

From Craft Guilds to Academic Discipline: The Paradigm Shift in Ceramic Education of Modern Jingdezhen

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Abstract: *The rapid development of ceramic education in Jingdezhen during the modern period can be attributed to the following three factors. First, in the early modern era, a group of ceramic practitioners influenced by Western thought demonstrated a strong sense of national responsibility and a keen insight into social transformation. They recognized that national revitalization must be driven by economic development, which in turn relied on talent cultivation. As a result, they actively engaged in establishing new schools with the mission of saving the nation from crisis. Second, the local government of Jingdezhen provided strong support for the establishment of these new schools, offering relatively robust political guarantees. Third, after the imperial kiln was shut down, a number of highly skilled craftsmen dispersed among the populace. The Jingdezhen Ceramic Industry School hired these artisans as instructors, providing high-level technical expertise for practical courses on ceramic production techniques, thereby facilitating the preservation and development of traditional porcelain-making crafts.*

Keywords: Jingdezhen, Modern ceramics, Ceramic education, Reform.

1. INTRODUCTION

Modern Jingdezhen pottery and porcelain skills gradually transitioned from the traditional family inheritance system to the ceramic school. This cannot be accomplished overnight. People of insight in China recognize the importance of education and advocate science and technology and aesthetic education to rejuvenate the country. During the Westernization Movement, Li Hongzhang, Zuo Zongtang, Zhang Zhidong and others believed that to "seeking wealth" and "strengthening the country", technology must be developed, and the key role of technology development is the cultivation of talents. In April 1912, Cai Yuanpei published an article discussing his opinions on education policies. He emphasized the rejuvenation of the country by aesthetic education, and believed that both drawing lessons and manual lessons were the basis for the rise of aesthetic education. He said: "Pictures are also aesthetic education, and its content must contain various doctrines, such as physical paintings for materialism, historical paintings for moral education. Even the objects of beauty and dignity can get a world view." Materialism can also invigorate the sense of beauty." After the establishment of the modern government, a series of reforms have been carried out on education. Among its reform measures, art education has been paid special attention, and hand-painted painting has gradually been put on the agenda. Jingdezhen ceramic manual painting education has also been fully developed in the context of the national education reform.

China's preparations for the establishment of a porcelain school began in the late Westernization Movement-in the 22nd year of Guangxu (1896), when Zhang Zhidong, then governor of Jiangxi, wrote in "Jiangxi Gentry's Request for a Small Steamboat • Porcelain and Sericulture School", It is the first time to mention running a school for the ceramic industry. But it was the eventful autumn of the Qing dynasty. The Sino-Japanese War of 1894-1895 was just defeated and forced to cede land for compensation from Japan. The Qing court was already in distress and had no time to take care of the school. However, the subsequent reform of the Reform Movement of 1898 failed, and the Eight-Power Allied Forces invaded China, which even stranded the motion to open a ceramic industry school. It was not until 1910 that Chinese national capitalism began to awaken. They felt that long-term feudal social relations and small- scale production had severely hindered the progress of China's porcelain industry. In modern times, Jingdezhen's traditional porcelain making methods could not compete with foreign porcelain. , So the porcelain industry must be improved. In addition to setting up industries, the most important thing for this improvement is to cultivate talents in the new porcelain industry. Therefore, Kang Da, the general manager of Jiangxi Porcelain Industry Company and the first prime minister of Jingdezhen Chamber of Commerce, petitioned the Ministry of Education for approval, and jointly funded the establishment of the first ceramic vocational school in China's history with Zhili, Hubei, Jiangsu, Anhui and other provinces. China Ceramic Industry Academy.

2. THE INTRODUCTION OF NEW MACHINES REQUIRES A LARGE NUMBER OF CERAMIC PROFESSIONALS

Since modern times, new economic factors have continued to grow, new sciences and new technologies have emerged in an endless stream, coupled with the intrusion of foreign porcelain, making many ceramic capitalists realize the importance of mechanical porcelain, so they have introduced various types of ceramic machinery and equipment. However, mass production under this large industrial scale has much higher requirements for technology and design than traditional handicrafts. First of all, the number of ceramic products produced by machinery is huge, so if there are some small errors in the design, the loss of the porcelain factory will be very huge; secondly, from the perspective of domestic and foreign porcelain production markets, machine production is irreversible, so it is Before production, it is necessary to design in advance. After the ceramic products to be produced are fully designed, production can be started; again, the design and production of traditional handmade ceramics are done by one person or a few people, and they are very familiar with the conception and production process. , But in the modern large-scale industrial production system, the designer and the producer are separated, so when the designer is designing, he also needs the assistance of the porcelain makers to understand and be familiar with the production process, otherwise it may produce defective products .

In modern times, porcelain professionals are quite scarce, so some manufacturers can only import large quantities of ceramic design drawings from abroad. However, the pattern samples purchased are not suitable for the aesthetic requirements of the Chinese people; on the other hand, due to the huge cost, Increasing production costs, making Jingdezhen porcelain less competitive than foreign products, and also making China's ceramic handicraft industry under control everywhere. Therefore, the demand for ceramic design professionals has made some people of insight realize that it is urgent to strengthen the training of domestic ceramic design talents.

Feeling the rise and fall of the porcelain industry, some people of insight naturally put ceramic vocational education in an important position for development. Because ceramic vocational education can provide short-term and effective training for those unemployed groups with low academic qualifications and lack of expertise, so that they can quickly be used for ceramic development and also help solve their livelihood problems. The content taught by the Porcelain School is simple and easy to learn, and only requires strong hands-on skills, such as: porcelain molding, pattern design and drawing of paperbacks, etc. In addition, ceramic vocational education can also adjust training methods at any time according to the needs of the society. For the above reasons, ceramic vocational education has naturally become one of the main ways to train ceramic designers.

It can be seen that the establishment of Jingdezhen Ceramic Vocational School in the modern era is an unprecedented pioneering work in the history of Chinese ceramics. It not only made a certain contribution to the development of ceramics in the early modern period, but also cultivated a large number of professional talents for the development of the ceramic industry in Jingdezhen, New China. . As a result of the introduction of technology, on the one hand, it promotes the improvement of productivity, on the other hand, it also inevitably brings about the impact and change of social ideas. In modern times, some Western science and technology books were translated and published in China. These books not only enriched the craftsmanship knowledge of ceramic workers, but also further broadened their horizons and updated their industry development concepts. The government has also sent a large number of publicly funded international students to accept Western scientific and technological knowledge and concepts. After these young people returned from their studies, they opened lecture halls or founded schools to pass on the knowledge and skills they learned during their study abroad to more Chinese people, such as China's famous ceramicist and ceramic educator- Wang Fan, who shared ceramics all his life. Forged an indissoluble bond, and did a lot of pioneering work on ceramic production and ceramic education in China. Another example is Du Chongyuan. After returning to China in 1923, he set up Zhaoqing Ceramics Company in Shenyang. He advocated saving the country by industry. After coming to Jingdezhen, he and Chen Xiaonan, the investigation director of Hunan, Hubei and Jiangxi District of the Ministry of Industry, inspected the situation of Jingdezhen's porcelain production and proposed the development of Jingdezhen's porcelain industry Ten reasons for struggling. He advocated the establishment of large-scale mechanical ceramic factories, and jointly formulated ten improvement measures with Chen Xiaonan, the investigation director of the Hunan, Hubei and Jiangxi District of the Ministry of Industry. The top ten improvement measures mentioned the opening of ceramic schools, popularization of worker education, and sending students abroad to learn new technologies and introduce new equipment. Together with the influx of science and technology books, these international students introduced modern Western technology and ideas into China, which aroused the enthusiasm of the Chinese to accept modern technology education.



Figure 1: Bronze Statue of Wang Fan



Figure 2: Wang Fan

The introduction and adoption of western modern porcelain-making technology has made the traditional training methods of porcelain craftsmen no longer suitable for the development of machine porcelain. On the one hand, machine-made porcelain requires a large number of skilled workers to master the machine operation, while the traditional way of passing on from master to apprentice can only meet the needs of a very small number of talents; on the other hand, traditional porcelain-making education emphasizes the teaching of practical skills, but mechanical porcelain-making Not only are skilled workers required to have strong practical and operational skills, but they must also have certain cultural knowledge and artistic appreciation capabilities, which can only be achieved through modern vocational education.

3. THE RISE OF THE INDUSTRIAL SALVATION MOVEMENT ADVOCATES THE CULTIVATION OF NEW-STYLE TALENTS

As early as during the Westernization Movement, Li Hongzhang, Zuo Zongtang, Zhang Zhidong and others recognized that to "seeking wealth" and "powering the country", technology must be developed, and technology development, and the key to technology development is the role of talents. of. Zhang Zhidong once said: "China is not poor in wealth, but poor in human resources." He pointed out: "China strives to be self-reliant, and there is nowhere to start cultivation of talents." After the Revolution of 1911, capitalist ideas became available to all social strata. Widely disseminated, the views of "science" and "democracy" have gradually become popular, providing a better environment for the development of modern education in China. Since the beginning of modern times, economic growth, technological leaps, and pressure from foreign businessmen have caused a shortage of talents in various fields. National capitalists have realized the importance of large-scale mechanical production, so they have introduced mechanical porcelain equipment one after another. However, mass production under this large-scale industrial scale requires much higher design requirements than traditional handmade porcelain. Therefore, the training of porcelain talents is urgently needed. After Huang Yanpei inspected Jingdezhen in 1914, he said in his "Inspecting Education Diary": "The porcelain makers in Jingdezhen have obeyed the law and cannot be changed. However, once they are improved, they will be eliminated, and there is nothing to eat. And out of a way of group resistance, mines moved to avoid them."

4. FREQUENT WARS PROMPTED THE REFORM OF CERAMIC ART EDUCATION

The bourgeois revolution led by Sun Yat-sen in 1911 destroyed the decadent Qing Dynasty and established a bourgeois republic. However, due to the weak compromise of the Chinese bourgeoisie, the power of the Republic was quickly transferred to the hands of the feudal warlord Yuan Shikai. The reign of the Beiyang warlords can be called the darkest and most chaotic period in modern Chinese history. For 16 years, the country has been in a state of war for a long time. Until the outbreak of the Anti-Japanese War, due to the need to implement conscription, training courses began to be offered in schools, with boy scout training in elementary and junior high schools, and exclusive military training in high schools and universities. Due to the lack of a stable and clear political environment, Jingdezhen Ceramics School was forced to undergo demolition and relocation several times, which prevented students from studying at ease, resulting in the slow development of ceramic education. For example, from 1939 to 1942, Jingdezhen was continuously bombed by enemy planes. Schools and factories were razed to the ground everywhere. People had to go out to the countryside or mountains to hide in the morning and come back to live in the evening. In such an environment, who else has the mind to sit in the classroom to learn ceramic technology, this is undoubtedly a kind of misfortune of the times for the education industry.

It can be seen that although the porcelain school has been established, the progress and development of ceramic school education is closely related to the social environment of that era. A stable environment promotes the development of ceramic education, while a turbulent environment hinders the progress of ceramic education.

5. THE UPDATE OF IDEAS

Porcelain production in Jingdezhen is a typical handicraft production method, which has great limitations. The workers' feudal ideas are very serious. Therefore, to improve production technology and craftsmanship, it will not happen overnight. In response to the situation at the time, the Administration provided new ideological guidance to skilled workers and constantly reformed their old feudal ideas. Especially in the sagger factory, Moli shop, red shop, porcelain shop, Zhou shop, and the so-called "five elements" (Hui Se, Ba Zhuang, packaging, barreling,

collateralization) and other industries Hereditary conventions are deeply ingrained in their thinking. Because in this way they can monopolize the entire industry. Once it is cancelled and broken, buying and selling will be free, and the market will no longer be controlled by them. This will be a big loss for those with special skills. After the establishment of the Ceramic Industry Administration Bureau, this aspect was rectified. First, this hereditary system was cancelled. With the establishment of porcelain schools, porcelain making skills were gradually transformed into the inheritance of school learning. On the one hand, the Porcelain School hires old craftsmen to teach at the school and pay them wages so that they can teach their skills; on the other hand, by explaining knowledge to them, instilling new ideas in them, it makes them realize that through teaching students Passing on the skills can also have financial resources. Only by passing on one's skills to the next generation can the porcelain industry develop more.

The Ceramic Industry Administration also cancelled many other stereotypes and bad habits, so that the previous phenomenon of monopolizing the market no longer appeared, and let them realize that only the unity of various industries can better promote the development of the porcelain industry and break the rush of foreign porcelain against the country at that time. The situation in the market.

The change in the thinking of porcelain workers is also manifested in the removal of their previous belief that "a woman without talent is virtue", that reading is a man's business, and women must obey the feudal idea of "three obediences and four virtues". For example, the biggest difficulty Feng Tianwen encountered when he founded the "Zhushan Women's School" in Jingdezhen was the feudal thought that girls could not study. Among them, the most stubborn feudal thought was the potter, so Feng Tianwen tried to convince them one by one. Feng Tianwen explained to them the major events at home and abroad and the prosperity of developed cities every time they met in the same town on festive holidays, and inspired them to understand that education can promote scientific development and the ceramic industry can flourish; encourage them to send more children to school, emphasizing daughters and Like men, they should also read books, and also honor their ancestors, and let them realize the harm of patriarchy and illiteracy from their personal experience. The change in the ideology of the porcelain workers is undoubtedly very beneficial to the development of the porcelain industry in Jingdezhen.

6. THE INTRODUCTION OF WESTERN SCIENCE AND TECHNOLOGY EDUCATION

From the late Qing Dynasty to modern times, China's political and social outlook has undergone earth-shaking changes, and the commodity economy has also developed to a new level. In this violent and profound social change, Jingdezhen porcelain industry education has undergone modernization in terms of educational concepts, knowledge inheritance methods, and personnel training objectives.

The educational concept in the West is to promote science and technology to rejuvenate the country. Only by developing science and technology can the economy develop. The introduction of this Western scientific and technological education concept into China, on the one hand, came with the footsteps of Western commercial invasion, on the other hand, it was brought back to China through overseas students and gradually penetrated into China's educational concepts at that time.

While the whole world's technological concepts have caused profound changes with the development of industry and commerce, the introduction of new-style porcelain education concepts will inevitably have a great impact on the traditional handmade porcelain industry. For example, Mr. Zhang Hao from this province returned from studying in Tokyo, Japan, and together with Mr. Kang Da, he founded a ceramics school in Poyang County in 1910. The ceramic school encourages students to learn Western technology and adopt new methods of porcelain production in order to revitalize the porcelain. At that time, the feudal power of Jingdezhen was serious. It was believed that Jingdezhen porcelain had always been the first in the world. Hand- made porcelain was better than mechanical porcelain, especially the older generation of craftsmen could not accept mechanical porcelain. Therefore, the school could not be set up in Jingdezhen, and had to be jointly run by several provinces. The name of the school was China Ceramics Academy. It can be seen from the above that the traditional feudal ideas and the new ideas brought back by overseas students were initially incompatible. It is difficult for the new- style ceramic school to take root in Jingdezhen, and the Chinese and Western concepts need a process of running-in. Only by integrating Chinese and Western thoughts can Jingdezhen ceramics education be pushed to a new level. For example, after the Revolution of 1911, the Ceramics School was changed to the Jiangxi Provincial A Type Industrial School. Mr. Zhang Hao is the principal and has a branch school in Bijia Lane, Jingdezhen to train technical talents. It can be seen that people's thinking has been quietly changing at that time. The gradual

expansion and development of the Porcelain School has played a certain role in promoting the development of Jingdezhen Porcelain Industry.

In addition, Western educational concepts advocate that everyone has the right to education, and women can also enter schools to receive education. This is not feasible in China's feudal society. In traditional Chinese education, only men are educated, while women are housewives with an underground status, and there is no opportunity to receive school education and learn cultural knowledge. This kind of educational concept has been constraining the development of Chinese education. As a relatively closed town, Jingdezhen is relatively more conservative in its thinking. The porcelain-making skills have always been passed on from men to women. After the opening of the Porcelain School, under the influence of Western education, women also had the right to enter the school to receive education. This was a major breakthrough in Jingdezhen's ceramic education in modern times, and played a significant role in promoting the development of Jingdezhen's porcelain industry.

At the same time that Western technology was introduced into China, some advanced Western education models were also introduced. Since the traditional Chinese porcelain craftsmanship was not incorporated into formal school education before modern times, as soon as Western educational forms were introduced, they became the object of Chinese education imitation. Jingdezhen ceramic education also learns from this new educational form, which played a huge role model for the modern transformation of the Chinese ceramic education model.

Western science and technology education focuses on the combination of practice and theory, especially in process technology, theory and practice are inseparable. The introduction of this education model has greatly promoted the ceramic technology. From a practical point of view, the improvement of traditional porcelain-making technology can be said to be the product of the combination of Western new technology with school education and experimentation. Zhang Hao, who had studied kilns in Japan, introduced new techniques such as coal-burning pedal wheels, manual glaze breaking machines, printing, brushing, and plaster cast blanks by running schools and pilot plants after returning to China. The application of new technology in practice has enabled the traditional Jingdezhen porcelain industry to start modern production. Theoretically speaking, the education of porcelain-making technology is not only the study of porcelain-making practice, but also the study of theory, and the practice is guided by theory. It can be seen that China's attempts to introduce Western porcelain education models have had an impact that cannot be ignored in Jingdezhen, which is located in a remote mountainous area.

In a nutshell, Jingdezhen ceramic art, as a traditional handicraft with a long history, has always been passed down in China in the form of father to son and apprentice to teacher. However, due to the development of the capitalist economy in the early modern years, the introduction of advanced foreign machinery and technology, and the emergence of new production methods, a large number of workers who can adapt to mechanized production are required. Therefore, the traditional way of passing on skills from father to son and apprentice is gradually not working. Instead, ceramic technical talents trained under the new education model have been developed. The establishment of ceramic vocational schools is catering to the training of new talents. Model, this is the initial reform of Jingdezhen ceramic education. For example, in 1910, the porcelain tire molds and refractory bricks of the Nanyang Quye Association won the super award. Kangda's school-running philosophy of cultivating "technologically advanced talents" was also used for reference by later generations and carried forward.

7. CONCLUSION

To sum up, the ceramic education in Jingdezhen in modern times has gradually become more rationalized, and through the attempts of different types of teaching methods, diversified characteristics have gradually emerged. Although most attempts were at the initial stage, they laid the foundation for ceramic education in the late modern period. Due to the interference of social, economic, political and other factors at the time, the development of ceramic education was also unsatisfactory. However, the development process has cultivated many ceramic professionals and promoted the reform and development of ceramics to a certain extent. It provides rich and valuable experience for the reform of ceramic art education.

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