Material Dialogue: Aesthetic Exploration on the Combination of Lacquer and Ceramics in Contemporary Tea Set Design

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ABSTRACT

Lacquerware has been passed down for 7000 years since its discovery at the Hemudu site. Lacquerware, which has been passed down to this day, is gradually distancing itself from people, which is not conducive to the modernization development of lacquerware. It is necessary to find a new path for lacquerware to integrate into modern life. The cultural customs of drinking tea and sipping tea are still active in contemporary times, and tea utensils are the carrier of tea ceremony. Therefore, integrating lacquer process into contemporary tea set design and attempting to combine lacquer with ceramics can not only solve the problem of lacquer activation, but also expand the material selection of contemporary tea set design. Finally, through in-depth analysis of history and current situation, this article provides a new perspective and thinking path for the research and practice of lacquer art, affirming the practical value of combining lacquer with ceramics.

Keywords: Tea set design, Lacquerware, Ceramics.

1. INTRODUCTION: CONCEPT DEFINITION AND EVOLUTION OF LACQUERWARE

1.1 Concept Definition of Lacquerware

Lacquerware is a type of handicraft or daily necessities made by applying raw lacquer to the surface of the body of a vessel as a protective film. Most objects have a harder texture after being painted with lacquer, and the repeated painting techniques can also give the objects a richer visual effect. As the old saying goes, "Dripping lacquer into the soil, it will not spoil for a thousand years." This refers to lacquerware.

One characteristic of lacquerware is that it can be polished to a level comparable to porcelain. The lacquer in it is a juice secreted by the lacquer tree. After being dehydrated by sunlight, it becomes a mature lacquer that can be used as a coating. ¹ The material after painting has special functions such as

moisture resistance, high temperature resistance, and corrosion resistance. At the same time, different colored paints are prepared, which shine brightly and have decent ornamental properties.

1.2 The Development History of Lacquerware

China is the country where lacquer was first discovered in the world. As early as the Neolithic period, people had already recognized the properties of lacquer and used it. So raw lacquer is widely used in various aspects of life, from tools to buildings, and its use can be found everywhere.2 With the improvement of productivity and the advancement of production tools, lacquer art in various dynasties and generations has developed to varying degrees, and its uses have also been extended, covering almost all categories. During the Qin and Han dynasties, due to the decline in the status of bronze ware, porcelain had not yet emerged, and lacquerware ushered in its heyday with diverse shapes and changes. In the

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^{1.} Zhou Fanlin, Study on modern Taiwan Residents Traditional Lacquerware Process [J]. Heilongjiang Science, 2018, 9(10): 112.

^{2.} Guo Xiaoying, Lacquerware [M]. Anhui: APGTime, 2016; 2-5.

development of porcelain production during the Three Kingdoms, the Eastern and Western Jin dynasties, Southern and Northern Dynasties, and Sui and Tang dynasties, lacquerware gradually withdrew from the mainstream of daily necessities and was replaced by porcelain. The development of the last few generations focused on various lacquer coating techniques, striving to convey the beauty of paint in visual effects and transform it into exquisite handicrafts. This change was most typical in the Qing Dynasty, such as the technique of inlaying treasures with luxury ornaments.

It is precisely because of the long history and culture, rich categories, and exquisite craftsmanship of lacquerware that as early as the Han Dynasty, Chinese lacquerware had already crossed the sea and become an edge tool for cultural exchange and dissemination, writing a chapter in Sino -foreign exchanges.

From a historical perspective, the birth of lacquerware was accidental, during which it was widely used in various aspects of life due to the preferences of rulers and the progress of production tools. There have also been times of decline due to political turmoil and the development of porcelain. The development of lacquerware also had inevitability. The decline of bronze craftsmanship triggered a gap in arts and crafts. At this time, the development of pottery was also very limited. Lacquerware played a historical role in connecting the Bronze Age and the Porcelain Age at that time. At its own peak, the craftsmanship and decorative patterns it left behind also pointed the way for the development of porcelain. In the later stage of development, lacquerware gradually found its new position in the era, from practical daily necessities to handicrafts with appreciation as the main purpose. Relying on artistic appreciation and cultural inheritance, art forms are constantly updated to express the aesthetic needs of people from different eras. Its strong vitality not only stands out in the history of Chinese culture, but also shines brightly in the history of human civilization.

1.3 The Current Situation and Difficulties of Lacquerware

On the one hand, lacquer art has also emerged as a new form of existence, rapidly sprouting and developing, distinguishing it from traditional lacquer art. Modern lacquer painting emerged under modern aesthetic concepts, transforming traditional lacquer painting techniques into modern painting language. The beauty of lacquer painting lies in its unique materials and craftsmanship. Lacquer paintings are mainly made of materials such as gold foil, silver foil, seashells, eggshells, etc., to create a unique effect of lacquer painting. In interior decoration, there are also attempts to break down parts of the system from the lacquer process to create separate decorative effects.

In handicrafts, the power of lacquerware is slightly insufficient. Materials such as fabrics, metals, plastics, ceramics, etc. occupy a large market space, and new materials and technologies are far higher than lacquerware in terms of price and promotion. Therefore, lacquerware is rarely seen in the current handicraft market on a large scale.

On the other hand, lacquerware, like other traditional handicrafts, originated from the lives of the working people and was inseparable from the production and lifestyle of that time. With the progress of industrialization, a large number of high-quality, affordable, and diverse industrial products have emerged in the market, constantly squeezing the survival space of traditional handicrafts. The daily necessities and high-end decorations that were once indispensable in daily life are gradually being phased out by innovative and practical modern industrial products. The reasons for the limited internal development are as follows: firstly, it is the limited content of the materials produced and environmental pollution. Some luxurious materials have become legally protected materials, which are difficult to obtain in the market. Some materials have disappeared with historical development and cannot be recycled, making it difficult for handicrafts to achieve superior quality; Secondly, the traditional concept of mentorship is limited, and the approach of "passing on male but not female" leads to the loss of human resources. The traditional handicraft industry, which is mainly manual and timeconsuming, has encountered serious problems such as talent gap and lack of successors. 3 The inheritance of traditional handicrafts has also caused a significant blow, as many learners of traditional handicrafts are forced to switch careers after mastering their skills in order to make a living. Furthermore, contemporary young people have limited understanding of the artistic and aesthetic value of traditional handicrafts, and in modern society, people generally prefer to seek immediate

^{3.} Jiang Ranyu, Chen Yijia, Zhu Zhu, Hu Tingting, Li Xuan, On the Inheritance and Development of Traditional Handicraft [J]. Collection and Investment, 2020, 11: 69.

benefits with short cycles, low investment, and quick results. This is reflected in the minority of people willing to learn and inherit traditional handicrafts, further compressing the development of lacquerware from a talent perspective. Finally, in the operation process of China's traditional handicraft industry, most of them adopt a small workshop style production model, which has a relatively small production scale and a relatively single management method. The low degree of industrialization and marketization limits the dissemination effect and scope of traditional handicrafts.

The argument focused on in this article lies in the modernization path of lacquerware. The author believes that both the flourishing lacquer painting art and the lacquer process applied to interior decoration are developed by cutting a section from the lacquer craftsmanship, making it difficult to fully unleash the true charm of lacquer and achieve modernization of lacquer craftsmanship. The development of lacquer needs to be based on adaptation to industrial society. If adaptation to industrialization cannot be achieved, the value of lacquer will be weakened, and it may even be left behind in historical trends. There are not many traditional handicrafts that can still meet the requirements of industrial production at present, but ceramics seem to contain a glimmer of possibility. It is reported that the advancement of 3D printing technology has enabled the printing of ceramics, and the technology of ceramic gypsum flipping has also withstood the test of time. These undoubtedly provoke the author's reflection that is there a way to combine the already industrialized ceramic process with the lacquer process to explore the modernization of lacquer technology.

2. FUNCTIONAL ANALYSIS AND CASE REVIEW OF CONTEMPORARY TEA SETS

2.1 Functional Analysis of Contemporary Tea Sets

Lewis Sullivan, a representative figure of the Chicago School in the United States, once proposed a famous theory that form obeys function. This theory guides the principle of prioritizing functionality in product design, however, tea sets are a collection of three functions.

The first function is practical function, which refers to the specific functions of tea utensils for brewing, storing water, and holding water. Except for these functions, all other needs belong to the second or third function. Practical function constrains the basic shape and material of tea sets.

The second function is cultural function, which refers to meeting the cultural needs of tea drinkers. It further controls the shape and pattern decoration of tea sets through cultural tea drinking behavior, resulting in tea set shapes that are only born to meet cultural etiquette needs.

The third function is aesthetic function. The aesthetic function is reflected in the change and adjustment of visual factors such as the shape, color, and external decoration of tea sets, without changing the existing structure and function, after achieving other functional needs. Usually, the realization of aesthetic function is nurtured in the realization of cultural function, and is not always separately listed and adjusted.

Name	Legend	Function
Tea pet		It refers to the pets of the tea men, which are nourished with tea or played with while drinking tea. Some tea pets use a hollow structure, and after pouring tea, they will experience foaming and spraying water, adding fun to tea drinking and leisure.
Tea clip		Also known as tea chopsticks, it is mainly used for hot washing cups and removing tea residue from teapots. Belongs to the shape derived from cultural functions.
Tea spoon	/	The shape resembles a spoon, so it is called a tea spoon. Its main purpose is to scoop tea leaves from the tea barrel, and it is also used to scoop tea leaves that have been soaked in a pot.

Table 1. Analysis of tea set functions

Name	Legend	Function
Tea needle		Also known as Chatong, it unblocks the filter of a teapot to maintain smooth water flow. It can be used to mix the tea leaves evenly after adding them, or to cut tea cakes.
Tea tray		A tea tray is a vessel used to hold teapots, cups, tea ceremony sets, tea pets, and even tea food; It can be large or small, and its shape can be square, round or fan-shaped.
Teapot		A mouthed vessel used for brewing and pouring tea, mainly used for brewing tea. It consists of four parts: the lid, the body, the bottom, and the ring feet.
Tea cup		A container used to hold tea water. After the tea leaves are brewed in the teapot, they are poured into the teacup through a fair cup.
Justice cup		A vessel with a V-shaped spout, poured from a teapot, symbolizing fairness, used to evenly color the soup, precipitate tea residue, and facilitate tea separation.
Tea jar		A sealed container for storing tea to ensure the stability of tea quality, prevent insects and moisture, and isolate odors.
Tea carrier		Cooperating with a tea spoon and needle to transport the tea leaves into the teapot.

2.2 Case Review of Contemporary Tea Sets

The key to tea culture lies in the combination of tea sets that effectively interpret the etiquette of gentlemen, and the key to tea sets lies in the teapot. Among tea sets, the teapot is the leading role, and other utensils are supporting role. The setting of the teapot determines the content and style of the whole set of tea sets. In sales, teapots also have the highest sales volume, and other tea sets are usually purchased as accessories. Therefore, considering the design of a tea set, the design of the teapot should be given priority, and other utensils should also be designed based on the content of the teapot to adapt to the style of the teapot and ensure the consistency and systematicity of the entire tea set.

After organizing information about teapots on online platforms, the author discovers the differences between teapots in China and the West. The Western ceramic teapots, represented by Britain, have a different tea culture positioning from Chinese, and are not meant to interpret the personality of a gentleman.

When they introduced tea, they mainly considered the physiological effects of tea and water on humans. They also prefer black tea in the selection of tea to hedge against the negative effects caused by long-term consumption of meat. This particularly demonstrates that their demand for the physiological benefits of tea is greater than their cultural needs. Although the popular afternoon tea culture in the Britain has played a social role to a certain extent, its scope of application is limited, and its location is also limited, strictly limited to inherent space. In terms of the shape of the teapot (as shown in "Figure 1"), British teapots have a larger and fuller overall body shape, with the belly of the teapot being the most bulging part, advocating the use of naturalistic curves. In terms of material, gold or gold-like materials are more common to showcase a magnificent texture. In the pattern decoration, plant elements such as roses, thistles, and clovers are often used to symbolize Britain, as well as animal elements such as lions and unicorns. The above reasons have led to the inability of Western tea culture, represented by Britain, to create the same long-standing ethnic characteristics as Eastern tea culture.



Figure 1 Example of an English teapot.

After establishing the design principle centered around the teapot, the author believes that we should adhere to the idea of adapting foreign things to Chinese needs and making the past serve the present to participate in the design of traditional culture and handicrafts, avoiding showing a rigid imitation and complete acceptance of foreign culture.

There are over 200 classic teapot shapes that have emerged in China. There are roughly ten popular Chinese teapot shapes in the current market, and the high-end materials sold are mostly purple clay teapots. The author's analysis is that due to the development of the Chinese economy, consumers have more funds to choose their favorite tea sets. In the environment of affluent society and consumerism, consumers are more eager for highend tea sets. Many people who have achieved great success have limited understanding of tea culture, but reflect the consumption concept of not seeking

Image source: www.baidu.com

the best but the most expensive, which has made expensive purple clay teapots made of purple clay, red clay, or green clay the darling of the market. In addition, the faint purple light on the surface of the purple sand material gives it a simple and elegant texture, and the slightly frosted texture is also irresistible. Playing with the physical properties of purple clay for a long time can also wrap its surface with a layer of slurry, commonly known as raising the teapot. This unique purple clay attribute allows the purple clay pot to be different from the same pot, making it highly playable. The function of raising a pot is also incomparable to traditional ceramics.

But for designers, the materials used to express culture can change, but it is important to extract the value of the shapes and empower new designs. The following "Table 2" is the author's analysis of popular teapots in the market.

Table 2. Analysis of tea set cases

Name	Legend	Evaluation
Xishi pot	Ó	Round and cute, small and exquisite, crafted by the master Xu Youquan. The disadvantage is that the spout of the teapot is short, and pouring tea close to the spout is prone to leakage
Stone ladle pot		The pot shape is upright and the water is strong. The flaw lies in the pot body being too firm and not pleasing the female audience aesthetically.
Antique teapot	Arm to the second	It is grand and rustic, with smooth bones and flesh. Overall, the quality is high and there are no obvious shortcomings.
Dezhong teapot		The vessel has a dignified and stable shape, coordinated proportions, rigorous structure, and a demeanor of upright and outspoken advice to a gentleman. The spout of the teapot is straight and smooth, with clean and neat handling, and smooth water cutoff.

Name	Legend	Evaluation
Hanwa teapot		Designed based on the shape of Qin bricks and Han tiles, the vessel has a simple and direct shape, with a large spout for easy cleaning and use.
Lotus seed pot		The design is simple, with a pot shape that highlights lotus seeds. Although it may seem simple, it reflects the skills and profound skills of a pot artist. The disadvantage is that a small capacity pot can scald people's hands if they stick their fingers in it.
Qin Quan pot		The teapot is shaped like a weighing mound, steady and composed, named after the weight used by First Emperor of Qin to unify measurement and balance.
Smiling Sakura pot		The shape of the pot gradually converges from top to bottom, all the way to the ring feet. The ring feet add a sense of stability to the entire pot. The button of the pot is shaped like a flower bud, and the delicate and small lid is often arched and tightly combined with the spout.
Horizontal pot		The production process is exquisite, requiring that the spout and handle of the teapot be made of mud that is absolutely equal, so that the teapot can float on the water surface and remain level. The disadvantage is that the capacity is small, the spout is light and thin, and it is easy to be knocked and damaged.
Hollow flat teapot		The rarest shape in fully handmade molding is the one that starts from a barrel shape and then uses a "mud racket" to beat it so flat that the force is even and it cannot collapse. A rare extremely flat shape, full of artistic interest and distinctive features.

3. ANALYSIS OF THE INTEGRATION OF CONTEMPORARY TEA DRINKING CUSTOMS AND TEA LACQUER CULTURE

3.1 Observation and Analysis of Contemporary Tea Drinking Behavior

At the beginning, China's tea ceremony did not use small pots or cups. After a long history, it finally ushered in the soaring trend of tea fighting in the Song Dynasty. The most significant change among them is that drinking tea has changed from the Tang Dynasty's method of brewing tea to ordering tea. Literati and officialdom no longer used large mouthed tea pots to cook tea, but instead used small mouthed, long flowing soup bottles to boil water. The characteristics of Chaoshan Gongfu tea can be summarized by a common saying, which is to use small pots and cups to brew, and this process is very meticulous, emphasizing "Gongfu". "Gongfu" in "Gongfu Tea" has three main

connotations: the tea man's literacy, the mastery of tea art, and the leisure time for brewing.⁴

Chaoshan Gongfu tea was originally a local tea drinking habit in Chaoshan. Since the mid to late Qing Dynasty, as the Chaoshan people's business path spread throughout the country, their tea drinking habits have also taken root throughout the country with the development of commerce. In Chaoshan people's shops, people usually prepare a cup of "Gongfu" tea to entertain guests, and fresh tea does not appear deliberately more suitable for the social environment, in order to expand their popularity and make extensive connections. Merchants often enjoy tea and discuss business with customers. In the carefully savored brewing process, it not only reflects respect for customers, but also inadvertently promotes Chaoshan. Many visitors traveling from south to north have

^{4.} Xu Xiahui, Li Sulan, Views on Chaoshan Gongfu Tea's Inheriting and Developing of Ancient Gongfu Tea [J]. Journal of Zhaoqing University, 2017, 28(01): 46-48.

witnessed Gongfu tea as a result.⁵ At the same time, the frequent commercial exchanges between China and the West in modern times have also driven Chaoshan Gongfu Tea to drift across the sea and survive in foreign countries. Thanks to the dissemination of commerce, the stereotype that Chinese tea culture is equivalent to Chaoshan Gongfu tea has been basically formed around the world.

In addition, the popularity of Chaoshan Gongfu tea is also inseparable from the innovation of tea culture. The evolution from the complex process of frying tea in the Tang Dynasty to brewing tea has fully inherited the gentlemanly way contained in the complex process, without the need for additional steps. It has optimized the tea drinking process, reduced learning costs, and made it more conducive to the dissemination of tea ceremony.

In the current tea drinking behavior, there may be changes, but they are all modifications based on the basic blueprint of Chaoshan Gongfu tea, which is essentially the result of adapting to the modernization of Chaoshan Gongfu tea. Therefore, in the process of designing contemporary tea sets, it is also necessary to refer to the tea drinking behavior of Chaoshan Gongfu tea and immerse users into a tea culture environment through their tea drinking behavior, facilitating users to savor the aroma and flavor of tea, recall tea culture, and lacquer culture during use.

3.2 Analysis of the Integration of Tea and Lacquer Culture: Material and Psychological Dimensions

The traditional concept holds that culture is the sum of material and spiritual wealth created by humanity in the process of social and historical development. It includes three aspects: material culture, institutional culture, and psychological culture. Compared with institutional culture and psychological culture, material culture is a visible and explicit culture, referring to the material civilization created by humans, transportation, clothing, daily necessities, etc.; Institutional culture and psychological culture are invisible and implicit cultures, which have concealment and are hidden within material culture. They constantly influence the things of material culture and are the internal manifestations of material culture. Institutional culture refers to the living system, family system, and social system. Psychological culture refers to ways of thinking, religious beliefs, aesthetic tastes, including literature, philosophy, aesthetics, politics, and other aspects. The embodiment of tea culture and lacquer culture in material culture is not only tea leaves, tea sets, and lacquerware, but also in psychological culture is a concentrated reflection of the Chinese collective personality of gentlemen, presented through tea etiquette and lacquer culture.

After understanding Mr. Yu Qiuyu's definition of culture, the author has come up with an explanation that culture is the sum of a way of life and spiritual values that have already formed inherent habits. The ultimate manifestation of culture is the shaping of the collective personality of a specific group of people. Chinese people have been immersed in the Chinese culture that advocates Confucianism and Taoism for thousands of years, constantly undergoing erosion and baptism in the long river of history. Ultimately, a universal and spiritualized personality image - the gentleman - was extracted from the vast sea of Chinese people, and the "Tao" was used to guide their practical activities.

Whether it is the tea culture or the lacquer culture, they are both material and psychological cultures, and can be found to correspond in both material and psychological activities.

At the beginning, ancient people drank natural water directly, but unhygienic habits ultimately brought health risks, and many outbreaks of epidemics were related to unhygienic drinking water. The author believes that tea is a branch of the history of ancient people's conquest and utilization of water. In the understanding and transformation of water by ancient people, the East and the West chose different directions. The ancient Western people sealed crops with water, and this mixture underwent fermentation to produce wine. The fungal lysate in fermentation has both antibacterial and anti-inflammatory effects, making water suitable for human health needs. When ancient people in the East transformed water, they chose the method of boiling water at high temperatures to achieve sterilization. The origin of tea is very accidental. It is said that ancient people accidentally dropped a few pieces of tea leaves while boiling water. The water cooked with it has a slightly yellow color, which is sweet, thirst quenching, and refreshing to drink. This kind of flavorful water became the earliest beverage for

^{5.} Xu Xiahui, Li Sulan, Views on Chaoshan Gongfu Tea's Inheriting and Developing of Ancient Gongfu Tea [J]. Journal of Zhaoqing University, 2017, 28(01): 46-48.

ancient people. In order to reproduce this experience, the ancients explored and experimented for a long time, and finally created the modern tea.

Tea culture refers to the cultural characteristics formed by people in the process of drinking tea. The author analyzes tea culture as tea and tea water, which can respectively echo material culture and psychological culture. Tea includes tea cultivation, picking, and tea making process, while tea includes brewing, drinking, etiquette, and environment.

From the perspective of tea culture in terms of material culture, tea is extracted and refined by boiling water under closed conditions, extracting and refining the tea polyphenols and other active elements contained in the tea, and dissolving them in water. Modern science has confirmed the positive effects of these ingredients on the human body through experiments, especially in promoting digestion, antioxidation, anti-aging, softening blood vessels, and inhibiting bacteria. The materiality of tea meets the health and wellness requirements of users and is the material guarantee for its long-lasting prosperity.

From the perspective of psychological and cultural aspects of tea culture, both tea leaves and tea water reflect the collective personality image of the Chinese people. All of its processes are in line with the gentle and humble personality of a gentleman, especially in the etiquette part of tea, which reflects the benevolent and polite characteristics of a gentleman. Or rather, tea culture is the expression of the Chinese gentleman's personality in tea making and drinking. Tea culture is the embodiment of the gentleman's personality and also the advocacy and admiration of the gentleman's personality. The application of tea by Chinese people seems to comply with the requirements of the Tao, and the cultivation of a clear and humble inner realm can even be extended to the inevitability of using grains when drinking

Similarly, it can be inferred that lacquer culture refers to the cultural characteristics formed by people in the process of lacquer activities, and lacquer culture can also be analyzed as lacquer and lacquerware, corresponding to material culture and psychological culture. Lacquer includes the planting of lacquer trees, the picking of raw lacquer, and the lacquer making process, while lacquerware includes the lacquer painting process, the use of lacquerware, and the ceremonial value.

From the perspective of the material and cultural content of the lacquer culture, lacquer trees are mainly distributed in warm and humid regions of Asia. In China, they grow in vast areas between 97 °E to 126 °E and 19 °N to 42 °N. The Qinling Mountains, Daba Mountains, Wudang Mountains, Wushan Mountains, Wuling Mountains, Dalou Mountains, Wumeng Mountains and mountain ranges are the most concentrated and are the central production areas of lacquer trees in China. China's environment has created favorable conditions for the growth of lacquer trees. The lacquer polysaccharide in the lacquer liquid is also a natural catalytic and stabilizing substance. Research has shown that it is a branched acidic heteropolysaccharide with specific biological activity and certain therapeutic effects in medical functions such as coagulation and anti-tumor; raw lacquer also has significant effects in anti-corrosion. According to the Compendium of Materia Medica, raw lacquer has a series of medicinal values such as anti-fouling and regulating the intestines. It has a certain inhibitory effect on some bacteria with spoilage and destructive effects, such as staphylococcus aureus, escherichia coli, and pseudomonas aeruginosa. 6 Natural raw lacquer is beneficial and harmless to humans, which provides medical evidence for the modern development of lacquerware.

From the perspective of the psychological and cultural content of lacquer culture, the historical evolution of lacquerware reflects the changes in human thinking and consciousness. The use of lacquer by humans reflects the fact that humans can actively transform the world. With the development of human intelligence, new requirements will inevitably be put forward for the use of tools. The emergence of lacquerware has moved away from the mechanical use of natural materials by humans at the beginning, to the conscious transformation of natural materials subjectively to meet their own functional and aesthetic needs. This marks the emergence and development of human aesthetic consciousness. Due to past technological limitations and the influence of natural worship, humans can only simply imitate the forms of nature to achieve the application of decoration, and express their emotions towards nature on the tools of self-creation.

^{6.} Zhang Yunfan, etc., Preliminary Study on Inhibition of Three Common Bacteria by the Raw Lacquer [J]. Journal of Chinese Lacquer, 2018, 37(04): 47-50.

The lacquer culture represented by lacquerware is influenced by the humble and noble personality of China in aesthetics, and its decorative patterns are rich in Chinese flavor. From a global perspective, lacquer culture symbolizes the human ability to transform the world, and is a microcosm of human transformation. It has an indelible commemorative value for humanity. In addition, the anti-corrosion effect of lacquerware also inevitably leads to a connection with funeral rituals. The urgent pursuit of posthumous honor by ancient people, especially the ruling class, prompted people to recognize the excellent anti-corrosion and waterproof properties of lacquerware, which was applied in coffin making to ensure posthumous peace. During the historical period of the Qin and Han dynasties, bronze craftsmanship declined and porcelain craftsmanship had not yet developed. Lacquerware played a crucial role in bridging the gap between the past and the future. During the gap between bronze and porcelain, lacquerware deeply satisfied the luxurious desires of the ruling class and became a carrier for the ruling class to express wealth. The long and tedious production process of lacquerware also reflects the calm and meticulous characteristics of a gentleman's personality. Otherwise, it is impossible to master complex craftsmanship. The tedious processes and long construction period during the production process also invisibly embody the demand for cultivating one's mind and character, which is a reproduction of the beautiful vision of Confucianism for selfcultivation, family harmony, and world peace.

In summary, the lacquer culture and tea culture share similar cultural genes, and in their production, production, and use, they both embody the characteristics of the Chinese collective personality of a gentleman, sharing the same roots and roots as Chinese culture. The organic combination of the two in tea sets is an attempt to promote cultural diversity and novelty within tea sets, as well as a powerful tool for promoting cultural innovation and revitalizing Chinese culture.

4. INNOVATIVE COMBINATION OF LACQUER AND CERAMICS

4.1 Analysis and Selection of Material Technology

Based on the author's previous analysis, in terms of cultural entry points, both lacquer culture and tea culture share similar cultural genes and can also embody the collective personality of the Chinese people - the image of a gentleman. In terms of the combination of the two materials, the author believes that ceramics is the best medium choice. Firstly, the production cost of ceramics is relatively low, making it easy to produce on a large scale; Secondly, the appearance of ceramics is delicate and smooth, with a warm and jade like texture, which is more in line with the aesthetic requirements of gentlemen and also most in line with the texture of lacquer after polishing.

The artistic beauty of lacquerware is mainly achieved through the decorative effect on the body, that is, the lacquer coating process. It can be roughly classified into these categories: painting techniques, inlay techniques, carving and filling techniques, and pattern coating techniques.

Modern tea sets were born based on the improved tea culture - Chaoshan Gongfu Tea Culture. Therefore, under the requirements of modern tea etiquette, the capacity of small teapots and cups constrains the size of tea sets. Therefore, it is not easy to achieve color painting, inlay techniques, carving and filling techniques on small volume Gongfu tea sets. So pattern coating techniques are the most suitable and suitable for visual artistic expression in small spaces.

4.2 Characteristics of Ceramic Materials and Lacquer Materials

The ceramic raw material uses porcelain clay, and the temperature in the kiln during firing is about 1200 degrees. The texture of the ceramic is compact, hard, waterproof, and has a metallic like sound when struck. The color of the ceramic body is white and has transparency or translucency. At the same time, ceramics have considerable plasticity during the production process, and various shaping methods can be applied to create different shapes and images. In terms of decoration, it is also possible to adopt decorative techniques such as drawing and printing, while also taking into account carving and carving, to create a decorative effect with rich layering effects, which creates feasibility for the combination of lacquer coating techniques. The material of lacquer is derived from a type of lacquer liquid secreted by natural lacquer trees. After sun treatment, the lacquer liquid can be made into lacquer. Lacquer liquid has adhesive function and is a necessary condition for combining with other materials, so lacquer can fill various materials on the body for decoration. Like other color pigments (as shown in "Figure 2"), lacquer

liquid is capable of blending colors and has excellent possibilities for color creation.

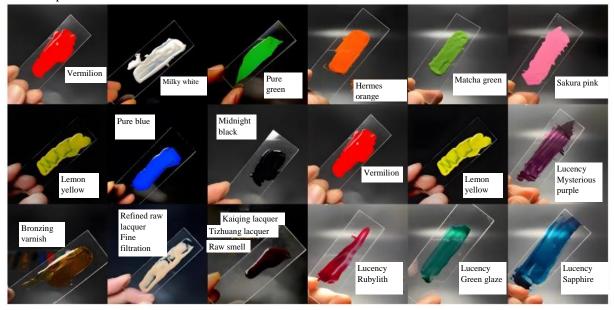


Figure 2 List of lacquer pigments.

4.3 Commonalities Between Ceramic Materials and Lacquer Materials in Terms of Craftsmanship

Ceramics and lacquer materials similarities in terms of expression and glaze craftsmanship. The ceramic kiln transformation technique (as shown in "Figure 3") is very similar to the pattern painting technique of lacquer (as shown in "Figure 4") in terms of visual effect, both of which are produced by multiple overlays of different color materials. In the overlaying process, emphasis is also placed on the combination of contrasting colors and similar colors to match aesthetic functions. Whether it is the ceramic glaze kiln transformation technique or the lacquer pattern painting process, consistency cannot be guaranteed in production, and the color texture changes have the characteristic of randomness.

a Image source: www.taobao.com



Figure 3 Ceramic flower glaze kiln transformation techniques.

a Image source: www.baidu.com



Figure 4 Lacquer pattern coating craft rhinoceros lacquer.

a Image source: www.baidu.com

The opening pattern of ceramics (as shown in "Figure 5") is also very similar to the eggshell inlay process of lacquer (as shown in "Figure 6"). The opening pattern was initially caused by an accident during firing, resulting in irregular cracks on the glaze. This seemingly cracked but seamless feature enhances the artistic beauty of Jun porcelain. Later, with the advancement of craftsmanship, craftsmen mastered the rules of firing slit grain patterns and innovated various open pattern techniques. For example, fish roe patterns, crab claw patterns, and hundredfold crackle are all masterpieces of slit grain patterns. The eggshell inlay technique of lacquer art refers to the use of raw lacquer to stick the eggshell onto the vessel according to a specific pattern, forming a natural cracking effect, which is similar to the slit grain pattern.



Figure 5 Ceramic slit grain pattern.

a Image source: www.baidu.com



Figure 6 Lacquer eggshell inlay process.

Image source: www.baidu.com

In addition, in terms of color painting, the color painting techniques of lacquer and ceramic painting also have commonalities. Both are the patterns required for brush drawing, and both require a harmonious and complete color matching and composition.⁷

4.4 Application Methods of Combining of Ceramics and Lacquer Coating

The decorative technique of combining porcelain and lacquer has existed since ancient times, not just on paper. It existed as early as the Spring and Autumn period and the Warring States period (as shown in "Figure 7"), with ceramics as the body, painted with black paint throughout the body, and supplemented with red and white to enhance the color impact, making the objects obtain good aesthetic value



Figure 7 Color-painting coiled cobra pattern lacquer clothes with ceramic cover beans.

Image source: www.baidu.com

During the Ming and Qing dynasties, a technique called "lacquer sand ware" emerged, which used purple sand as the body and combined carving and painting on the surface. There are decorative methods such as purple sand carved lacquer and purple sand painted clothing. Purple clay carved lacquer (as shown in "Figure 8") is based on the purple sand body, painted dozens or even hundreds of times with lacquer liquid, and then carved with a knife to create patterns. The so-called purple clay lacquered garment is a decorative form of painting, gilding, and painting on the body of a purple shirt. The specific process is to coat the

^{7.} Zhang Jingjing, Using the Techinque of Organic Paint for Ceramic Decoration [J]. China Ceramic Industry, 2017, 24(06): 43-46.

^{8.} Zhang Jingjing, Using the Techinque of Organic Paint for Ceramic Decoration [J]. China Ceramic Industry, 2017, 24(06): 43-46.

purple clay body with black paint as a whole, and use painting techniques to draw patterns. However, this decorative technique completely ignores the fetal body, and the material sense of the fetal body cannot be detected through the five senses. In addition to the exposed tire inside the vessel and the ring feet, the remaining decorations are carved lacquer. Purple clay carved lacquer is more about its aesthetic appeal and interesting contrast with the physical properties of purple clay being good for tea.



Figure 8 Ming and Qing Dynasty purple clay carved lacquer square pot.

Image source: www.baidu.com

There are two popular directions for the combination of modern ceramics and large lacquer. One is the overall combination of ceramics and large lacquer (as shown in "Figure 9"). Instead of hanging glaze on the ceramic body, liquid paint is used as decoration, and the entire ceramic body is wrapped and covered with liquid paint. Another approach is to combine the lacquer process as a decoration for ceramics (as shown in "Figure 10"), by painting the ceramic body parts according to relevant designs, to decorate the parts of the ceramics with the lacquer coating technique. In this technique, the Kintsukuroi technique (as shown in "Figure 11") was also derived, which involves sticking damaged porcelain together, coating it with black or red push gloss paint, and then decorating it with gold paint or gold foil. 10 This technique creates a fragmented beauty, and some artists even intentionally smash ceramics and restore them to create unique forms of work.



Figure 9 Ceramics-lacquer combination coverage.

Image source: www.baidu.com



Figure 10 Partial of ceramics-lacquer combination.

Image source: www.baidu.com

^{9.} Zhang Jingjing, Using the Techinque of Organic Paint for Ceramic Decoration [J]. China Ceramic Industry, 2017, 24(06): 43-46.

^{10.} Zhang Jingjing, Using the Techinque of Organic Paint for Ceramic Decoration [J]. China Ceramic Industry, 2017, 24(06): 43-46.

Figure 11 Kintsukuroi legend.

In summary, the author believes that the second method of combining porcelain and lacquer is more conducive to the modernization of lacquerware. The first method takes significantly longer in terms of process time, which invisibly elongates the production line scale of lacquerware. To improve the production efficiency of lacquerware, it is necessary to reduce the time spent on painting process. Only the second method can reduce painting time and reflect the combination of porcelain and lacquer. Using ceramics as the base and local lacquer coating decoration can achieve modernization of lacquerware.

5. CONCLUSION

In this study, the paper explores the aesthetic and of lacquer integration ceramics contemporary tea set design, aiming to explore how to combine traditional craftsmanship with modern design concepts to create tea sets that have both practical value and aesthetic significance. Firstly, the paper defines the evolution process of the concept of lacquerware. Secondly, through functional analysis and case review, this study demonstrates how contemporary tea utensils can meet the practical needs of modern life while preserving and inheriting the essence of Chinese tea culture.

Thirdly, this article explores the integration of contemporary tea drinking customs and tea lacquer culture, pointing out that in modern society, people are increasingly valuing cultural experiences and emotional exchanges during the tea drinking process. The combination of lacquer and ceramics can precisely enhance this cultural experience. Finally, the study highlights the significance of the combination of lacquer and ceramic innovation, not only in the innovation of materials and processes, but also in the deep cultural values and aesthetic pursuits they embody. Through this innovative combination, not only has tea utensils been given new life and functions, but also new paths have

Image source: www.baidu.com

been opened up for the inheritance and development of traditional craftsmanship.

In conclusion, this study not only provides new perspectives and ideas for contemporary tea set design, but also provides useful references for the integration of traditional craftsmanship and modern lifestyle, showcasing the vitality and charm of traditional Chinese culture in modern society.

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