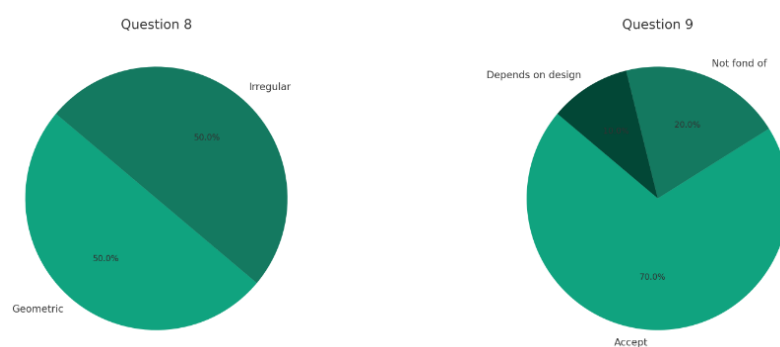


Figure 92 pie chart of question8-9
Source: Made by Danxi Luo, 2024

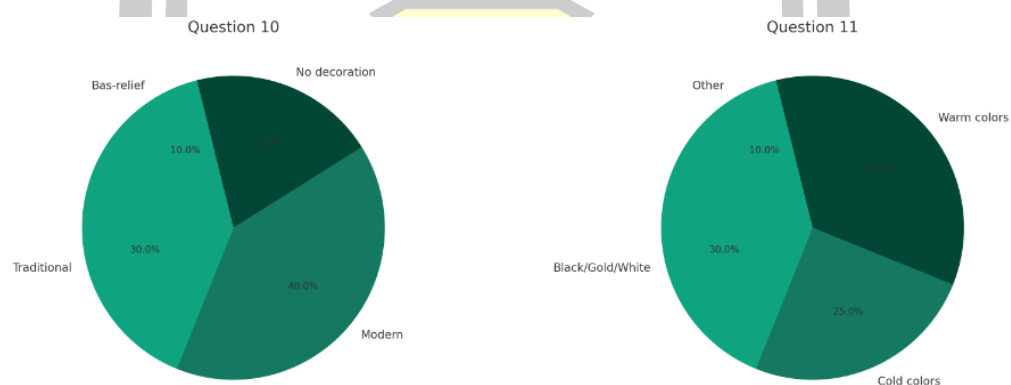


Figure 93 pie chart of question10-11
Source: Made by Danxi Luo, 2024

Survey Questionnaire Analysis: Consumers showed a significant preference for ceramic material in lamps, reflecting a strong market demand for ceramic lamps, possibly due to their aesthetic and cultural connotations.. Most consumers were comfortable with a price range between 50 to 300 RMB, providing a reference for our pricing strategy. In terms of the characteristics that good ceramic lamps should have, consumers valued practicality and aesthetics the most, indicating that ceramic lamp designs should balance functionality and visual appeal. For ceramic products not previously used but of interest, consumers were most inclined to try ceramic lamps and dinnerware, suggesting potential growth space for these two categories in the market.

In terms of design structure preference, consumers did not show a clear inclination towards either regular or free-form shapes, indicating a balanced market acceptance for different design styles. In terms of decorative style, modern designs characterized by dots, lines, and planes were most popular, possibly reflecting a trend towards modern minimalist design. In conclusion, consumer preferences in the ceramic lamp market are clear, with sensitivity to price and high expectations for design and functionality. It is recommended that manufacturers consider consumer price sensitivity when designing ceramic lamps and focus on the product's practicality and aesthetic design. Marketing strategies should also emphasize the cultural value and design philosophy of the product to attract the target consumer group.

The value of the final works

By combining the cultural essence of traditional porcelain garden stool with modern design concept, the works show a harmonious symbiosis of culture and modernity, creating a new product of porcelain garden stool that not only has traditional charm but also meets modern aesthetic and functional needs. This process, from the generation of innovative design ideas to expert evaluation and consumer feedback, reflects the pursuit of innovation and practicality of the product at every step.

The final value is reflected in the following aspects:

Inheritance and innovation of cultural values: the work is not just an object, it carries a rich historical and cultural connotation, through the integration of modern design techniques, so that these traditional elements can continue to be inherited in modern society, and presented in a novel way.

Integration of aesthetic values: every detail in the design takes into account how to combine traditional aesthetics with modern aesthetic preferences to create products that are both in line with modern human settlements and with traditional cultural characteristics.



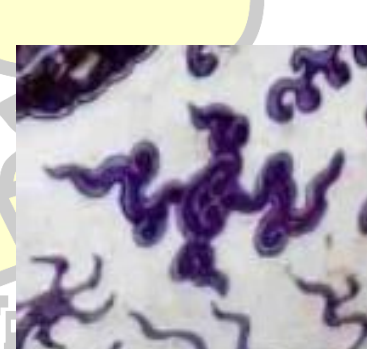
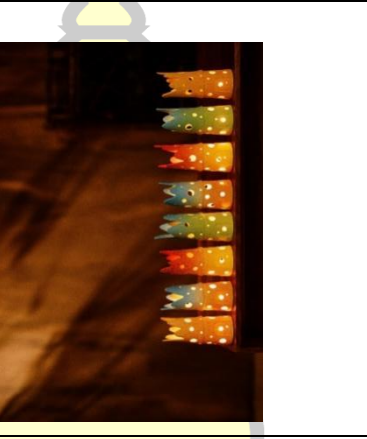
The combination of practicality and aesthetics: in addition to the emphasis on aesthetics, your design also focuses on the utility and functionality of the product, ensuring that the product is not only visually appealing, but also meets the needs of the user in everyday use.

Environmental and sustainable development practices: the concept of environmental protection and sustainable development is integrated into the design concept, such as the design idea of "The Fragmented Porcelain Garden stool" reflects the environmental concept of waste reuse and emphasizes the environmental responsibility in the design.(Table 23)



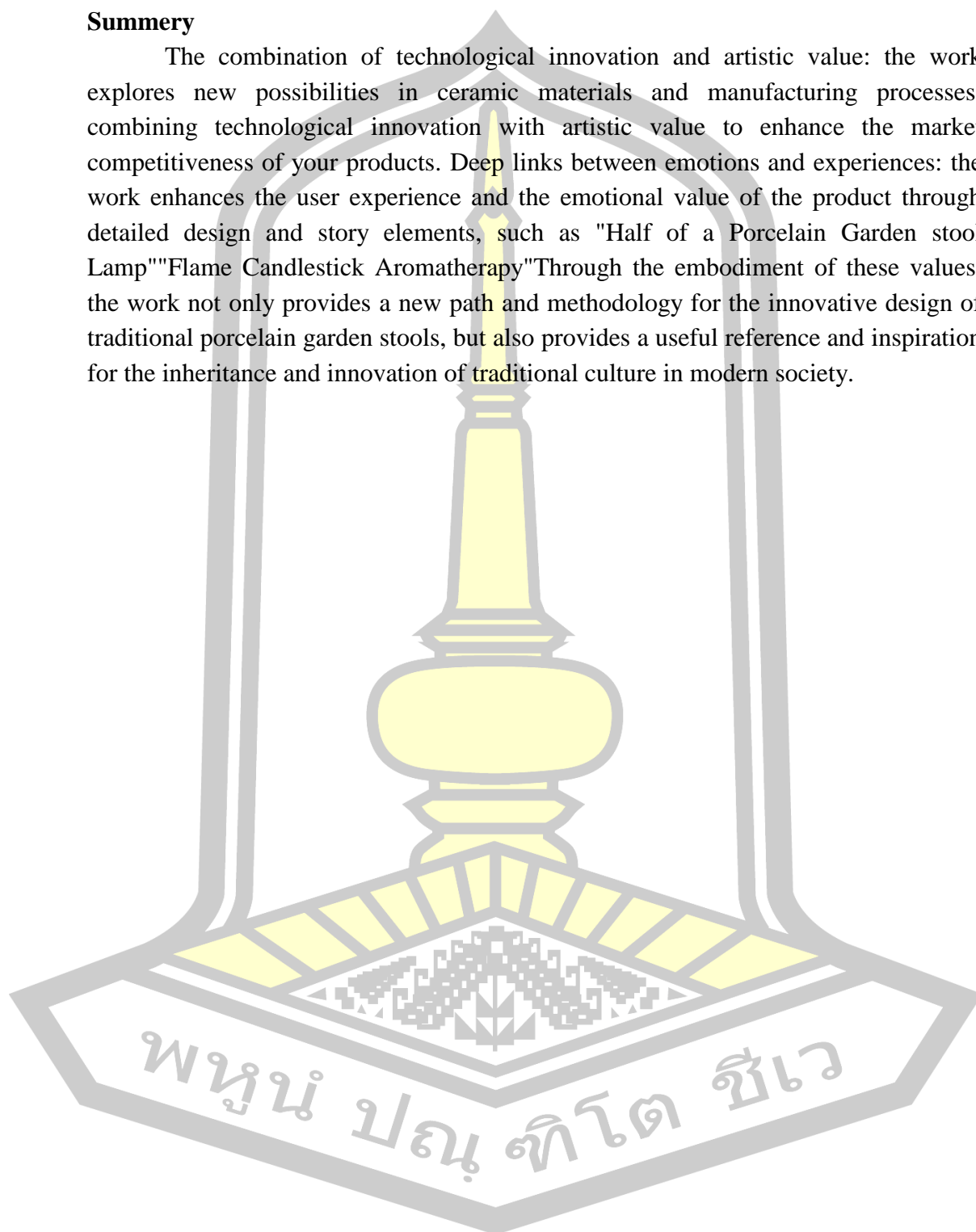
Table 21 Value Conclusion
Source: Photography by Danxi Luo, 2024

Original Product	New Product	Value
 		Through the innovative design of the pattern decoration and technique decoration in the traditional identity of the porcelain garden stool, the traditional pattern of the porcelain garden stool is extracted and designed as the English character representing the symbolic meaning of the dragon, and the pattern of my five lamps is formed: a stand for Authority, d stands for Dignity, l stands for Lucky, s stands for Strength, m stands for Mysterious. In terms of techniques, the original production process of porcelain garden stool has been changed, but the modern splicing process is used to combine the original fragmented billets through high-strength bonding technology.
  		Through the traditional identity of porcelain garden stool in the craft techniques, patterns techniques, decorative techniques innovative design. The traditional porcelain garden stool is made by casting in half, and then the two halves are glued together to form a complete porcelain. This creation does not glue the porcelain garden stool, but through the design of the two halves, the traditional grouting process becomes a visible part, the user can intuitively appreciate every detail, and the porcelain

			<p>garden stool is divided into two halves, each half is independently decorative and functional, and the internal space can be used to place lamps and other devices. In the pattern, the traditional dragon and phoenix pattern for simple and modern design. In the light body using modern exquisite technology, through the light to give its three-dimensional sense and depth.</p>
			<p>Through the innovation of the shape decoration and glaze decoration in the traditional identity of porcelain garden stool, the flame pattern of porcelain garden stool is extracted and transformed into the flame shape with dynamic effect. The color of the main glaze mimics the color change of the flame from the base to the top, from deep to light gradient, respectively trying the matte texture of dark brown, gray, bean green, mint green and other medium temperature glaze.</p>

Summery

The combination of technological innovation and artistic value: the work explores new possibilities in ceramic materials and manufacturing processes, combining technological innovation with artistic value to enhance the market competitiveness of your products. Deep links between emotions and experiences: the work enhances the user experience and the emotional value of the product through detailed design and story elements, such as "Half of a Porcelain Garden stool Lamp""Flame Candlestick Aromatherapy"Through the embodiment of these values, the work not only provides a new path and methodology for the innovative design of traditional porcelain garden stools, but also provides a useful reference and inspiration for the inheritance and innovation of traditional culture in modern society.



Chapter V

Research Conclusion, Discussion and Suggestion

1. Research Conclusion

This study deeply analyzes the porcelain garden stool as an important element of Chinese traditional material culture, its development track in the long history, its artistic value and the importance of innovative design in the process of Chinese modernity. Through the historical dimension, we discuss the evolution process of porcelain garden stool from simple daily necessities to artworks with profound cultural symbolic significance, reflecting the changes of China's social economy, technology and culture.

The conclusion emphasizes the ability of porcelain garden stool to adapt to modern aesthetic and functional needs while maintaining the essence of traditional culture. This dynamic balance between tradition and innovation reveals the interaction and integration between traditional elements and modern design concepts, showing the vitality and plasticity of porcelain garden stool as a traditional cultural heritage in modern life.

In addition, the attempt to innovate the design of porcelain garden stool is not only to meet the renewal of practical functions, but also to explore the sustainable development and inheritance of traditional Chinese culture in the process of modernization. Through the innovative design of porcelain garden stool, it can not only enhance its application value in modern life, but also promote cultural exchange and understanding, and strengthen social recognition and respect for traditional culture.

For the four research purposes of this paper, the following conclusions are drawn respectively.

To study the historical development and function of porcelain garden stool in Chinese traditional life scene from the perspective of material culture;

The history and development of porcelain garden stool went through the mats in the early farming society. In the Song Dynasty, with the prosperity of culture and commerce, the improvement of handicraft technology and aesthetic level, the types and uses of porcelain garden stool were further expanded, and then there appeared the types of porcelain garden stool with study rooms and tea rooms as the main places of use, the most representative of which was porcelain garden stool. In the court nobility, its decoration was endowed with the ceremonial characteristics of the upper and lower ranks; In literati concentrated porcelain garden stool decoration is elegant and beautiful, while the porcelain garden stool used by ordinary people is simple and simple. By exploring the relationship between porcelain garden stool and the natural environment, production technology, and material exchange, from the natural environment of Jingdezhen gave birth to the porcelain piers culture, to the porcelain garden stool pattern decoration showing the values between the royal family and the people, to the expanding material exchange and the evolution of the medium of information circulation and cultural communication, The unique ceramic raw materials, cultural meanings of decorative patterns, grade symbols and so on promote

the development of material culture of porcelain garden stool, and reveal the material cultural attributes of porcelain garden stool in a unique way.

To study the traditional identity and value of porcelain garden stool from the dimension of artwork;

The traditional identity of porcelain garden stool is mainly embodied in pattern identification, shape identification, decoration technique identification, process identification and function identification. In pattern identification, by summarizing more than 50 kinds of porcelain garden stool patterns, and sorting out the porcelain garden stool patterns used by the royal family, civil and military officials from the first grade to the ninth grade, and ordinary people, the emperor gave a seat, according to the different arrangements of different decorative porcelain garden stool, representing different levels. The emperor and the crown prince commonly use the dragon and phoenix patterns, and the dragon is regarded as an auspicious symbol in the porcelain culture, representing imperial power and majesty. The decoration of civil officials is mainly craning pattern and peacock pattern, and the decoration of military officials is mainly tiger and lion pattern. The porcelain garden stool of the people in the city is mainly decorated with simple and simple, such as lotus pattern and peony pattern, which symbolize the good meaning. Therefore, it can be seen that the dragon and phoenix pattern, as a representative of the porcelain pier decorative pattern, shows the upper and lower ranks, and can convey the significance of identity with the royal family or nobility. In the decoration technique identification, porcelain garden stool decoration is the use of different techniques and corresponding decorative materials on the surface of the art treatment, its techniques recognize that it can be divided into body decoration, glaze decoration, painted decoration three plates.

Through research, blue and white, pastel, exquisite, color glazed porcelain garden stool as the traditional identity of porcelain garden stool, the reason is that blue and white, pastel, exquisite, color glaze synthesis of Jingdezhen four famous porcelain, its techniques are used in the decoration of porcelain garden stool, because of its porcelain garden stool special use occasions and functions, So that each piece of blue and white, pastels and other porcelain garden stool works can show its unique traditional identity and artistic value through its design, pattern, color, composition and other aspects. In terms of physical identity, the shape of porcelain garden stool also reflects the identity of different genders in the social and cultural environment to different degrees. In the Ming Dynasty, the harsh political environment made scholars shift their focus from political career to their own psychological needs. The porcelain pillars made by scholars and artisans had different styles and shapes, without considering the women who were subjected to feudal ethics at that time.

In the Qing Dynasty, due to the feudal etiquette period, more constraints on female etiquette and posture to cater to the male aesthetic, at this time, the shape of the porcelain garden stool is slightly concave, and there is no backrest and because it is in the middle of the big two small, easy to fall, so it must be used when sitting upright, waist and back straight, it can be said that the porcelain garden stool is the embodiment of the etiquette culture. The use of porcelain garden stool is usually covered with a female silk embroidery on the pier surface, the exquisite degree of embroidery can show a woman's needlework ability, but also shows that women accept their own identity and identity in the social and cultural environment.

In functional identification, the exquisite decoration of the porcelain garden stool body has the function of beautifying the interior and decorating the room, but the practical function as a seat is its most basic function, and it is also its primary function as a kind of furniture, and practicality is its most essential identity. It can be used both indoors and outdoors for people to sit while enjoying the garden. Since the garden stool is based on the shape of the square, the decoration around it is not primary or secondary, and there is no physical limitation; Because of the small size of the garden stool, it is suitable for placement, does not affect the pattern of large furniture and furnishings, and is suitable for furnishings in small and delicate environments such as study, show pavilion, garden and inner room.

To study the development process of innovative design of porcelain garden stool;

These creative design projects focus on how to successfully combine traditional cultural elements with modern design needs to create porcelain garden stool lamps that have both cultural value and modern consumer preferences. The modern appearance of the innovative porcelain garden stool, its design improvement not only enhances the practicability, but also gives the porcelain garden stool new cultural and aesthetic significance. After the initial creative idea, expert evaluation, consumer survey, design adjustment and modification of porcelain garden stool, through the investigation and analysis, it is clear that consumers aged 25 to 50 years old are the main target market of modern ceramic lamps. This discovery guides the design direction to ensure that product design is compatible with the aesthetic preferences and lifestyles of this particular population.

To create the innovative design of porcelain garden stool in the process of Chinese modernity.

The combination of technological innovation and artistic value: the work explores new possibilities in ceramic materials and manufacturing processes, combining technological innovation with artistic value to enhance the market competitiveness of your products. Deep links between emotions and experiences: the work enhances the user experience and the emotional value of the product through detailed design and story elements, such as "Half of a Porcelain Garden stool Lamp""Flame Candlestick Aromatherapy".Through the embodiment of these values, the work not only provides a new path and methodology for the innovative design of traditional porcelain garden stools, but also provides a useful reference and inspiration for the inheritance and innovation of traditional culture in modern society.

2.Discussion

The porcelain garden stool is discussed as a symbol of material culture, and it is comprehensively analyzed from the perspectives of its historical evolution, arts and crafts, practicability and its connection with modern life style. This paper sorted out and analyzed the historical process of the evolution and change of porcelain garden stool, sorted out and refined the artistic style and elements of porcelain garden stool in various historical periods, redefined the multiple values of porcelain garden stool, and actively explored the artistic value, historical value and cultural value of porcelain garden stool.

From the perspective of design innovation, this paper studies the modern value of porcelain garden stool, carries out design practice, and conducts a series of design research and development of porcelain garden stool. With reference to Zhao Chuan's *Experimental Innovation of materials and Processes in Ceramic Design* and other literature, we can see that the innovation of materials and processes in ceramic design is not only a technological breakthrough, but also provides new vitality for traditional utensils. For example, Israeli artist Rachel Boxnboim's use of "sewing" ceramics, British designer Max Lamb's use of physical tapping to control the shape of cups to create unique ceramic works, and Whisper Studio's use of leaf and ceramic combination technology, all show the endless possibilities of traditional ceramics in modern design. These experimental innovations not only enrich the expression of porcelain, but also provide theoretical support and practical cases for innovative design in this study. At the same time, Li Yuxin in the "blue and white porcelain elements in the innovative application of cultural creative product design" talked about the continuous development of art, its forms are also colorful. Blue and white porcelain elements are no longer limited to traditional porcelain, Li Yuxin's research emphasizes that in the design of cultural creative products, especially when using blue and white porcelain elements, we must pay attention to the principle of cultural creativity, aesthetic experience and practical purpose. These viewpoints provide important theoretical support for the porcelain garden stool design of this project, indicating that the combination of traditional cultural elements and modern design concepts should pursue aesthetic and functional innovation while maintaining cultural connotation, so as to meet the needs of modern consumers. Through such innovative practice, porcelain garden stool can not only be used as a work of art appreciation, but also integrate into modern life and realize the living inheritance of culture.

The modern appearance of the innovative porcelain garden stool, its design improvement not only enhances the practicability, but also gives the porcelain garden stool new cultural and aesthetic significance. After preliminary creative conception, expert evaluation, consumer survey, design adjustment and modification of porcelain garden stool, three creative designs of porcelain garden stool were selected as the final design draft, and finished products were made. After the final evaluation by experts and consumers, the expected goals were achieved and the expected results were obtained. The author hopes that through the innovative design of the living heritage porcelain garden stool, the porcelain garden stool can go out of the decline stage, rebuild the existence value of the porcelain garden stool, and make it integrate into people's modern daily life and become a part of modern life style.

In the process of studying porcelain garden stool as a material cultural product, combined with the literature review on material culture in *Long Things: Material Culture and Social Conditions in Early Modern China*, we can discuss how porcelain garden stool reflect the values and aesthetic concepts in a specific social and cultural context. Porcelain pier is not only used as daily necessities, its design and decoration also reflect the development of arts and crafts and the change of social customs. In addition, the production and circulation of porcelain garden stool reveal historical consumption patterns and economic activities, while their use and collection in different social classes reflect social structures and identity markers. By studying porcelain garden stool, we can gain a deeper understanding of the interaction between

objects and human society, as well as the important role of material culture in recording and transmitting historical information.

Combined with Xie Zhizai's "On the Cultural Significance of China's Modernization Construction", we can discuss the development and significance of porcelain garden stool in this background. China's modernization involves not only economic development, but also comprehensive progress in material, institutional and spiritual culture. Porcelain garden stool, as a part of material culture, reflects the cultural changes and aesthetic development of Chinese society. Through the innovative design of porcelain garden stool, we can see the integration of traditional Chinese crafts and modern design concepts, which not only promotes the inheritance of traditional culture, but also reflects the importance and innovation of traditional values in the process of modernization. Therefore, the research and development of porcelain garden stool can be regarded as a microcosm of the interaction between material culture and spiritual culture in the process of China's modernization, showing how China balances tradition and innovation in the modernization drive, and how to solve the "bottleneck" problem in cultural development.

3.Suggestion

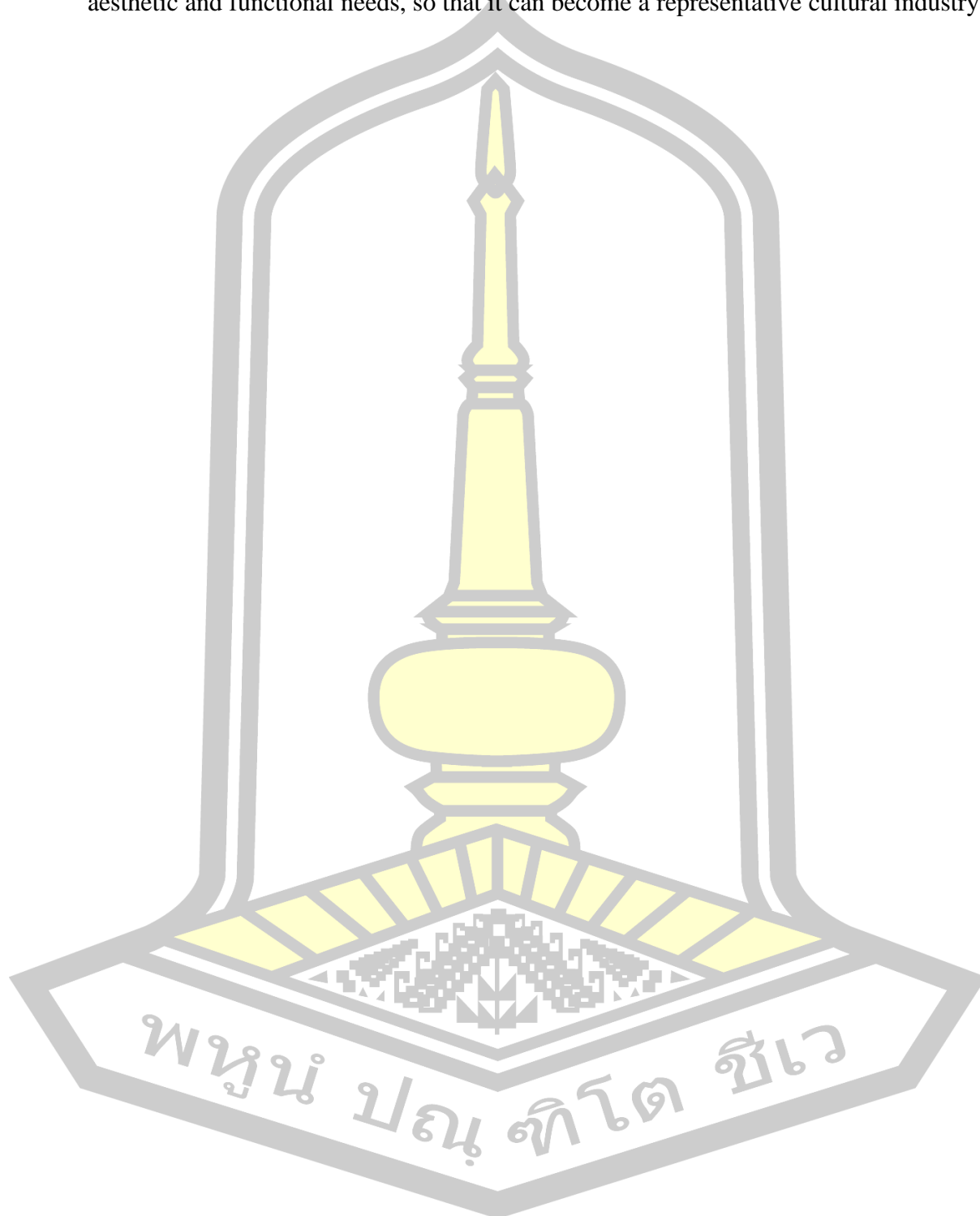
3.1 Throughout the research at home and abroad, many scholars and teams are studying porcelain garden stool. From the perspective of the research content, there is a wide range of research on porcelain garden stool, involving the history of porcelain garden stool production technology, decoration techniques, etc., but there are almost no studies on porcelain garden stool from the material culture and innovative design. This study discusses the porcelain garden stool as a symbol of material culture, redefines the multiple values of the porcelain garden stool, and re-organizes and refines it, combining traditional cultural elements with modern design concepts, so that the porcelain garden stool can realize the living cultural inheritance in the process of modernization.

3.2 This study is the first research report to study porcelain garden stool through the two main concepts of "material culture" and "innovative design", which helps to sort out the innovation and development of porcelain garden stool under the background of social and cultural changes and aesthetic development in the process of China's modernization, broaden the diversified perspectives of porcelain garden stool research, and thus provide rich information resources for future researchers.

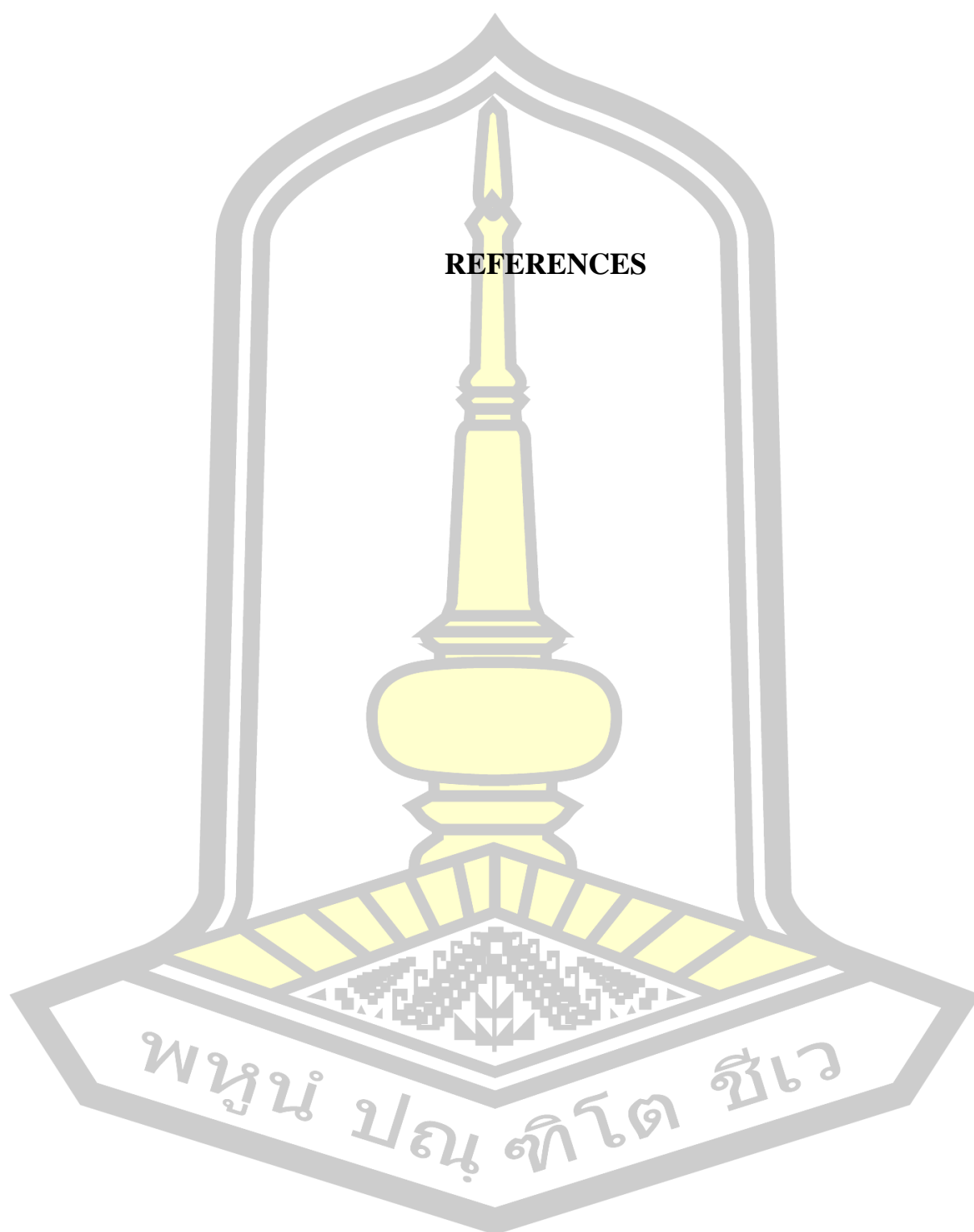
3.3 In March 2017, Chinese government jointly launched the "Revitalization Plan for Chinese Traditional Crafts", and in the same year, issued the "Several Opinions on Promoting the Development of Cultural and creative Products", aiming to deal with the relationship between inheritance and development of traditional crafts, do a good job in creative transformation and innovative development, emphasizing the need to build cultural and creative brands. The cultural and creative products include some devices with both practical and decorative functions, such as porcelain garden stool. Therefore, the most important thing for the study of porcelain garden stool is to innovate a set of design principles, and also to provide a new path for other traditional Chinese cultural artifacts with similar difficulties.

3.4 This paper aims to encourage cooperation between different fields such as art design and engineering technology, and jointly explore how to combine traditional

cultural elements with modern design concepts and advanced manufacturing technologies to create products that both have traditional charm and meet modern aesthetic and functional needs, so that it can become a representative cultural industry.



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BIOGRAPHY

NAME	Ms.DANXILUO
DATE OF BIRTH	June26,1991
PLACE OF BIRTH	Jingdezhen City,Jiangxi Provience,China
ADDRESS	Jingdezhen City,Jiangxi Provience,China
POSITION	Office worker
PLACE OF WORK	Government agency
EDUCATION	2016 Jingdezhen Ceramic University 2024 Doctor of Fine and Applied Arts Research and Creation,Mahasarakham University

