# Redesign and Application of Bengbu Double Piers Carving Symbol in Urban Public Art

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**Abstract:** the article in the form of public art language as the breakthrough point, with a double block depicting symbols as the research object, to its modelling characteristics of deconstruction and reconstruction, excavate its intension, looking for design with regional culture characteristics of public art, and realize the protection of local traditional culture, so as to promote the quality of the urban public space.

Keywords: Double piers, Public art, design, Inheritance

In today's society, bengbu Shuangdun carving symbols no longer have ideographic function, but also have decorative function. When applied to public art, they are not only materialized art decoration in urban sculpture, murals and other public Spaces, but also a manifestation of the cultural spirit of the city. By analyzing the application of symbolic design elements in bengbu Shuangdun site in urban public art, the author puts forward a new art form in the field of public art. In order to make it have more cultural symbolic significance and value as a pattern element, it re-creates and designs the carved symbols. This paper aims to explore the connotation of the symbols and find the connection point with today's real life. With public art design as the carrier, it will not only show the symbols of the double piers, but also carry forward the profound regional traditional culture of the Huaihe River Basin.

## 1. The origin and cultural implication of double piers carving symbols

## 1.1. Double block new source

Shuangdun site is located in the north of Shuangdun Village, Huaishang District, Bengbu City, Anhui Province, in the middle reaches of the Huaihe River Basin. It has a history of more than 7,000 years, which is earlier than banpo culture and Dawenkou culture, and belongs to the same period as Hemudu culture. Shuangdun site is called tai-shaped Neolithic site because it has two ancient tombs 9 meters above the ground. The site covers an area of more than 20,000 square meters. During the national cultural relics survey in the 1980s, the Anhui Provincial Institute of Cultural Relics and Archaeology excavated it, and unearthed clam vessels, stone tools, animal bones, pottery shards and other cultural relics.[1-2] In 1991 and 1992, a second excavation of shuangdun site was carried out, and a total of more than 600 pieces of symbolized pottery and POTS were found. In 2005, an academic seminar on the culture of Shuangdun site was held in Bengbu, indicating that it is of great significance to the study of the long history of Chinese civilization and the origin of Chinese characters. In May 2013, Shuangdun Site was approved by The State Council as the seventh batch of national key cultural relics protection units. In addition to the stone tools and pottery mentioned above, the excavation also found clay sculpture works of art and some architectural remains of braised earth blocks, which were engraved with various symbols of primitive human life scenes. Through textual research, these remains are the earliest neolithic cultural relics discovered in the middle reaches of the Huaihe River so far, witnessing the prehistoric civilization in the middle reaches of the Huaihe River.[3]

## 1.2. The cultural connotation of double piers carving symbols

The carved symbols excavated in shuangdun culture site are mainly represented by pottery bowls and bowls, and only a few carved symbols are found on other utensils. The symbol pattern is mainly decorative, but it can also be seen from the pattern that it records the life scenes of primitive people such as fishing and hunting. These patterns are mostly geometric shapes, such as circles, squares and curves. There are also some irregular ornamentation. In the pottery body carving similar to animals, plants, human face and other patterns, but only a few. According to data records, most of the symbols of double

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piers are carved in the imperceptible parts, such as the inside and bottom of the circle foot of pottery products. Therefore, double piers not only have surface decoration, but also have special functions. This characteristic reflects the rich cultural connotation of shuangdun cultural site, which also distinguishes the carved symbols of shuangdun from other symbols.

## 2. Main classification forms of double piers carving symbols

The symbols of the double piers are characterized by Yang carving, Yin carving, and scratching, among which the majority of the carved Yang symbols are the salient features of the double piers carving, and these symbols have the character of writing. In addition to the single symbol, there are two or more forms of symbol combination. This combination of symbols shows the content to be expressed, forming a special symbol that can be understood and interpreted by others, showing the characteristics of the text.

## 2.1. Geometric class characterization symbols

According to the 2008 Excavation Report of Shuangdun -- Neolithic Site in Bengbu, 18 of the cultural relics excavated from 1986 to 1992 were carved with heavy arcs. These carved symbols have abstract fish shape, which can be said to be the earliest pictographic fish symbols discovered in this period. Some of the engravings are composed of double arcs or multiple arcs overlapping and intersecting, and the middle part is carved with a simplified "fish" shape, which is used to represent the situation of fish swimming in the water. This combination is similar to the characters for "mountain", "water", "fire" and "fishing" in oracle bones, which are also carved from the shapes of objects. From the comparison, it can be seen that the curved water ripple in the double dun inscription is not only very similar to the oracle bone inscriptions in terms of expression methods, but also has various forms of expression of water ripple, which fully demonstrates the influence of the unique ecological environment in the middle reaches of the Huaihe River on the carving symbols. The circular geometric symbol is also an important feature of the double pier carving symbol, which can be divided into single line circle and double line circle, and the double line circle symbol has a radial shape. As an abstract symbol, the single line circle may express the concept of "circle" in Chinese characters, while the radial circle, according to research, expresses the pictographic pattern of "day". In this kind of symbols, it is found that a repeated double line circle is carved outside the double line circle with rays, which adds a larger range on the basis of "day". The most reasonable explanation should be "day". Ancient people compared "heaven" to a circle, from the word "round heaven and earth" is not difficult to know. In addition to circular symbols, semicircular geometric symbols also appear in the descriptive symbols of this period. In a semicircle, there are two or three semicircles combined with a straight line or double line; Double line semicircle, rectangle and single arc, double arc water pattern or double straight line combination; Single line square and single, double arc water pattern or straight line combination. [4-5]These semicircles also meant heaven at the time. Since these symbols were carved on pottery at that time and the technology was not yet mature, it was natural for circles or arcs to be deformed into straight lines or rectangles. There are also a large number of similar examples in oracle bones.

## 2.2. Symbols used to depict plants

Aquatic grass type carving symbol. More than half of the carved symbols unearthed are about fishing and hunting. Therefore, the symbols of aquatic grass are also closely related to people's fishing activities at that time. Although the number of such symbols is small, and most of them are fragments, which have not been completely preserved, they also vividly show different shapes. There are two carving forms of water grass: one is a dense roll grass shape, the other is a leaf strip shape. Although there is no complete depiction of fish and aquatic plants together in the symbols of this period, aquatic plants generally grow on the banks or inlets of rivers and lakes, belonging to shallow waters. Fish like to seek such calm and grassy places when resting or spawning. After grasping the habits of fish, shuangdun people depicted the image of aquatic plants suitable for fish to roost, forage, mate and spawn.[6]

There are two ways to depict the symbol of leaf vein shape: one is to depict the leaf vein clearly with uniform and meticulous lines, with meticulous performance and realistic techniques. The other is to pay attention to the graphic performance of veins, pay more attention to the decorative effect, the use of straight line and diagonal line combination, regularly show the pattern of multiple groups of veins, with the characteristics of abstract symbols.

Tree, branch shape carving symbol. The appearance of trees and branching symbols is mostly related

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to people's hunting and fishing activities. Tree symbols are generally made up of branches and side branches, which generally extend upward. With branches as the center of the symmetrical layout, the overall pattern is abstract, depicting the content of sericulture, cocoon and weaving, etc. Although the number of records is small, they have shown the realism and record of ancient people's life, which makes it easy for us to understand the meaning of the carers to express.

The characteristics and types of double pier carving symbols directly affect the inheritance and development of modern visual symbols. Through the study of their artistic value, different types of visual symbol design methods can be found, so as to apply these to the contemporary urban public space environment, and better highlight the urban culture and regional characteristics.

## 3. Re-design and application of double piers in public art

## 3.1. Re-design of double piers in public art

Nowadays, bengbu is experiencing rapid economic development. How to inherit and carry forward the excellent traditional culture of Bengbu and how to develop the construction of spiritual civilization is a problem that needs us to think deeply. The transmission value of culture needs the support of regional cultural industry, and the inheritance and development of a city's cultural deposits need corresponding material carriers. Therefore, it is necessary to select, process, reconstruct and recreate the rich traditional culture to transform it into fashion elements that can be consumed by the public and give full play to its due social and cultural value. First of all, consumption culture has become a trend in today's society, and the public's consumption of cultural value is no longer only in pursuit of material needs, but also requires spiritual satisfaction. Secondly, the dissemination of cultural resources has the characteristics of wide range, great influence and repeated many times. It can also cater to the preferences of the public, and then imperceptibly improve the cultural literacy of the public.

Therefore, on the method of urban cultural value, can be double block symbol modelling characteristics of deconstruction and inductive, refine out plant patterns, patterns, geometric patterns, and other elements, the man's face and apply creative design art gimmick, decoration pattern design with regional features and cultural creative design product, And applied to product packaging, advertising, tourism industry, indoor and outdoor environment design and other fields, give full play to the social function of public art as a carrier of traditional culture. This reflects bengbu's profound cultural heritage.

## 3.2. Application of double piers in public art

Urban public art is a part of People's Daily life and affects people's judgment of a city's cultural heritage. At present, the phenomenon of "homogenization" in many cities is increasingly intensified, public art and culture are increasingly assimilated, and regional characteristics are gradually disappearing. How to apply regional cultural elements reasonably to urban public art is the key problem we need to solve. At the same time, the city visual identification system can be emphasized, which is conducive to improving the image of the city, so that the overall urban cultural environment can not only meet the living needs of modern people but also highlight the cultural characteristics of the region.

Now bengbu with regional culture characteristics of public art environment give, daming lake park cultural park, huai river scenery park, etc., to apply double pier depicting symbols as a design element of successful cases in bengbu city public art design museum square in front of the lamp design, the museum of arts and visual recognition system design, etc., the cases are rare.<sup>0</sup>

According to the urban survey results, the following aspects can be considered to integrate the double pier carving symbols as design elements into bengbu's public art design: for example, urban public facilities, such as street lamp design of main urban roads and Bridges, bus station decoration design, high-speed railway station interior decoration design, tourism cultural and creative products design, etc. The depiction symbol is not only used as decoration in various fields, but also as a unique modeling element. Through redesign, it can be integrated into the whole urban environment and be in line with The Times. For example, in the guardrail design of main roads, the branches and branches in the symbols of double piers can be directly designed into hollow patterns to replace the traditional single-shaped guardrail and increase the novelty of facilities. In the logo design and partition of urban landscape park, animal and plant symbols in the elements of double pier carving can also be designed into patterns and applied to form a complete series, echoing the theme of the park and increasing the interest of people's experience in this environment.

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In short, the rational application of the symbolic elements of double piers in bengbu urban public art design is on the one hand the inheritance and development of traditional culture, on the other hand, it also reflects the combination of regional culture and modern design. Urban public art can not only serve people, but also establish their own cultural image and enhance people's regional cultural identity.

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