





The Diversified Influence of Ming and Qing Porcelain Symbols on Modern Clothing Patterns and Cultural and Artistic Connotations From the Perspective of Intangible Cultural Heritage

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Citation: Pan, Y., Luo, Q & Xu, Z. (2024). The Diversified Influence of Ming and Qing Porcelain Symbols on Modern Clothing Patterns and Cultural and Artistic Connotations From the Perspective of Intangible Cultural Heritage. *Mediterranean Archaeology and Archaeometry*, 24(3), 148–162. [10.5281/zenodo.13626756](https://doi.org/10.5281/zenodo.13626756)

ARTICLE INFO

Received: 10 Oct 2023
Accepted: 17 Jan 2024

ABSTRACT

In order to excavate the archaeological value of the symbols in porcelain during the Ming and Qing dynasties (1580~1710 AD) and provide a reference for modern clothing design, it is necessary to excavate the artistic connotation of porcelain symbols. In this paper, three pieces of Ming and Qing dynasty porcelain excavated in Dongxi kiln in 2015 were used as research objects, using a 4K electron microscope B105 (Shandong, China) and a DONZy 3D scanner K2002 (Guangdong, China) from Shuguang Optics Take the test. First, the depth, pattern, material, and color of the porcelain were observed with a 4K electron microscope, and then the porcelain symbols were extracted with the DONZy 3D scanner. Finally, through the comparison of data and the in-depth classification of patterns, the symbolic meaning, culture and art of porcelain in the Ming and Qing dynasties are summarized, and the influence of porcelain on modern clothing design is analyzed. The results show that the late Ming Dynasty (1580~1644 AD) and the early Qing Dynasty (1644~1710 AD). The porcelain materials of that period were coarse, with relatively light patterns and large metal particles in color. The porcelain symbols are multi-directional, with bold patterns that incorporate dots, lines, and circles. Therefore, the porcelain symbols of the Ming and Qing dynasties not only inherited the pattern drawing characteristics of the official kiln, but also carried out innovation in shape and style, which can provide avant-garde design inspiration for modern clothing design, and have a high non-genetic heritage.

Keywords: Intangible Cultural Heritage, Ming And Qing Porcelain, Symbols, Modern Clothing, Culture And Art, Connotation, And Multiple Influences.

INTRODUCTION

Ming and Qing dynasty porcelain is a treasure of ancient Chinese culture and art. Since the Tang Dynasty (618~752 AD), porcelain has become an essential commodity in China's foreign trade. After the rapid development of the Song Dynasty (1127~1279 AD) and the Yuan Dynasty (1271~1368 AD), the production and manufacturing of porcelain reached a new peak (Black et al., 2023). At the same time, the symbolic patterns of porcelain in the Ming and Qing dynasties (1580~1710 AD) have also been profoundly developed, especially the decoration of symbols and the practicality of porcelain have been improved (Colomban et al., 2023), and continuous innovation has been made. Therefore, porcelain from the Ming and Qing dynasties was the most popular commodity in trade at that time and became an important carrier in cross-cultural communication, reflecting the connotation of Chinese national culture. Based on this, this paper studies the porcelain symbols of the Ming and Qing dynasties from the perspective of intangible cultural heritage (De Silva et al., 2023) and analyzes the diversified influence of symbols on modern clothing patterns and cultural and artistic connotations.

Firstly, the symbols in Ming and Qing dynasty porcelain are classified with a variety of different themes, and the porcelain symbols are observed and constructed using microscopes and 3D scanning equipment. At the same time, it analyzes the beautiful meaning of porcelain symbols and excavates the connotation of national culture and art (Guo et al., 2023). Finally, the Ming and Qing porcelain symbols were applied to the design of modern clothing patterns to achieve the purpose of symbol inheritance and artistic enlightenment. The patterns and cultural and artistic connotations in Ming and Qing porcelain are influenced by many diversifications, including ethnic culture, Manchu and Han cultures, and Western cultural influences in the Western Regions, so the pattern design has a Chinese flavor, Western Regions style, and historical precipitation. Therefore, studying the connotations of symbols in Ming and Qing porcelain can promote the inheritance of Chinese culture and art and provide support for modern design.

LITERATURE REVIEW

Diversified Excavation of Porcelain in the Ming and Qing Dynasties

Variety of Colors and Patterns

Ming and Qing dynasty porcelain refers to the Ming and Qing dynasties (1580~1710 AD), the porcelain fired by the official kiln, the delicacy, enamel, color and pattern of the porcelain is the pinnacle of porcelain craftsmanship in the feudal dynasty. Ming and Qing dynasty porcelain using Jingdezhen kaolin as the clay embryo, the glaze is crystal clear, the color is bright, the shape is round, so its pattern and shape are integrated into one (Hsieh et al, 2023), by the world's respect and praise, is a rare art treasure. First of all, Ming Dynasty porcelain inherited the technological characteristics of the Ming Dynasty period (1580~1644 AD), was influenced by Western Regions' culture, and developed to a relatively high height. The main characteristics of porcelain of the Ming Dynasty (1580~1644 AD) are soft lines, various colors (pastel, multicolored lanterns), and various functions and categories. The main pattern symbol of Ming and Qing porcelain is blue and white, which belongs to the symbol pattern with a sense of dynamism and vigour. The porcelain motifs are presented in a variety of colours, with bright tones and rich connotations, which are extremely brilliant. In addition, Ming and Qing porcelain have soft color differences (Jin et al, 2023), delicate painting techniques, and has the cultural characteristics of Manchu, Mongolian and Tangut peoples. The Qing Dynasty (1644~1710 AD) was a critical period for developing porcelain color and patterns in the Ming and Qing dynasties (Ke et al, 2023). On the basis of blue and white porcelain, Ming and Qing dynasty porcelain made improvements in the production process and developed many personalized symbols and styles.

Pattern Drawing Process

The color is soft and bright, the painting skills are more delicate and gentle, and the overall artistic style shows a more elegant and romantic artistic style. Glaze red is an important decorative technique in Ming and Qing dynasty porcelain, which is to directly adds red pigment to the glaze, carries out multi-layer firing, and forms a gorgeous, textured, three-dimensional ware through fine carving. Porcelain production process in the Ming and Qing dynasties was extremely lean, and the porcelain symbols and shapes were also quite rich. On the porcelain of the Ming and Qing dynasties, simple patterns and ornaments are more common patterns, such as plum blossoms, lotuses, peonies, etc., as well as unicorns, bats, dragons, phoenixes, etc. Some of the symbols of Ming and Qing porcelain include historical figures, mythological stories, etc. (Kim et al, 2023), and the symbols run through the entire porcelain. Different from the porcelain symbols of the early Ming Dynasty (1423~1489 AD), Ming and Qing porcelain paid more attention to colour, line and other drawing techniques.

The Intangible Cultural Heritage Value of Ming and Qing Dynasty Porcelain

The intangible cultural heritage value of porcelain in the Ming and Qing dynasties includes drawing techniques, colors, lines, etc., as well as the role of historical culture and artistic inheritance. Ming and Qing dynasty porcelain represents the characteristics, style and identity of the Chinese nation, and is also a witness to the integration with the culture of the Western Regions. Therefore, Ming and Qing porcelain can not only continue the historical memory of the Ming and Qing dynasties (AD 1580~1710), but also be an integral part of the inheritance and development of porcelain modeling culture.

Protection and Inheritance of Porcelain Color Intangible Cultural Heritage

Ming and Qing dynasty porcelain preserves the characteristics of national traditional culture and can realize the continuous inheritance of porcelain culture so that history and culture can be preserved long-term. On the basis of protecting the intangible cultural heritage skills of Ming and Qing dynasty porcelain, we will deeply understand the wisdom and practical methods of porcelain craftsmen in the Ming and Qing dynasties (1580~1710 AD), and carry forward the spirit of the Chinese nation (Liu et al, 2023). Because Ming and Qing porcelain

represents traditional Chinese porcelain art and carries a profound historical memory and national culture, it has excellent irreplaceability. Inheriting the production technology of Ming and Qing porcelain can enrich the spiritual life of modern people and improve the recognition of Chinese culture. Through intangible cultural heritage activities such as clothing design and cultural and creative projects, you can feel the aesthetics of the Ming and Qing dynasties (1580~1710 AD), get a better enjoyment, and understand the value of intangible cultural heritage. Moreover, the study of porcelain symbols in the Ming and Qing dynasties can promote regional economic development, as well as tourism business, and increase the level of art design and improve the level of modern clothing design.

Intangible Cultural Heritage can Promote Innovation in Clothing Design

Ming and Qing porcelain can stimulate the designer's sense of innovation, and with the effective improvement and integration of traditional skills, the designer will reinterpret and apply various intangible cultural heritage elements, and make the patterns in the Ming and Qing porcelain more vibrant. At the same time, the patterns and modern designs in Ming and Qing porcelain are integrated, which can not only promote traditional Chinese culture but also excavate the skills of porcelain craftsmanship and promote the inheritance of Ming and Qing porcelain (Liu et al., 2023). For example, Ming and Qing porcelain has exquisite skills, unique national style, and carries a deep national culture and historical connotation, which can support the historical and cultural research of the Ming and Qing dynasties (1580~1710 AD). From the perspective of intangible cultural heritage, porcelain's technical experience and production process in the Ming and Qing dynasties have played a certain enlightening role in modern clothing design. Costume designers can participate in and learn the patterns of Ming and Qing porcelain but cannot inherit the traditional skills of patterns and cannot integrate new techniques. The symbolic patterns on Ming and Qing porcelain reflect ancient Chinese culture and aesthetic concepts and are also the key cultural carriers of intangible cultural heritage. For example, in the Ming and Qing dynasties, the production of lines and colors, as well as the integration of shapes and styles, etc., can be fully integrated into modern clothing design to improve the artistic connotation of modern clothing design.

METHODOLOGY

Research Techniques and Methods of Porcelain in the Ming and Qing Dynasties

Research Technology

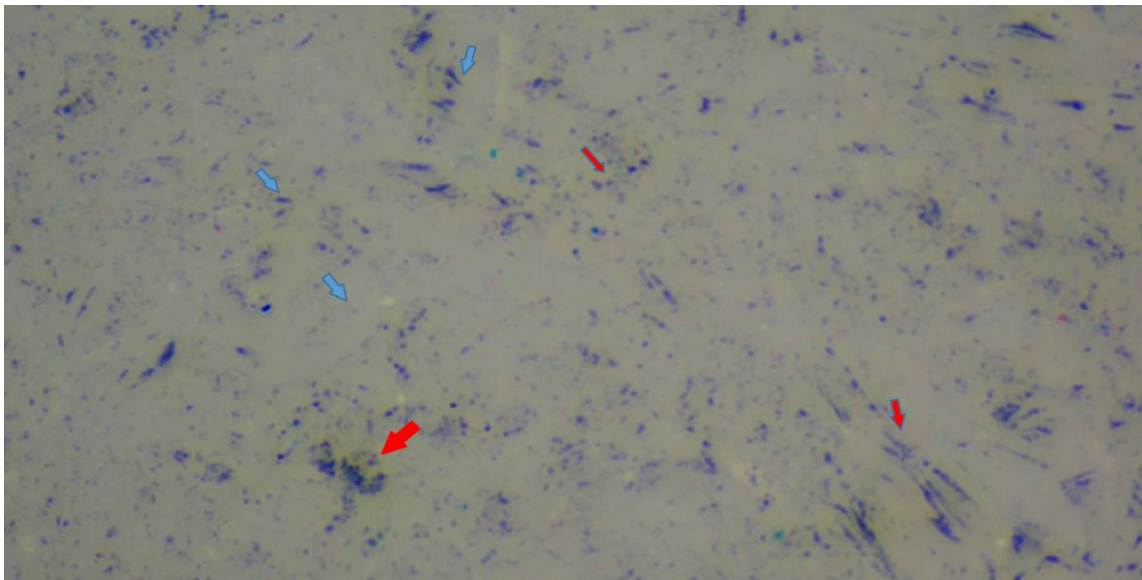
In this paper, four pieces of Ming and Qing dynasty porcelain unearthed from Dongxi kiln unearthed in 2015 were taken as the research objects, and Chenxi Optics 4K electron microscope Type B105 (Shandong, China), 0.7~1.4 times, resolution 1 nm and DONZY 3D scanner K2002 (Guangdong, China), 214*283mm, frequency 10 times/s were used for the test. First, the depth, pattern, material, and color of the porcelain were observed with a 4K electron microscope, and then, the porcelain symbols were extracted with the DONZY 3D scanner. Finally, through data comparison and pattern depth classification, the symbolic connotation, culture and art of porcelain in the Ming and Qing dynasties are summarized, and the influence of porcelain on modern clothing design is analyzed. Among them, the microscope is mainly used to observe the color seepage of the patterns in the porcelain, the way the colour is drawn, and to find out the pattern characteristics of the porcelain of the Ming and Qing dynasties. The 3D scanner is mainly used to restore the data of porcelain to form a 1:1 imitation, which provides a basis for the thickness, height and length mapping of patterns in later porcelain.

RESULTS

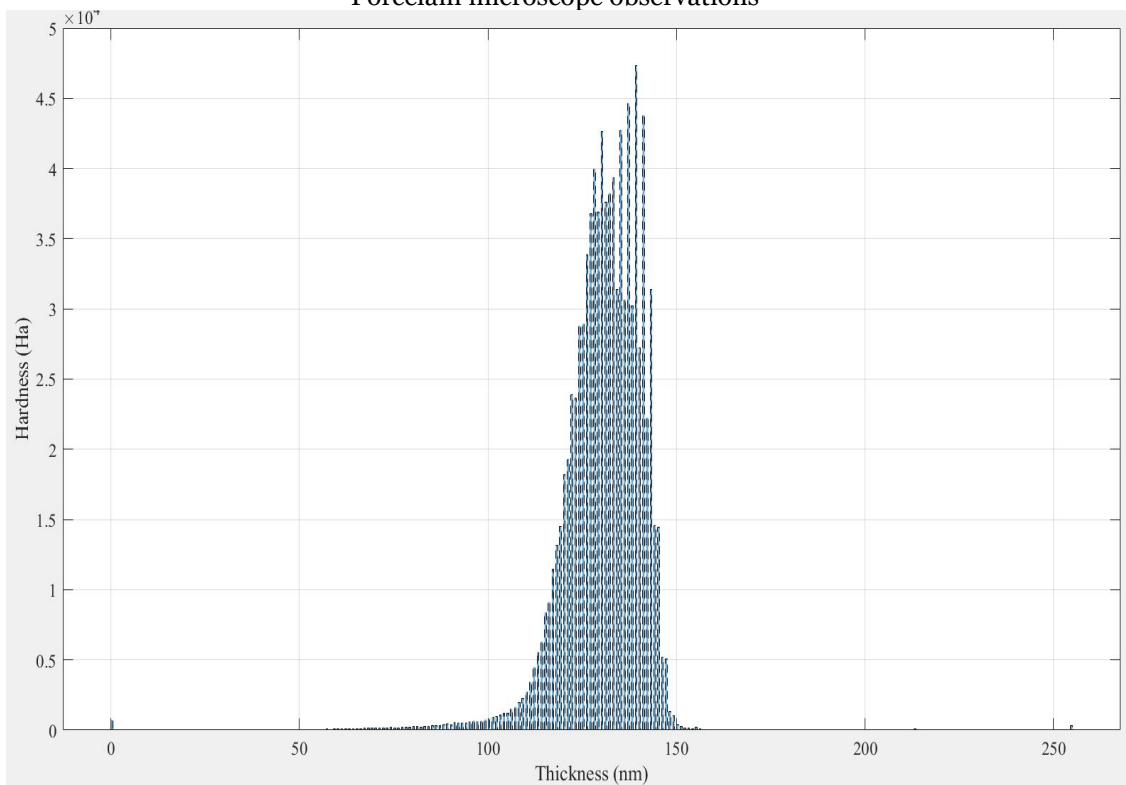
There are many types of porcelain in the Ming and Qing dynasties (1580~1710 AD), and there is a certain unity in the aesthetic taste, quality and decorative style of porcelain. Therefore, this article analyzes the material, color, line, depth and direction of the pattern.

Materials

The material analysis of three pieces of Ming and Qing porcelain is mainly to observe the particle distribution of porcelain materials through a microscope and show the most representative blue and white porcelain vases and lotus bowls unearthed from Dongxi kiln at the end of the Ming Dynasty (AD 1580~1644), and the cloud dragon plate at the beginning of the Qing Dynasty (1644~1710 AD), the results are shown in [Figure 1](#).



Porcelain microscope observations



Hardness measurement at different thicknesses

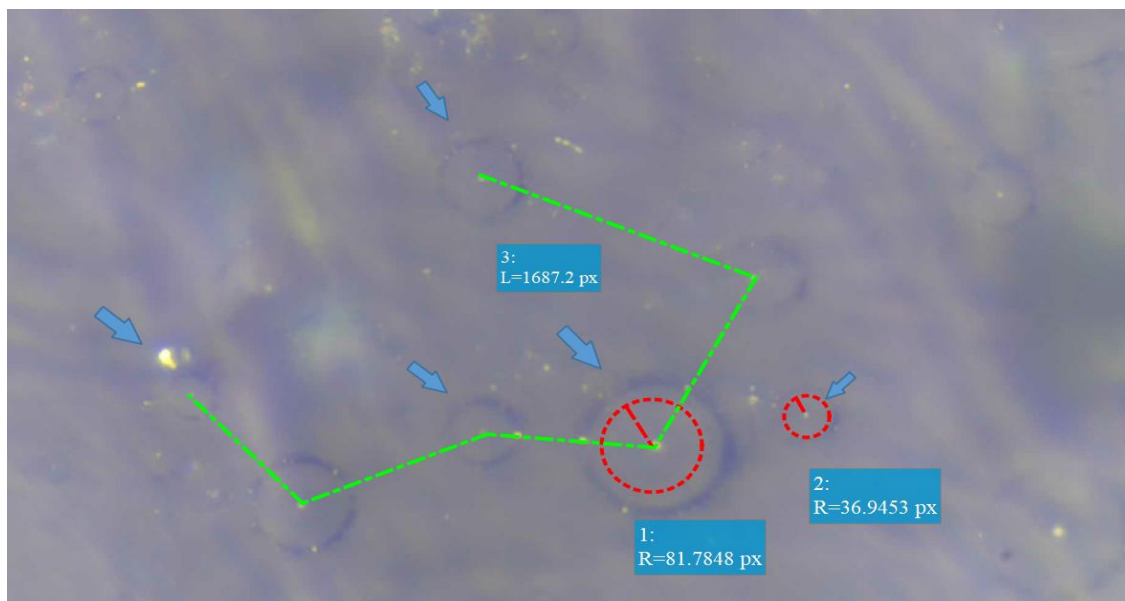
Figure 1. The Porcelain Material of the Lotus Bowl

From the microscope reversed-phase photographs in Figure 1, it is found that the materials of Ming and Qing porcelain were not only delicate in the Ming Dynasty (AD 1580~1644) but also large particles in the early Qing Dynasty (1644~1710 AD), but the materials are mixed evenly. In Figure 1, the delicate material is in the middle, and the large grain material is around, indicating that the porcelain is mainly a delicate material, and the extensive particle material is gradually increased. The reason for the above problems is mainly that at the end of the Ming Dynasty (1580~1644 AD), the production process and method of porcelain symbols and patterns gradually changed and gradually influenced by the culture of the Western Regions, as well as the culture of the Manchu and Mongolian peoples. The development and changes of porcelain in the Ming and Qing dynasties are striking, and in the middle of the Ming Dynasty (1490~1534 AD), the continuous exchange of Chinese and European cultures, the overall development of porcelain in the Ming and Qing dynasties is also changing (Lu, 2023). At the same time, the Manchu, Mongol and Tangut wars occurred in the late Ming Dynasty (1520~1564 AD), which made Ming porcelain greatly influenced by Manchu, Mongol and Tangut cultures. In addition, in the middle of the Ming Dynasty (1480~1539 AD), maritime trade was carried out, and porcelain was a crucial foreign

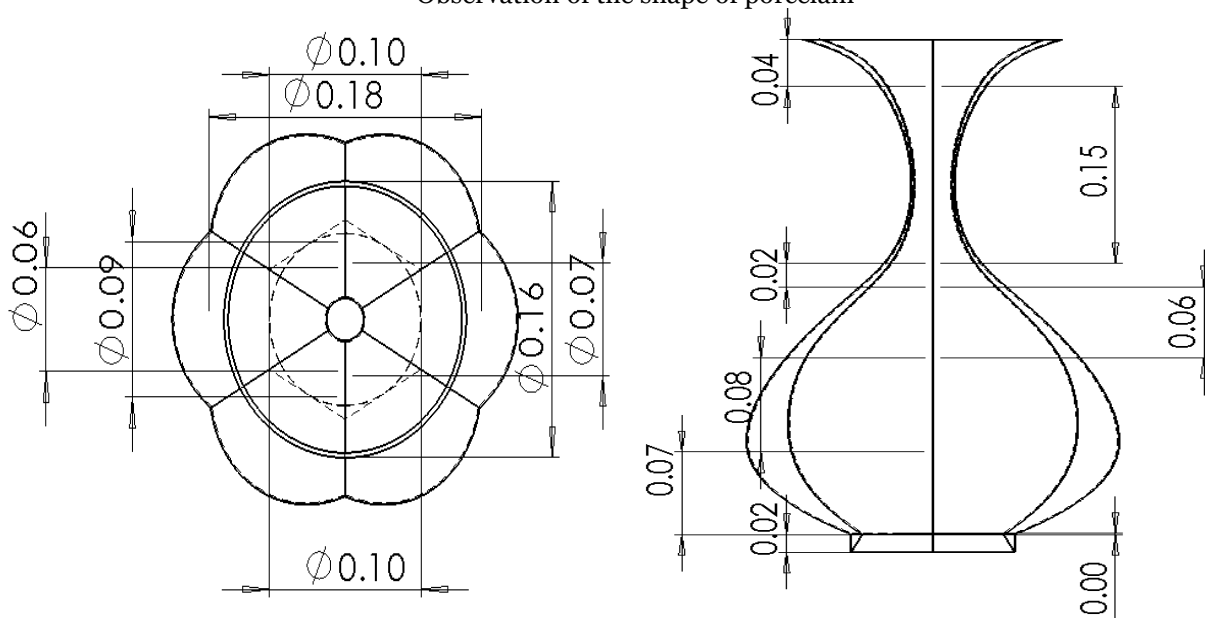
trade product, so its workmanship was more sophisticated. In addition to the beginning of the Chinese style to the integration of overseas culture, porcelain also began to appear according to the overseas needs of the situation, so its development is dynamic, condensing the Chinese national culture, the customs and habits of the people everywhere, religious culture, etc., and gradually integrated into Western elements. Therefore, Ming and Qing porcelain also reached a peak of development at this stage and began to play an important role in promoting cultural exchanges.

Lines

In Chinese porcelain of the Ming and Qing dynasties, human symbols have always been important representatives of porcelain decorative symbols, including different character themes, such as religious figures, war figures, mythological figures, etc. The display of character symbols is mainly as well as lines and shapes, such as the theme of "blue and white", which adopts streamlined shapes and uses a large number of parallel lines as the display of character symbols, as shown in Figure 2.



Observation of the shape of porcelain

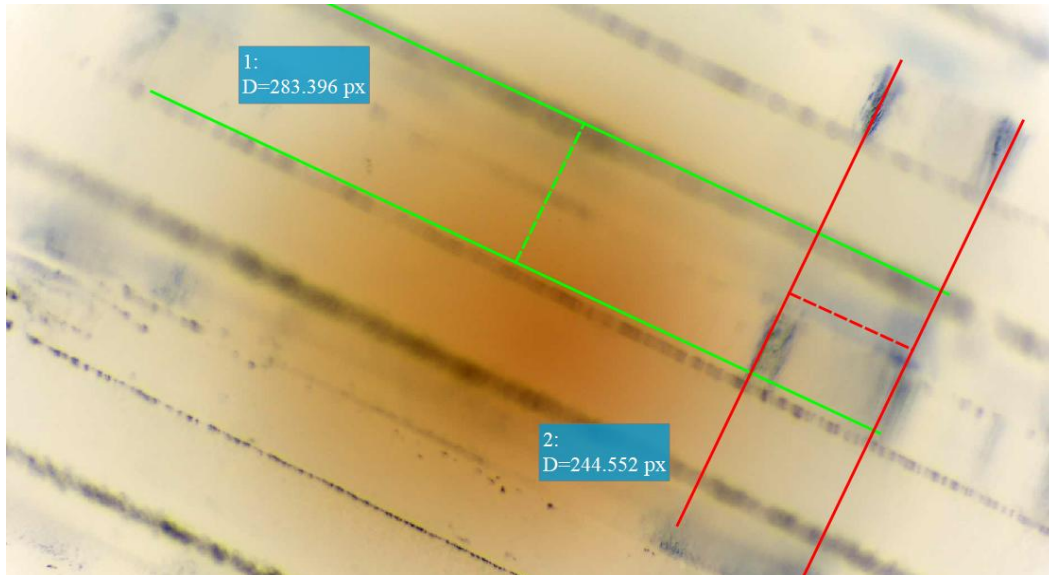


CAD measurement of porcelain

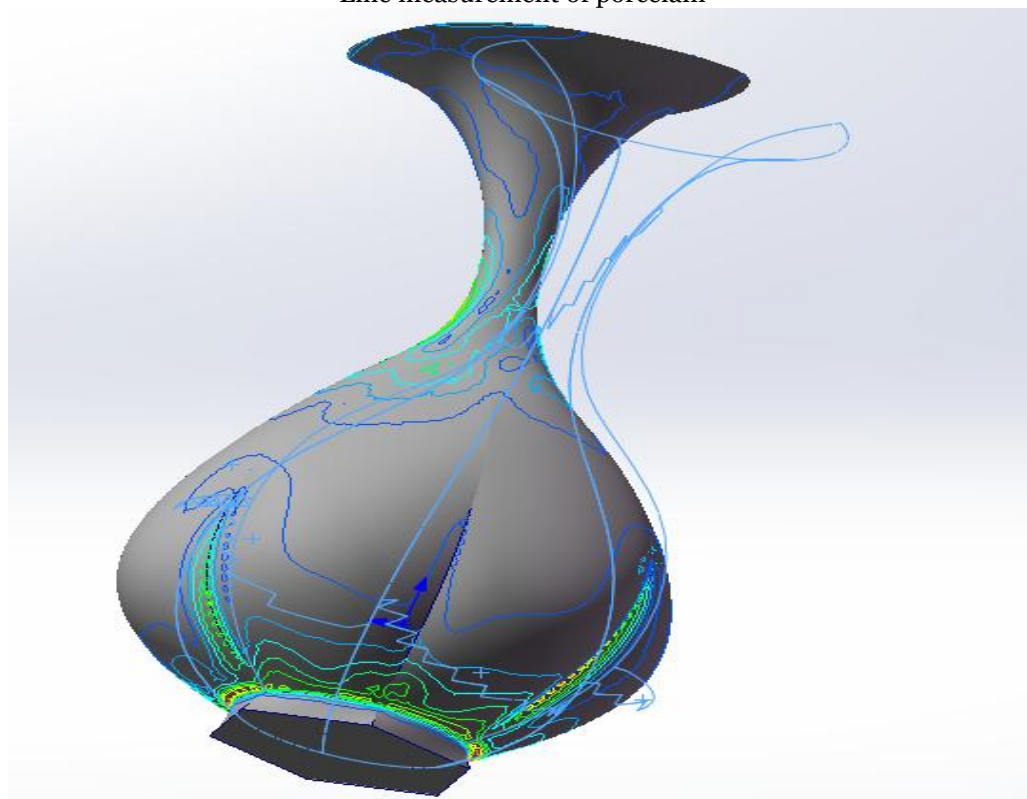
Figure 2. Streamlined Lines in Blue and White Porcelain

The line test in Figure 2 shows that many rings are used in blue and white porcelain, and the diameter of the rings is between 0.36mm~0.81mm, which shows the accuracy of pattern drawing. Different patterns present a

folded line shape, with a length of 16.87mm. It covers 5 rings, indicating that the line drawing of Ming and Qing porcelain soared, and the workmanship is fantastic. This kind of "blue and white" related painting or art first appeared in China's two Jin dynasties, and by the Tang Dynasty (618~752 AD), it began to be widely popular, so the "blue and white" theme of porcelain decorative symbols began to appear on porcelain in Changsha kilns and other regions, and the lines of the blue and white porcelain vase were measured below, and the results are shown in Figure 3.



Line measurement of porcelain



Pattern distribution of porcelain

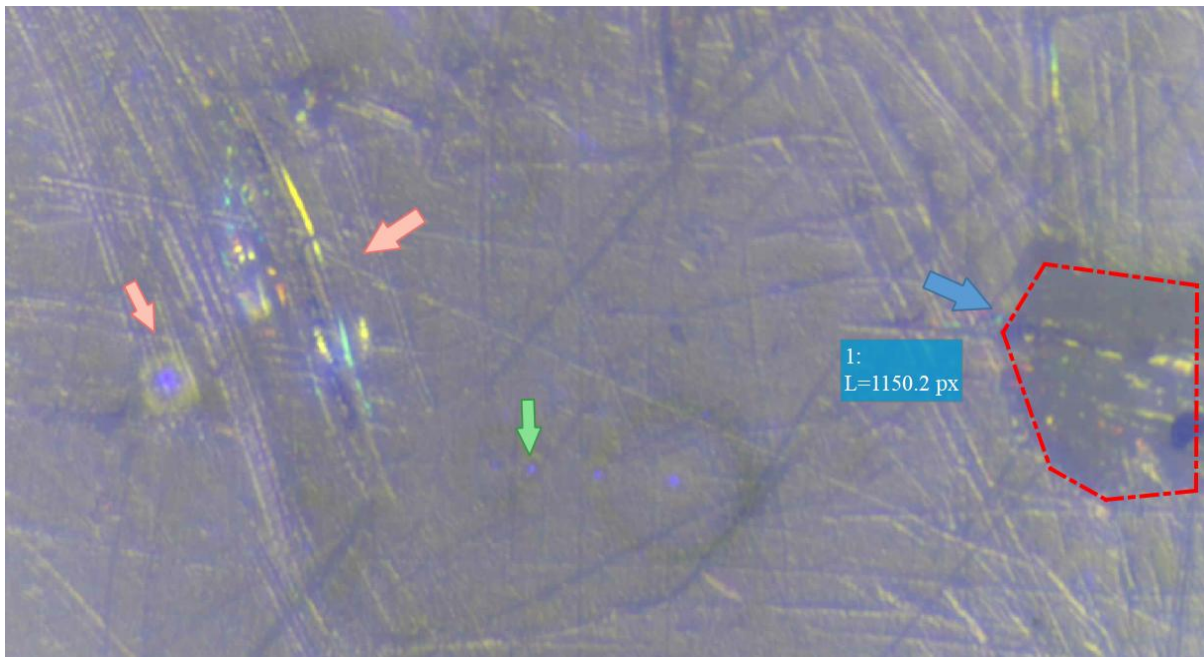
Figure 3. Line Measurement of a Blue and White Porcelain Vase

From the measurement of the blue and white porcelain lines in Figure 3, it can be seen that the line width of the blue and white porcelain vase is between 2.44mm~2.83mm, and the lines are dotted, indicating that the drawing process of porcelain patterns is complex. In addition, the different lines are interspersed with finer line segments, further proving the symbol's fineness. In the Ming and Qing dynasties (1580~1710 AD), with the export

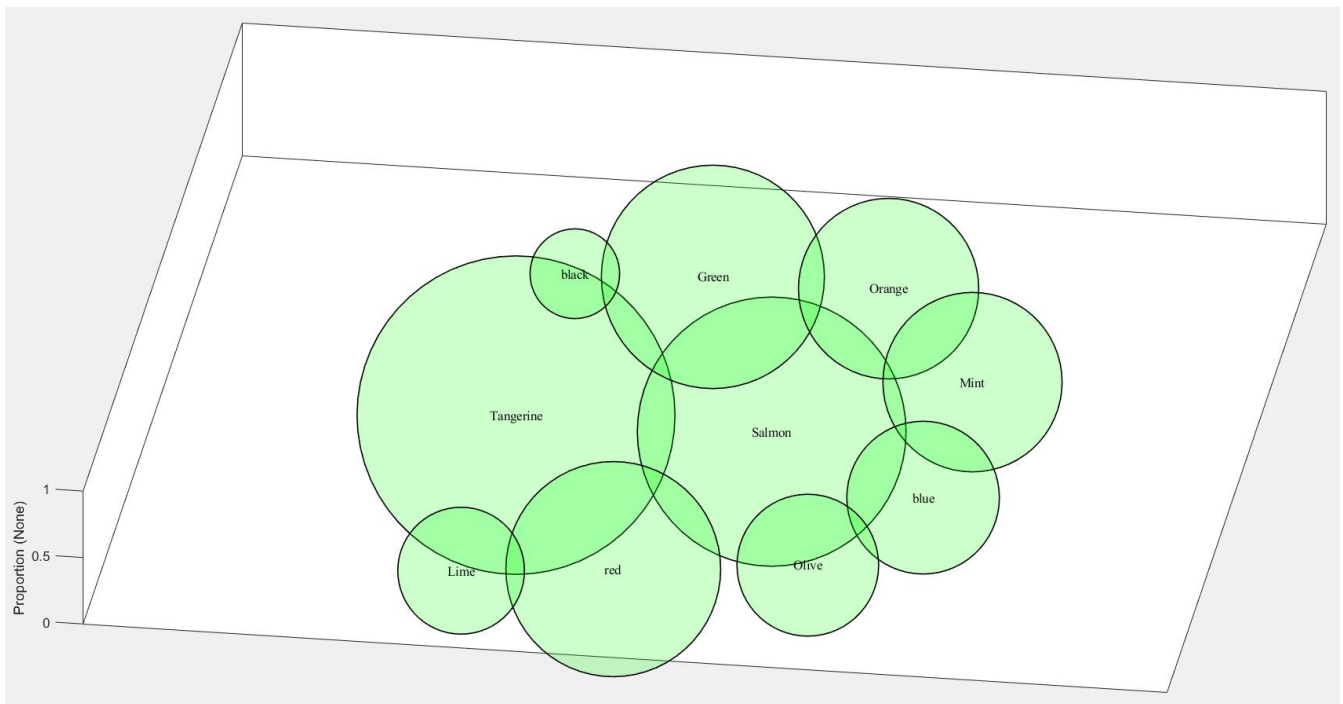
of Chinese porcelain overseas, porcelain with blue and white symbols began to be very popular, so porcelain with many blue and white symbols began to get export opportunities and continued to expand the scale of production. The porcelain with these blue and white symbols often has different artistic expressions, some mainly focus on the elegant and fresh temperament of blue and white and related content creation, and some focus on the expression of tranquility and leisure artistic conception, which can basically reflect the actual living environment and related scenes of women in the official palace of the Ming and Qing dynasties.

Painted Colors

During the Yuan Dynasty (1271~1368 AD), opera began to develop well, and many well-known drama works were born, such as "Dou E's Injustice" and so on. At the same time, the painting elements with the theme of drama characters and drama plots familiar to ordinary people have gradually been applied to the creation of porcelain decoration. For example, porcelain decorative symbols based on the theme of "The Legend of the West Chamber" began to be used more often. However, using figures in Ming and Qing porcelain requires complex colours to support it. For another example, in the Ming and Qing dynasties (1580~1644 AD), many porcelain symbols related to the four famous novels "Romance of the Three Kingdoms", "Journey to the West", "Dream of Red Mansions" and "Water Margin" began to appear on porcelain. This method of integrating the pattern symbols of ancient Chinese classic stories into the porcelain craft was widely adopted by the people at that time, in a sense, it can enrich the pattern elements of porcelain and further enhance their artistic connotation. In addition, it brings valuable resources for the inheritance of intangible cultural heritage, and the following is a study of the Yunlong Pan in the early Qing Dynasty (1644~1710 AD) as the research object, and the color of the pattern symbols in porcelain is measured, and the results are shown in Figure 4.



Observation of the color of porcelain



The proportion of different colors
 Figure 4. Color Analysis of the Cloud Dragon Disk

As can be seen from Figure 3, the Yunlong plate contains elements such as yellow, blue, cyan, orange and light green, indicating that the dyeing process of porcelain in the early Qing Dynasty (1644~1710 AD) was more complicated. Among them, the blue color should be copper sulfate, the yellow color should be gold dust, the orange color should be ferric oxide, and the cyan color should be a mixture of cinnabar and copper sulfate. This analysis shows that Ming and Qing porcelain dyes are vibrant, mainly obtained from trade with Europe and the Americas. In the early Ming Dynasty (1644~1710AD) porcelain, the motifs and symbols in the porcelain also include landscape garden symbols, such as the background of the figures, etc., and the dye colors are also more diverse, and the display is more vivid. Under the action of blue, yellow, and red, the cloud dragon disk will have a clear picture of far and near. In addition, the landscape garden symbols that appear in blue and white porcelain are rich in the characteristic advantages of traditional Chinese landscape painting techniques, and the porcelain ornamentation symbols are more complete, which also benefits from various dyes. At the end of the Ming Dynasty and the beginning of the Qing Dynasty (1644~1710 AD), complex colors in porcelain symbols generally appeared on foreign trade porcelain, such as plates, plates, bowls, etc. Moreover, because Europeans were more enthusiastic about tea then, the porcelain garden symbols were more coarse. The variety of colors combined with complex painting techniques makes the porcelain patterns more delicate and delicate, and there are many painting styles, with a quiet style, showing the Chinese style.

Drawing Depth of Porcelain Symbols

In the history of the development of Chinese porcelain symbols, as a carrier of beautiful symbols, the image of flower and plant symbols has been well continued until the Ming and Qing dynasties (1644~1710 AD)., floral plant symbols are still prevalent. Flowers and plants conform to the prevalence, mainly the depth of the drawing changes. During the early Ming Dynasty (1345~1365 AD), the depth of porcelain symbols was shallow, and it was impossible to draw peonies, plum blossoms, bamboos and other flowers, resulting in complex shading and unclear symbol patterns. However, the introduction of European carving technology has changed the carving depth of Ming and Qing porcelain, and the carving depth has reached 3.2mm, the color and lines have not changed, and the carving depth test of the lotus bowl is shown in Figure 4.

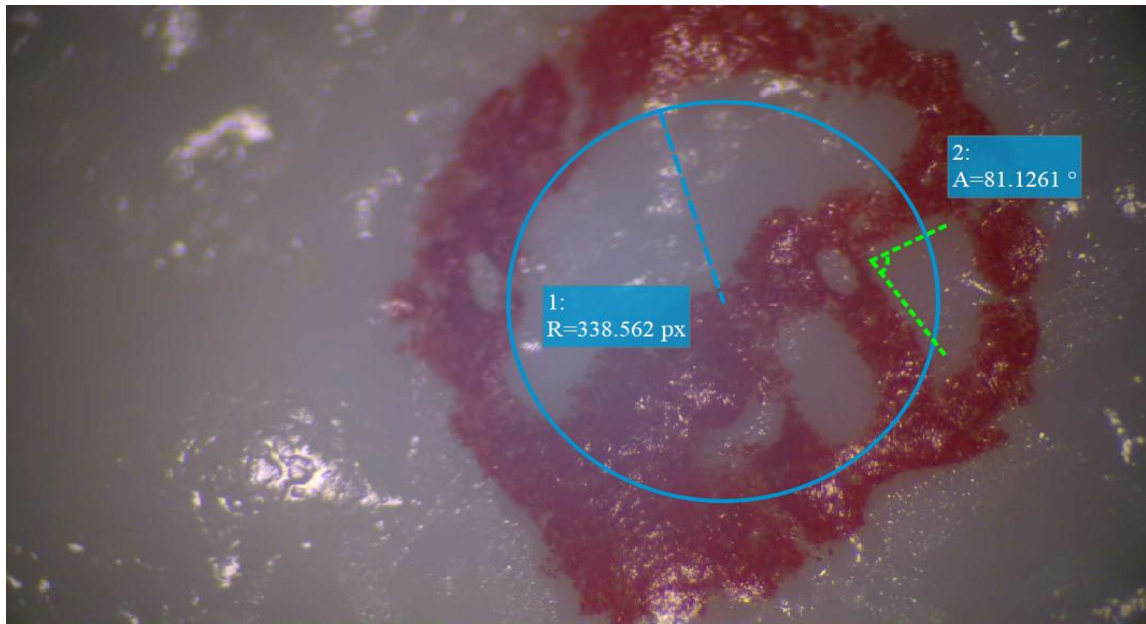


Figure 5. Pattern of Lotus Flowers in a Lotus Bowl

As seen from Figure 4, the lotus bowl's lotus pattern angle is less than 81° , and the radius is 3.38m, which shows the exquisite drawing and vividness of the lotus. The depth of the pattern of the lotus bowl was tested, and the results are shown in Figure 5.

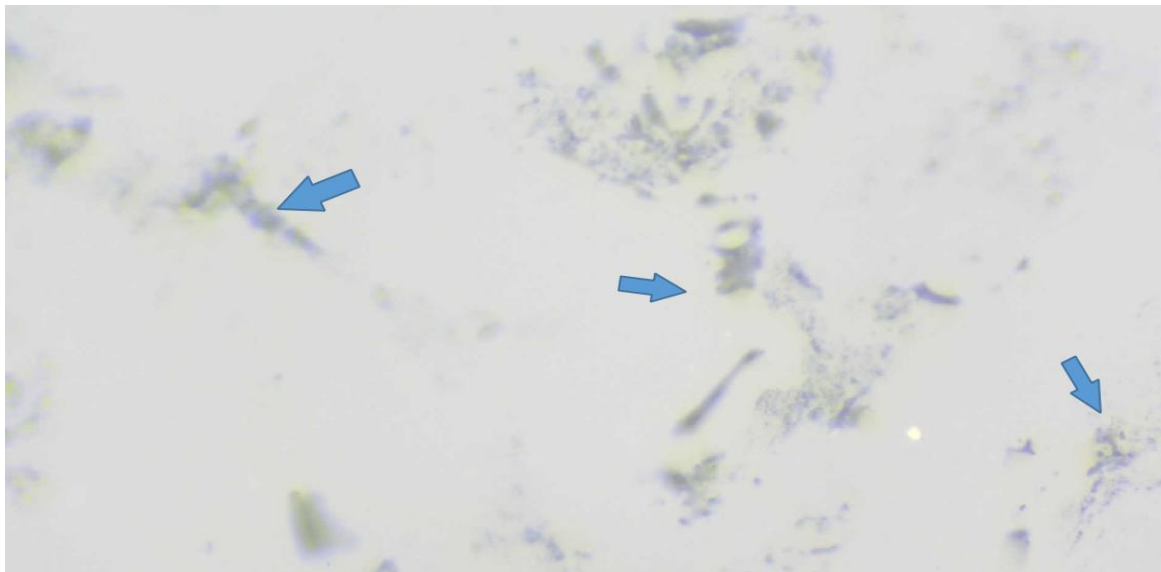


Figure 5. Depth Test of Lotus Bowl

As seen from the test depth of the lotus flower in Figure 5, the middle of the carving is relatively deep, the surrounding area is relatively uniform, and the most profound depth reaches 2mm. It can be inferred from this that the carving of the lotus bowl should adopt the technique of seal carving, and the pattern should be carved in the form of dots and lines. At the same time, the engraving process is a step-by-step process to show the delicacy of the pattern. In terms of the carving distribution of the lotus bowl, the depth of the carving is scattered, covering the entire lotus pattern, proving that the carving process is very complex and the carver is delicate. The lotus pattern symbol is a metaphorical symbol for people to place their beautiful emotions and hopes, and has always been a source of inspiration for Chinese artists, widely appearing in the Ming and Qing dynasties (1644~1710 AD). In Ming and Qing dynasty porcelain, flowers were generally painted in the middle of the porcelain, occasionally as lace and shading. Each flower will have a specific symbol. For example, the peony flower represents "gorgeous and rich", and the plum orchid bamboo chrysanthemum in the four gentlemen represents "elegance and nobility". For

another example, the lotus flower symbolizes the beautiful temperament of "getting out of the mud without staining", while the pomegranate flower carries the good wishes of "having many children and grandchildren" and "blessing full of halls". In some cases, next to the flowers on the porcelain of the Ming and Qing dynasties, there will be some birds, insects, etc., which play the role of embellishment. Although the varieties of flowers in the later Ming and Qing dynasties are not so clear, specific and challenging to distinguish, flowers are still rich in profound cultural connotations and symbolic symbols in Chinese porcelain. In view of the above analysis, the pattern characteristics of blue and white porcelain in the Ming Dynasty were identified, and the specific results are shown in Table 1.

Table 1. Symbolic Characteristics of Blue and White Porcelain in the Ming Dynasty

index	Symbol weights	Cultural weights	Revelatory
red	0.838	0.300	0.300
blue	0.198	0.181	0.039
Yellow	-0.142	0.172	0.045
curve	0.224	-0.100	0.027
Line	-0.165	0.029	-0.009
straight line	0.073	0.012	-0.002
Traditional culture	-0.006	-0.024	0.006
Pattern	-0.024	0.019	-0.005
cross	0.027	-0.009	0.003

From the matching characteristics in Table 1, it can be seen that red and blue have a higher proportion, and bear more cultural weight, and have a higher inspiration for modern clothing. The conformity characteristics of curves, discounts, traditional culture and patterns are obvious, and the cultural weight is relatively high, so the overall enlightenment is high. It can be seen that the blue and white porcelain of the Ming Dynasty has obvious characteristics and more cultural connotations, which has a profound impact on modern clothing.

DISCUSSION

The Diversified Influence of Ming and Qing Porcelain Symbols on Modern Clothing Patterns, Cultural and Artistic Connotations From the Perspective of Intangible Cultural Heritage

Diversified Influence on Modern Clothing Patterns

In Ming and Qing dynasty porcelain, flower symbols have always been a popular element. Moreover, judging from the current situation of modern clothing pattern design, floral themes tend to receive more attention from designers and get more applications. Therefore, this paper mainly takes flower symbols as an example to analyze and study the multiple influences of Ming and Qing porcelain symbols on modern clothing patterns and cultural and artistic connotations from the perspective of intangible cultural heritage.

In the Ming and Qing dynasties, some common flower symbols, such as lotus, plum blossom, peony, etc., have always had a great influence on modern clothing patterns, and these influences appear to be very diverse, which is embodied in these points:

Incorporate Ming and Qing Porcelain Symbols

In the eyes of modern fashion designers, the flower symbols in Ming and Qing porcelain are very charming, and they often have many beautiful meanings and symbols, which are very suitable for reference. Therefore, some modern clothing designers will apply the flower symbols in Ming and Qing porcelain to the clothing pattern design. Through this use, these elegant and delicate flower symbols have a lot of influence on modern clothing, and bring a full and effective combination of tradition and fashion to modern clothing, and highlight the excellent

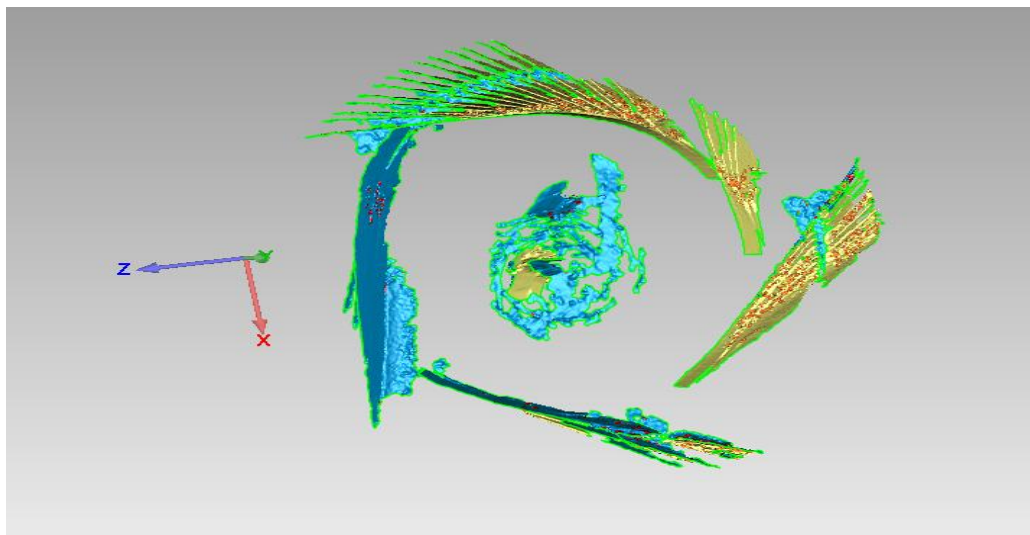
matching effect. For example, designers can borrow the floral elements in the Ming and Qing dynasty porcelain symbols and effectively combine them with history, culture, and modern aesthetics to create a charming and distinctive clothing style. In this way, the design of modern clothing can be used to achieve intangible cultural heritage and promote Chinese culture. For example, some Chinese designers will apply some classic peony symbols and decorations in Ming and Qing porcelain to dinner dresses and dresses, and show an excellent, elegant and noble effect. Some designers will use the lotus symbol in Ming and Qing porcelain for more casual and daily clothing styles to highlight the relaxed, elegant, fresh, and natural style or feeling of clothing. In this way, people will discover the Ming and Qing porcelain symbols through these distinctive clothing designs, so as to deepen people's impression and understanding of the Ming and Qing porcelain symbols, so as to achieve the effective promotion and dissemination of intangible cultural heritage.

Deepen the Connotation of Patterns and Symbols

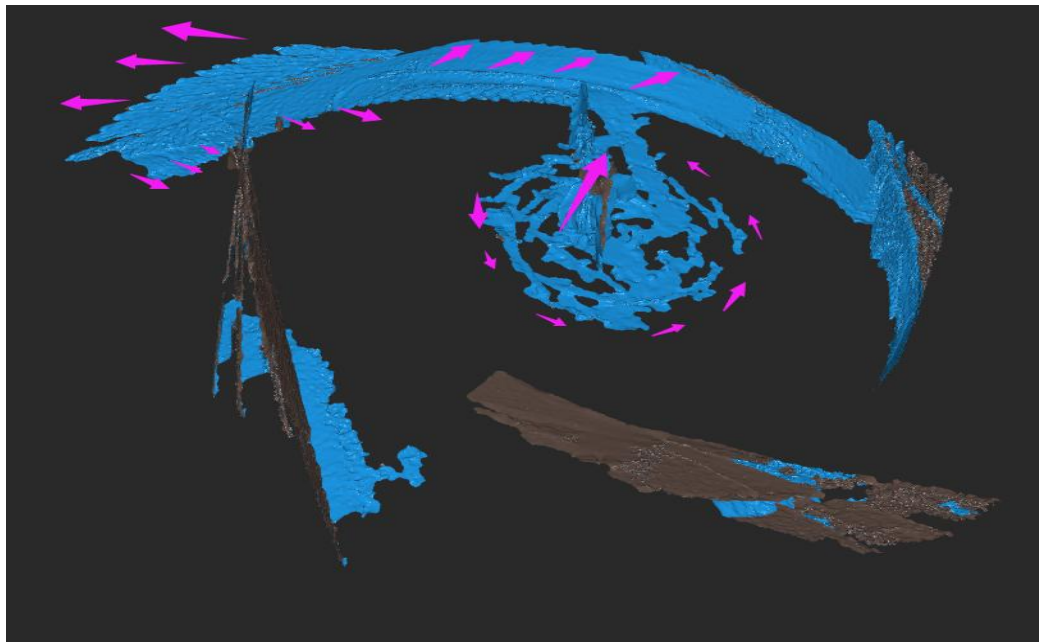
From the perspective of intangible cultural heritage, costume designers can also effectively combine flower symbols and modern patterns in Ming and Qing porcelain. Therefore, designers will use this to create clothing styles that have both traditional cultural characteristics and fashion elements. In this way, the characteristics of Ming and Qing porcelain symbols can be preserved, and people's attention to intangible cultural heritage can be further increased. At the same time, it is also in line with the personality taste and fashion pursuit of modern people, and can further expand the scope of intangible cultural heritage. For example, designers can effectively combine flower symbols and modern popular elements in Ming and Qing dynasty porcelain and incorporate them into T-shirt designs. In this way, the designer will create a more chic, attractive and fresh style of clothing. This effective fusion will reflect the delicacy and magnificence of Ming and Qing porcelain symbols, and show the uniqueness of the combination of T-shirts and Ming and Qing porcelain symbols, so as to attract the attention of young people and further deepen their understanding and support for intangible cultural heritage.

Decorative Novel Shapes

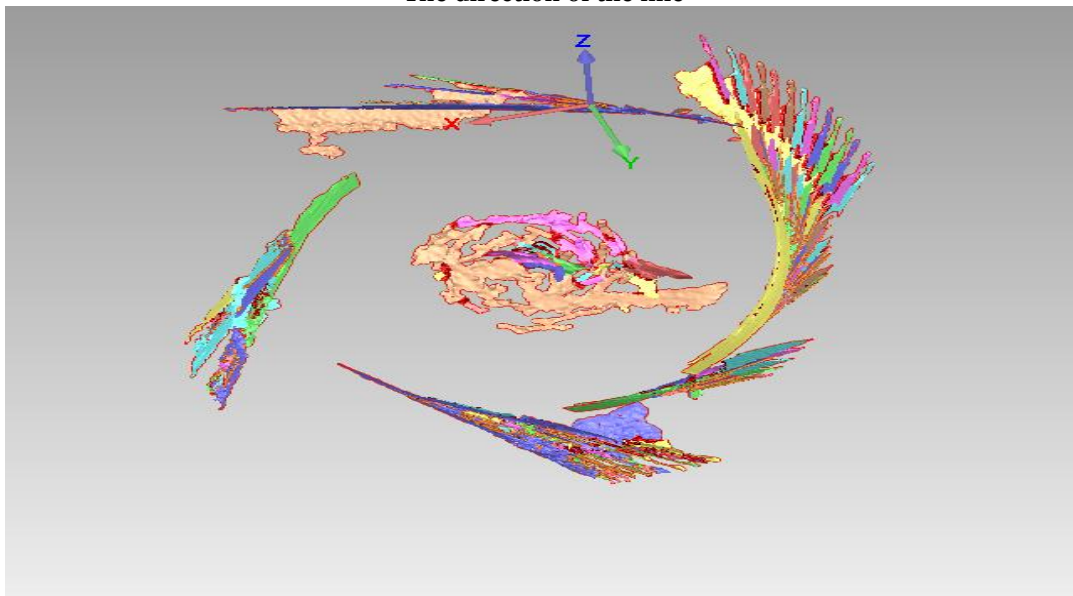
In modern clothing design, designers can integrate the flower symbols of Ming and Qing porcelain into clothing design to make the clothing patterns very rich and further change the decorative characteristics of clothing shapes. From the perspective of intangible cultural heritage, Ming and Qing porcelain symbols can add artistic sense and uniqueness to clothing, and make modern clothing more distinctive and fashionable. For example, designers can incorporate the flower symbols of Ming and Qing porcelain into the skirt of the dress to use it as a pattern on the skirt of the dress, to better play the role of embellishment and improve the visual effect of the clothing. In this way, the dress will show a gorgeous, sophisticated sense of charm and fashion so as to attract more people's attention, as shown in [Figure 6](#).



The color of the pattern



The direction of the line



Splicing effect of different materials

Figure 6 .The Design Effect of the Pattern in the Dress

As can be seen from the three-dimensional effect in Figure 6, the lines of the dress diverge from the middle line to the outside world, similar to the lotus pattern in the lotus bowl. The pattern is spliced with different materials to show a richer color, consistent with the colour in the cloud dragon plate. The outer contours in the pattern are clear, similar to the lines in a blue and white vase. Therefore, the pattern design of the dress integrates the characteristics of the sample studied in this paper and reflects the symbolic connotation of Ming and Qing porcelain. In addition, designers can also integrate the flower shapes in Ming and Qing porcelain into the neckline and cuffs of dresses to decorate the edges, so as to add artistic charm to the clothing design and improve the delicacy of the clothing itself. In this way, people will feel the charm of Ming and Qing porcelain symbols from the patterns of these modern clothing. At the same time, this can also reflect the historical and cultural heritage of modern clothing patterns, and then better realize the purpose of intangible cultural heritage.

Enhance the Creativity of Printing Design

Designers can make the Ming and Qing porcelain symbols an element in modern clothing printing based on effective creative transformation. For example, designers can first digitize the flower symbols on Ming and Qing dynasty porcelain, then carry out innovative processing on them, and transform them into creative prints of modern clothing patterns to improve the design sense and taste of modern clothing. It is worth mentioning that

this transformation not only retains the wonderfulness and characteristics of these Ming and Qing porcelain symbols, but also adds many new expressions to modern clothing, which can improve the individuality of modern clothing design (Sun et al, 2023). For example, when designing casual street-style modern clothing, designers can digitally print by incorporating flower symbols from Ming and Qing dynasty porcelain and effectively apply them to modern clothing to make the clothing have traditional characteristics, and have a sense of fashion and personalization. Based on this, people will feel the influence of Ming and Qing porcelain symbols on the design of modern clothing patterns, and this influence can show certain diversified characteristics, and shape a certain cultural connotation and artistic significance. Using these Ming and Qing porcelain symbols (Tian et al., 2023), people will effectively promote the integration of modern clothing into the intangible cultural heritage and show the significance of intangible cultural heritage.

Diversified Influences on the Connotation of Culture and Art

From the perspective of intangible cultural heritage, the Ming and Qing porcelain symbols have been considered an important element of traditional Chinese porcelain art, and under the intangible cultural heritage, people began to apply these Ming and Qing porcelain symbols to modern clothing patterns, so they can play a diversified role in influence. At the same time, it will also have a diversified impact on the connotation of culture and art, as follows:

The Cultural Symbol to Continue

Contribute to the intangible cultural heritage and deepen people's impression of and attention to the porcelain symbols of the Ming and Qing dynasties. For example, the application of flower symbols in Ming and Qing porcelain to modern clothing patterns will better inherit the beautiful meaning of Chinese culture, such as "natural harmony", "happiness and health" and other meanings, will be integrated into these designs, so that people can appreciate the charm of Chinese culture and art, appreciate the essence of Chinese culture, and carry out a longer transmission. In this way, it can show Chinese culture and art's characteristics and humanistic spirit and deepen the world's attention to intangible cultural heritage (Tornvall, 2023). The flower symbols in Ming and Qing dynasty porcelain have high aesthetic value, so they can be effectively integrated into modern clothing patterns to effectively integrate modern and traditional aesthetic concepts. Based on this, people will pay more attention to the national characteristics and connotation of porcelain symbols in the Ming and Qing dynasties, and reflect the fashion sense of modern clothing and the extraordinary characteristics of traditional culture and art. In this way, it can attract more people to feel the charm of traditional culture and art, and meet people's pursuit of individuality, fashion and unique aesthetic elements.

Realize the Inheritance and Innovation of Skills

From the perspective of intangible cultural heritage, the symbols of Ming and Qing porcelain, such as flower symbols, can be integrated into the pattern design of modern clothing, so that the ancient art form of Ming and Qing porcelain symbols can be combined with modern fashion clothing, so as to reflect the new cultural and artistic connotation and charm. Designers can make effective innovations and transformations based on preserving traditional techniques, giving them new expressions and designs. In this way, the artistic elements of the ancient porcelain craft can be effectively inherited (Wang et al., 2023), and people's attention to the inheritance of skills can be improved, and people's interest in the intangible inheritance of Ming and Qing porcelain can better protect the ancient culture and art. As we all know, the flower symbols or other symbols in the porcelain of the Ming and Qing dynasties represent the aesthetic peak of ancient Chinese porcelain art. The designer's application of Ming and Qing porcelain symbols to modern clothing patterns will enhance people's sense of identity and identity construction of traditional Chinese culture and art. From these creative fusions, people can better feel the historical memory, emotional meaning and values of these Ming and Qing porcelain symbols. In this way, it can shorten the distance between future generations and traditional Chinese culture and art, and enhance the connotation of traditional Chinese culture and art.

Promote Cultural Exchange and Interaction

The symbols of Ming and Qing porcelain have been applied to the design of many modern clothing patterns, and this pattern use is no longer limited to China, but has begun to be applied and displayed on the international stage. For example, at the International Fashion Week, many fashion designers have begun to incorporate the flower symbols in Ming and Qing porcelain into their works and display them to the world. So, this has formed a kind of cross-cultural communication and interaction. Under such circumstances, the Ming and Qing dynasty porcelain symbols have long become a bridge connecting Chinese national culture with the fashion and culture of other countries worldwide. Therefore, from the perspective of intangible cultural heritage, the Ming and Qing porcelain symbols, especially its flower symbols, have been recognized by the public for their diversified influence on modern clothing patterns and artistic and cultural connotations.

Moreover, this influence is mainly reflected in the continuation of cultural symbols, the inheritance and innovation of skills, and the effective integration of aesthetic concepts. In short, by applying the Ming and Qing porcelain symbols to modern clothing patterns, people will deeply feel and understand the charm of Ming and Qing porcelain symbols, and truly understand the characteristics and connotations of Chinese culture and art. At the same time, it will also lay a better foundation for the sustainable inheritance and development of Chinese culture and art and promote the further protection and inheritance of Chinese intangible cultural heritage. The symbols of Ming and Qing porcelain have always been intangible cultural heritage (Wang et al, 2023), so it is extremely important for the intangible inheritance of Ming and Qing porcelain. If the Ming and Qing dynasty porcelain symbols and patterns are integrated into modern clothing patterns and applied, then the role of intangible cultural heritage can be better played, and the display opportunities can be improved, so that more people can understand, learn and inherit intangible cultural heritage.

Moreover, integrating symbols in Ming and Qing dynasty porcelain, such as flower symbols, into the pattern design of modern clothing can also enhance the position of intangible cultural heritage in the public's hearts and improve the protection and inheritance effect of intangible cultural heritage. The use of Ming and Qing porcelain symbols, such as flower symbols, can help the public to increase the protection and attention of traditional crafts. When integrating them into the design of modern clothing patterns, people will know and understand the traditional craftsmanship and artistic connotation of Ming and Qing porcelain through the knowledge and understanding of Ming and Qing porcelain symbols, so as to better inject more vitality into the promotion of modern clothing design and cultural and artistic taste, and deepen the public's impression of traditional Chinese culture and art and intangible cultural heritage, and improve the overall inheritance (Zou et al, 2023).

CONCLUSION

All in all, Ming and Qing porcelain is one of the essences of Chinese intangible cultural heritage, and the symbols in Ming and Qing porcelain can be widely used in modern clothing pattern design and classic elements in culture and art. Therefore, from the perspective of intangible cultural heritage, the Ming and Qing porcelain symbols have a diversified influence on the design of modern clothing patterns and the promotion of artistic and cultural connotations. Since the use of flower symbols by Chinese basically contains good meanings, such as "auspicious wishes" and "happiness" and "happiness", they are applied to modern clothing patterns to reflect the charm of Chinese culture and art. In this paper, three pieces of Ming and Qing dynasty porcelain excavated from Dongxi kiln in 2015 were used as research objects, and tested with Chenxi Optics 4K electron microscope and DONZy 3D scanner. The results show that the lines of Ming and Qing porcelain are more delicate, the line gap is less than 2.83mm, and the symbols are multi-dimensional circles, with a diameter of 0.36mm~0.81mm. The patterns in porcelain use a variety of complex dyes, such as cinnabar, copper sulfate, iron oxide, etc., to make the patterns conform to the presentation of more complex relationships. In addition, the pattern is in the form of seal engraving, the depth is greater than 2mm, and in a circle with a radius of 3.38mm, the line drawing angle is less than 81°. This illustrates. The Ming and Qing dynasties porcelain workmanship is fine, the colors are diverse, the patterns are complex, the pattern is applied to modern clothing, will promote the inheritance of traditional culture and art, improve the innovation of modern clothing patterns, and deepen the artistic connotation.

PROJECT FUNDING

1. Non-hereditary Inheritance Research Team of School-level Research Team of Anhui Institute of Information Technology in 2022;
2. Phased research results of "Research on Database Construction and Living Inheritance of Traditional Skills in Southern Anhui" (Project No.: 2022AH030155), an outstanding youth fund project of Anhui Province, China;
3. The phased research results of the Youth Fund for Humanities and Social Sciences Research of the Ministry of Education of China's "Research on the Design and Application of Anhui Folk Ceramics' Cultural and Creative Products from the Perspective of 'Intangible Cultural Heritage'" (Project No: 21YJC760093).

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