

Special Feature

# A New Perspective on Royal Kiln White Porcelain in the 16<sup>th</sup>-century Joseon Dynasty: Supply and Demand

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## Introduction

Saongwon 司饗院 was Jeongsampum amun (Fifth-rank Ministry 正三品衙門) belonging to the Ijo (Ministry of Personnel 吏曹) and in charge of serving and preparing food to the royal family and people in the palace. Saongwon established a branch office in Gwangju-mok, Gyeonggi Province around 1467 to produce dishware used by the royal family and central government offices.<sup>1</sup> It was the Gwangju branch office of Saongwon (hereinafter, referred to as Royal Kiln (*gwanyo* 官窯)).<sup>2</sup> Until 1883, the Royal Kiln produced white porcelain under the state-run handicraft system.

As for white porcelain produced by the Royal Kiln, diverse changes were observed in the 16<sup>th</sup> century. Above all, a tendency became clear that the quality of the highest-grade white porcelains deteriorated in that period (Kim 2013d). The inscriptions 銘文 written on white porcelain changed in the 1560s from “天” (heaven), “地” (earth), “玄” (black), and “黃” (yellow) to “左” (left), “右” (right), and “別” (special) (Yun 1981a, 1981b). It is presumed that the inscribed white porcelains produced by the Royal Kiln had excellent quality and therefore were used by the royal family. The main consumer of made-in-Royal Kiln white porcelains was the royal family. In that sense, the deterioration in the quality of

top-grade white porcelains has significant implications. In addition, it cannot be overlooked that inscriptions that had been engraved on white porcelain produced by the Royal Kiln for over 50 years suddenly disappeared or changed to different ones. This is especially true when considering that the Royal Kiln was operated under the government-run handicraft system.

So far, this author strived to interpret a variety of changes that appeared in white porcelains created at the Royal Kiln in the 16<sup>th</sup> century in the historical context of that time, analyze those white porcelain to identify the phenomenal differences, and by extension, find the reasons behind such changes. There are not many references that inform about the actual state of the Royal Kiln until the 16<sup>th</sup> century after its establishment. In addition, they contain fragmentary content, causing considerable difficulties. However, by organizing the individual aspects of white porcelain, this author came to the conclusion that a series of changes seen in white porcelain in the 16<sup>th</sup> century were linked organically and confirmed that supply and demand for *gwanyo* white porcelain were at the basis of such changes.

This paper summarizes the published paper this author wrote on the topic of 16<sup>th</sup>-century white porcelain in terms of the increase in demand for and limitations in the supply of white porcelain produced by the Royal Kiln and the response of the royal family and the Royal Kiln to address the issue. Viewing white porcelain as a consumer good, this paper attempts to organically explain the transition of *gwanyo* white porcelain in the 16<sup>th</sup> century through the interrelationship between the royal family as the main consumer and the Royal Kiln as a producer. It is expected that this will serve for the structural understanding of the interaction between the two through white porcelain made by the Royal Kiln in the 16<sup>th</sup> century.<sup>3</sup>

1 The branch office of Saongwon was, in general, understood as *gwanyo* (Royal Kiln 官窯). However, in the 2000s, an opinion was raised that the characteristics of *gwanyo* in the 17<sup>th</sup> century when *gwanyo* appears as a branch office of the Saongwon in literature should be distinguished from the one called *sagiso* (earthenware workshop 沙器所) in the 15<sup>th</sup> and 16<sup>th</sup> centuries (Jeon 2008, 200–03). Furthermore, it was claimed that Saongwon did not establish a branch office until the Japanese invasions of Korea in the year of Imjin (1592) (Park 2014a, 92–100). However, a recent review of related materials has proven that *gwanyo* was highly likely a Gwangju branch office of Saongwon from the beginning (Kim 2020b, 145–64).

2 This paper uses “Royal Kiln” to refer to the Gwangju branch office of Saongwon. At the moment, the branch office is generally called *gwanyo*, which literally means a government-run kiln, in the academia with a focus on the fact that it was run by the state. Seo Yu-gu 徐有榘 (1764–1845) and Lee Gyu-gyeong 李圭景 (1788–?), *silhak* (practical studies) scholars of the late Joseon dynasty, also used the term *gwanyo*. On the other hand, the main consumer of white porcelain produced by *gwanyo* during the Joseon dynasty was the royal family, represented by the king. The most important task of *gwanyo* was to produce dishware for the king. Most of the pieces must have consisted of the highest-quality white porcelain. Officially, the consumer of top-quality white porcelain was limited to the king. Therefore, in this paper, *gwanyo* is understood as a “royal kiln,” rather than an “official kiln,” with a focus on the main consumer of *gwanyo* white porcelain (Kim et al. 2015, 84–87). However, there is still room for understanding *gwanyo* as an “official kiln” in consideration of the fact that it was operated by the government since *gwanyo* white porcelains were also used in central government offices and available officially or unofficially at that time.

3 This paper is newly composed based on the author’s previously published papers and examines the 16<sup>th</sup>-century white porcelain produced by the Royal Kiln from a new perspective and in a different paradigm of ceramic history research. For detailed explanations and proof of each theory, which are not included in this paper due to the length of the paper, see this author’s previous research presented in the list of references.

## Increased Demand for Royal Kiln White Porcelain

Around 1430, King Sejong used white porcelain as his dishware. He chose white porcelain as a replacement for goldware and silverware. He paid attention to the blue-and-white and white porcelains bestowed by then Emperor Xuande 宣德帝 (1425–1435) of the Ming dynasty. Xuande used blue-and-white and white porcelains as imperial gifts to the kings of the tributary countries (Koo 2017, 14–16; Oh 2018, 238–41). For the Joseon royal family, the Ming emperor's gifts became a practical means of symbolizing the king's authority both internally and externally (Kim 2020a) (Figure 1).



Figure 1. Jar with Dragon, Ming dynasty (1368–1644), Xuande mark and period (1426–1435), early 15<sup>th</sup> century, H. 48.3 cm, The Metropolitan Museum of Art

However, it was difficult to replace all goldware and silverware with white porcelain in the Joseon royal family. Goldware and silverware were the greatest luxury items at the time since the metals had the highest status as materials. Consumption of white porcelain within the royal family, however, steadily increased. In 1447, King Sejong replaced the silverware used in the Munsojeon 文昭殿 and Hwideokjeon 輝德殿 shrines with white porcelain.<sup>4</sup> The fact that King Sejong replaced the silverware used in the royal shrines (*honjeon* 魂殿) with white porcelain implies that the royal family's perception of white porcelain improved to that level. In particular, the demand for white porcelain within the royal family further increased after King Sejo ascended to the throne in 1455.

4 *Sejong sillok* (Veritable Records of King Sejong), Vol. 116, Day 4, Month 6, the 29<sup>th</sup> year of King Sejong's reign (1447), Entry 2. Munsojeon was originally called Insojeon 仁昭殿, a royal shrine that enshrined King Taejo's wife, Queen Sinui 神懿王后 of the Han clan. When King Taejo passed away in 1408, Insojeon was renamed Munsojeon as the tablet of King Taejo was enshrined in the shrine together. Hwideokjeon enshrined the tablet of King Sejong's wife, Queen Soheon 昭憲王后 of the Sim clan. This paper does not present the original texts or their translation for the materials digitalized into databases, such as *Joseon wangjo sillok* (Veritable Records of the Joseon Dynasty 朝鮮王朝實錄) and *Seungeongwon ilgi* (Daily Records of Royal Secretariat of Joseon Dynasty 承政院日記) which are accessible at the Database of Korean History operated by the National Institute of Korean History.

After his accession, King Sejo ordered the kitchen of the queen's residence to use blue-and-white porcelain (*hwajagi* 畫磁器) instead of gold cups. He also ordered the use of porcelain in the Palace of the Crown Prince.<sup>5</sup>

After white porcelain had been adopted as royal dishware around 1430, the demand for white porcelain increased among the ruling class. The desire to consume the same kind of dishware as those with the highest power was not much different from other times. In 1445, Chief Circuit Inspection Commissioner 都巡察使 Kim Jong-seo 金宗瑞 (1383–1453) wanted white porcelain owned by Magistrate of Goyeong District 高靈縣監 Kim Suk-ja 金叔滋 (1389–1456) but ended up failing to obtain it.<sup>6</sup> In 1447, when Minister of War 兵曹判書 Lee Seon 李宣 became Magistrate of Gaeseong 開城府留守, he gave three post station horses to Hwang Jae-jung 黃在中, his acquaintance and requested to purchase Jeolla Province's top-quality paper and white porcelain.<sup>7</sup> In this atmosphere, the production of hard white porcelain began in Joseon in the 1430s (Lee 2008, 376–90). Namwon and Goryeong regions as well as Gwangju, Gyeonggi Province produced high-quality white porcelain in the 1440s (Park 2014b, 88–90).<sup>8</sup>

King Sejo established the Royal Kiln around 1467 to ensure a stable supply of white porcelain for the king's dishware, and control consumption to achieve the political goal of retaining 君君臣臣, the principle that a king should act like a king and a subject should act like a subject (Kim 2022a). Saongwon, a pro-royal family agency, managed the production and consumption of white porcelain (Song 2002, 194–204). The "Criminal Code" of the *Gyeongguk*

5 *Sejo sillok* (Veritable Records of King Sejo), Vol. 1, Day 19, intercalary Month 6, the 1<sup>st</sup> year of King Sejo's reign (1455), Entry 5.

6 Kim, Jong-jik, *Jeom Pil-jae jip* (Collected Writings of Jeom Pil-jae 佔畢齋集), Ijun rok (The Records of the Honorary and Respectful Person 彝尊錄), Vol. 2, Seongong saeop (The Contributions of the Deceased Father 先公事業), Chapter 4: "乙亥夏 與金南海允德 遇於清道公館夜話 公云 予昔在高靈 金宗瑞 時以都巡察使入縣 召余對食 金指案上白砂器曰 貴縣砂器 甚善甚善 言至再三 予實未了其欲之也 只唯而退 後金在京師 屢對人謂予之拙 冀予聞之。"

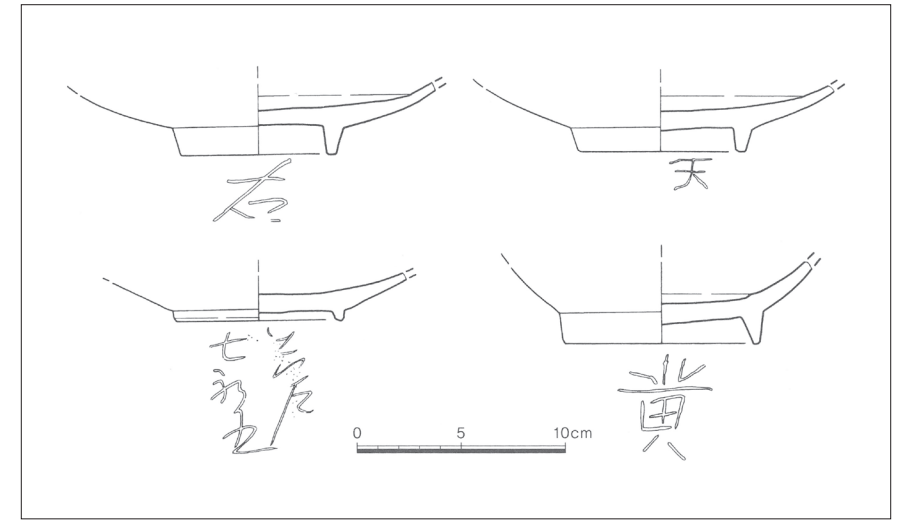
7 *Sejong sillok*, Vol. 116, Day 7, intercalary Month 4, the 29<sup>th</sup> year of King Sejong's reign (1447), Entry 1.

8 Kim, Jong-jik, *Jeom Pil-jae jip* (Collected Writings of Jeom Pil-jae 佔畢齋集), Ijun rok (The Records of the Honorary and Respectful Person 彝尊錄), Vol. 2, Seongong saeop (The Contributions of the Deceased Father 先公事業), Chapter 4: "高靈歲貢白砂器 工人用功 甚鹵莽 故器多若窳 官被詰責 先公至 召語工人曰...若等祖孫 世守其業 何鹵莽如是 若等妻子 皆知造餅餅 飾之數重 則米屑精潔 撫按良久 則脈理 膩滑 其用工與此何殊 遂教其下九飾之法 精緻鮮潔 居廣州南原之右 先是 每進獻 二邑之工受賞 縣工多得罪 今縣工得賞 而二邑之工 反受譴 至今賴之。"

*daejeon* (*National Code* 經國大典) prohibited the use of blue-and-white porcelain other than for use as drinking vessels.<sup>9</sup> However, there were limits to suppressing the desire to consume blue-and-white porcelain given that the literati used Chinese blue-and-white porcelain in the 1470s.<sup>10</sup> At that time, the royal family attempted to control the consumption of blue-and-white porcelain but the effort had little effect.

There was also a considerable amount of white porcelain leaked out from the Royal Kiln. By the early 16<sup>th</sup> century at the latest, white porcelain was consumed so widely that even the Yanggye Government Office in the outskirts of the country purchased and used the highest-quality white porcelain from the Royal Kiln.<sup>11</sup> This can be guessed from white porcelain with Royal Kiln inscriptions excavated from the remains of local government offices (Figure 2). The highest-quality white porcelain with “天,” “地,” “玄,” and “黃” inscriptions produced by the Royal Kiln and found in the remains from the capital Hanyang proves that the actual consumers of those vessels porcelain were not limited to the royal family and central government offices (Park 2023, 84–88). By the early 16<sup>th</sup> century at the latest, made-in-Royal Kiln white porcelain was so widely distributed that top-quality white porcelain called *baekjagi* was available in Gwangju and at shops in Hanyang. This helped promote the consumption of Royal Kiln white porcelain.

However, the main consumer of white porcelain produced by the Royal Kiln was the royal family. Therefore, even more attention should be paid to the rise in demand for white porcelain in the royal family. Unfortunately, no literature directly shows the increased consumption of white porcelain by the royal family in the early 16<sup>th</sup> century. This can be presumed from research results on the financial history of the royal family in the 16<sup>th</sup> century.



**Figure 2.** Royal Kiln White Porcelains with Inscriptions Excavated from the Yangju Government Office Site (Gijeon Research Institute for Cultural Heritage 2009)

It is generally understood that the financial demand of the royal family in the 16<sup>th</sup> century began soaring during the reign of Yeonsan-gun. What is cited as the institutional background behind this is the Sinyu In-kind Taxation Reform (Sinyu gongan 辛酉貢案), which was enacted during the reign of Yeonsan-gun.<sup>12</sup> Yulgok 栗谷 Yi I 李珣 (1536–1584), the greatest Confucian scholar and bureaucrat of his time, cited the taxation system as the cause of the arbitrary management of national finances during the King Seonjo’s reign.<sup>13</sup> Yi’s perspective was accepted by those who conducted relevant research (Go 1985, 179–80; Kim 2001, 54–57).

Given the background of the taxation reform during Yeonsan-gun’s reign, it is difficult to deny that the reform in the year of *sinyu* aimed at collecting more tax in kind. At the same time, however, a measure was also prepared

9 *Gyeongguk daejeon*, Hyeongjeon (Criminal Code 刑典), Geumje (Prohibitions 禁制): “大小員人 用紅灰白色表衣白笠紅粘者 酒器外金銀青畫白磁器者...竝杖八十.”

10 *Seongjong sillok* (Veritable Records of King Seongjong), Vol. 55, Day 12, Month 5, the 6<sup>th</sup> year of King Seongjong’s reign (1475), Entry 3; *Seongjong sillok*, Vol. 77, Day 13, intercalary Month 2, the 8<sup>th</sup> year of King Seongjong’s reign (1477), Entry 1; *Seongjong sillok*, Vol. 77, Day 14, intercalary Month 2, the 8<sup>th</sup> year of King Seongjong’s reign (1477), Entry 3; *Seongjong sillok*, Vol. 77, Day 10, intercalary Month 2, the 8<sup>th</sup> year of King Seongjong’s reign (1477), Entry 1.

11 *Jungjong sillok* (Veritable Records of King Jungjong), Vol. 7, Day 27, Month 1, the 4<sup>th</sup> year of King Jungjong’s reign (1509), Entry 5; *Jungjong sillok*, Vol. 60, Day 6, Month 2, the 23<sup>rd</sup> year of King Jungjong’s reign (1528), Entry 2; *Jungjong sillok*, Vol. 88, Day 18, Month 8, the 33<sup>rd</sup> year of King Jungjong’s reign (1538), Entry 2.

12 The previous research of this author details cases where the Sinyu In-kind Taxation Reform was abused by the royal family in the 16<sup>th</sup> century and the circumstances under which the abuse influenced the expansion of white porcelain consumption (Kim 2020c).

13 Yi I 李珣, *Yulgok jeonseo* (*The Complete Works of Yulgok Yi I* 栗谷全書), Vol. 5, Socha (Memorial 疏笏) 3, Mancon bongsa (Memorial in Ten Thousand Words 萬言封事): “臣伏以 所謂改貢案以除暴斂之害者 祖宗朝 用度甚約 取民甚廉 燕山中年 用度侈張 常貢不足以供其需 於是 加定以充其欲 臣於曩日 聞諸故老 未敢深信 前在政院 取戶曹貢案觀之 則諸般貢物 皆是弘治辛酉所加定 而至今遵用 考其時則乃燕山朝也 臣不覺掩卷太息曰 有是哉 弘治辛酉 於今為七十四年 聖君非不臨御 賢士非不立朝 此法何為而不革耶.”

to minimize the increase. Administrative bureaus of the central government tried to reduce the increase by identifying the shortage and surplus of items by each bureau and then offsetting the shortage with the surplus before each bureau collected additional items. If this measure was taken properly, each bureau would have been able to effectively redistribute its financial resources and minimize the increase in tax in kind. The Sinyu Taxation Reform was a reasonable system that established an institutional mechanism to achieve the goal of collecting more tax in kind while minimizing the increase (So 2019, 139–51). The problem is that it was difficult to conclude that those who utilized the system were reasonable as well.

It was easy for the royal family represented by the king to abuse the Sinyu In-kind Taxation Reform since it did not specify whether it was possible to divert items for national use to items for the use of the royal family<sup>14</sup> and how much tax in kind could be collected additionally. Of course, the royal family and government offices could apply the system in a reasonable way, but it was difficult to expect it in reality.

The royal family expanded its financial demand by making bad of the ordinances on diversion and tax increase. The ordinances stipulated in the Sinyu Taxation Reform were abused as a way to secure royal finances, which had become insufficient during the reigns of Yeonsan-gun and King Jungjong. One of the advantages of the reform was to minimize tax hikes by allowing a bureau to divert other bureau's finances before implementing the hikes. However, if the system were used badly, it could provide room for higher-level government bureaus to divert the finances of lower-level bureaus (Kim 2001, 69–70). In particular, diversion was highly advantageous to the royal family, the highest social class at the time. After the Sinyu Taxation Reform was implemented, the royal family legitimately diverted finances for national use to finances for private use.

After the establishment of the Royal Kiln around 1467, white porcelain consumed by the royal family was produced at Saongwon and Naesusa

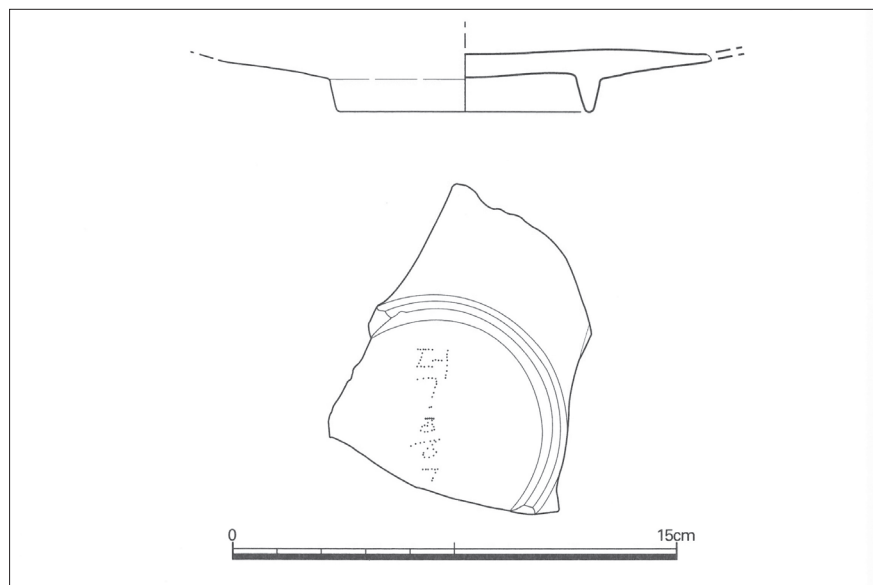
(Royal Treasury 內需司) (Park 2015, 2016). The royal family had their white porcelains supplied from Saongwon and Naesusa, which were classified as those for public and private use, respectively. The royal family converted white porcelain from Saongwon, which was produced for national use, into one for private use, just as they did for other items.<sup>15</sup> In 1502, Yeonsan-gun ordered to bestow *hwaryongjun* 畫龍樽, blue-and-white porcelain with a dragon and cloud design, upon Princess Hwisun 徽順公主. However, royal secretaries objected, arguing that *hwaryongjun* was not used even when Chinese envoys visited, and therefore, it was much less appropriate to bestow it upon the princess. Yeonsan-gun relented, saying there was no need to give it to the princess.<sup>16</sup> However, considering the fact that Yeonsan-gun issued the order to give *hwaryongjun* to the princess, it is presumed that the diversion of daily dishware already became prevalent. In addition, the royal family secured additional white porcelain through special orders, on top of the ones presented on an annual basis. The expansion of white porcelain consumption within the royal family due to the Sinyu Taxation Reform was sufficiently proven through the analysis of royal family-related inscriptions stippled on white porcelain in the first half of the 16<sup>th</sup> century. When the royal family appropriated for private use state-use white porcelain produced by Saongwon, the change in ownership was expressed by stippling royal family-related inscriptions on the vessels, such as “上” (*sang*) and “大上” (*daesang*) for the king, “中” (*jung*) for the queen, “옷제” (*utjje*) and “옷궁” (*utgung*) for the Queen Mother and Queen Grandmother, and “대쇼” (*daesyo*) for the kitchen of the king's residence. It is noteworthy, in particular, that some white porcelains were stippled with the names of King Jungjong's sons and daughters such as Princess Hyesun 惠順翁主 (1512–1583), Prince Yeongyang 永陽君 (1521–1561), Prince Deokheung 德興君 (1521–1561), and Princess Jeongsin 靜愼翁主 (1526–1552) (Figure 3).<sup>17</sup>

14 A king in the Joseon dynasty had a dual role as the head of the state and the head of a family. Accordingly, the royal finances were largely divided into two: one is the public finances of the royal family, which were managed within the national finances, and the other is the private finances, managed by the royal family as a private household (Song 2002, 15–16). In relation to this paper, the budget of Saongwon was covered with the former while the budget of Naesusa (Royal Treasury 內需司) was included in the latter.

15 In 1530, Ji Seok-han 智書學, a lower clerk at the Ministry of Taxation (Hojo 戶曹), and Hong Yangsaeng 洪良生, a lower clerk at the Military Procurement Agency (Gunjagam 軍資監), attempted to embezzle 50 *seok* of rice by forging an official document claiming that it would be presented as offerings to Naesusa (*Jungjong sillok*, Vol. 67, Day 21, Month 1, the 25<sup>th</sup> year of King Jungjong's reign [1530], Entry 4.) The forgery of Naesusa document clearly shows the extent of the exploitation of public finances by Naesusa. In addition, many cases are found in *Joseon wangjo sillok* that the royal family diverted items for state use into ones for private use.

16 *Yeonsan-gun ilgi* (*Daily Records of Yeonsan-gun*), Vol. 46, Day 29, Month 10, the 8<sup>th</sup> year of Yeonsan-gun's reign (1502), Entry 2.

17 For the status and nature of inscriptions stippled on white porcelain produced by the Royal Kiln in



**Figure 3.** White Porcelain Stippled with an Inscription, “덕흥 一(군),” Presumed to Mean Deokheung-gun and Excavated from the Center of the Woldae Stone Platform in Front of Gyeongbokgung Palace Gwanghwamun Gate (National Research Institute of Cultural Heritage 2011, 146)

As the Sinyu Taxation Reform was enacted, Naesusa's role as a white porcelain producer was also transferred to Saongwon (Kim 2021, 83–106). It must have been difficult for Naesusa to meet the royal family's demand for white porcelain since the agency had only six ceramic artisans. The system of the Royal Kiln, established around 1467, stabilized in the late 15<sup>th</sup> and early 16<sup>th</sup> centuries. In addition, the implementation of the taxation reform enabled the royal family to have white porcelain supplied from Saongwon without difficulties. However, Naesusa stopped producing white porcelain as it did not have the requirements for white porcelain production, such as white clay, *siji* (woodland for firewood 柴地), and space.

To summarize the above, the Royal Kiln was established around 1467 to manage the production and consumption of white porcelain. The consumption of the highest-quality white porcelain was officially limited to the royal family, although it was consumed more widely to the extent that it was available and used even in the outskirts of the country in the early 16<sup>th</sup> century. The royal

family also expanded consumption based on the Sinyu In-kind Taxation Reform. The increase in demand for white porcelain in the 16<sup>th</sup> century served as an important factor in deteriorating the operation of the Royal Kiln under the government-run handicraft system.

### Limited Supply of Royal Kiln White Porcelain

The Royal Kiln was operated under a state-run craftsmanship system. Saongwon dispatched a ceramic production inspector (*beonjogwan* 燔造官) to the kiln every year. The inspector oversaw the production of white porcelain from spring to fall and presented the vessels to the royal warehouse (*eobu* 御府).<sup>18</sup> The Royal Kiln had lower clerks and office servants in charge of the overall affairs to assist the production inspector, for example, by managing the kiln's finances, the white clay ledger, white porcelain production, and ceramic craftsmen. The artisans belonging to Saongwon performed their forced labor duty and produced white porcelain at the Royal Kiln. Highly skilled ceramic masters were a prerequisite for the stable operation of the kiln. Unfortunately, direct records of Royal Kiln craftsmen are not found in literature until the late 19<sup>th</sup> century.

According to *Joseon doja myeongo* (*The Book of Joseon Ceramics* 朝鮮陶磁名俗), 108 ceramic artisans worked for the Royal Kiln government in the late 19<sup>th</sup> century (Asakawa 1991, 85–87; Bang 2000, 137). The titles and job descriptions indicate that artisans engaged in production were divided into groups of experts who were skilled in their own work. Considering the white porcelain production process, it is presumed that the division of production developed shortly after the establishment of the Royal Kiln (Table 1).

According to the National Code, 380 craftsmen (*gyeonggongjang* 京工匠) belonged to Saongwon as ceramic craftsmen. They worked at the Royal Kiln according to rotating shifts. It is not clear how many pottery artisans produced white porcelain together at the Royal Kiln at one time. However, it is presumed that after the establishment of the Royal Kiln, the 380 craftsmen were divided into two, with 190 people serving at the kiln each year (Park 2013, 542–43).<sup>19</sup>

18 Seong Hyeon 成倪, *Yongjae chonghwa* (*Assorted Writings of Yongjae Seong Hyeon* 慵齋叢話), Vol. 10: “每歲遣司饗院官 分左右邊 各率書史 從春至秋 監造而輸納于御府 錄其功勞 而等第之 優者賜物.”

19 *Gyeongguk daejeon*, Ijeon (Code of Personnel 吏典), Japjik (Miscellaneous Post 雜職), Gongjo

the 16<sup>th</sup> century in detail, see Park 2014b, 191–213; Kim 2014.

**Table 1.** The Titles and Job Descriptions of Ceramic Artisans in the Late 19<sup>th</sup> century Seen in *The Book of Joseon Ceramics*

Title	No.	Job description		Title	No.	Job description	
		Recorded	Presumed			Recorded	Presumed
<i>Byeonsu</i> 邊首	2	巡視	Supervision	<i>Joyeok</i> 助役	7	釜炊補助	Assisting the <i>hwajang</i>
<i>Jogijang</i> 造器匠	10	成坏方	Forming	<i>Buhosu</i> 釜戶首	2	釜炊頭	Responsible for kiln firing
<i>Majojang</i> 磨造匠	10	任上 or 削方	Making a foot	<i>Namhwajang</i> 覽火匠	2	火加減	Managing fire in a kiln
<i>Geonhwajang</i> 乾火匠	10	乾燥方	Drying	<i>Hwacheongjang</i> 畫青匠	14	畫描	Engraving patterns
<i>Subi</i> 水飛	10	碎土·水嵌·除水	Refining white clay	<i>Yeonjeong</i> 鍊正	2	釉藥調合	Making glaze
<i>Yeonjeong</i> 鍊正	10	土鍊	Kneading white clay	<i>Chaksujang</i> 着水匠	2	施釉方	Applying glaze
<i>Chamyek</i> 站役	18	手直	Repairing a kiln	<i>Pagi</i> 破器	2	選別	Checking finished products
<i>Hwajang</i> 火匠	7	釜炊	Firing a kiln	Total	108		

It is difficult to accurately determine the quantity of white porcelain supplied to the capital by the Royal Kiln each year. It is confirmed that white porcelains made by and stored at the Royal Kiln in the spring and fall of 1694 amounted to 13,000 pieces, though it was a record of the later times, and that a certain quantity of white porcelains was separately produced for the needs of the royal family.<sup>20</sup> As of the late 17<sup>th</sup> century, at least 13,000 pieces of white

(Ministry of Public Works 工曹): “匠人數 見工典 分二番 任滿九百(尙衣院 綾羅匠 造紙署 紙匠 則分三番 任滿六百) 加階 從六品而止 只計元任 他司匠人同.” According to the document, it is presumed that craftsmen, excluding *neungnajang* (silk weaver) of the Sanguiwon (Bureau of Royal Attire) and *jijang* (paper maker) of the Jojiseo (Paper Manufactory), were divided into two groups to serve their forced labor duty according to their rotating shift schedule.

20 *Seungeongwon ilgi*, Vol. 355 (fair-copy version Vol. 18), Day 13, Month 2, the 20<sup>th</sup> year of King Sukjong's reign (1694), Entry 9. In the *Yukjeon jorye* (*Applications of the Six Codes* 六典條例) proclaimed in 1867, the number of white porcelains was recorded as 1,327 *juk* 竹 (10 pieces per *juk*), which indicates 13,270 pieces were offered (*Yukjeon jorye*, Vol. 2, Ijeon [Code for the Ministry of Personnel 吏典], Branch Office of Saongwon: “各樣沙器一千三百七十二竹 隨燻進上 [廟社殿宮陵園墓祭器及內局藥用件 同爲輪納 內外頒賜及堂郎封餘 各處例送 不在此限”).

porcelain were produced per year.

As mentioned above, the use of white porcelain by the royal family and the ruling class increased rapidly after the establishment of the Royal Kiln in 1467. There was also a case where a Saongwon official personally appropriated white porcelain. In 1524, Saganwon (Office of the Censor General, 司諫院) blamed Prince Gyeongmyeong 景明君 Lee Chim 李忱 for extorting luxury items such as drinking vessels and porcelain for his private interest while serving as a superintendent (*jejo* 提調) at Saongwon.<sup>21</sup> In 1540, the Saheonbu (Office of the Inspector General 司憲府) proposed the dismissal of Han Se-myeong 韓世鳴, an official (*bongsa* 奉事) at Saongwon, since he had indiscriminately collected a certain quantity of white porcelain from craftsmen for private use while serving as a ceramic production inspector.<sup>22</sup>

From early on, the duty of a Royal Kiln craftsman was so arduous that they had two assistants assigned for sustenance when they entered the kiln to perform their forced labor duty.<sup>23</sup> The increase in demand for Royal Kiln white porcelain itself put a great burden on the ceramic artisans. It would not have been a problem if government finances expanded in line with the rising demand, enabling a large number of craftsmen to join the production at once. However, this was a realistically impossible measure under the government-run craftsmanship system.

It is understood that the state-run handicraft system of the Joseon dynasty gradually collapsed during the reigns of Yeonsan-gun and King Jungjong due to contradictions within the system itself and the loosening ruling system. In the 16<sup>th</sup> century, the departure of government artisans 官匠 was a general phenomenon that took place across state-run handicrafts (Gang 1984, 69–75). The key to government-run crafts was the stable supply and demand of government craftsmen. If government artisans leave government offices, the government-run handicrafts are bound to falter. The situation of the Royal Kiln was not that different from that of other government-run crafts.

21 *Jungjong sillok*, Vol. 51, Day 27, Month 6, the 19<sup>th</sup> year of King Jungjong's reign (1524), Entry 2.

22 *Jungjong sillok*, Vol. 93, Day 11, Month 5, the 35<sup>th</sup> year of King Jungjong's reign (1540), Entry 5. It is said that when Jeong Mae-sin 鄭梅臣 served as the production inspector, craftsmen, who had run away and wandered around, returned together since Jeong, contrary to Han, did not misappropriate porcelain for private use.

23 *Seungeongwon ilgi*, Vol. 14 (fair-copy version Vol. 1), Day 19, Month 7, the 4<sup>th</sup> year of King Injo's reign (1626), Entry 20.

After the establishment of the Royal Kiln around 1467 until *Daejeon songnok* (*Expanded National Code* 大典續錄) was published in 1492, the lack of porcelain artisans was not perceived as a significant problem.<sup>24</sup> This was because the Royal Kiln was set up relatively late around 1467, and the *Daejeon songnok* (1492) only included the punishment provisions for damaging white porcelain.<sup>25</sup> The law included provisions for supplementing insufficient artisans, but they targeted all government artisans. Doma-ri Kiln, which was operated around 1505, produced the highest-quality inscribed white porcelains in the 16<sup>th</sup> century. This implies that highly skilled craftsmen were secured until at least around 1505. However, around 1530, the lack of ceramic craftsmen emerged as a serious problem.

In 1530, Saongwon strived to address a shortage of ceramic artisans. At that time, King Jungjong pointed out that there used to be many pottery craftsmen, but now half of them had run away.<sup>26</sup> Of course, in arithmetic terms, it is not clear whether 190, half of the 380 ceramic artisans, really fled from the Royal Kiln. However, given that the king recognized it as such, it can be interpreted that at least around 1530, the Royal Kiln found it difficult to stably secure ceramic artisans.

Artisans belonging to government offices were skilled technicians who had repeatedly performed the same work for several years or even decades. The breakaway of those artisans from the government-run handicraft system deteriorated the quality of inscribed, top-grade white porcelain (Kim 2013d). At that time, the skill of technicians was divided largely into three levels.<sup>27</sup> Those who first fled from government offices were the most skilled master craftsmen. The proficiency of the remaining artisans was leveled downward.<sup>28</sup> It was more

advantageous for a highly skilled craftsman to sell their products on the streets rather than engage in forced labor for the government.<sup>29</sup> Although regulations on technical training were established for newly supplemented craftsmen, it was difficult for them to become able to do their part in the short term.<sup>30</sup> It took about 10 years for a craftsman to learn sufficient techniques.<sup>31</sup> This means that it was nearly impossible for the newly-supplemented artisans to perform their role from the beginning.

The absence of specialized experts in the white porcelain production process, along with an absolute shortage of ceramic craftsmen, had a significant impact on the operation of the Royal Kiln. The escape of artisans would have placed a greater burden on the remaining craftsmen at the kiln, causing the vicious cycle of encouraging other craftsmen to run away.

*Beonjogwan* in charge of the Royal Kiln had to supply more white porcelain to the capital than the annual set amount. *Beonjogwan* was an official of Saongwon, and as a government official, handled the demands of the royal family. Nevertheless, the departure of porcelain craftsmen and the deteriorating technical skills of the remaining artisans made it difficult for the kiln to expand production while maintaining the quality. Those working for the Royal Kiln strived to come up with a plan to respond to the demands of the royal family. Now in a new chapter, this paper examines the strategies of the royal family and the Royal Kiln to respond to the supply and demand imbalance of white porcelain.

24 *Daejeon songnok* is a law book that compiled provisions subject to permanent implementation among the royal edicts issued from the publication of the *National Code* until 1491 (Kyujanggak Institute for Korean Studies 1997, 3–5).

25 *Daejeon songnok*, Vol. 5, Hyeongjeon (Criminal Code 刑典), Chudan (Punishment 推斷): “司饗院磁器失毀者 三箇笞五十 每三箇加一等 罪止杖八十.”

26 *Jungjong sillok*, Vol. 67, Day 5, Month 2, the 25<sup>th</sup> year of King Jungjong's reign (1530), Entry 1.

27 Craftsmen had to pay craftsman tax while they were not in service. The tax was levied, depending on the amount of profit, at three notes of paper money for first-grade craftsmen, two notes for second-grade craftsmen, and one note for third-grade craftsmen. Artisans were divided into at least three grades according to their skill level. It is presumed that craftsmen with excellent technical skills were the first to flee from the government-run handicraft system (*Taejong sillok* [Veritable Records of King Taejong], Vol. 29, Day 2, Month 4, the 15<sup>th</sup> year of King Taejong's reign [1415], Entry 2).

28 *Seongjong sillok*, Vol. 206, Day 12, Month 8, the 18<sup>th</sup> year of King Seongjong's reign (1487), Entry

2; *Jungjong sillok*, Vol. 84, Day 25, Month 4, the 32<sup>nd</sup> year of King Jungjong's reign (1537), Entry 1.

29 *Yeonsan-gun ilgi*, Vol. 57, Day 5, Month 3, the 11<sup>th</sup> year of Yeonsan-gun's reign (1505), Entry 1.

30 *Daejeon hu songnok* (*Amendment to the Expanded National Code* 大典後續錄), Vol. 6, Gongjeonjo (Applications of the Public Works Code 工典條): “諸色 最緊匠人有闕 勿拘軍士保率閑役官屬公賤 可當人充之 未成才人 乏限傳習 不勤傳習 則訓誨匠人並依違令論 該司官員 或丘史或他務帶喚者 依律論罪.” *Daejeon hu songnok* is a law book that included provisions for permanent implementation among the royal edicts of King Seongjong and King Jungjong issued for 50 years until 1542 from the publication of the *Daejeon songnok*, which contained provisions until 1491 (Kyujanggak Institute for Korean Studies 1997, 5–6).

31 *Seungjeongwon ilgi*, Vol. 380 (fair-copy version Vol. 20), Day 27, Month 8, the 24<sup>th</sup> year of King Sukjong's reign (1698), Entry 14.



## Response of the Royal Family and the Royal Kiln

The Royal Kiln was operated under a government-run craftsmanship system. A constant number of artisans performed their forced labor duty at the kiln. It was difficult to expect any significant changes in the budget allocated to the kiln. It supplied a certain amount of white porcelain to the capital every year. The quantity of white porcelain offerings would not have decreased even in 1530 when half of the porcelain craftsmen fled from the Royal Kiln. This is because the demand from the royal family, the highest ruling class, was highly unlikely to be adjusted according to the operational status of the kiln.

In order to produce a set quantity of white porcelain with an insufficient number of ceramic artisans, the Royal Kiln had no choice but to raise labor intensity or save labor in the production process. The former had a limitation in that a rise in labor intensity led to a departure of craftsmen. Therefore, it is believed that the kiln took a measure to reduce labor and costs in the white porcelain production process while maintaining a certain level of labor intensity.

It is not clear, in fact, at what stage in the production process labor was saved. However, by the mid-16<sup>th</sup> century, made-in-Royal Kiln white porcelain with inscriptions began taking on a grayish color, which implies that changes were made at least in the water content of clay and the glaze-manufacturing process. In this regard, it is worth noting the record that Kim Suk-ja, Jong-jik's father, taught craftsmen in Goryeong how to remove impurities by sifting white clay nine times, improving the quality of Goryeong white porcelain compared to those produced in Gwangju and Namwon.<sup>32</sup> Differences in clay composition were also proven through natural scientific analysis. After the mid-16<sup>th</sup> century, an increase in the iron content of the clay composition led to a proportional increase in the titanium component. Accordingly, the color of clay also changed (Gyeonggi Provincial Museum 2008, 120–28).

The Royal Kiln used high-quality white clay brought from all over the country. However, the quality of white clay could vary depending on the water-filtering process, even if it was the same white clay. The quality of white clay

was also influenced by the social and economic conditions surrounding the Royal Kiln (Bang 2000, 213). Therefore, it can be presumed that the kiln saved costs and labor to a certain extent in the clay water-filtering and glaze-making processes. The kiln also took a measure to increase the percentage of *yebeon* 例燻 white porcelain in production.

Royal Kiln white porcelain in the early 16<sup>th</sup> century can be broadly divided into two categories according to their quality. One is *gapbeon* 匣燻 white porcelain, which had high-quality as it was made by placing and firing only one vessel in a sagger (*gapbal* 匣鉢). *Gapbeon* white porcelain had a neatly-cut inverted triangular foot, and had no dent on the inner bottom, which may have appeared when vessels were fired in stacks, since it was fired individually. The color was close to white. The other is *sangbeon* 常燻 white porcelain, which has lower quality made by stacking several vessels and stilts one by one before firing. *Sangbeon* white porcelains with a bamboo joint-shaped foot were stacked before firing, leaving clear traces of fireclay props on the inner bottom of each vessel. The color was usually gray. *Gapbeon* white porcelains were produced with an emphasis on quality, while *sangbeon* vessels were produced with an emphasis on quantity.

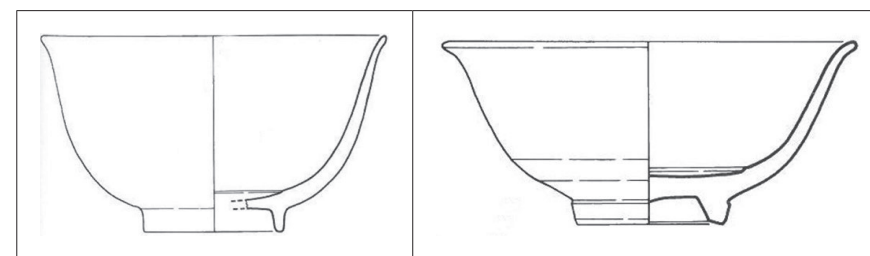


Figure 4. High-quality (left) and Low-quality (right) White Porcelains Excavated from Gwangju Doma-ri Kiln Site No. 1 (different scales used)

*Yebeon* white porcelains are molded in the almost same method as *gapbeon* vessels. However, the difference from *gapbeon* white porcelain is that only one piece of *yebeon* porcelain is fired on the stilt in the kiln, instead of using a sagger. *Yebeon* porcelains are less white than *gapbeon* porcelains, but whiter than *sangbeon* porcelains. The quality of *yebeon* white porcelains is between that of *gapbeon* and *sangbeon* vessels. When divided into high- and low-quality porcelains, *yebeon* vessels are included in high-quality white porcelains. Accordingly, if it was difficult to secure a certain quantity of good quality white

32 Sieving white clay nine times helps filter out coarse particles in the process of crushing white clay and removing its impurities in water (Jang 2004, 127n8). The quality of white porcelain produced in Goryeong improved as impurities were sufficiently filtered out during the crushing and water-cleaning processes.

porcelain within a given time, the Royal Kiln must have replaced some of *gapbeon* vessels with *yebeon* porcelains.




High-quality white porcelain (fired individually)		Low-quality white porcelain (fired in stacks)
<i>Gapbeon</i> (sagger used)	<i>Yebeon</i> (no sagger used)	<i>Sangbeon</i>
		
Gwangju Beoncheon-ri kiln site No. 8 (1550s)	Gwangju Daessangnyeong-ri kiln site No. 2 (late 16 <sup>th</sup> century)	Gwangju Mugap-ri kiln site No. 14 (around 1548)

Figure 5. Types of White Porcelain Firing Used at the Joseon Royal Kiln

Of course, if there were sufficient materials and craftsmen to produce *gapbeon* porcelains, the production of *yebeon* porcelains must have hardly increased. *Gapbeon* porcelains had superior quality to *yebeon* porcelains since the success rate of firing *gapbeon* porcelains was higher than that of *yebeon* vessels. However, *yebeon* porcelain was an excellent alternative when all requirements were not fulfilled for producing the entire set quantity of high-quality white porcelain using a *gapbeon* technique.

A *yebeon* technique could save the cost and labor required to make a sagger. Since a sagger was larger than the vessel inside, it was possible to fire more white porcelains at one time when using a *yebeon* technique, as long as the inner space of the kiln was the same. Therefore, the increased production of *yebeon* porcelains at the Royal Kiln at that time can be seen as evidence that the operation of the kiln was in difficult conditions. Interestingly, the production of *yebeon* white porcelains increased slowly during the early 16<sup>th</sup> century. By the mid-16<sup>th</sup> century, the kiln operated a *yebeonyo* 例燔窯, which was mainly used to produce *yebeon* vessels. The Royal Kiln chose to meet the growing demand for white porcelains. Of course, not all high-quality white porcelains were made in a *yebeon* technique. In addition, there are realistic limitations in suggesting the ratio of *gapbeon* and *yebeon* white porcelains since the quantity of *yebeon* vessels produced may have increased or decreased depending on the operation

conditions of the Royal Kiln. Given that *yebeonyo* was operated, however, it can be fully acknowledged that more *yebeon* white porcelains were produced when the operating conditions worsened.<sup>33</sup>

However, this flexible response by the Royal Kiln, as expected, led to a downgrade of the quality of top-quality white porcelains. The royal family provided an important cause for this situation to take place. From the royal family's perspective, the deteriorating quality of the best white porcelains was not desirable. However, they accepted the reality surrounding the Royal Kiln to a certain extent. Unless the production of white porcelain was transferred to a private craft industry, there was no choice but to maintain the Royal Kiln.

King Sejo attempted to strengthen his royal authority through the use of vessels suited to his cause.<sup>34</sup> Consuming vessels according to a cause was a common logic applied to all kings. According to the *Gyeongguk daejeon juhuae* (*Interpretations of the National Code* 經國大典註解) (1555), white porcelain was still limited to the use for the king's dishware.<sup>35</sup> If the production of white porcelain for royal use was transferred to the private sector, it would have become much more difficult to control the consumption. The symbolism of white porcelain, which was needed by the royal family, would be weakened. They could not give up the Royal Kiln being operated under the government-run craftsmanship system. In reality, there was only so much private handicraft workshops could do to handle the white porcelain production process, including excavating and transporting white clay scattered across the country, supplying firewood, and molding and firing vessels, as well as transporting the finished white porcelain to the capital. The royal family made a policy decision to solve the supply and demand imbalance of white porcelain, with maintaining the government-run craft system of the Royal Kiln as an important principle. Accordingly, it is believed that the Joseon government made efforts to address

33 In the early 16<sup>th</sup> century, the Royal Kiln operated two types of kilns: *gapbeonyo* (a kiln producing *gapbeon* vessels 匣燔窯) and *sangbeonyo* (a kiln producing *sangbeon* vessels 常燔窯). However, it is presumed that *yebeonyo* appeared in the mid-16<sup>th</sup> century at the latest. The background behind the emergence of *yebeonyo* and changes in the kiln operation were examined in detail in this author's previous studies (Kim 2013c; 2020d, 109–39). Representative kilns that were found to be *yebeonyo* through excavation include the Beoncheon-ri kiln sites No. 5 and No. 9 operated in the 1550s and Daessangnyeong-ri kiln site No. 2 operated in the late 16<sup>th</sup> century.

34 *Sejo sillok*, Vol. 29, Day 30, Month 11, the 8<sup>th</sup> year of King Sejo's reign (1462), Entry 1.

35 *Gyeongguk daejeon juhuae, Juhye* (*Interpretation*), Vol. 2, Hyeongjeon (Criminal Code), Geumje (Prohibitions), Baekjagi (White Porcelain): “御膳用白磁器 東宮用青器 禮賓用彩文器.”

the departure of ceramic craftsmen, which posed the greatest threat to the stable operation of the Royal Kiln at that time.

The government included, in the *Daejeon hu songnok* (*Amendment to the Expanded National Code* 大典後續錄) (1543), provisions on the succession of ceramic artisans and punishment of ceramic craftsmen fleeing from the Royal Kiln.<sup>36</sup> The penal provisions were not a measure to directly prevent them from running away but must have been helpful. The regulation that required the profession of ceramic craftsmen to be inherited from artisans to their descendants was an active measure to secure artisans. The succession not only helped the government maintain the number of artisans stably but created conditions enabling the natural accumulation and development of porcelain-producing techniques as they were passed on from fathers to their sons. The problem was that the succession could be effective only when it was preceded by improvements in the treatment of porcelain craftsmen. In a situation where master artisans had already been leaving the Royal Kiln, the succession of the profession without additional support had a great risk of accelerating their departure. The best way for the Royal Kiln to secure artisans was to ensure that they could make a living. It was required to provide craftsmen with sufficient time to take care of their own livelihood. It is presumed that this led to the reform in the 1560s to change the two-shift service system 分二番 to the three-shift one 分三番. Due to changes in the forced labor system, craftsmen performed their duty only for one out of every three years at the Royal Kiln, instead of one out of every two years. Adjusting craftsmen's service term was an effective policy that could supplement the regulation on occupational succession seen in *Daejeon hu songnok* (Kim 2023; 2013b, 231–39).

On the other hand, as the forced labor system of the Royal Kiln changed from the two-shift system to the three-shift one, the absolute number of craftsmen producing white porcelain in the office declined. The number of artisans in service at one time decreased by about 30 percent from 180 to 127. This is a considerable burden on the operation of the Royal Kiln. However, as seen in Table 1 above, the Royal Kiln had about 108 porcelain masters even

during its flourishing time in the late Joseon dynasty. In reality, it became impossible for 180 craftsmen to perform their duty at the kiln as many of them had run away. Moreover, considering that the production of *yebeon* white porcelain was increasing, there must have not been much difficulties in running the kiln with about 120 pottery masters. It is believed that the government implemented a policy to stably secure ceramic craftsmen serving at the kiln at one time, even if the number decreased gradually.

The government was able to make the policy decision since it acknowledged that fine-quality white porcelain was divided into *gapbeon* and *yebeon* porcelain. It must have been difficult for the government to implement a policy to reduce the number of pottery artisans serving at the Royal Kiln at one time if the royal family had only adhered to *gapbeon* white porcelain. However, they used both a carrot of adjusting the days of craftsmen's service terms and a stick of tightening the management and supervision of the Royal Kiln.

White porcelains produced at the Royal Kiln from the 1480s to the 1560s had inscriptions “天,” “地,” “玄,” and “黃” engraved on the glazed inner bottom surface of the foot. The letter numbering using the first four characters of the *Thousand Character Classic* can be interpreted to refer to Saongwon's warehouses, but there are also differing opinions (Kim 2020d, 148–52). The letters were also engraved in stipples. The letters were stippled in the porcelain-consuming capital city, not in the porcelain-producing Royal Kiln. Therefore, it is hard to understand that the inscriptions were related to production. The inscriptions were most likely signs for consumption or management after white porcelains were delivered to the capital (Kim 2013a, 64–66).

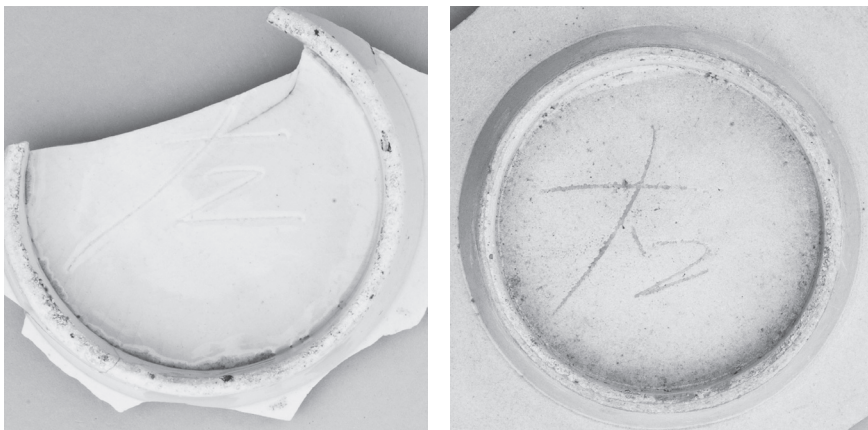
It is interesting that in the 1560s, the inscriptions changed from “天,” “地,” “玄,” and “黃” to “左” and “右” (Figures 6 and 7). “左” and “右” refer to the “left production division” 左班 and the “right production division” 右班 of white porcelain at the Royal Kiln (Yun 1981a, 37). Existing inscriptions were related to the consumption and management of white porcelains after they were transported to the capital. From the 1560s, however, inscriptions related to production began to be engraved. Afterward, the sexagesimal cycle and numbers were used to indicate the year of production and the month and date of production in order, respectively (Figure 8). In the 1560s and afterward, the royal family recorded production information to ensure a stable supply of top-quality white porcelain. They attempted to determine who was responsible for the production of white porcelain. This is believed that by doing so, they

36 *Daejeon hu songnok*, Vol. 6, “Gongjeon” (Public Works Code 工典), Gongjangjo (Applications to Craftsmen 工匠條): “司饗院沙器匠子枝 毋乏他役 世傳其業.”; *Daejeon hu songnok*, Vol. 5, Hyeongjeon (Criminal Code 刑典), Jamnyeongjo (Miscellaneous Provisions 雜令條): “司饗院沙器匠 逃亡後現者 杖一百 還役 許接者 杖一百 徒三年 切隣·管領·里正等 知而不告者 制書有違律論.”

strengthened the management and supervision of the Royal Kiln (Kim 2013d).

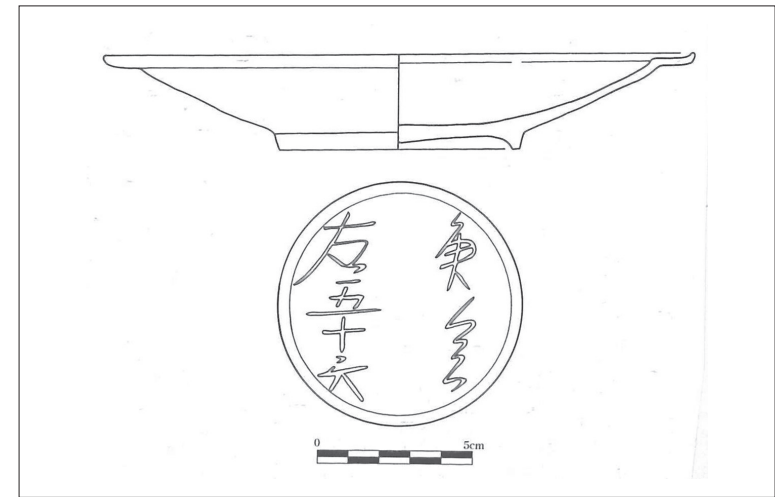


**Figure 6.** White Porcelain Bowls with “天,” “地,” “玄,” and “黃” Inscriptions, national treasures, H. 11.3 cm, D. 21.7 cm, National Museum of Korea Kunhee 14



**Figure 7.** White Porcelains with “左” and “右” Inscriptions, Gwangju Gonjiam-ri Kiln Site No. 1, 1572 (Korea Cultural Heritage Institute 2011, 35–38)

On the other hand, some white porcelains produced at the Royal Kiln in the 1560s were inscribed with “別” (Figure 9). “別” refers to *byeolbeon* 別燔, porcelain specially made for use in royal events such as wedding ceremonies (Yun 1981a, 37). It needs to approach *byeolbeon* within the presumptions

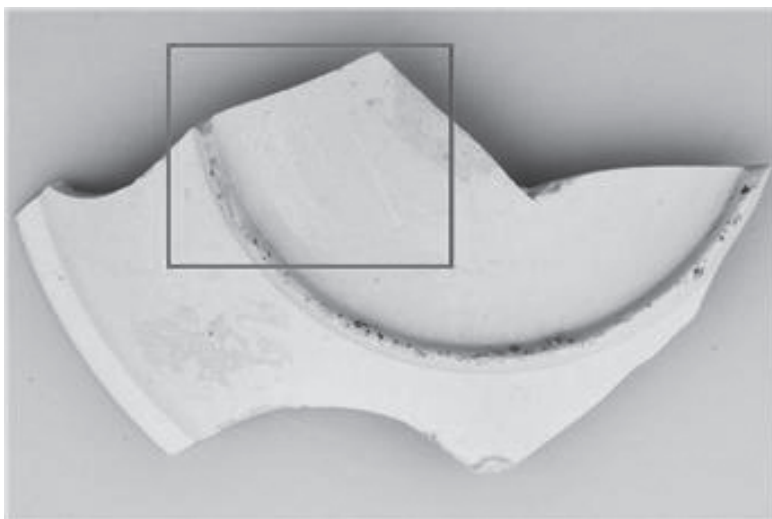


**Figure 8.** White Porcelain with a “庚寅右五十六” (Year of Gyeongin 庚寅, 1650), Gwangju Songjeong-dong Kiln Site No. 6 (Joseon Royal Kiln Museum 2008, 188)

shown in the Sinyu In-kind Taxation Reform. The record of *byeolbeon* first appears in the document that includes Yeonsan-gun’s order in 1504 to produce 1,000 pieces of *gyuhwabae* (hollyhock-shaped cup 葵花盃) and 100 pieces of *aengmubae* (parrot beak-shaped cup 鸚鵡杯). Of course, no information is identified about the government agency that produced the cups. Naesusa and Saongwon were the only government offices to which ceramic craftsmen were allocated, but it is presumed that Naesusa’s function as a white porcelain producer had been suspended at that time. Therefore, it is more reasonable to understand that *gyuhwabae* and *aengmubae* cups were created and presented separately by Saongwon in addition to the annual porcelain offerings.<sup>37</sup>

There were several cases where *byeolbeon* was produced. If the records of the 17<sup>th</sup> century are accepted, the most important reason for producing *byeolbeon* was royal events or banquets for entertaining foreign envoys. Compared to porcelains presented annually, specially produced vessels were used on formal or important occasions. Records in 1659 confirm that the white clay used to produce special vessels was of better quality than that used for the annual

<sup>37</sup> *Aengmubae* has rarely been unearthed in the excavations of the Royal Kiln that have been conducted so far. However, it is highly likely that Yeonsan-gun ordered production of *aengmubae* cups since he had recognized them.



**Figure 9.** White Porcelain Dish with a “別” Inscription, 1572, Gwangju Gonjam-ri Kiln Site No. 1, H. 2.96 cm (Korea Cultural Heritage Institute 2011, 40–42)

porcelain offerings.<sup>38</sup> In the mid-17<sup>th</sup> century, there was a strong tendency to use clay from Wonju in the spring and clay from Seosan in the fall to produce white porcelain for annual offerings (Lee 2017, 27–33). Specially created white porcelain used earth separately mined in Seoncheon and Gyeongju.<sup>39</sup> They were produced using a *gapbeon* technique.<sup>40</sup> The royal family paid attention to securing high-quality special vessels.

This interpretation, if possible, indicates that the production of white porcelain with the “別” inscription in the 1560s reflected the royal family’s intention to ensure that amid the increased production of special vessels, “別”-inscribed white porcelains could be produced separately from others at the production stage for a stable supply. The royal family implemented several policies to stabilize the operation of the Royal Kiln in the 1560s. It is believed that at that time, the royal family, in consideration of consumers of specially-produced vessels, made sure that “左” and “右” inscriptions were engraved on

annual offerings and “別” on special offerings in a situation where even high-quality white porcelains were classified depending on the quality. The Royal Kiln’s dual inscription system for white porcelain, established in the 1560s, lasted until at least the 1640s (Kim 2022b, 213–30).

## Conclusion

This paper has so far explored the 16<sup>th</sup>-century white porcelain produced at the Royal Kiln in the relationship between the royal family as the buyer and the kiln as the supplier. In particular, it has structurally examined the aspects of white porcelain from the perspective of the demand and supply imbalance of white porcelain. As a result, this paper has confirmed that the interests of the royal family and the Royal Kiln played a complex role in the changes in white porcelain produced at the kiln at the time. The following is a summary of what has been explored so far.

Strengthening the status of white porcelain in the royal family of the early Joseon dynasty was closely related to royal authority. King Sejo established the Royal Kiln around 1467, which also had the political significance of strengthening royal power in his later years. The royal family enacted the Sinyu In-kind Taxation Reform in 1501 to legally expand its financial demand. This was also applied to white porcelain produced at the Royal Kiln. The royal family, represented by the king, was the highest ruling class in the hierarchical Joseon society. Since the Royal Kiln was operated under a government-run craftsmanship system, it was difficult to fundamentally suppress the increase in the royal family’s demand for white porcelain.

However, ceramic craftsmen of the Royal Kiln resisted any way they could: the departure from the kiln. In addition, those working for the Royal Kiln set up a plan to reduce the budget and labor required per unit production of high-quality white porcelain. This degraded top-quality white porcelain and increased production of *yebon* white porcelain, which had relatively low quality, though it was perceived as good-quality porcelain along with *gapbeon* white porcelain. This was how the government responded to the royal family’s growing demand for white porcelain. In this situation, the royal family acknowledged the reality and came up with a variety of policies to continue operating the Royal Kiln under the state-run craftsmanship system. In this process, the inscriptions

38 *Seungjeongwon ilgi*, Vol. 162 (fair-copy version Vol. 8), Day 12, Month 6, the 1<sup>st</sup> year of King Hyeonjong’s reign (1660), Entry 15.

39 *Ibid.*; *Seungjeongwon ilgi*, Vol. 238 (fair-copy version Vol. 12), Day 8, Month 3, the 15<sup>th</sup> year of King Hyeonjong’s reign (1674), Entry 19.

40 *Seungjeongwon ilgi*, Vol. 262 (fair-copy version Vol. 13), Day 21, Month 11, the 3<sup>rd</sup> year of King Sukjong’s reign (1677), Entry 11.

engraved on white porcelain changed in the 1560s to contain consumption and management-related information, instead of production information. It is presumed that certain changes were also made in the way ceramic artisans performed their duty.

In fact, there are not many records left about the Royal Kiln of the 16<sup>th</sup> century. Furthermore, the records were written briefly, leaving room to be interpreted differently depending on the researchers' perspective. Nevertheless, this paper attempted to explain the interaction between the royal family and those serving for the Royal Kiln with supply and demand as a benchmark. This author is better aware than anyone else that there are many errors and logical leaps in the process. This author will continue to modify and supplement these aspects little by little.

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## Abstract

This paper examines the 16<sup>th</sup>-century Royal Kiln-produced white porcelain in the context of the interrelationship between the royal family as the main consumer and the kiln as the producer. In particular, it structurally explains the changes in white porcelain from the perspective of the increase in demand for white porcelain and the imbalance in supply. The royal family enacted the Sinyu In-kind Taxation Reform in the early 16<sup>th</sup> century and expanded royal finances based on this. The demand for white porcelain produced at the Royal Kiln also increased through the provisions on appropriation and tax-in-kind hikes of the reform. On the other hand, the Royal Kiln was operated under the government-run craftsmanship system and, therefore, had a limited annual budget to spend and a limited number of available artisans. As a result, an imbalance occurred in the supply and demand for Royal Kiln white porcelain. The royal family and the kiln responded to this issue by reflecting on each other's positions. Accordingly, it is assumed that changes were brought about in the quality and inscriptions of white porcelain, and in the way Royal Kiln was operated. This paper is of significance in that it organically understands changes seen in white porcelain created at the Royal Kiln in the 16<sup>th</sup> century through the relationship between the royal family, the highest ruling class at the time, and the kiln operated under the state-run handicraft system.

**Keywords:** royal family, Royal Kiln, state-run handicraft system, white porcelain supply and demand, Sinyu In-kind Taxation Reform, ceramic craftsmen