# Innovation and application of ceramic art in modern product design

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Abstract: With the rapid development of modern society and economy, the living standard of residents is constantly improving, and the requirements for personal quality of life are also getting higher and higher. Therefore, there are more requirements and designs to meet people's modern product design. As a treasure of Chinese traditional art, ceramic art has gone through historical precipitation and changes. Nowadays, ceramics have become an indispensable vessel in our life, which is more and more popular among consumers. Besides, with the development of science and technology, the manufacturing process has been comprehensively improved, and the overall ceramic products are more exquisite and beautiful. As far as modern product design is concerned, ceramic art is also a design element, which plays an important role in innovating modern product shape, color, technology and enriching cultural connotation. Therefore, according to the requirements of modern product design, this paper will pay attention to the characteristics of ceramic art materials, put forward specific methods and application advantages of innovative design of modern products from the decorative patterns of ceramics, and actively explore the development direction of traditional ceramic art and modern product design.

#### 1. Introduction

As a product of the optimal application of art, technology and materials, ceramics, as an important cultural heritage in China's traditional art, has had a far-reaching impact on personal life and material application needs. When design and art are integrated, the artistic effect will be enhanced. A good design is not only to design the final result, but also for people's daily good life. However, with the continuous improvement of people's living standards, the daily design can no longer meet the needs of the public. People begin to hope that they can meet people's spiritual enjoyment of beautiful things while using them. In recent years, the exhibition process of ceramics has been integrated with modern products, and the design content has gradually become one. As an excellent traditional art process in China, the design of ceramic art has a lot of references for modern products in many aspects. Nowadays, with the support of various high technologies, the ideas of modern product design tend to be novel, and some excellent traditional cultural elements are integrated into product design in the process of constantly pursuing material and modeling innovation. On the one hand, the modern application of traditional cultural elements is realized; On the other hand, it promotes the transformation of aesthetic style of products from inside out. Applying ceramic art to modern product design and application can not only complete the diversified development of modern product design materials, styles and application directions, but also realize the active application of ceramic decorative patterns in modern product design, realize China's modern art innovation, and meet the needs of comprehensive innovation and improvement of modern art design.

# 2. Application of ceramic art material characteristics in modern product design

# 2.1. Psychological feeling of ceramic art connotation

Ceramic art is an important cultural connotation with thousands of years of history. According to the psychological feelings of different individuals, it can be considered that the psychological characteristics of pottery itself can affect individuals from a psychological level. Modern ceramic art is a kind of thirst and search for the essence of art separated from traditional ceramics. With the transformation of the times and beyond the constraints brought by the transformation of time and space, it expresses the aspirations and aesthetic concepts of modern people. Many potters are more in pursuit of returning to nature, publicizing their individuality, and rediscovering the essential requirements of art with their own aesthetic concepts. Chinese ceramic art has never been a closed system. It has always been influenced by various foreign crafts and artistic factors, and has entered the process of localization from the initial imitation. On the whole, in the traditional Chinese ceramic art, ancient-colored porcelain is relatively less affected by external factors, and maintains a very deep local cultural accumulation. With the rapid development of modern science and technology, the overall production process and accuracy of ceramics can be improved to a higher degree, and the use of ceramic materials can also produce more precise and detailed parts products, which means that ceramic materials can achieve a wider range of products. The application can be actively adapted to the needs of various environmental decorations.

# 2.2. Physical characteristics of pottery shape

In general, the physical properties of ceramic materials are easy to clean, high temperature resistance, high hardness and other properties, which are highly similar to the high-quality content of products pursued by modern design and application. Compared with the handicraft products used in traditional product design, it has more advantages. The primary purpose of design is use, that is, functional utility. Without the so-called function, it can not meet people's living needs, which fully reflects the purpose of the design. The function and utility of each living utensil must meet the normal use of everyone, and at the same time create a good use environment and feeling. It should not only make users comfortable, safe, but also convenient, so as to reflect the functional utility and functional beauty of the utensils. To achieve this harmony between practical use and functional beauty is an excellent contemporary ceramic art design. Through practice and innovation, a beautiful ceramic work of art will be formed after the process of ceramic mud proportioning, ceramic shaping, ceramic drying, ceramic firing, etc. It can be seen that ceramic technology is an important medium for artistic emotion and social expression of emotion. It can not only express people's pursuit of ceramic technology, but also reflect the emotional pursuit of producers, and pass on their own ideas through ceramic technology. Not only that, it is precisely because the ceramic art products have the characteristics of high hardness and smooth surface, and the dirt is not sufficiently contained in the ceramic products, so it is easier to be cleaned in practical application. Therefore, ceramic products have gradually entered the field of kitchenware and sanitary ware, and the hand washing pools, bathtubs and cutting tool teapots have been widely used in real life.

#### 3. Innovative application of ancient ceramic color in modern ceramic art

## 3.1. Subjective innovative application

The innovative application of ancient ceramic color in modern ceramic art means that ancient ceramic color occupies a dominant position in modern ceramic works. This dominant position is reflected in all aspects. Inheriting and absorbing traditional and modern ceramic techniques, excavating traditional materials and symbols of folk culture, and reasonably applying them in combination with the contemporary environment can all become the creative means and thinking ideas of modern and contemporary ceramists. And make it an artist's language. Without inheritance, there will be a fault in artistic expression and even detours, which can't continue to develop. Only by constantly absorbing the nutrition of life and discovering new creative fields and new creative themes can art generate new creative inspiration and new forms of expression, thus promoting the real innovation and prosperity of art. The so-called new things are strong, fresh and alive; Old, old, rotten, and stagnant. In all dynasties of history, it was the continuous improvement of ceramic production technology and innovation of ceramic categories and decorative elements that enabled ceramics to realize the transformation from crude ceramics to exquisite ceramics, and became a world-renowned oriental art representative. Today, the development of ceramic art is still inseparable from inheritance and innovation. Through innovation, the artistic style, use value and

cultural function can be changed, and the ancient ceramic art can truly become a part of modern life. Modern ceramic technology has different forms in creative techniques and methods, and the modern handicrafts made by it can become a brand-new product, such as intelligent ceramic tea set, intelligent ceramic acoustics, intelligent ceramic pots and pans, etc. It is a new craft product that combines modern products with ceramic technology. Creative modern modeling can be adopted to set off and highlight the ancient color picture, and other materials and means, such as color glaze and sculpture, can be innovatively applied to assist, thus giving the ancient color picture a stronger sense of modernity.

## 3.2. The Development Space of Modern Ceramic Art

Since the mid-1980s, China's modern ceramic art has gradually emerged and matured. The innovative application of ancient ceramic colors in modern ceramic art has broadened the material space for the development of modern ceramic art, so that the creation of modern ceramic art can draw a lot of useful nutrition from the extremely rich treasure house of ancient ceramic colors, greatly enhancing the cultural inclusiveness of the works. And the national characteristics, and the more inclusive and national modern ceramic works are easier to go to the world, and play a role in fighting for a place for Chinese modern ceramics on the world's modern ceramics stage. In fact, the innovative application of ceramic art in modern product design can also design ceramic products as the main product, and integrate the functions of other products into ceramic products, so as to realize the combination of ceramic art and modern product functions. In today's era, due to the application of technology in product design, products are becoming more and more intelligent and humanized, so the application of ceramic art in modern product design should also closely follow this trend, combining modern technology, modern products and The three ceramic arts are fully combined to design products with a sense of fashion, technology and intelligence. Therefore, in the process of designing modern products, designers integrate ceramic craftsmanship with modern products, which can not only inherit the cultural connotation of Chinese national art, but also convey the characteristic craftsmanship and spiritual thoughts brought by ceramic craftsmanship through modern products., not only to show the fusion of modern products and ceramic technology, but also to reflect the technical fusion of the two. Combined with modern technology, ceramic art can break through the limitations of materials, performance, and craftsmanship in the innovative application of modern product design, so that ceramic art not only shines in enhancing the appearance and decoration of products, but also plays a pivotal role in improving product functionality and performance. The structural model of ceramic art and modern product design is shown in Figure 1.

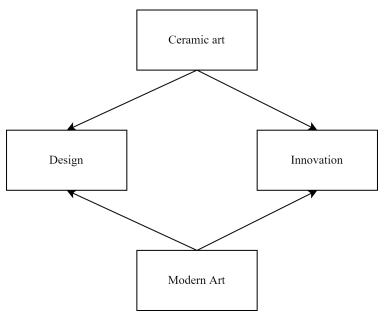


Figure 1 Ceramic art and modern product structure

#### 4. Conclusions

Admittedly, at present, the innovative application of ancient ceramic color in modern ceramic art is still in the initial stage. Most artists of ancient ceramic color are not involved because of their lack of experience in modern ceramic art, and most creators of modern ceramic art are difficult to apply ancient ceramic color to their creations because of the difficulty of ancient ceramic color technology. As a result, the innovative application of ancient ceramic color in modern ceramic art is far from forming an independent and mature system. While developing modern ceramic art, we should also study and inherit the charm of traditional porcelain. The noumenon of art is an eternal subject through continuous inheritance and development. Sticking to the abandoned innovation and breaking away from the traditional innovation can't make art embark on a glorious course. The connotation of ceramics and the performance of products, one inside and one outside, realize value combination, design crossover and innovation breakthrough, thus forming a product design chain system. Macroscopically, consider the function, shape, technology and materials of the product, and microscopically, consider the combination and collocation of elements, highlight the decorative theme, etc., so as to make the performance of the final product meet the requirements of modern consumption and the packaging meet the requirements of modern consumption as much as possible. With the rapid development of science and technology, ceramic technology has also improved a lot in ancient times. First of all, the most prominent one is the hardness of ceramics. Now, not only ceramic knives that are harder than steel have appeared, but also many kitchen utensils that can keep the original taste of food have appeared in kitchen utensils. Therefore, the combination of modern products and ceramic technology not only inherits China's ceramic technology, but also brings new development to modern products and makes modern tea farmers have more oriental characteristics. Promoting ceramic art innovation while conforming to modern aesthetics is an important requirement to realize the innovative application, inheritance and protection of ceramic art.

### References

- [1] Hu Qianqian. A brief introduction to the application of ceramic art in modern product design [J]. Popular Literature and Art: Academic Edition, 2021(10):2.
- [2] Chen Jianpo. On the integration and innovation of traditional ceramic art and modern product design [J]. Ceramic Science and Art, 2021, 55(4):1.
- [3] An Zhengjie. The Expression and Research of Modern Ceramic Art in Public Art [J]. 2021(2017-12):193-193.
- [4] Wang Chunhua. The application of traditional ceramic technology in modern display art design [J]. Ceramics, 2018(4):3.
- [5] Nie Huafei. The application and development of modern design elements in ceramic art [J]. Ceramic Research, 2019, 34(6):5.
- [6] Zhao Jinjie. Research on innovative strategies of ceramic art design from the perspective of modern consumption [J]. Tomorrow's Fashion: Late Ten Days, 2021(11):3.
- [7] Wang Yun. Analyzing the visual beauty of color and contemporary ceramic art design [J]. Drama House, 2017(3):1.
- [8] Wu Yingchen. Curriculum setting and teaching mode innovation of ceramic art design specialty: Comment on "Ceramic Creative Design" [J]. China Education Journal, 2021(10):1.
- [9] An Zhengjie. The Expression and Research of Modern Ceramic Art in Public Art [J]. Art Science and Technology, 2017, 30(12):1.
- [10] Geng Dahai, Yu Jiexing, Xiang Dan. Application innovation and product development of raindrop glaze in Boshan, Shandong [J]. Design Art, 2020, 000(001):99-102.