

Research on Sustainable Development of Traditional Lacquer Technology

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ABSTRACT: The traditional lacquer technology is a kind of crafts, by taking plant paint as raw material, using a variety of techniques to protect and decorate the object surface. The plant paint has the characteristic of environmental protection, pollution-free and renewal, and its material advantages can not be replaced by the modern chemical paints. However, in a modern society with rapid development of science and technology, products with traditional lacquer art products are gradually withdrawing from the mainstream of society, and can not really get into the life of modern people. This paper, starting with the importance of traditional lacquer technology, analyzes the necessity of combining the traditional lacquer technology, modern industry design and modern art, clarifies that the traditional lacquer technology must pay great attention to the development in the domain of practical display, and based on this, further expounds how to research the process and material by using scientific method and the development direction of lacquer art by fully displaying the advantage of lacquer technology, and tries to through the research on sustainable development, find a new joint point between the traditional lacquer technology and modern society.

Lacquer art, as a time-honored and traditional technology in China, has a long history for thousands of years, and is a wonderful work in our traditional crafts, with rich cultural connotation and unique artistic value. Traditional lacquer art used to be an important component of interior furnishings in ancient China, there have been several developmental summits in the history, but in modern society where modern industrial production develops rapidly, new materials and technologies keep on emerging, people's living spaces become increasingly diversified, traditional lacquer art gradually drops out of the mainstream of social industry, has been unable to become the main body of modern furnishings, nor truly blend into the lives of modern people. The existing value of a culture is the equivalent of the level of its integration, and to what extent it could ensure various social activities linking closely together by its normative structure. Lacquer art must search for new opportunities from the reality, open up new developmental spaces in the crevice between tradition and modernity, and further walks into modern interior furnishings, into the modern people's lives.

Traditional lacquer

The handcrafted nature of lacquer art determines its characteristic of inheritance, its production methods, processes, criteria, art textures shine with the light of traditional technology to a large extent. Traditional paint art provides an inexhaustible treasure for the development of modern lacquer art, all kinds of paint art can be traced back to the same origin, such as the eggshell mosaic in modern lacquer painting is the development of traditional mother-of-pearl inlay work, also all kinds of modern bodiless crafts molded by plastic painting can date back to the ramee lacquer in Warring States period. It can be seen that the development of modern lacquer art is inseparable from the inheritance of and reference to traditional paint art, traditional lacquer crafts represent the high achievement of lacquering art development in thousands of years, and are part of our national technology culture, the foundation of lacquer art development. At present, the use of lacquer has developed from the initial purposes of protecting and painting artifacts into a kind of representation of cultural spirit and protection of non-material culture. The culture of a nation is the precipitated essence after elimination in its developmental process, traditional lacquer art products, as one of the carriers for cultural tradition and aesthetic form of the nation, as handicrafts that gather people's emotions, in modern indoor furnishings design that focuses on conveying cultural information, have attracted and

will continue to attract people's attention as a cultural carrier that displayed by traditional lacquering technology.

COMBINED WITH MODERN INDUSTRIAL DESIGN

Traditional lacquer art is a handcrafted art, and has always been manufactured in the form of individual labor of handicraft industry, this form is individualized with small quantity, and because its materials are expensive and processing procedures are complicated, this will inevitably increase costs, while the products are in high quality, it is not easy to achieve cheapness, or to meet the public demands, therefore it losses part of the market. The emergence of modern industrial design is accompanied by technical and artistic revolution in modern society, and based on the use of machine and highly developed productivity, the establishment and development of market economy, and the tremendous progress of science and technology, provide the necessity and possibility of mass production. Lacquer crafts, taking handwork as the main production mean, can only serve for the minority of people in the social community, after combing with mechanized and mass production of modern industrial design, on the premise of not affecting the quality of products, can shorten the production cycle, reduce production costs, lower product prices, serve for more consumers, and meet the real life needs of most people. At this point, traditional lacquer art has taken a big step, such as developing mechanized, semi-mechanized, spraying, and mass lacquer products while preserving the traditional manual labor at the same time. Some factories that produce traditional lacquer were also introduce advanced equipment to cater for the market demands, for example, Yangzhou lacquer factory has introduced computer carved lacquer machine to assist the production of carved lacquer products, through setting up programs on the computer in advance and transmitting to carved paint machine, the reserved patterns can be carved out, the carved patterns are more precise and detailed than manually carved patterns, saving time and labor while guaranteeing the quality of products at the same time. (Fig.1)

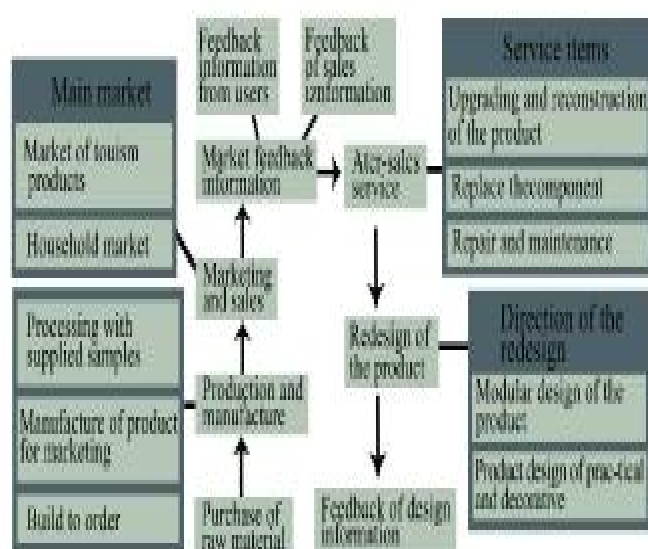


Fig1. industrial chain of lacquer art in Yangzhou

COMBINED WITH MODERN ART

Modern furnishing design lays increasing emphasis on the reflection of 'artistry' and 'personality'. In order to meet the demand of 'artistry' and 'personality' of furnishings design, traditional lacquer art must seek new lacquer art language and expression, combining with modern art is one way, in recent decades, after unremitting exploration and practice by a group of people who are devoted to lacquer

art development in China, traditional lacquer art has achieved rather fruitful results in this aspect. The infinite possibility corresponding to modern spirits implied by the material characteristic of lacquer and other materials, plus the ever-changing crafting techniques enable lacquer art with the effect unavailable to other art forms, such as the appearance of lacquer painting, mural lacquer painting, plastic painting, mural lacquer decorations, and other new forms of lacquer art (Fig. 2)(Fig. 3), the tentacles of traditional lacquer art are expanding to wider life domains with all kinds of new forms in modern days. Although the technology of these new forms of lacquer art obviously inherits traditional lacquer crafts, their expression technique of art, art quality and style all have fundamental changes, manifesting the convection, integration, and revolution of traditional technology and modern art, their styling, colors and formation all show strong modernity, and the image and characteristics of modern art, regardless of concretes or abstracts, or strong decorative processing, the image language or art expression way conveyed by them overflow the sentiment and mood of modern art, corresponding with the ever-changing aesthetic perception of modern people.



Fig.2 Lacquer adornment of wall

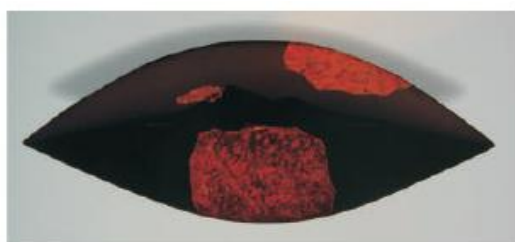


Fig.3 Modern lacquer sculpture

EMPHASIZING ON THE EXPLORATION OF PRACTICAL FURNISHINGS FIELD

Ever since the rise and popularity of porcelain in Eastern Han dynasty, traditional lacquer art gradually fades away from part of the practical furnishings sectors, but today, it is necessary for traditional lacquer art to reexamine this part of field it lost before. Like some daily vessels, undeniably the vessels that modern people often use, such as enamel vessels and glass vessels, do have their advantages over lacquer ware, for example they are more thrifty in production cycle compared with lacquer ware, prices are lower than lacquer ware, and have better practical functions, but lacquer products

still have many unique advantages, lacquer ware are usually made of wood, bamboos, and other raw materials, which are lightweight, easy to wash, difficult to break, and have good insulating effect, and after people are used to using porcelain, glass vessels and some other common life vessels, the reappearance of lacquer ware evokes both familiar yet fresh feelings of people, adds new choices for people when selecting this kind of furnishings. In the future development, traditional lacquer art should make some helpful try and exploration in more practical fields, such as lacquer tableware (plates, bowls, chopsticks, spoons and etc.) (Fig. 4), lacquer tea ware (tea-pots, teacups, tea canisters), lacquer wine sets, lacquer cigarette utensils (cigarette cases, ashtrays) and other diversified daily living equipment (Fig. 5), increasingly fulfilling people's practical requirements.



Fig.4 Lacquer bowl



Fig.5 Lacquer cup

STUDYING LACQUER ART MATERIALS AND CRAFTS FROM THE ANGLE OF SCIENCE

Materials and crafts are the foundation for lacquer art, and it can only be empty talk without these two. In some ancient crafts literature records, mostly there were only external descriptions or experience on materials and crafts, missing scientific analysis and grasp, this is determined by the productivity development level at that time, while today, our understanding of materials and crafts cannot only stay on the original basis, but should rise to scientific level, using scientific methods to understand and research materials and crafts. Scientific knowledge and research of materials include many aspects, for example microstructure, macrostructure and density of materials and etc. The liquid quality and covering property of lacquer make people invent lacquer craft, the slump ability of lacquer liquid makes people invent mosaic craft, and since the dried paint liquid has hardness, and resistance to polish, people then invent grinding craft, and so forth, various types of lacquer crafts are established on the basis of the inner structure and performance of lacquer itself, so it is especially im-

portant to understand and study materials with scientific methods. With the help of modern technology, we can more correctly understand and grasp materials, improving the success rate, saving raw materials, and grasping the artistic style and expression of works more easily. With the help of modern technology, we could understand and master materials more accurately, thus create more excellent crafts. Such as the researches of all kinds of glazes and clays conducted by modern pottery art and pottery artists have been upgraded to the level of chemical sciences, not only increasing the success ratio but also saving raw materials, and making it easy to control the artistic styles and expressiveness of works.

GIVING A FULL PLAY TO THE ADVANTAGES OF LACQUER ART

In the production of excellent crafts, the individual characteristics of materials tend to be put to the best use, protection and play, so should lacquer art. Facing a variety of new materials and new technologies, traditional lacquer art should learn to tolerate and absorb strengths, combine with various appropriate materials and techniques, giving a full play to the role of lacquer art. For instance, lacquer art can combine with wood furniture, bamboo furniture, and metal furniture. Furniture, so to speak, is a market that never fades, is the indispensable furnishing in any era. In bamboo, wood, and metal furniture, lacquer decorations can be used partially, this comprehensive, marginal, and new form can not only change the inherent color mode of lacquer ware mainly in red and black, but also increase the varieties of bamboo, wood, metal furniture, improve the cultural taste of bamboo, wood, metal furniture. (Fig. 6) Prolonged contacts between people and furniture will trigger emotional needs other than the practical requirements of furniture, and the requirement of its being an independent art work for aesthetic appreciation. Certainly, in addition to furniture, other furnishings, such as wall decorations and small ornaments, can also attempt to combine with various materials and crafts. There are three basic forms of lacquer art during the painful period of economic transformation, pure ornamental art works, mainly ornamental articles combining partly with practicability, and utensils largely based on practicality applied with ornamental materials and crafting techniques of lacquer art. Proportions of traditional lacquer art are different in the three basic forms, but all of them could find their corresponding locations in modern interior furnishing.



Fig.6 Lacquer adornment of wood furniture

CONCLUSIONS.

New era brings dramatic challenges to traditional lacquer art, but also brings great opportunities for it at the same time. In future development, it is crucial for traditional lacquer art to handle well the relationship between heritage and innovation, confronted with tradition, it has to learn to discard and draw lessons, tradition is our accumulation, and is the selective preservation in history, we cannot

completely cut the connection with history, or we will be like rootless duckweed, but if we are limited to tradition, then we are doomed to be bound by tradition, and cannot adapt to the needs of social development. Basing upon tradition, focusing on development, walking towards innovation can advance with time, acquire greater achievement than tradition. It is certain that, in the near future, traditional lacquer art will step into modern furnishings with a brand new look.

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