

Analysis of the Impact of Chinese Traditional Ceramic Sculpture on Modern Sculpture

Zhao Yingjian

Xiamen Academy of Arts and Design, Fuzhou University, Fujian, Xiamen, 361021, China

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Abstract: In the evolution of civilization for thousands of years, ceramic sculpture has been existing and developing in an artistic form with nationalization. Modern ceramic sculpture is the product of modern social civilization. Its development can not be separated from modern advanced science and technology, the improvement of material living standards, and the higher requirements of people for aesthetic taste. With the continuous progress and development of ancient Chinese sculpture art, ceramic sculpture has produced remarkable achievements and positive far-reaching impact. Due to the language and morphological characteristics of modern ceramic sculpture, modern ceramic sculpture has incomparable artistic expression and touching artistic charm, which is a characteristic other arts do not have. Ceramic workers can do their best to explore and play, so that their ceramic sculpture works show unique pursuit, endow the works with vitality and achieve a new perfection.

1. Introduction

As an important component of ceramic art, under the influence of the development of modern art, the value of ceramic sculpture as a traditional craft has undergone tremendous changes with the changes of the times and the changes of humanistic thoughts [1]. We are now in an era of scientific prosperity and open ideology, which provides unlimited creative space for different artistic forms and personal preferences. Modern ceramic sculpture is the product of modern social civilization. Its development cannot be separated from modern advanced science and technology, the improvement of material living standards, and people's higher requirements for aesthetic taste [2]. After thousands of years of history, traditional ceramic sculpture art has been explored and interpreted by numerous creators of ceramic sculpture art, showing a positive development trend [3]. In addition, many sculpture artists are also trying to use ceramic techniques to make sculptures, which also makes ceramic sculptures more artistically developed. The continuous progress and development of ancient Chinese sculpture art has made ceramic sculptures produce outstanding achievements and positive and far-reaching influences [4].

The molding and firing process of ceramic sculptures originates from traditional ceramics, but it is more complicated in shape than in the shape of the sculptures, so accidental deformation or breakage occurs during the molding process and after the firing [5]. The creation of ceramic figurative figures will also enable ceramic art design students to eliminate the unknowable mystery when glaze is not under my control, so that the creative activities themselves become rational when they need reason [6]. It is precisely because of the language and morphological characteristics of modern ceramic sculpture that modern ceramic sculpture has incomparable artistic expression and touching artistic charm, which is a feature that other art does not have [7]. The uncertainty in the ceramic sculpture making process also makes ceramic sculpture have artistic characteristics that other sculpture arts do not have. Ceramic art creation tends to be more diversified and more abundant, which undoubtedly promotes the formation of the free character of modern ceramic sculpture [8]. Ceramic workers can do their best to explore and play, so that their ceramic sculpture works show unique pursuit, endow the works with vitality and achieve a new perfection.

2. Development and Current Situation of Traditional Ceramic Technology

Modern ceramic sculpture is the product of the development of modern social culture and science

and technology. Its development is based on traditional ceramic sculpture and supported by modern science and technology. Ceramic materials have the weakness of brittleness and fragility, so the shape should not be too trivial. Because the firing size is limited by the kiln location, it is generally a small sculpture form. Today, with the rapid development of science and technology, various new materials are constantly emerging. The achievement and influence of the artistic style of ceramic sculpture have an excellent tradition of our national culture. Modeling technology is the unity of content and form, with a strong national style and greatly reflects the spirit of the times sculpture works of art. Modern ceramic sculpture is an important branch of modern ceramic art. Its development is accompanied by the development of modern ceramic art. It means that modern ceramic art has a modern ceramic sculpture [9].

Compared with traditional ceramic sculptures, modern ceramic sculptures have richer expressions and varied artistic styles, and at the same time emphasize the creators' personal thoughts and aesthetic spirits. The use of folk art symbols in ceramic art of speed is the best fusion of ceramic art and folk art. The study of the rheological properties of ceramic materials is mainly based on the measurement of the macroscopic dynamic viscoelasticity of the material and the theory of a low-filled blend system. Figure 1 is a schematic diagram of plasma treatment of ceramic materials.

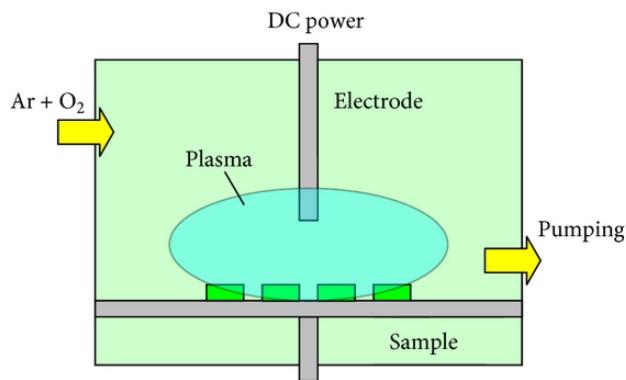


Fig.1. Principle of plasma treatment of ceramic materials

The morphological changes of the works also show more strong individuality, free and accidental forms of expression, and create more new styles that can show the artist's personal thoughts and feelings. The wide classification of ceramic sculpture shows its great practical and aesthetic functions in daily life. The reason why ceramic sculpture has attracted the attention of many people with its unique artistic style lies in its irreplaceable unique artistic charm. The long history of art has deeply attracted people and stimulated their thinking and creation. Modern ceramic sculpture is inseparable from traditional ceramic art, which can be said to be an inheritance and development of traditional ceramic art in terms of materials and manufacturing techniques. As an art with materials before ideas, traditional ceramic sculpture is still a solid foundation for modern ceramic sculpture.

3. Influence and Inheritance of Traditional Ceramic Sculpture

3.1. The Influence of Traditional Culture on Ceramic Sculpture

Chinese traditional culture is influenced by Confucianism, and it also plays a certain guiding role in the formation of the aesthetic characteristics of the whole nation. In the molding techniques of ceramic art, hand-kneading molding is the most basic manufacturing method. Just as sculptors play with mud in their hands, shape it at will and then enlarge it, freehand kneading can express the author's creative ideas most quickly and intuitively. As the young sculpture creators in the new era, we need to continue to draw the essence from the ancient sculpture art. Its art forms are national and world-wide. Chinese ceramic art not only pays attention to the effect of modeling, but also pays more attention to the expression of a kind of artistic conception [10]. Today's ceramics have also learned to formulate their own ceramic blanks with the right mix of ingredients. Although this is cumbersome and requires careful experimentation, the benefits are that they can meet their special needs.

Whether it is a traditional figure or a statue or a modern abstraction, the only constant is that they are all three-dimensional spatial language expressions of ceramics as the main material, with their unique artistic language expressions and characteristics. The composition, microstructure, and sintering process of the material are designed and determined based on the performance or mechanical properties of the ceramic material. After removing the outliers, the mass fraction of the dopant is used as the input parameter of the network. A competitive neural network model was established with the performance constant of the composite as the output parameter. The comparison between the learned values of the flexural strength and the resistivity and the experimental values are shown in Tables 1 and 2.

Table 1 Comparison of experimental and predicted values of flexural strength

Group number	Experimental value	Predictive value
1	31.6	30.8
2	43.6	44.2
3	45.8	45.1

Table 2 Comparison of experimental and predicted values of resistivity

Group number	Experimental value	Predictive value
1	43.61	44.12
2	45.83	46.39
3	31.64	30.89

3.2. Basic Forming Method of Ceramic Sculpture

Traditional culture plays an important role in the development of modern ceramic sculpture. However, in this process, the display of the nationality of traditional culture in modern ceramic sculptures is on the same path as the other modern art forms in China. Craftsmanship has the dual attributes of craftsmanship and craftsmanship, so it is both manual and technical. In the creation of pottery figures, the beginning stage can be as casual as the sculptural characters. In the final stage of completion, the creators focused on their performance according to their respective limitations. Based on the unique advantages of pottery sculpture, it is often easier to express the theme, more convincing and attract people's attention with a series of works. Ceramic art itself is a kind of art media with rich ideas. It interprets ideas in terms of language and form of objects and becomes an idea and carrier that keeps pace with the times. The creation of all arts is both contemporary and national. With these characteristics, there is a real reason and artistic value for its existence and development.

4. Conclusions

In the modern ceramic sculpture works, no attention is paid to practicality. The aesthetic spirit is the main factor, and a variety of materials are combined to create the unique artistic style of potters. We should not only regard the achievements of the ancient traditional pottery art as the basic content of art education, but also integrate modern and contemporary art concepts into the art activities that are constantly being explored, so that they can be provided to students as the crystallization of human artistic achievements. The language and form of modern ceramic sculpture is the way to express the artist's personality. In the process of modern ceramic sculpture creation, most of them are made by hand, combined with abundant materials, using a variety of technology and forming methods to express the ceramist's perception of life and unique aesthetic interest. Attaching importance to new ways of expression and new forms of expression, visualizing artistic techniques, expressing the flow of human consciousness and various perceptions of the world and society. The way for traditional ceramic restoration technology to survive better is undoubtedly to constantly absorb new ideas and apply old technology. Applying the traditional ceramic restoration technology to the modern ceramic sculpture art will find a new direction for the development of modern ceramic sculpture, and at the same time find a new inheritance way for the traditional ceramic restoration technology.

References

- [1] Mila C, Valeria B, Paolo P, et al. A Characterisation Study on Modern Bronze Sculpture: The Artistic Patinas of Nado Canuti. *Studies in Conservation*, 2018:1-8.
- [2] Rodriguez J A, Cooper H J. Large ceramic femoral heads: what problems do they solve?. *The Bone & Joint Journal*, 2013, 95-B(11_Supple_A):63-66.
- [3] Imaging of ceramic liner fractures in total hip arthroplasty: the value of CT. *Skeletal Radiology*, 2015, 44(8):1189-1192.
- [4] Okunev I, Morozov I, Kobets V, et al. Field Measurements of Magnets for Modern SR Sources and FEL. *IEEE Transactions on Applied Superconductivity*, 2016, 26(4):1-5.
- [5] Xiao B, Zheng W, Zhu M, et al. Multi-field susceptible high-fc ceramic composite with atypical topological microstructure and extraordinary electromagnetic properties. *Journal of Materials Chemistry C*, 2014, 2(36):7482-7488.
- [6] Pop I, Redac R, Borodi G, et al. Structural and Magnetic Characteristics of (Eu_{1-x}Gax) Ba₂Cu₃O_{7-δ} High-Tc Superconductors. *Modern Physics Letters B*, 2013, 11(13):593-597.
- [7] Kargin Y F, Akhmadullina N S, Solntsev K A. Ceramic materials and phosphors based on silicon nitride and sialon. *Inorganic Materials*, 2014, 50(13):1325-1342.
- [8] Sebastian M T, Ubic R, Jantunen H. Low-loss dielectric ceramic materials and their properties. *International Materials Reviews*, 2015, 60(7):392-412.
- [9] Li Y C, Xu F, Hu X F, et al. In situ investigation on the mixed-interaction mechanisms in the metal-ceramic system's microwave sintering. *Acta Materialia*, 2014, 66:293-301.
- [10] Borodianskiy K, Selivorstov V, Dotsenko Y, et al. Effect of Additions of Ceramic Nanoparticles and Gas-Dynamic Treatment on Al Casting Alloys. *Metals*, 2015, 5(4):2277-2288.