# THE LAYOUT OF POWER AND SPACE IN JINGDEZHEN IMPERIAL FACTORY

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#### 1. Introduction

Space has social attribute, and the study of space in human geography gradually proceeds from the exterior to the interior and eventually into the complicated structure of the society. The study of culture in geography no longer treats culture as the object of spatial behavior, instead, it focuses on culture itself, exploring the function of space in constructing and shaping culture [1]. The concentrated and introverted space of imperial power is typical of this function. In the centralized system of absolute monarchy, the emperor with arbitrary authority, controlled and supervised the whole nation and wield his unchecked power at will. The idea of spatial practice and representations of space proposed by Henri Lefebvre provides a good reference for the study of the above-mentioned issues, such as the material environment, allocation, organization and ways of representation of production [2]. To study the production path and control mode of the landscape from the perspective of power, we can see that culture is not only represented through landscape, but also shapes the landscape, they interacting with each other in a feedback loop [3]. We can also understand the relationship between social environment and space of imperial power which starts from the emperor, moves down to the imperial court and then to the provinces. This method of social government is also reflected in the Imperial Factory, the center of imperial power in ceramics. The Imperial Factory, located in Zhushan Region (the center of Jingdezhen), facing south, reflect the spatial ethics that the more central and higher one is positioned, the more prestigious and dominant one is, highlighting the majesty of the imperial court. The imperial landscape, guided by the ideology of family-governed monarchy and absolute loyalty to the emperor, finds expression in the regulation of government building and layout of workshop: the Imperial Factory is the carrier of the evolution of power and porcelain made for imperial use the vessel of system and technology. In this paper, the Imperial Factory refers to Jingdezhen Imperial Ware Factory in Ming Dynasty and Jingdezhen Imperial Kiln Factory in Qing Dynasty.

#### 2. The Power-space of the Imperial Factory

The operation trajectory of politics in space refers to not only the architectural space but also behavioral space. Power is not only symbolic but also practical. If space and its boundary can be said to have social attribute, then the physical movements such as going through doors and crossing boundary and space can be regarded as social practices [4]. Jingdezhen Imperial Factory is the spatial representation of the operation of imperial power which is both physical(as in architecture) and hierarchical. They are planed and built according to the geographical situation and by taking advantage of the climate and geographical features, aiming to achieve the state of perfection among climate, geography and people. At the same time, the landscape becomes the tool of power to constrain the private kilns and discipline the potters.

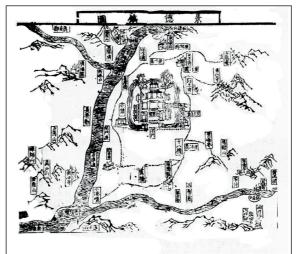


Figure 1. Map of Jingdezhen in the 21st year of Kangxi



Fig. 2 Map of Jingdezhen in the 48th year of Qianlong

# 2.1. Monarchical representation in the geography and geomancy of the Imperial Factory

*Fuliang County Gazetteers* published in the 21st year of Kangxi reign (Fig. 1) and 48th year of Qianlong reign (Fig. 2) and *Record of Jingdezhen Ceramics* (Fig. 3) published in the 20th year of Jiaqing reign have drawn a rough outline of Jingdezhen town proper, which highlight the Imperial Factory but ignore streets and markets. In fact, they are more sketch maps than topographic ones. This is especially true of the map in *Fuliang County Gazetteers* which simply represents the space of Jingdezhen town proper during Ming and Qing Dynasty. The town proper is embraced by mountains and surround by water in the west, south and north. In the north of the town lies Lishidu, in the south Xiaogangzui, in the west Changjiang and in the east Ma'anshan. To the east of Jingdezhen there are tall mountains, to the west rivers, hence the town can only be extended to the south and north, not east and west. Most of the streets and markets run from north to east instead of east to west and are parallel to the Changjiang River.

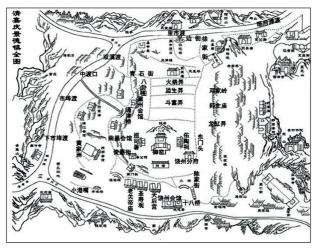


Figure 3. Map of Jingdezhen in the 20th year of Jiaqing

#### Fuliang County Gazetteers have drawn Changjiang River, West River,

South River, and marked the ferries, village, mountains, ridges and temples along both sides of Changjiang River. Although the names on the map are detailed, its representation the topographic information is less realistic than that of Kangxi edition. As for *Record of Jingdezhen Ceramics*, it is much improved because the topographic information is realistically represented and keeps record of rivers, ferries, temples, but gone are the villages. In addition, halls and streets and markets are added while the space was narrowed at the east bank of Changjiang River.

Through a general comparison of the three maps, it must be pointed out that: Firstly, the three maps are sketches instead of topographic maps. Therefore, it is necessary to note that in the east and north of Jingdezhen was high hills, while in the west and south are small hills. The town proper is low while its surrounding regions high. Hence the town in whole is a basin which opens in the south west. Secondly, as to rivers and

their tributaries, West River and South River are tributaries while Changjiang is the major river which is shaped like the Chinese character ")<sup>—</sup>". Changjiang River flows from northeast to southwest, passing Sanlv Temple, and then from north to south. Thirdly, the distance between Lishidu to Xiaogangzui (which runs from south to north) is about 13 Chinese Li (One Li equals 500 meters) and the distance between Changjiang and Ma'anshan (from east to west) is 6 Li [5]. All of these three versions of map have not properly represented the narrow and long shape of the region, but even so, all of their Imperial Factories stand right in the middle of the town.

The formation of power-space needs not only majesty, but also strategy. Space becomes the tool to convey power, even a certain kind of institution itself which influences, warns and deters people who are involved. The imitation of the imperial architecture throughout the country is a reflection of the influence of imperial power. The Imperial Factory of Ming Dynasty, with an area of 54300m<sup>2</sup>, was chosen to be built up in Zhushan of Jingdezhen, to whose south lies Gongguan Mountain (nowadays The Middle Zhushan Road), to east Houshan pavilion (The Northern Zhonghua Road), to west Bijia Upper lane and Dongsiling, and to north Pengjia Upper lane [6]. The buildings in Imperial Factory, mainly government offices and workshops, are located in the central high ground of the town, facing south and with north at its back. This position reflects the spatial ethics that the more central and high one is positioned, the more prestigious and dominant one is, highlighting the majesty of imperial court. Its location in the center of the transportation is also conducive to gathering and distributing goods. By overlooking the surrounding private kilns, it produces a dominating air, which deters the potters in their behaviors and minds.

The formation of power-space is not only particular about hierarchy but also geomancy. The latter that observes the principle of harmony between heaven and human, balance of Yin and Yang, and mutual generation and restriction of The Five Elements, is important for construction of palaces, mansions and houses, etc, in terms of choice of location, direction, and architectural shapes. With geomancy, one can implement the optimal technology to utilize and improve nature. It is believed that the building can obtain vitality and prosperity by staying away from Yin, embracing Yang, being close to water, facing streets and with mountain at its back. Guanzhong(BCE 719-645,a famous thinker) contends that flood would cause the worst damage among the five natural disasters. Kilns in Jingdezhen are built along the river which is definitely advantageous for people to obtain and make use of water, but surrounded by water at three sides, Jingdezhen also has suffered the most from storms and floods. According to geomancy, Zhushan is located at the position of Xue (the best place). It is the only hill in the center of the town proper, overlooking the surrounding places. The place looks like five surrounding dragons holding a pearl. During Tang Dynasty, a pavilion called "Pearls Gathering Pavilion" was built there, hence the name Pearl Mountain. During Song, Zhongli Pavilion was built there which was appointed to be the headquarter of the revolting army by General Guan Yu. During the reign of Wanli, Ming Dynasty, it was renamed as Huancui Pavilion. During Yongzheng reign, Qing Dynasty, it was called Wenchang Pavilion. It is a prosperous place full of Feng (Wind) and Qi (Air) elements over various dynasties. The blue and white pattern of the Imperial Factory on the porcelain table collected by The Capital Museum (Beijing) (72.5 cm in diameter) (Fig. 4), is round in form, with the Imperial Factory at the center which connects streets and shops and is surrounded by rivers, mountains, (Fig. 4)

Streets and buildings. On it there are green mountains and forests at the both

side of the river, ships coming and going for porcelain, zigzagging lanes filled with busy workers and numerous shops packed with happy clients and owners.



Figure 4. Blue and white round table with the pattern of Imperial Factory collected in Capital Museum

In the east and west of the Factory are workshops, and in front of the main door are halls and shops. Inside the door lie administrative offices and temples. The blue and white drawing of varying shades and different density presents prosperous scenery of the 13-Li Taoyan region. Therefore, in the early Ming Dynasty, the choice of The Imperial Factory being built on a gentle slope, Zhanshan being the center of the Factory, and the symbolic significance of five dragons offering a pearl to drive away the evil spirit, is a design that strikes a wonderful balance between the aesthetic value and practical function.

# 2.2. The evolution of security management of the Imperial Factory

Space, as a place of production, is capable of changing and creating. The process by which government transmits imperial power is one by which they can allocate resources to develop, design, utilize and command the right of space production. *Raozhou Prefecture Gazetteers* of Zhende Reign, Ming Dynasty, records that the evolution of Jingdezhen porcelain kilns from Tang Dynasty to Yuan Dynasty: "Jingdezhen, the place where ceramics are made, rose in Tang and developed in Song Dynasty. Our Dynasty has set up a bureau to supervise it". Jingdezhen kilns have gone through four stages, developing from folk kilns, folk kilns firing tributary porcelain, official kilns and eventually to the Imperial Factory in Ming and Qing Dynasty. Here, a bureau of supervision is set up and pottery supervisors are appointed by the court. As a place of rituals and moral teaching and an embodiment of evolution of hierarchical power, it is a unique cultural landscape of China and even the whole world.

In the past, the political center of Fuliang County was located originally in the northwest of the county. In order to strengthen the security management, the Department of Patrol and Inspection was set up in Song Dynasty. It was moved to the town of Taoshu in Yuan Dynasty, and moved again to the town of Legong in Ming Dynasty, and not until 42nd year of Wanli Reign was it relocated to Jingdezhen where the first and second hall and offices of the Department of Patrol and Inspection were built. In the 2nd year of Kangxi Reign, Fuliang barrack was set up in the county proper, and in the 4th year of Kangxi, magistrate Xiao Yunshu built government offices together with 60 army barracks there. In the 22nd year of Kangxi Reign, a military barrack of Raozhou Prefecture was relocated to Jingdezhen to repress local riots. In the 32nd year of Kangxi Reign, Raozhou Prefecture government appointed a governor to station in Jingdezhen [7]. In the 32nd year of Kangxi Reign, a department of Patrol and Inspection was set up in Jingdezhen. It is worth mentioning that the governors of Yuan, Ming and Qing dynasties were responsible for supervising food, arresting criminals, defending coast and river, and managing water resource, etc. As officials ranking the fifth in the hierarchy of court officials, their high status show that the royal court had attached great importance to Jingdezhen.

In Ming and Qing dynasties, Jingdezhen, as a town under the jurisdiction of Fuliang County, is not a political center, but was the center of porcelain making and economy of China. Therefore, different people are gathered here. "There are desperate fugitives and a lot of mobs who make it difficult to govern the place" [8]. From time to time, the inspection tours by provincial and municipal government are required, but these patrols are limited in time, incapable of stationing in Jingdezhen for long. Therefore, the court entitled the Imperial Factory with authorities of security management to ensure the smooth implementation of government decrees and security of the place. Besides, a department of patrol and inspection was set up in Jingdezhen to ensure local security during the reign of Wanli. And in the Imperial Factory, there were branch agencies of securities, patrol and inspection, such as offices of branches of Jiujiang Province, and of Raozhou Prefecture and Fuliang County.

Jingdezhen Imperial Factory, though not as important as Fuliang County government, was of highly significance as it produces imperial porcelain so that ceramic supervisors were appointed by the imperial court or directly by the emperor himself to take charge of porcelain production. In Ming Dynasty, the ceramic supervisors were eunuchs of the court and officials of The Ministry of Industry or local governments, while in Qing Dynasty, most of them were officials of Customs and The Ministry of Industry, or local officials. Generally, ceramic supervisors governed better than eunuchs: the former facilitated the development of porcelain industry by devoting themselves to their duties and treating potters with kindness, while the latter hindered its development by embezzling money, colluding with businessmen and oppressing and abusing potters and the mass. Most of the ceramic supervisors ranked higher than the governor of Fuliang County, some of them even ranked the third or fourth in the hierarchical order, such as Tingqui Duan and He Cui of Ming Dynasty, Yingxuan Zang, Tingji Lang, and Gengyao Nian of Qing Dynasty. For the stable production of imperial porcelain, most of the ceramic supervisors managed effectively. Among them, Ying Tang stood out who made innovations of the variety, shape, decoration, and pattern of the wares, improved the quality of the ware and the transportation condition, guaranteeing potters with good life and maintaining social security. Ying Tang, whose contribution far outweighed that of magistrates of Fuliang County, helped Jingdezhen porcelain become worldly famous.

#### 3. The buildings of government offices in the Imperial Factory

By exploring the history of regional culture, studying the way how people utilize and transform environment, and the process how they turn natural landscapes into cultural ones, we can understand the energy of power in shaping space. Foucault's Power-Space in not simply an empty room or a showy appearance, instead, it is combination of space and power to regulate people's behavior and tame people's thoughts [9]. Yunsu Li believes that the relationship between "Li (rites)" and architecture is related to the building regulation of capital and imperial palace. Architecture is the embodiment of political system, and also the content of "li (rites)", used as a political tool [10]. In accordance with Chinese regulations, Jingdezhen Imperial Factory entitles the architecture with hierarchical ranks by means of scale and form. Through the symbolic function of its architecture, the Factory manifests social order and value orientation. Even the construction of pavilions for supervisors and prisons in the Factory can form a peculiar power-space.

#### 3.1 The spatial regulation of government offices in Imperial Factory

In Ming and Qing Dynasty, Jingdezhen Imperial Factory produced wares exclusively for royal families and court. Ceramic supervisors took charge of factory affairs on behalf of the emperor, so his ranking was high with great power, well above that of the magistrate of the county. Therefore, Imperial Factory is entitled with the authority of government office; hence its architecture is naturally the same with that of government office. Imperial Factory is of grand scale, even larger than the office of Fuliang County government, a design that highlights the dignity of monarchy.

The government office is the most majestic architecture in a place. Its architecture reveres patriarchal moral codes while its spatial order emphasizes that the architecture faces south and is symmetric. According to The Doctrine of the Mean, "the middle is the fundamental". Therefore, the left is allocated for ancestral temples and the right for the altar of nation; civil officers stand on the left and military officers on the right; the east is for the honorable and the west is for the humble; the administrative offices are at the fore and living guarters at the rear; Ministries of Personal Affairs, Civil Affairs, and Rites are located on the left and Ministries of Military, Penalty, and Industry on the right. The overall architecture makes clear distinction between the important buildings and the lesser ones. It is also rigorously arranged, not only standardizing the pattern of space but also taming people's behavior with space. Generally, three longitudinal axes run parallel to each other, with the main axis in the middle and the auxiliary axes alongside. On the main axis are screen wall, memorial archway, main door, the second door, paved path leading to the main door, warning pavilion or archway, gatehouses in the east and west, government offices and the hall; After Yangong door (the third door) is the second courtyard; Behind the inner chamber is the third courtyard, that is, courtvard for inner chambers. On the east axis are Land God's Temple, quest houses. kitchen, garden, houses for officers and so on; on the west axis are prisons, reception rooms, rooms for constables, etc.

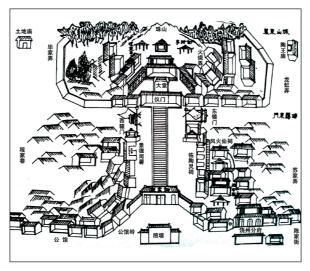


Figure 5. Map of the Imperial Factory in 20th year of Jiaqing

From "Book of Ceramics" in History of Jiangxi Province and "Map of the Imperial Factory" in Record of Jingdezhen Ceramics (Fig. 5), we can know the administrative offices are at the fore and living quarters are at the rear. Important architectures are standing along the north-south axis, including screen wall, the first door, the second door, and the hall. In front of the hall are three ritual doors, three drum towers, six big warehouses of the east and west, and eight warehouses inside and outside. From the ritual door to the hall are administrative areas, though there are no labeled names, but all are constructed according to the spatial regulations of government offices. There is no sign for the second hall. From the hall to the second hall, there is Huancui Pavilion on the left and Land God's temple on the right as well as three supervisors' pavilions and one prison. On the hill behind the hall is a pavilion, named "Wu Ran" in Ming Dynasty but changed to be "Hua Ji" in Qing Dynasty. On the left of the axis are office of Jingde Inspection, and West Yuanmen; on the right are Ceramic Temple, East Yuanmen, Guandi Temple, God of Wind and Fire. In the Southwest of Imperial Factory is the temporary office for the magistrate of the county, and supervisor's offices of Patrol and Inspection of Jiujiang are in the southeast. Among management personnel of Imperial Factory, civilian officers are small in number, including the person in charge, the supervisor, person in charge of the archives and copyists. But there are a good number of military officers, including patrolling soldiers, gate soldiers and warehouse soldiers. Factory regulations of Qing Dynasty mainly follow that of Ming Dynasty, only with one more screen wall outside the gate. Between screen door and the first gate, paved path in the east and west are built to connect downtown streets, and there are three doors in the southeast [11-12]. Following the rule of "full-empty-full", the architecture (Fig. 5) emphasizes the connection of physical buildings and the overlapping of images. By barricading, the space for practicing rituals, administrating, resting and entertaining in the Imperial Factory is formed.

# 3.2. The architectural features of government offices in the Imperial Factory

In terms of space, geography focuses on observing the natural attributes of measurement, often ignoring the social attributes of history and culture, but in fact, as a product of human practice, space is entitled with special implication by power operation. Powerspace needs auxiliary means to demonstrate, such as form of roof, color of structures, and width of rooms. As to the height of roof, hip roof is the highest, mainly used for palaces and temples, followed by gable roof, often used for secondary palace buildings, while hanging peak and hard peak are usually used for civil buildings. Among colors, gold, red and yellow are the most noble ones, used for the palaces of emperors and aristocrats; what follows are cyan and green, used for houses of officials; black and gray are the color of lowest level, used for houses of common people. Different length and height of wall, as a means to separate space, shows differences of their owners' power.

Taking the map of Imperial Factory in "Record of Jingdezhen Ceramics" as an example. Screen wall, the first door and the second door (ritual door) are built with hanging peak, while the main hall with gable roof. The main hall is a two-story building with three halls and five rooms, 0.8 meter higher than the ground and with five steps. The main hall, Office of Jingde Inspection, Branch of Raozhou Perfecture government, Ceramic God Temple are all installed with three doors of large size but different positions and different shapes [13]. Museum of Gongyi City collects famille rose square cup with the pattern of Imperial Factory in the period of Emperor Xianfeng (28cm long,14cm wide,10 cm high). In the map, workshops are separated by enclosures; pavilions for band performance are built with gable roofs or tented roofs. The Palace Museum of Beijing collects a big famille rose bottle with the pattern of Imperial Factory in the reign of Daoguang (60.3 cm high and 20.2 cm diameter). In it, workshops are built with eaves of rake angles, white wall and black tiles, scarlet columns, jar-like stone seat, high wall and doubled eaves, overlapping doors, showing clear boundary and respecting patriarchal moral codes. In this symbolic and ceremonial space composition, power is overlapped, added and emphasized, taming people's behavior by shapes and colors of architecture, so it is of closed and introverted features.

According to "Zuozhuan", worshiping ceremonies and wars are the most important affairs of a country. Therefore, the government office is built with the ancestral temple on the left is and the altar of nation on the right, highlighting the tradition of respecting saints and worshiping gods. Due to the difference of time and region, temples and worshiping ceremonies of Jingdezhen Imperial Factory are different, with Temple for Ceramic God, Guandi Temple and Temple for Grandmaster in the east and Temple of Great Emperor Zhenwu in the west. "Regulations of former emperors require people to worship god with ceremonies and stipulated religious rituals which cannot be confused. Only through meritorious service, one can hold worshiping ceremonies, which is the principle of Li (rites). Human should be honest while Gods are just, which is the way of the communication between human and god. The five elements (metal, wood, water, fire and earth) create life and there is a god for each element [14]. Offering sacrifices to the gods has already been part of the governing system, and people wish to get benefits by communicating with gods. Kao Gong Ji writes that goodness are based on the right place, the right time, good materials and skillful workmanship. The ancient people believed that when creating things, people needed to follow natural laws, stress the quality of materials, have a good command of technology, adjust production to seasons, and harmonize the relationship between human and nature. This mysterious thought gave birth to Ceramic God, and reflected the idea of "god's work" in traditional craft. In Tang Ying's *Illustrations of the Manufacture of Porcelain*, there is a picture in which people offer sacrifice to god and praying for blessings. By doing so, people express their wishes to produce wonderful porcelain as well as their pursuit of god's work. Therefore, it is not only concerned with the ceramic making techniques, but also thoughts, feelings and ethnics.

# 4. The production of the Imperial factory

"Space is not a non-material concept, but the incarnation of various cultural, political and psychological phenomenons....To some extent, space is always social. The composition, experience and pattern of the space greatly shape the relationship between individuals and society." [15] So, the space is not an empty container, but the product of history and culture, which is often limited by nature, ability and technology [16]. The imperial system which combines power and capital, will inevitably affect the layout and technology of production and production, forming special fields. With the specialization and labor division of imperial porcelain production, more and more production spaces arise. The layout of workshops and kilns has absorbed the features of landscape and architecture of gardening, paying attention to the cohesion of processing procedures, linking the courtyards with the workshops. In this way, a rare official factory with cultural landscape of imperial characteristics appears.

# 4.1. The production characteristics of the Imperial Factory

The buildings in the Imperial Factory consist of management buildings and production buildings. For the part of production, the buildings are courtyard, providing huge and orderly power space for royal porcelain production. From material processing to kiln filling and firing, production is mainly made of two general steps: molding and kiln firing, thus endows the workshops with producing function and auxiliary function. In this sense, the royal factory is hand-made porcelain workshop of large scale, compete with all kinds of workshops.

"Book of Ceramics" in History of Jiangxi Province records: "For porcelain making, there are rooms for big bowls (7 rooms, and 7 small rooms), for wine cups (3 rooms), for small plates (8 rooms, 4small rooms), for plates (7rooms, 4small rooms), for cups (7 rooms, 4 small rooms), or stamps (10 rooms, 4 small rooms), for Zuilong, for pigment painting (1 room), calligraphy (1 room), for coloring (7 rooms), for saggers (33 rooms), for clay (1 room), for big woods (5 rooms), for small wood (5 rooms), for ship woods (2 rooms), for irons (4 rooms), for bamboos (2 rooms), for oil painting (3 rooms), for ropes (3 rooms), for buckets (1 room), for dyes (1 room), for Dongya (46 pieces), for Xipo (16 pieces)...; for firing, there are kilns such as: Fenghuo kilns, Se kilns, Huang kilns (20 kilns, with Se kilns counted), kilns for big dragon jars (16), kilns for saggers, and Qing kilns (44)...; 2 factories (ship wood factory, with 10 rooms; match factory, with 9 rooms), firewood rooms (87)." [17] Archaeological findings show that the advanced technology in labor distribution and processing techniques improved significantly in Ming Dynasty. for example, the methods of glazing is classified into four types: swinging, dipping, pouring, and blowing, and for molding process, it takes the method of secondary printing and secondary trimming. The kilns in the Imperial Factory have also developed generations: the gourd kilns were often used from Hongwu to Yongle reign, while the dome kilns were popular after Xuande reign of Ming Dynasty.

Illustrations of Record of Jingdezhen Ceramics records: "there are 23 workshops for making porcelain. They are workshops for big wares, small wares, antique-style wares, carved or inlaid wares, printed wares, pigment painting wares, innovated wares, calligraphy, coloring, oil painting, sagger, dying, slurry, big wood, small wood, ship, iron, bamboo, rope, bucket, Dongdui, Xidui....There are 6 kinds of kilns: Qing kiln, big dragon jar kiln, Fenghuo kiln, Se kiln, Lanhuang kiln, sagger kiln.." [18] Most of the technology of Ming was adopted in Qing Dynasty, with some improvements: the big bowls, wine cups, small plates, plates, bells are classified as big wares, small wares, antique-styled wares, carved or inlaid wares, and innovated wares respectively. The round wares of similar quality are combined and classified into big or small wares. Tang Ying writes in Summary of Ordered Illustrations that "a single change in the blue and white pattern painted on the round ware would affect hundreds of labors. If not the same paintings, though similar in looks, there must be different in many ways. Hence, painters would not learn to dye, and the dyers will not learn to paint. Painters and dyers are separated in different rooms so that they can work wholeheartedly." According to the Chinese Technology in the Seventeenth Century: T'ien-kung K'ai-wu, "72 procedures complete one piece of porcelain. The details of are far beyond words." [19] Technology of porcelain making is complex, and is even sophisticated for imperial porcelains.

### 4.2. The production layout of the Imperial Factory

Imperial porcelain production is made by the craftsmen and supervised by the officials, and strictly follows the production standards in terms of variety, function, specification, style, glaze, decoration and design. Precise organization and division of labor along with orderly and reasonable production layout, ensure the imperial requirement for quality porcelain, and in this way, the emperor's control of art is realized.



Figure 6. Jiaqing famille rose vase with the pattern of Imperial Factory collected in Shanxi Province Museum

Jiaqing famille rose vase with the pattern of Imperial Factory (Fig. 6) collected in Shanxi Province Museum is 60.3 cm in height, and 20.2 cm in diameter (mouth).

Daoguang famille rose with the pattern of Imperial Factory (Fig. 7) collected in the Palace Museum in Beijing is 63 cm in height, 22 cm in diameter (mouth), and 22.5cm in diameter (foot). Both of the vases are painted with figures who are engaged in quarrying, stirring clay, delivering material, throwing, painting body, blowing glaze, filling kiln, firing, painting with colors, firing(the second time), emptying kiln, loading, etc. Painters of the Imperial Factory are represented wearing robes or skullcaps, or (Fig. 7) glasses while the chore men wearing coarse linen jacket, or holding buns.



Figure 7. Daoguang famille rose with the pattern of Imperial Factory collected in the Palace Museum

The number of figure on the Daoguang vase is more than 61. Xianfeng famille rose square cup with the pattern of Imperial Factory collected in Gongyi Museum (28cm long,14cm wide, and 10cm high) are painted with potters engaged in lifting, carrying, repairing body while the supervisor urging craftsmen with a whip in hand. These representations confirmed the historical documents' recordings about the factory's organizational system, labor division, and production arrangement. Tang Ying in Illustrations of the Manufacture of Porcelain drew 20 pictures of porcelain making process, which proves the collaboration of specialized production. French missionary Père d'Entrecolles recorded that "those Christians who are employed at it find it difficult to attend church; they are only allowed to go if they can find substitutes, because as soon as this work is interrupted all the other workmen are stopped". His writing reveals the preciseness of the flow of process, and the strictness of the management system.

In Ming and Qing dynasties, the distributions of porcelain process are generally similar to each other, which is recorded in detail in "Book of Ceramics" in *History of Jiangxi Province*, and briefly recorded in *Illustrations of Record of Jingdezhen Ceramics*. The first 13 processes are related to production which include body making, color painting, etc., followed by ten auxiliary processes. In the end, they introduce 6 kinds of kiln for firing porcelain. In total,25 kilns were unearthed, including 7 gourd kilns, 15 dome kilns, and 3 seriously damaged kilns of unknown shape. The 7 gourd kilns, unearthed in the northeast of the Imperial Factory, lasted from Hongwu to Yongle reign, Ming Dynasty. In its southwest, 15 dome kilns with 6 wheel pits were unearthed [21], which lasted from Xuande reign of Ming Dynasty to Jiaqing reign of Qing Dynasty. These kilns are similar in shape and have not undergone substantial change. Archaeological findings prove that the workshops and kilns in the Imperial Factory were distributed on both sides of the government buildings, forming a symmetrical distribution featured with "one axis and two wings". Together they form a long ladder shape which is wide in south and narrow in north with a circumference of 1145m, and a total area of 54300 m<sup>2</sup> [22]. The above records show that the production scale of Imperial Factory was large, and the workshops and kilns were in reasonable layout, with one process closely linked to another.

### 5. Conclusion

Space is both a concrete material environment and abstract ideology, and develops along with the civilization. Imperial power monopolizes and organizes political, economical, cultural resources, and constructs ruling order with force, endowing the society with hierarchical difference and unbalanced layout of space controlling and reassembling the ruling regulations. Cultural landscape includes the relationship between supply and demand, historical tradition, technology and natural telepathy, etc. Cultural zone and local area, being the core concept of cultural geography, are adopted to study the mechanism of landscape formation and spatial change [23]. Jingdezhen Imperial Factory, with its unique political, economical, and cultural attributes, endows the buildings with the feature of government office as well as special social function. The layout of space in Jingdezhen over the years spreads out with a top-bottom order, shaping the abstract symbol of imperial power, influencing the layout of buildings, affecting the combination of capital and technology. The production layout and technological features of the Imperial Factory whose layout, procedures and functions are interconnected in a multi-dimensional manner, reflects the combination and separation of economics and culture and the interaction of time, space, quantity, structure and order [24]. The paper, through the change of security management of the Imperial Factory, studies the construction of the power-space, focus on new cultural geography and pays attention to the operational methods of culture in society [11]. It concludes that the Imperial Factory does not only rely on the majesty of the imperial power, but also the mechanism of rituals and law which can endow the factory with the system and function of constraining, hence influencing the workers' behaviors, creating a good social environment and forming a special cultural landscapes.

#### References

- Zhou Shangyi, Anglo-American Cultural Studies and the New Cultural Geography, Georaphica Sinica 2004, 59 (S1):162-166.
- [2] Shi Song, Ning Yuemin, *Evolution on Connotation of Space in Human Geography*, Scientia Georaphy Sinica, 25 (3): 340-345.
- [3] Zhu Hong, Lin Jie, Wei lei, *The research Context of Cultural Geography in China Indicated by A Hundred Issues of Human Geography* [J], Human Geography, 2009, 24 (5): 13-21.

- [4] Zhu Jianfei, *The Royal Battle the Outline of the Political Layout of Qing Palace Museum* [J], Architecture, 1997.4. 101-112.
- [5] Jingdezhen Bureau of Relics, *The Journals of Jingdezhen relics* [M] *Beijing:* Beijing Green Everlasting Press, 2007: 12-13.
- [6] Jingdezhen Bureau of Relics, *The Journals of Jingdezhen relics* [M] *Beijing*: Beijing Green Everlasting Press, 2007:12-13.
- [7] Fuliang Local Journals Community, *Fuliang County Records-Important Events*[M], Beijing: Beijing Fangzhi Press, 1999
- [8] Fuliang Journals [M] Qing Kangxi 21 carving copy
- [9] Michel Foucault, Liu beicheng, Yang Yuanying Surveiller et Punir [M] Beijing: SDX Joint Publishing Company, 2003.28.193.
- [10] Li Yunye, Artistic conception in China[M], Tianjin: Yianjin University Press, 2005
- [11,17] Wang Zongmu Book of Ceramics-Records of Jiangxi Province[M]Jiajing 35 carving copy
- [12,13,18] Qing.Lan Pu Picture of Imperial Factory--Ceramic Records of Jingdezhen [M].Jiaqing 20 carving copy
- [14] Zhan Shan, Records of Reconstructing the Awarded Temple for Wan Shuohou[M]. Fuliang County Records--Ceremony
- [15] Dani Cavallaro, Critical and Cultural Theory [M]. Nanjing: Jiangsu People's Publishing 2006: 179
- [16] Magnuson J J.Longterm ecological research and the invisible present[J]. Bio Science, 1990, 40: 495-501.
- [19] Song Yingxing, Chinese Technology in the Seventeenth Century: T'ien-kung K'aiwu [M]. Shanghai: Zhonghua Book Company. 1959
- [20] Entrecolles, Records of Jingdezhen. Prist Aori, Church Accountant, Kangxi 51.
- [21,22] Liu Xinyuan,Quan Kuishan, etc. Guanyinge Kiln of Ming Dynasty in Jingdezhen City,Jiangxi Province.Cultural Relics, 2009.12. 39-58.
- [23] Zhou Shangyi. On the Research Framework and Methodologies of Cultural Geography[J]. Bulletin of Chinese Academy of Sciences, 2011, 6(5): 174-183.
- [24] Forman R T T,Godron M.Landscape Ecology[M]. New York: John Wiley and Sons,1986.
- [25] Zhu Hong, Qian Junxi, Feng Dan. On the Symbolic Meanings of Space [J] Progress in Geography 2010, 29 (6): 643-648.

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# Summary

This paper, by referring to the archaeological reports and local gazetteers and comparing images of porcelain wares, makes a comprehensive and in-depth analysis of the layout of power and space in Jingdezhen Imperial Factory according to its geography, geomancy, security management, space regulation, architectural features,

production characteristics and production layout. It contends that the Imperial Factory which integrates porcelain making factory with local government is the embodiment of absolute monarchy in ceramic culture. The factory is located on Zhushan mountain, the center of Jingdezhen's industry, business and transportation. Being at the center, it gives off an air of prestige and majesty, overlooking dominantly the surrounding private kilns. It has also turned the political system into power operation, setting up not only workshops but also administrative offices. By taking advantage of the best resources, it has produced porcelain for imperial family and court. Its specialized production has solved the contradiction between complicated technology and numerous procedures of production. The shape, color and pattern of the porcelain wares are strictly stipulated and the best of the best wares are demanded. Hence the porcelain production is featured with longest firing, largest scale, superb craftsmanship, and best kinds of wares. All of these reveal the process and rule power and space are intersected and different cultures overlapped.