

## Jingdezhen's Ceramic Civilization: The Past and Today

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**Abstract.** As the main host city, Jingdezhen, celebrated China's ninth "Cultural Heritage Day" on June 14, 2014. After several thousand years' inheritance and development, Jingdezhen now has unique and unmatched ceramic culture nationwide and even worldwide. It has many precious cultural heritage and immovable cultural relics, totally 770 pieces. Today Jingdezhen is endeavoring to find a way to inherit and develop the traditional techniques innovatively, facing the world with brand new and charming appearance.

### Introduction

The word "china" in English not only means China, but also refers to porcelain. China has exported a large amount of porcelain since Han and Tang dynasties. Both the exquisite techniques of the Chinese porcelain and the rich history and culture expressed by it were highly appraised worldwide. People believed that only China could create such beautiful precious treasures, so they simply named porcelain from China as "china". But another tale is more popular in Jingdezhen: China is the imitating translation of the Chinese characters "Chang Nan" (Chang Nan in Pinyin, which is the original name of Jingdezhen). With the exportation of a large number of Qingbai (greenish white) wares from Jingdezhen to the West, china gradually became the name of the country China.

### Millennium Development of the Porcelain Capital

**The world famous "China".** Previously named Xinping Town, Changnan Town was originally established in Han Dynasty. Chinese ancients started to build kilns to fire porcelain at Changnan even early in East Han Dynasty. "Skillful potters nationwide came to Changnan, and quality wares made by them were transported worldwide". In the 300+ years from East Jin Dynasty to the early Tang Dynasty, the pottery production at Changnan gradually stepped into the stage of porcelain production. Celadon, white and color wares all were available during that period, and each has its own formula and firing requirements. According to the *Pottery History of Jingdezhen*: "In Tang Dynasty, Changnan Town already had a Tao kiln and a Huo kiln making porcelain wares rendered to the imperial court as tribute. As an origin of famous porcelain ware, Changnan gained herself a reputation all over the world. In Song Dynasty Jingdezhen had more than 300 kilns, of which about 50,000m<sup>2</sup> ancient kiln relics have already been found up to now. The *General Record of Jiangxi* states, during the reign of the Jingde Emperor in Song Dynasty (from 1004 to 1007 AD), emperor Zhenzong (Zhao Heng) ordered the potters of Taoyang Town (i.e. the Changnan Town) to fire porcelain wares for imperial court. The outside bottoms of all these porcelain wares were marked with four characters "JING-DE NIAN ZHI" (which means made under Jingde's reign). Such wares were sold well home and abroad, and people from near and far came to Changnan to imitate the technique. Taoyang Town was then renamed as "Jingdezhen" which has been used henceforth till today. During the rule of the Jingde Emperor, Changnan Town, dedicated to the production of porcelain wares, witnessed unprecedented prosperity of porcelain trades. [1]

The appearance of the blue and white wares in Yuan Dynasty contributed a lot to Jingdezhen's status as the Porcelain Capital. The porcelain industry of Jingdezhen was acknowledged as the best in China since then. The Yuan Qing Hua only refers to the blue and white wares made in Jingdezhen in Yuan Dynasty, although other regions such as Yunnan Province also fired the blue and white wares during that time. The blue and white wares made in Jingdezhen in Yuan Dynasty adopted the decorative craft of under-glaze and applied cobalt oxide as the color reagent. Usually, it is a once-fired ware with the firing temperature up to 1200°C and even above. After a high temperature firing, the patterns of the black cobalt pigment onto the porcelain body will take on a bright blue color, which forms beautiful decoration of blue flowers against a white background. However, the charming and distinctive blue of this kind at that time seriously relied on the imported cobalt paint which, after firing, would take on a special color of jewelry blue with black spots. The porcelain body of Yuan Qing Hua employed the formula of two-component or three-component, while its blue and white pigment adopted a kind of imported cobalt material. It is said that such cobalt pigment was imported from Kashan of Iran. This imported pigment contains less Mn but more Fe, therefore, the blue and white will take on a relatively rich blue color after firing, and one even may observe some metal crystal spots there. The spots are in rust color and uneven, which are usually called the iron stains.

The Imperial Kiln Factory was established in Ming Dynasty, dedicated to fire porcelain for the imperial court use. The factory was located at Zhushan Mountain of Jingdezhen Town (now Jingdezhen City in Jiangxi Province) under the government of Fuliang County, Raozhou Prefecture. The Imperial Kiln Factory of Ming Dynasty has fired a large volume of exquisite and beautiful wares during its existence for about more than two hundred years, from the 2<sup>nd</sup> year of Hongwu Emperor (1369) to the reign of the Wanli Emperor. The Imperial Kiln Factory's porcelain firing has been flourishing till the late Qing Dynasty. In 1640, according to a firsthand script about Chinese ceramics owned by Peter Mundy, a writer from Cornwall England, "The Chinese porcelain fits any house in the world". Obviously, Chinese ceramics were extremely popular in Europe at that time, and the volume of trade increased day by day. At the same time, popular in Europe was the Rococo Art, which upholds an elegant and exquisite art style, similar to the features of the porcelain wares exported from China. In consequence, it grounded a solid base for the "Chinese style" to prosper in Europe. However, balance of the trade between China and the Europe was broken after the first Opium War in 1840, gone also were the days of China exporting a large volume of ceramics abroad.

**Kaolin and kiln: catalysts of Jingdezhen's success.** In *The Exploitation of the Works of Nature* compiled by Song Yingxing of Ming Dynasty, it is stated that, there is a mountain named Gaoliang which has clay like rice, hard and solid. The mountain Gaoliang there refers to Gaoling, which is located at Dongbu of Yaoli Town, Fuliang County, Jiangxi Province, and 60km away from the northeast of Jingdezhen. There are a range of high and low hills around Gaoling, abounding with china clay called "kaolin", which is the main material for producing the porcelain body. The china clay produced by Gaoling Mountain is an ideal raw material for firing porcelain wares. Generally, the kaolin rocks appear white, or with a little light yellow or light blue, which are products from the erosion of deeply weathered crystalline rocks such as the granites. Kaolin is famous for its white and fine quality, and the nature of fire resistance. François Xavier d'Entrecolles (Chinese name: Yin Hongxu) was a French Jesuit priest, who once carried out an investigation at Jingdezhen in Qing Dynasty. After learning the technique of manufacturing porcelain, he wrote to the Roman Curia to introduce the kaolin and the process of porcelain production. Afterwards, a German scholar Ferdinand von Richthofen translated the Chinese "Gaoling" ("Gaoling" in Pinyin) as "Kaolin". Thereafter, porcelain clay having similar property as that produced by the Gaoling Mountain was all called kaolin. That's why the name kaolin has been accepted across the world.

Firing is the most important technique among all technical processes of porcelain manufacturing, and usually, the entire firing process is completed within kilns of various types. Therefore, the design of the ancient Chinese kilns, to some extent, has also manifested the high level of ancient China's porcelain making skills. The oldest porcelain kiln appeared between the Spring and Autumn Period and the Warring States Period (from 770 to 221 BC), which was developed from the pottery kilns of horizontal oval type earlier. The shape of such a kiln looked like a steamed bun, so it was also called

the “steamed bun kiln”. Such kiln has a relatively small kiln chamber, so each part of the kiln may be heated evenly. However, since the kiln walls are thicker, it is difficult to cool the kiln rapidly. During about the Warring States Period, a new kind of kiln appeared in the South China, which was called dragon kiln. A dragon kiln usually has a length of tens of meters, and the whole kiln body is just like a long chimney which has strong draft, so the kiln inside can achieve quick temperature changes. However, since the kiln body is too long, the inside of the kiln has relatively large temperature difference. In Song Dynasty, by combining the steamed bun kiln with the dragon kiln, kiln builders separated the body of a dragon kiln into several steamed bun kilns smoothly connected one by one, which was called ascending kiln. [2]

A new shape of kiln was seen in the Porcelain Capital Jingdezhen between the late Ming Dynasty and the early Qing Dynasty, which was named Jingdezhen kiln, Zhen kiln for short. The Zhen kiln was built by improving the ascending kiln. A Zhen kiln looks like an egg with higher and wider front but lower and narrower rear. The kiln top arches from the head of the kiln, and gradually descends towards the rear, while the bottom of the kiln forms an upward slope from the front to the rear. A chimney was set up at the kiln end. The Zhen kiln has rational design of structure, which facilitates it reaching higher temperature with less heat losses. Also, the Zhen kiln has large space inside. Usually, it may fire about ten tons of porcelain one time. In ancient China, it was the most advanced kiln in structure.

Learning from the masterpieces manufactured by famous kilns of different dynasties, and gathering the craftsmanship of skilled ceramic masters from different regions, Jingdezhen created and fired porcelain wares featuring distinctive specialties of “as white as jade, as thin as paper, as bright as a mirror, and as sound as a bell”. After the development of more than a thousand year, Jingdezhen has become the world famous Porcelain Capital. The great achievement reached by Jingdezhen in the ceramics industry naturally was due to that it owned a set of complete production and sales system for its handmade porcelain wares, which includes white clay shops, kiln use firewood shops, porcelain body firms, pine firewood kiln, porcelain painting shops, package shops (using rice straw), Xiabo (a box protecting porcelain during firing) factories, porcelain trading firms and stores, and other supporting industries such as ceramic jigger shops, mold repairing workshops, ceramic body cuts, brush shops, pigment shops, shipment firms and labor unions. In addition, these industries generated series of production and sales habits and customs generally accepted by the ceramics craftsmen, which, in fact, are the code of practices and folk custom rules linked by blood, geographic and/or industrial relation. Under the history background of that time, they played positive roles in promoting production and maintaining a stable society.

## Technique Inheritance and Development

**Porcelain panel making, colored glaze and “University of Porcelain Art”**. Known as the No. 1 porcelain panel village, Laoyatan is 1km to the south of Licun Houjie of Jingdezhen. You can see a large number of family operated porcelain panel shops there. Generally, a single shop can complete the whole process of the panel making, including clay stamping, molding and cutting, glaze blowing, and kiln filling. Besides the abundance of white panels, Laoyatan also has some shops dedicated to manufacturing special artistic porcelain. It is believed that there are more than 70 family operated porcelain shops in Laoyatan, of which 50 more shops are engaged in the white porcelain panel business. Many years ago, a man surnamed Liu from Duchang came to Laoyatan. He started his white panel business there, and made a fortune. Afterwards, led by Mr. Liu, more and more non-Laoyatan people engaged in the panel business there. As time goes by, their technique of white panel making has become better and better, and the white panels produced at Laoyatang have become more and more famous. Originally, the white panel making technique of Jingdezhen is the business secret of a state-owned enterprise, which would not be disclosed to other traders. However, this state-owned enterprise was dissolved later, and the workers mastering the technique of white panel making began to start their own business, which has facilitated the exchange, inheritance and development of this technique. After decades of development, the production efficiency of such private workshops has been enhanced and appreciated by the market. It is undoubted that the technique and volume of the

white panel production at Laoyatan both have risen after privatization. Of course, science and technology contributed most to its development, for instance, the replacement of coal kilns by shuttle kilns. On the other hand, as the traffic and transportation is becoming more and more convenience, high quality ceramic material nationwide all may be transported to Laoyatan. Therefore, quality of the porcelain panels is also becoming better and better. Now available porcelain panels are big panels of 4 meters long.

Colored glaze is a kind of ceramic glazes. By adding into the primary glaze with different metal oxide pigments, such as iron, copper, manganese and cobalt etc., respectively, the glaze will take on one of the different colors like cyan, brown, red and blue under different firing conditions. Besides being labeled as high, middle or low fire glaze by different temperature requirements, the colored glaze may also be categorized into single color glaze, crystalline glaze, multi-color glaze and crackle glaze. [3] Nowadays, many porcelain artists directly apply the colored glaze onto the surface of the porcelain, creating different visual effect. A new artistic expression appeared in the ceramics circle after 1980s, and that's the mixed media decor which, by taking advantage of the modern art of decoration, blends several traditional on- or under-glaze decorations together and applies them to a single ceramic work. This new trend has not only better manifested the ontology language of the ceramic art, but also more vividly expressed the ceramics decoration of the modern society. [4]

Jingpiao (Jingdezhen drifters) refers to most of the non-local artists in Jingdezhen, and most of them have chosen to work and to complete their creative works there. Jingdezhen is a city without fence, but drifters walking in and out block the city gate just like a big curtain, while in the city center quietly living there are more Jingpiao artists. The American ceramic artist Wayne Higby expressed his admiration to the famous artist Yao Yongkang for the latter staying in Jingdezhen all his life, "I guess your staying in Jingdezhen contributed much to your success."

Most pottery makers also are artists pursuing an art career throughout their lives. They never seek an easy and comfortable life. Instead, just like workhorses, they constantly work and strive to create new works. Jingdezhen is a wonderful place for them to have a pit stop. No matter whether you just want to drift there or you intend to do some ceramic works as an exchange for various physical items, Jingdezhen would be the ideal place. Painters, sculptors, designers and people engaged in the creative industry may all express themselves freely and absolutely there. Every summer vacation, local hosts living in Jingdezhen would become the busiest group, entertaining their guests with warm hospitality. Teachers, classmates and schoolfellows of the past, as long as they still love pottery, no matter how trivial, will enjoy a grand party at Jingdezhen. Old acquaintances of this kind will meet each other at the party. Painters come to paint, sculptors may do ceramic sculptures, and even people visit Jingdezhen to choose and buy porcelain gifts.

**Creative ceramics and fountain of life.** The abundant resources and masterful traditional technology of Jingdezhen have grounded a solid foundation for its cultural and creative ceramic development. Just in a few short of years, a series of cultural and creative ceramic businesses of different types have successively appeared in this place where the porcelain manufacturing had already developed for more than a thousand years. They are Sanbao International Ceramic Art Village, The Pottery Workshop, and Cultural and Creative Ceramic Sculpture Park. Depending on the long ceramic history and traditional culture of Jingdezhen though, those ceramic firms' operation respectively features their own characteristics. Their existence is an accumulation of experience and thoughts, little by little, contributing to the development of current industry of cultural and creative ceramics in Jingdezhen. They are also bridges to connect the traditional culture with the spirit of time, a good opportunity to carry forward the traditional ceramic culture.

The Pottery Workshop, founded in Hong Kong in 1985, is a ceramic art exchange center targeting to promote ceramic crafts and education. Its founder Caroline Cheng (Ms. Zheng Wei) established its Jingdezhen branch in the Sculpture Factory of Jingdezhen. The Pottery Workshop Jingdezhen is led by the famous international ceramic artist Mr. Takeshi Yasuda, and its infrastructure consists of studios, labs, a gallery, a shop, a coffee house and artist residency. Besides endeavoring to promote ceramics culture, the Pottery Workshop also provides children and adults with ceramics classes. In addition, it holds art exhibitions for artists from different countries to display their works and

exchange their personal opinions from time to time. Special mention must be given to the great effort of Pottery Workshop to foster ceramic creativity of the young generation: an art lecture hosted by foreign artists will be held every Friday; and the Creative Market opened at weekends or holidays is extremely popular among students majoring in ceramic art, young teachers and ceramic enthusiasts. The Pottery Workshop has now become a famous brand in Jingdezhen. It has its own style and specialty in the whole industry of cultural and creative ceramics.

Nestled in the Sanbao valley, ten kilometers to the southeast of Jingdezhen City, Sanbao International Ceramic Art Village is a tourist destination and cultural institution comprised by a group of old farms and ceramic workshops. Established by the famous ceramist Jackson Li (Professor Li Jianshen) in 1995, Sanbao Village has the function of a ceramic art research and exchange center and as a tourist attraction. [5]It is also one of the international ceramic culture exchange center in Jingdezhen. When the cultural and creative industry has not matured in Jindezhen more than a decade ago, Sanbao Village, as a pioneer responding to the State policy on developing the cultural and creative industry, began to carry forward the traditional ceramic culture and develop the creative ceramic industry. Featuring with the traditional ceramic culture of Jingdezhen, Sanbao Village operates systematically with clear division of department arrangement. Its three departments, the Sanbao International Ceramic Art Institute, the School of Art Study, and the Paradise Chinese Cuisine (Shi Wai Tao Yuan restaurant), respectively are for visitors to make ceramic and pottery artworks, exchange opinions on creativity, and enjoy the natural landscape.

Sanbao Village is like a poem, a village carrying on the ceramic and pottery techniques for more than a thousand years. Just like the poem describes, it's a place where hills green and rills blue, birds singing and bamboo sweet, where you dream to live like the great Chinese poet Tao Yuanming, "While picking asters 'neath the Eastern fence, My gaze upon the Southern mountain rests". Taking advantage of the porcelain plaques, a medium connecting us all over the world, today we gathered in Sanbao to freely talk and express our opinions on ceramics and pottery, which will have significant influence on the industry development. Such a meet actually is an art shock and exchange between the East and the West, which is beyond the prints and the ceramics, and will dissolve the national and regional differences, presenting us with the eternal value of life.

## Conclusion

Professor Fang Lili once said, the "Jingpiao" we frequently heard describes a group of artists and young students graduated from different fine arts schools and colleges, they came to Jingdezhen, run their own design and art studios, and seek their dream by themselves. Jingdezhen is an old city having a pottery and ceramic producing history of more than a thousand years, but today it is walking with us towards a full of new vitality. Where there are young people there will be hope and new vitality, so where will Jingdezhen seek for its hope and vitality?

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