

# Study on the Planning of the Reuse of Idle Ceramic Industrial Architecture Heritage in Jingdezhen

Lisha Yang

Jingdezhen Ceramic Institute, Jingdezhen, 333403, China

**Abstract:** With the continuous development of industry, China has entered the era of industrialization. Modern factories have high historical and social values and should be reasonably protected and reused. However, with the rapid development of cities, many factories have been idled. Among them, the architecture heritage of the ceramic industry in Jingdezhen is the most regrettable. Due to the unreasonable reuse methods, many architecture heritages of the ceramic industry are gradually being damaged or even disappeared. Aiming at the above background, this paper proposes the study on the planning of the reuse of idle ceramic industrial architecture heritage in Jingdezhen, analyzes the principle of the reuse of ceramic industry heritage in Jingdezhen, and puts forward the modes and countermeasures for the reuse of ceramic industrial heritage in Jingdezhen.

**Keywords:** Jingdezhen; Ceramic industry heritage; Reuse

## 1. Introduction

Industrialization is a product of the development of the times, but due to the rapid social development, scientific information technology has gradually replaced the status of industry. Many cities have left a lot of industrial architectural heritages which have large era. The rapid development of cities in China has led to further escalation of industry. In contrast, some enterprises with heavy pollution and low returns have been forced to relocate or close down. People pay much attention to interests, but they ignore the use value of industrial architectural heritage, demolish most of the architectural heritage, and then to develop other projects, which has led to the gradual oblivion of industrial civilization. With the upgrading of the industrialization of cities, the industrial architectural heritages are rapidly disappearing. In view of the above problems, the study on the planning of the reuse of idle ceramic industrial architecture heritage in Jingdezhen is put forward. This paper analyzes the planning principles for the reuse of the Jingdezhen ceramics industry heritage and proposes the planning model and planning strategy for the reuse of the Jingdezhen ceramic industry heritage.

## 2. Planning of the Reuse of Ceramic Industrial Architecture Heritage in Jingdezhen

### 2.1. Planning of ceramic industrial heritage in Jingdezhen

China's Jingdezhen is an ancient ceramic city with a long history. It began in the Han Dynasty and was the most prosperous in the Tang and Song dynasties. And it was at

the peak stage during the Ming and Qing Dynasties. Nowadays, Jingdezhen still has ceramic as its main industry. Domestically, the architectural heritage of the Jingdezhen ceramic industry is defined as: the ceramic factories from 1949 to the present and the history and technology contained in these ceramic factories. These ceramic factories were initially sensational and provided porcelain for the world. However, with the development of society and the reform of science and technology, these ceramic factories gradually failed to meet the needs of the times and gradually declined from the 20th century, leaving a lot of industrial architectural heritages. The Jingdezhen ceramic industry heritage mainly includes the material heritages such as factories, facilities, buildings, and workshops that have been reused and idled; the intangible heritages such as porcelain making technique, architectural aesthetics, and regional culture. There are five international-level cultural relics in Jingdezhen, three provincial-level cultural relics and forty three municipal-level cultural relics. These ceramic industrial heritages in Jingdezhen not only represent the industrial revolution, but also represent human progress[1]. In addition, the heritage of industrial architecture are inseparable with people's lives.

With the rapid development of Jingdezhen, many industrial lands have been damaged. Some survived but were left idle because of insufficient protection funds. A lot of industrial heritage is facing damage, and ceramic craftsman has no successors. The protection of the industrial heritage of Jingdezhen is relatively simple, and its own value cannot be tapped, ignoring the connection between heritage and the city.

### 2.2. Planning of the reuse of industrial heritage

The planning principles for the reuse of idle ceramic industrial architecture heritage in Jingdezhen include: the principle of overall consideration and balance, the principle of building recycling, the principle of green development, and the principle of urban regeneration.

As we all know, the reuse of industrial architectural heritage can not only stay in the value of the heritage itself, the development of the entire city must be considered. The heritages of industrial architecture in cities need to be rationally reused to protect local features and traditional culture. The reuse of the ceramic industrial architectural heritage in Jingdezhen should be commensurate with the urban structure and economic development of Jingdezhen. The reconstruction and remoulding of dilapidated factory buildings can beautify the city. And the transformation and reuse of old industrial areas can promote the economic development of surrounding towns. Taking into account the development requirements in all aspects, the benefits of reuse of industrial heritages are maximized.

The principle of building recycling can be divided into three ways: restoring the previously damaged buildings; giving the industrial buildings that had no original preservation value new functions; retaining the functions that can be used in the original buildings and continuing to use them.

When reconstructing the heritage of industrial buildings, we must take into account the national requirements for energy-saving and low-carbon. Instead of directly dismantling and rebuilding them, we should retain the available parts, rationally repair and recycle the buildings, which can not only reduce the unnecessary consumption of capital and manpower and other raw materials, but also reduce construction waste, realizing the construction of eco-friendly cities, and meeting the national call for green environmental protection.

At different stages of urban development, the problems faced are also very different. The principle of urban regeneration requires to formulate reasonable policies based on practical issues, with emphasis on the harmonious development of man and nature. The reuse of urban ceramic industrial heritage should fully consider the overall planning of the city and link the heritage with urban construction to maximize the use of resources [2].

### **3. Planning Methods for Reuse of Ceramic Architectural Heritage in Jingdezhen**

According to the value of the heritage itself, the planning modes of the reuse of idle ceramic industrial architectural heritages in Jingdezhen are not the same. It can be roughly divided into four categories: museum mode, entertainment and leisure mode, tourism development mode and cultural and creative mode.

The museum model is to reuse the heritages with high social value, to protect their historical significance and

cultural characteristics, and to rationally reform the original buildings. The entertainment and leisure model is to give new functions to industrial architectural heritages with large spatial structure, to link their spatial advantages with economic values, and to integrate culture, leisure, dining, and entertainment into a new commercial square. In addition to historical and economic values, the aesthetic value of the ceramic industrial architectural heritages is also outstanding. So tourism development mode is to use the beauty of heritages, retain the original characteristics of the factories while giving their new elements, use the advantages of industrial culture and places to develop tourism activities, and then provide people with high-quality tourism. The cultural and creative garden mode focuses on the use of the technical value of the ceramic industrial heritage. Many industrial architectural heritages have a long history and strong regional culture. They have experienced the rise and fall of the times, and when remoulding these architectural heritages, the inheritance of skills should be mainly focused on, so as to achieve partial protection [3].

The porcelain factories in Jingdezhen, such as People's Porcelain Factory and Hongxing Porcelain Factory have low historical, social, and aesthetic values, but they have high economic values, which are suitable for recreational development mode. These porcelain factories should be restored into modernized recreation center or commercial real estate while retaining their original features. The Guangming Porcelain Factory and Hongqi Porcelain Factory in Jingdezhen have high historical, social, aesthetic, and economic values. They can adopt the tourism development mode and transform them into cultural plazas or tourist attractions, which can not only beautify the local environment, but also realize the integration of sightseeing and leisure in the local era, to inject fresh blood into Jingdezhen. Jingdezhen's Sculpture Porcelain Factory and Art Porcelain Factory have low economic values, but their scientific and technological values are high. The cultural and creative garden mode can be used to carry out remoulding, which should do the best to play their economic construction services, and promote the local economic development [4].

## **4. Implementation of Planning Strategy for the Reuse of Ceramic Industrial Heritage in Jingdezhen**

### **4.1. Improve the value evaluation system of industrial architectural heritage**

The premise of the reuse of the idle ceramic industrial architectural heritage in Jingdezhen is the assessment of the value of the heritage. The local government should regulate the authority of the planning departments and fulfill their responsibility. Only a scientific and reasonable assessment of the architectural heritage can be used to

determine the next step. The local planning departments should follow the legal regulations in an orderly manner and avoid blindly demolishing the buildings. Therefore, it is very important to clarify the legal responsibilities of the relevant departments and improve the evaluation standards and systems [5]. In addition, the establishment of a hierarchical management system is also important to provide a reliable basis for future heritage assessment and reuse. The evaluation value of the ceramic industrial architectural heritage determines the value and method of its reuse. At the same time, it is necessary to establish a reasonable and standard assessment criteria, and to carry out graded protection according to local characteristics, so as to provide basis for formulating relevant reuse plans.

#### **4.2. Improve the legal and regulatory system of industrial architectural heritage**

China should formulate relevant laws and regulations to provide reasonable protection for the industrial architectural heritage of the Jingdezhen area, which will also provide protection for the reuse of the heritage. The Jingdezhen area should improve the relevant policies for the reuse of ceramic industrial heritage and avoid unreasonable demolition of buildings. Relevant regulatory agencies should be set up to be responsible for the supervision of the idle ceramic industrial architectural heritage, strictly examine the value of the heritage, and strengthen penalties for those who violate the laws and regulations, so as to ensure the smooth implementation of heritage reuse.

#### **4.3. Improve the reuse planning system of industrial architectural heritage**

The Jingdezhen area should be planned in an integrated manner. While designing the protection plan and restoration plan for the architectural heritage of the ceramic industry, the development of neighboring cities should be taken into consideration, so as to formulate a reasonable planning strategy. It is necessary to ensure that the reuse of industrial heritage is closely related to the surrounding cities and they can promote each other and develop harmoniously. The local regulatory authorities must conduct a general survey to clarify the specific conditions of each industrial architectural heritage and make records. Efforts should be made to integrate the industrial heritage reuse and the local environment, and to make reasonable overall planning and construction. People not only need to respect the original pattern and characteristics of the heritage, but also need to consider the overall structure of the environment, integrate the heritage with the city organically, and open up more space for people.

#### **4.4. Expand financing channels**

Jingdezhen was once an ancient city with a fascinating scenery. Now it gradually falls into decline and local resources will be exhausted. Reusing the industrial herit-

age is a top priority. The local government should carry out appropriate funding activities, expand financing channels, rely on local cultural characteristics to attract investment, and develop tourism and cultural and creative industries. Combined with the actual situation in Jingdezhen, China has given some preferential policies to promote the local economic development. The local workers are given some living subsidies to facilitate their artistic creation and thus Jingdezhen's ceramic arts can be passed on.

#### **4.5. Strengthening publicity and education of industrial architectural heritage**

The Jingdezhen area should use newspapers, media, and other means to publicize the value of industrial heritage and the related knowledge of reuse, so that people can fully understand the importance of heritage. The local government and developers should clearly understand the value and importance of the ceramic industrial architectural heritage, and establish the awareness of conservation and environmental protection, and conscientiously protect the heritage of industrial buildings. Those who destroy the heritage of industrial architecture must be punished severely. In addition, the local government must strengthen guidance and direct people to rationally choose the reuse mode according to the reuse planning principle to achieve the sustainable development of the ceramic industrial architectural heritage. People should not just see the economic value of the surface of industrial architectural heritage, use it as a tool to make money, and destroy the original features of industrial buildings, ignoring the value of the heritage itself. The government should make greater efforts to promote the cultural value, historical value, and social value of the heritage, improve the intellectual property system, and continue the ceramic process.

### **5. Conclusion**

Through the analysis of this paper, it can be understood that Jingdezhen's ceramic industry has a unique position in the world and has a long history. The ceramic industry in Jingdezhen has a long time span. The ceramic industrial architectural heritage retained so far has extremely high historical, social, economic, aesthetic, and technological values. Industrial architectural heritage is a special relic of urban development. It has the significance of the times and is facing the upgrading of the industrialization of the city. It is very important to protect the architectural heritage of the ceramic industry. It is necessary to make full use of the characteristics of the heritage and combine it with the surrounding environment to create urban space with new functions. While promoting the economic development of the city, it also guarantees the spread of ceramic crafts, and then realizes the harmonious development of the heritage and the city.

---

**6. Acknowledgment**

2017 Jingdezhen Municipal Soft Science Guidance Project “Study on the Planning of Reuse of Idle Ceramic Industrial Architecture Heritage in Jingdezhen” (Project No. 20171RKX011)

**References**

- [1] Sun Liangliang, Liu Lili, Luo Linghong et al. Facile Synthesis of Flower-like Pd Catalyst for Direct Ethanol Solid Oxide Fuel Cell [J]. *Journal of Fuel Chemistry and Technology*, 2016, 44 (5): 607-612.
- [2] Zhang Peng, Wu Xiaojing. Evolution of Transformation Policy and Conservation & Regeneration of Industrial Architectural Heritages: A Case Study on Shanghai [J]. *Urban Planning*, 2016, 40 (9): 75-83.
- [3] Dong Lili, Peng Yunni, Wang Jie. Renewal and Reuse for Old Industrial Mill of Shanxi Iron and Steel (Group) Company Based on Spirit of Place:Shangyuan 1/2 Creative Space in Xi'an [J]. *Industrial Construction*, 2017, 22 (6): 44-48.
- [4] Ji Hong. Methods of Recording Dynamic Information of Modern Industrial Legacies and Related Adaptive Application: A Case Study of Fujian Province [J]. *Architectural Journal*, 2016, 47 (12): 119-120.
- [5] Gai Lixin, Tao Kong. Study on the Middle East Railway Heritage and the Establishment of the Overall Protection Plan of the Middle East Railway Construction Group [J]. *Northern Cultural Relics*, 2016,4 (3): 70-75.