# The Application of the Porcelain Carving Art in the Creative Design of the Fragments of Jian Zhan Bowls

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*Abstract:* Although the fragments of Jian Zhan bowls are not the complete Jian Zhan bowls, they still keep the unique pattern and glaze beauty essence of Jian Zhan bowls. Coincidentally, The art of porcelain carving is made from porcelain fragments like the fragments of Jian Zhan bowls. This paper takes art, design and other related theories as a guide, combines the current situation and characteristics of the respective development of the porcelain carving art and Jian Zhan bowls, and researches the application of the porcelain carving art in the design of fragments of Jian Zhan bowls from the perspective of jewelry design, and explores its design application and application value. *Keywords:* Jian Zhan bowls; The porcelain carving art; Jewelry design; Intangible cultural heritage

## Introduction

Jian Zhan is the representative of black glazed porcelain, created in the late Tang Dynasty and flourished in the Song Dynasty. It has the characteristics of unique pattern, colorful and varied, and has strong artistic value. However, the firing technology of Jian Zhan in the kiln, by the billet, glaze, temperature and other factors resulting in a long firing cycle, slow results, low yield, high cost of Jian Zhan, but also lead to a large number of defective products and debris produced in the process of production.

And the porcelain carving art is mainly to select the damaged colored porcelain cut into small pieces of porcelain used to stick carving decorations, so the organic combination of the fragments of Jian Zhan bowls and the porcelain carving art is conducive to the development of intangible cultural heritage. It is also beneficial to promote the excellent traditional Chinese culture, and to meet the needs of the consumer market, there is an important significance of the study.

## 1. Status of development

#### 1.1 The current status of the development of Jian Zhan

Jian Zhan has a long history, in the Song Dynasty has been widely loved by all levels of society. In 2011, the firing technology of Jian Zhan was approved to be included in the third batch of national intangible cultural heritage list of China. The development of modern ceramic science and technology has greatly improved the success rate of Jian Zhan firing. After nearly thirty years of technological exploration experiments, Jian Zhan in the glaze color breaks through a single black limitations. Today, the production level of Jian Zhan is quite mature, compared with the ancient times also appeared a lot of new patterns and glaze effects.

But even with the help of modern technology, Jian Zhan still needs to go through thirteen procedures, such as selecting porcelain ore, crushing porcelain ore, washing, batching, aging, practicing mud, kneading mud, pulling billet, repairing billet, firing, glazing, loading kiln and roasting, which makes the process of production long and complicated. As a result, the yield of Jian Zhan is not high, and it is difficult for the defective products and fragments of Jian Zhan enter the market, which also leads to waste and environmental problems.

#### 1.2 The current status of the development of the porcelain carving art

The porcelain carving art is also know as inlaid porcelain, mainly developed in Chaoshan, Guangdong and southern Fujian, the technique can be understood as a collage of porcelain tiles. The porcelain carving art mainly uses colored porcelain or damaged porcelain as raw materials, and these materials are cut, knocked and ground into porcelain pieces of different shapes and sizes, and then carved figures, animals and landscapes, and finally decorated on buildings.By virtue of its unique artistic charm, the porcelain carving art was included in the intangible cultural heritage of Fujian Province in 2009<sup>[1]</sup>.

With the aging of the intangible cultural heritage inheritors of the porcelain carving art and the decline of ancient buildings, this intangi-

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ble cultural heritage skill is facing the crisis of being lost<sup>[1]</sup>. At present, the dilemma faced by the porcelain carving art, including the lack of carrier, insufficient heritage, low economic benefits and other issues.

# 2. Features

#### 2.1 The features of fragments of Jian Zhan bowls

Jian Zhan is an oddball in the Chinese traditional porcelain: gray and black class dark tone; large area open piece but not lose coordination; chiaroscuro vivid, more rich in line interspersed and mobility, expressive and lively; the expression of the method of bias towards abstract art, do not use the carving, drawing and other techniques<sup>[2]</sup>. The pattern of the Jian Zhan is very random, and it is difficult to reproduce the exact same, so each Jian Zhan can be called unique. In addition, the glaze patterns produced by the production of Jian Zhan bowls are very varied, and the comparison between different glaze patterns is very different. It has a strong artistic value.

The characteristics of Jian Zhan do not only exist in the complete Jian Zhan, in fact, many fragments of Jian Zhan bowls still have intact glaze patterns. If you look at it from an artistic point of view, you can also find the beauty of the incompleteness.

#### 2.2 The features of the porcelain carving art

The porcelain carving art is first of all to break colored porcelain bowls and other porcelain, or use damaged colored porcelain as raw materials to cut them into the desired shape, and then use wooden grinding wheels and other tools to grind and paste the pattern. The porcelain carving art has both the aesthetic characteristics of painting art and the three-dimensional sense of sculpture. It has the characteristics of bright color, vivid shape and strong three-dimensional sense, and can accept the sun and rain for many years without fading.

As a treasure in Chinese folk crafts, the porcelain carving art has special cultural characteristics. It is integrated into the artistic crystallization of the working people of ancient China. The porcelain carving art skillfully combines the two seemingly different concepts of "carving" and "painting", which has a strong uniqueness.

## 3. Design steps

### 3.1 Design thinking

The design application of the fragments of Jian Zhan bowls is extremely rare, and due to the hardness of the fragments of Jian Zhan bowls, the application of the fragments of Jian Zhan bowls in the field of clothing design is even more rare. However, if we want to find a creative design application of the fragments of Jian Zhan bowls, jewelry design, which is born from clothing design, is a very suitable choice. This type of design is full of connotation and characteristics, and it also has a lot of market popularity around the world. Based on this reality, the application of the fragments of Jian Zhan bowls in jewelry is feasible.

#### 3.2 Selection of materials

Compared with other major Chinese porcelain, Jian Zhan has a small chance of firing, and the process is quite complicated. The problems generally encountered in the firing process include: cracking, glaze skipping, glaze shrinkage, glaze bursting, bulging, sticky bottom, deformation, sand hole, kiln scarring, pinhole and other problems. Because these problems are difficult to repair, such defective products are usually destroyed, resulting in a large number of fragments of Jian Zhan bowls. However, among these fragments, a large number of fragments still have intact or relatively intact glaze patterns, which are no worse than the finished products in terms of local aesthetics alone, and these fragments can be reprocessed with the porcelain carving art.

When applying the Jian Zhan fragments to a field such as jewelry design, special attention should also be paid to the flatness, scarcity, and glaze pattern of the fragments of Jian Zhan bowls. In the process of firing Jian Zhan bowls, because the bubbles in the glaze will expand due to temperature, there may be uneven glaze, so this part should be avoided as much as possible in the selection of materials, otherwise it is easy to affect the service life, aesthetics and wearing comfort of the jewelry<sup>[2]</sup>. If flatness is about touch, then glaze patterns are about vision. According to Pantone, an authoritative organization specializing in the development and research of color in the United States, when faced with a large number of products, the influence of color on consumer choice has reached 67%<sup>[3]</sup>.

## 4. Values of application

## 4.1 The value of inheritance

The firing technique of Jian Zhan and the porcelain carving art are the national and provincial intangible cultural heritages of China, respectively, and they both face the same problems. They all require practitioners to have a high level of professionalism, and it is more difficult to enter the industry, and these two traditional skills are already facing the dilemma of being lost with the lack of inheritance and the aging of previous inheritors. In addition, their situation is even worse due to the lack of economic benefits and the constraints of ideological and technological progress. The application of the porcelain carving art in the design of Jian Zhan jewelry provides new development ideas for these two intangible cultural heritage skills and broadens the creative environment. The value of the porcelain carving art and Jian Zhan will be reflected in this application through the jewelry industry, which is in high demand, and provide value for the inheritance of these two intangible cultural heritage skills and the promotion of intangible cultural heritage.

## 4.2 Economic value

In recent years, people have gradually paid attention to Jian Zhan, and the sales of Jian Zhan are increasing year by year, and the output of Jian Zhan has been raised. The result of the large production volume and low yield rate is the low price of the fragments of Jian Zhan bowls, which means that the cost of raw materials of jewelry of the fragments of Jian Zhan bowls is not high. The unique cultural attributes and aesthetic attributes of Jian Zhan bowls can bring unique added value to jewelry, coupled with the double addition of the porcelain carving art, its economic value is highlighted.

In addition, every batch of Jian Zhan fired will be faced with the appearance of defective Jian Zhan, which is difficult to repair. The application of the fragments of Jian Zhan bowls to jewelry design with the porcelain carving art can promote the reuse of Jthe fragments of Jian Zhan bowls and the redevelopment of the porcelain carving art, which is helpful to uphold the concept of environmental protection and conservation, make up for costs, and give new meaning and economic value to the fragments of Jian Zhan bowls and the porcelain carving art.

## 5. Conclusion

The integration of the porcelain carving art into the jewelry design of fragments of Jian Zhan bowls is conducive to giving new value to Jian Zhan and the porcelain carving art, and also provides a new path for the creative design and application of fragments of Jian Zhan bowls, finding a new carrier for the porcelain carving art, and exploring a new territory for jewelry design.

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