New Trends in Late Fourteenth Century Inlaid Celadon Ceramics,

with a Focus on Food Vessels

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I. Introduction

The quality of inlaid celadon wares in the Goryeo dynasty (918–1392) reached its pinnacle of excellence during the twelfth and thirteenth centuries but declined gradually during the fourteenth century. As a result, inlaid celadon of the fourteenth century has received little attention due to its poorer quality compared to that of the earlier Goryeo period. Studies of Korean ceramic history have treated celadon ware of the late Goryeo period merely as a transitional group leading to the rise of Buncheong ware (stoneware decorated with white slip).

During the final years of the fourteenth century, the Goryeo dynasty gave way to the Joseon dynasty. Radical changes included the rise of a new elite group called new scholar officials (*sinheung sadaebu*, 新興士大夫) to dominate Goryeo society politically, socially, and culturally; the introduction of Neo-Confucianism as a ruling ideology; the development of a powerful central government structure; the appropriation of privately owned lands; and the fluctuation of classes in the hierarchical system.¹ In terms of the history of Korean ceramics, this era was the turning point from the celadon culture of the Goryeo dynasty to the white-bodied porcelain of the Joseon dynasty. Transformations in the shapes and techniques of decoration in celadon ware laid the foundation for the production of Buncheong ware in the fifteenth century.

The significance of this transition in ceramic production became evident when archaeological excavations took place in the major kiln sites of the Goryeo dynasty, at present-day Daegu-myeon (大口面), Gangjin-gun (康津郡), in Jeollanam-do province, during 1991 and 1992.² The report stated that 40 out of 180 kiln sites were found to be kilns for production of inlaid celadon during the fourteenth century. The archaeological surveys of these sites contributed to the analysis of the chronology of the Goryeo celadon with findings such as a large bowl with a peony motif and inscription of *jungneung*³ and similar sherds. This archaeological discovery yielded information for study of the new trends in the late Goryeo inlaid celadon production. Based on archaeological data and surveys, this article attempts to study the new trends of late fourteenth century inlaid celadon from a fresh perspective. Instead of the usual documentation of the degenerating quality of late Goryeo celadon, I will take a revolutionary view to investigation of this transitional stage of ceramic production by delineating how new methods were introduced to replace some elements that had gone out of fashion. To achieve this goal, I will first explain how mass production of Goryeo celadon ware resulted in inferior quality by examining shapes, design motifs, and techniques. Then, analysis of newly adopted production techniques for late Goryeo celadon ware will show to what extent this transformation had an impact on early Buncheong ware manufacture.

This research is limited in the sense that it deals mainly with the Gangjin area and does not include archaeological findings from all kiln sites active during the late Goryeo dynasty. However, considering the fact that Gangjin was the major kiln site in this period, I hope my study will touch upon some of the new trends in the late Goryeo celadon production which went on to appear in Buncheong wares during the early Joseon dynasty.

II. Historical background

The Goryeo dynasty during the fourteenth century was a period of turmoil both domestically and abroad. The Goryeo court was fully under the influence of the Yuan dynasty, but its harmonious ties to China could no longer be maintained during the time of the Yuan–Ming transition. The late Goryeo dynasty suffered from financial difficulties due to the exploitation of wealth by the Buddhist establishment and the noble families, who claimed ownership of lands and evaded taxes for their own benefit. In this time of disorder provincial elites, consisting of petty functionaries who espoused Neo-Confucianism, moved up to the central government and gradually seized political power. This new bureaucratic class called *sinheung sadaebu* attempted to reform late Goryeo society through practical and progressive thinking but failed to overturn the corrupt system.⁴

The collapse of the political and social order had a huge impact on infrastructure such as agriculture and manual industries; in this regard, ceramic manufacture also faced many difficulties. During this time, the rising demand for food vessels over decorative ceramics for display gave impetus to mass production and resulted in a lowering of the standard quality of inlaid celadon ware during the late Goryeo dynasty. The customer base gradually expanded from the court to include the commoners in all provinces, and individuals were able to realize financial benefits by buying and selling ceramics. This was supported by the governmental policy that emphasized the utilitarian aspect of celadon vessels. Here we will look at the historical background that gave rise to the new trends in late fourteenth century inlaid celadon.

First, the clientele expanded broadly to include all levels of Goryeo society. Goryeo society was strictly divided into four classes—the aristocratic families at the top, the middle class next, the craftspeople third, and the slaves at the bottom. During the time of disorder in the late Goryeo period, this social structure was collapsing. There were many instances of lower class men advancing to the upper level; as an outcome of the loss of census registration and a vacuum in administration, members of the lowborn peasantry as well as the merchants and craftsmen rose to the middle class. The bureaucrats who came from the ranks of the petty functionaries in the provincial administrations gradually performed a more important political role by advancing to serve at the national level. One example to show the expansion of the upper class in the late Goryeo period is the men who advanced themselves through valorous service in the military campaign in the third year of King Gongmin (r. 1351–74). This reward appointment system became a strong motivating force for many lowborn men to advance themselves to the high ranks.⁵

At the same time, with reform of the primary administrative divisions for the country, a number of districts and counties were upgraded and more officials were dispatched from the capital to administer local government. From the ninth year of King Hyeonjong (1018) to the third year of King Gongyang (1391), the number of counties increased from 93 to 360.⁶

Thus ceramic consumption increased both at the state level and in individual homes. This brought about mass production of ceramics for daily use, and potters had to devise ways to produce effectively and quickly to meet the rising demand. One can assume this development from the fact that the majority of ceramic sherds found in fourteenth century kiln sites are plates and bowls.

Second, as a result of the corruption of the governmental supervision of tribute collection in the fourteenth century, individuals were able to gain financial benefit by sponsoring ceramic production. There were many instances of the upper level class's demanding and collecting tribute, and even petty functionaries took over the collecting system. This collecting by both government and private individuals resulted in severe financial difficulties for those responsible for supplying tribute.⁷ Middle rank officials in charge of supply, management, and collecting bribed higher ranks to avoid heavy burdens.⁸ This weakened the power of the government bureaus to collect tribute from the counties that had duties to supply it.⁹

The Ceramic Bureau (*jagiso* 磁器所) in charge of supplying ceramic wares was not exempt from these conditions. Although consisting originally of the official kilns,¹⁰ the bureau was no longer under supervision of the central government. Individual patrons from powerful families or local officials who could exercise their influence upon the Saong bureau controlled ceramic productions for their own interests. The appeal to the royal court made by a scholar-bureaucrat, Jo Jun, which criticized the corrupt system of collecting tributes, offers a glimpse of this circumstance in the late Goryeo dynasty.

Every year, the food department sends officials to oversee the annual ceramic manufacture for the royal palace. However, theft of vessels in the name of public good but for private benefit has been a serious problem. For example, since each province takes away (vessels) in the quantity of eighty or ninety oxcarts, the vessels retrieved by the state are only one percent of

production and the rest is lost to the private groups. This brings a great deal of trouble to the state.¹¹

This report informs us that kiln operations in each province, supposedly under supervision of the Saong office,¹² did not function well enough to manage supply. Another example is the system whereby the Ministry of Finance (*hojo*, 戶曹) collected and controlled ceramics as taxes levied by the state on the provinces in the early Joseon dynasty, according to a record of the seventh year of King Taejong's reign (1417).¹³ This shows that the operation of kilns was no longer managed by the central government in the early Joseon period.

In contrast, from the early fourteenth century, during the reign of King Chunghye (1339–1344), there is a record about a merchant who sold porcelains to make a living and his daughter who became a concubine. ¹⁴ Drawing from this, one can suspect that celadon was already widespread in the market in the form of financial properties for individuals. One can argue that the expansion of consumption to all levels of society, from the royal court down to the commoners, led to the mass production of vessels for daily use.

Thirdly, the governmental made efforts to encourage the use of ceramics in the late fourteenth century. During the Goryeo dynasty, vessels were made in various media including gold, wood, and bronze as well as ceramics. Among them, the material most commonly used for everyday vessels was bronze. For example, during the sixth year of King Hyungjong's reign (1025), the scholar-official Kwakwon paid a visit to the Song court and reported on the life of the Goryeo society that "the commoner's vessels are all made in bronze."¹⁵ Moreover, the Chinese literati official Xu Jing, who visited Goryeo on a diplomatic mission from the Northern Song court, wrote in *Xuanhe fengshi Gaoli tujing* (Illustrated Record of the Chinese Embassy to the Goryeo Court during the Xuanhe Era) that "water, rice, cooked rice, and beverages are all stored in bronze jars and people carry them on their heads instead of on their shoulders,"¹⁶ Furthermore, "nowadays, Goryeo people use small bowls and plates in bronze on a small table..."¹⁷ and "most inscriptions on ceramics are in gold—sometimes in silver—and the most valuable vessels are celadon."¹⁸ In sum, bronze ware was widely used, ceramics

decorated in gold or silver were used for entertaining the foreign embassies or at official banquets and ceremonials, and celadon ware was most highly prized.¹⁹

It is likely that circumstances might have been different in the late thirteenth century. After the devastating Mongol invasions and forced participation in the Mongol expeditions against Japan, the Goryeo government endeavored to collect metalware needed desperately for war supplies. At the same time, a great quantity of bronze was submitted as tribute in response to the continuous demands of the Yuan court,²⁰ and this created a shortage in the domestic market. Another example to show increasing demand for bronze is the occasion when a considerable amount of bronze was collected from private homes to construct a new palace during the reign of King Chunggye in the fourteenth century.²¹ All this evidence explains the circumstances that brought about an extreme shortage of bronze in this period. Thus, one can argue that ceramic production was promoted as an alternative to metalware in the late Goryeo dynasty.

Despite these circumstances, extravagant spending was still widespread during the middle and late fourteenth century, and many scholar-literati of the *sadaebu* group appealed to the royal court to enforce strict austerity in society. Lee Jaehyun lamented this sumptuous consumption and, at the same time, argued that only bronze ware, earthenware, and pottery had been used prior to that time.²² During the reign of King Gongmin, Woo Pilheung successfully submitted an appeal to the court: "Vessels are to be made of brass, bronze, and earthenware to be in harmony with nature."²³ Bang Saryang, during the reign of King Gongyang (r. 1389–92), claimed that "since iron and bronze are not native (to Goryeo), from now on, they should be prohibited for use. Instead, use of clay and wood alone should be adopted to correct this bad custom."²⁴ From these historical records, it is not hard to imagine the severe financial difficulty and sumptuous consumption among the upper class in the late Goryeo dynasty. Moreover, the increased use of ceramics was driven mainly by governmental efforts reflecting the political views of the *sadaebu*.

Indeed, the improvement of ceramic production in quantity was due to the growing numbers of kilns in the late Goryeo dynasty. In the early period, kilns were concentrated in the two main locales, Buan and Gangjin, but they gradually expanded to all the provinces by the late fourteenth or fifteenth

century. The *Sejong sillok jiriji* (Geographical Appendix to the Annals of Sejong, 1424–32), which included the kiln sites in the early fifteenth century, shows 139 kilns in operation. Ceramic consumption dramatically increased within the century from the late Goryeo to the early Joseon dynasty.

Despite the political, social, and economical disruption in the fourteenth century, the consumption of inlaid celadon wares expanded and mass production of these everyday vessels took place by dint of government policies which the *sadaebu* bureaucrats deliberately supported. In this process, decorative and high-quality ceramics fell out of favor and the quality of inlaid celadon became poorer than before.

III. Review of Chronological Data

Here, before investigating the late fourteenth century inlaid celadon vessels mass-produced and of inferior quality, I will present some examples of chronological data to reconstruct the conditions of ceramic manufacture.

1. Bottle with decoration of willow trees and inscription (乙酉司醞署, *ulyu Saonseo*) (plate 1)

This bottle (*maebyeong*), now housed in the National Museum of Korea, Seoul, has a broken neck, but the black-inlaid inscription from the shoulder to the lower body suggests the chronological standard for its period. *Saonseo* (司醞署) was the official bureau in charge of brewing alcoholic beverages for state ceremonies, and the inscription on this piece provides evidence that it was presented to this office in the cyclical year of *ulyu*. Since the establishment of *Yang-onseo* during the reign of King Munjong (r. 1046–83), the title and grade of the chief officers in charge of this bureau had changed several times. The periods of time when this office used the name *Saonseo* were from the thirty-fourth year of King Chungnyeol (1308) to the fourth year of King Gongmin (1355); from the eleventh year of King Gongmin (1362) to the seventeenth year of King Dong (1368); and from the twenty-first year of King Gongmin (1372)²⁵ to the middle of King Taejo's reign in the early Joseon

dynasty. The production of this bottle falls within this time frame during the cyclical year *ulyu*, the first year of King Gongmin (1345).

The characteristics of this bottle include a sloping shoulder and a short base. These features are quite different from the earlier type of bottle made during the peak time of popularity for this vessel shape. Moreover, its decoration is simplified and stylized,²⁶ reduced to clouds on the shoulder and willow trees and reeds on both sides of the body. Judging from this example, one can argue that by 1345 production of celadon bottles was already in decline.

2. Dish with *ruyi*-head decoration and inscription (至正, *Jijeong*) (plate 2, Fig 1)

Since only the bottom part of this dish remains, it is hard to reconstruct a complete shape with accuracy. It is likely that the original vessel was a small plate with flat interior and relatively straight sides. This sherd, in the collection of the Haegang Ceramics Museum, was excavated from Sadang-ri (沙堂里), Gangjin-gun (康津郡), Jeollanam-do province. It has been reported that a similar sherd was also found in the survey of the celadon kiln site in Sodang-ri, Dangjeon area, carried out under the direction of the National Museum beginning in 1963.²⁷

Jijeong is the era name of the Chinese emperor Sun and was used from 1341 to 1367 during the Yuan dynasty. According to the *Goryeosa* (History of Goryeo), the Chinese era name was ordered not to be used after the fifth year of King Gongmin's reign (1356).²⁸ Thus, if this royal decree was followed, production of this celadon inscribed Jijeong can be dated between 1341 and 1356.

The surface of this sherd is covered with a light brown glaze pervaded by thin crackles. The interior bottom is decorated with the *ruyi*-head motif, and the inscription Jijeong is inlaid in black inside a double roundel. The characteristics of small dishes of the middle and late fourteenth century can be witnessed in the *ruyi*-head decoration inlaid on the bottom of the interior and the glazed roughly scraped from the bottom of the foot before firing.

3. Group of dishes and large bowls with inscription (丁亥, *junghae*) (plate 3)

This group of celadon wares with cyclical inscription *junghae* is another good example to understand the condition of ceramic manufacture during the middle and late fourteenth century.

There have been debates²⁹ among scholars about how to date the celadon wares with cyclical inscriptions.³⁰ In the case of this *junghae* celadon sherd, it was found during the survey excavation of the kiln sites in Sodang-ri by the National Museum in the same level with a Jijeong sherd. In this light, the consensus dates its manufacture to 1347.

The characteristics of the *junghae* celadon group can be summarized. First, this inscription often appears in small plate types. Next, the color of glaze is usually yellowish brown and thinly crackled. The interior of the bottom and surface of the foot were roughly scraped after glazing, and sand supports were used in most cases.

4. Large bowl with peony and vinescroll design and inscription (正陵, Jungneung) (plate 4, Fig 2)

The large bowl, now in the collection of the National Museum, has Jungneung inscribed on the interior bottom in white inlay. Jungneung was the name for the royal tomb of Princess Noguk Daejang, the Mongolian wife of King Gongmin, who died in 1365. The vessels with this inscription are known to be used for the funerary services and rituals in Jungneung. Thus this large bowl's manufacture can be dated after 1365, the year of Princess Noguk Daejang's death. Since a fragment of the vessel with the same inscription was unearthed at Sadang-ri by a Japanese archaeologist in 1928,³¹ it has been said that ceramic production for royal families was still underway in Gangjin until the end of the Goryeo dynasty.

This shape and decoration of this Jungneung celadon offer a significant instance to show the characteristics of the late fourteenth century's large bowls. First, a wide recessed center³² is formed on the bowl's interior bottom, the side rises vertically and straight toward the rim, and the foot is contoured like a bamboo joint. The interior is decorated in four layers. The main design is a peonies and scrolling vines motif³³ which depicts peonies in black and white inlay surrounded by foliage on each of four layers. The simplified vinescroll pattern and small foliage motifs appear repeatedly and the decorations were impressed onto the body using a stamp.

This large bowl is covered in a dark brown glaze and the surface where its foot touches was wiped off after glazing. The vessel was fired on sand supports. It is likely that this piece was not placed

inside a saggar (Korean *gapbal*), a container made of clay, since debris adheres to the glazed surface. Thus, even though the piece was made for the royal court, its quality is not the best.

Similar types of celadon vessels or sherds with peonies and vinescroll decoration are still excavated in large quantities at Sadang-ri, as well as in the early Buncheong ware kiln sites in all the provinces in Korea. This archaeological discovery suggests that this type was one of the most popular large vessels in production from the late fourteenth century to the early Joseon dynasty.

5. Large bowl with line decoration excavated from the Yeongjeonsa temple site (plate 5, fig 3)

This large bowl was discovered in the process of relocating two relict pagodas of the Buddhist priest Bojejonja on the site of the Yeongjeonsa temple and is now housed in the National Museum. This is a typical large bowl with a round interior bottom and its decoration is simply three-layered lines in white inlay. It is covered in a grayish-blue glaze and traces of glaze remain on the exterior of the bowl. The bowl was fired on thick sand supports and it has four spur-marks on the bottom of the interior. Since debris is left on the bowl's surface and its design motif is executed with simple lines, it is likely that this piece was not meant to be a high quality product.

Since this large bowl was unearthed along with the memorial clay-slate stone inscribed with a date in the year 21 of Hongwu (the era name of Emperor Taizu of the Ming dynasty; 1388), it is believed to have been made in the late Goryeo dynasty.³⁴

IV. New Trends

In the above, I attempted to study the circumstances of the middle and late Goryeo celadon manufacture by analyzing a few examples that provide evidence for chronology. Based on these chronological data, this chapter will investigate the new trends in terms of shape, design, and technique, using some examples of inlaid celadon wares unearthed from kiln sites in Daegu-myeon, Gangjin-gun, Jeollanam-do province, or housed in the collections of the provincial museums.

By the late fourteenth century, some noticeable trends in celadon production in terms of shapes, design motifs, and techniques had emerged. Generally speaking, one group of vessels preserved traditional elements while gradually transforming from the Goryeo celadon to the Joseon Buncheong ware style. Another declined and disappeared by the late fourteenth century. The last group emerged newly in the late fourteenth century, and its influence continued in Buncheong production during the early Joseon dynasty. Here, I will focus on these types of late fourteenth century inlaid celadon and compare them side by side to elucidate the new trends of celadon production from a new perspective.

Shape

During the peak period, inlaid celadon wares were produced not only as dishes or bowls but in many different forms of everyday vessels. By the fourteenth century, however, the typical celadon shapes such as wine bottles, jars, vases, and hair-oil bottles gradually disappeared and were no longer produced. The majority of production was concentrated on food vessels, namely dishes and bowls. This chapter will investigate these significant changes in celadon shapes in the late fourteenth century.

(1) Shapes in decline

Celadon wares were made in a variety of food vessel forms such as rice bowls, dishes, kettles, cups, jars, and so forth by the end of the Goryeo dynasty. Among them, the shapes such as a bowl with a diagonally widened rim, octagonal dish, and flower-shaped dish with an inward rim ceased to be produced. Although these shapes used to be among the most popular, by the final years of the Goryeo period, they fell out of favor and disappeared in buncheong ware production. Therefore, these shapes exhibit the characteristics representative of the Goryeo celadon.

[1] Dish with a diagonally widened rim

First, this type of dish has a relatively straight side between the mouth rim and the base and the foot is trimmed around the foot ring like a stair. The precedent of this dish with a reliable date was found in Jireung the tomb of King Myeongjong (d. 1202). Both the dish with chrysanthemum design in relief and the dish with chrysanthemum design (plates 6-1 and 6-3, fig. 4), from the National Museum, have a rim widened slightly outward. Instead of the projecting foot ring, these dishes have a flat foot with its bottom evenly trimmed. These features continued throughout the thirteenth century and the same can be also found in the dish with chrysanthemum design and inscription ($\exists E$, *gisa*), corresponding to 1269³⁵ (plate 7, fig 5) as well as other contemporaneous dishes inscribed with the

cyclical year. However, the dish with chrysanthemum decoration and inscription of the cyclical year (壬午, *imo*), corresponding to 1288³⁶ (plate 8, fig 6), is exceptional in that it has a trimmed foot ring. Several dishes retrieved from kiln site number 10 and its vicinity at Sadang-ri in the late fourteenth century (Plate 9, Fig 7) share these features. These findings suggest that this type of dish continued to be produced until the late Goryeo period. However, it is difficult to speculate to what extend this trend was extended in production of Buncheong wares due to lack of evidence. In Buncheong, no dish shapes appear to have a straight side. Thus, a dish with a diagonally widened rim was no longer produced by the late Goryeo period.

[2] Octagonal dishes

The octagonal dish is another form that fell out of favor and disappeared by the end of the Goryeo dynasty. While both octagonal and hexagonal disheswere made, octagonal dishes were the majority. The forming of an octagonal shape was done by using a mold placed on the inside walls and hand-pressed from the outside. The design motifs are carved in low relief on the interior, while the exterior has inlaid designs in most of the cases.

The earliest among the datable octagonal dishes is a dish with peony decoration (plate 6-2, fig. 8) unearthed from the Jireung tomb of King Myeongjong (1202). The characteristics of this dish can be described: each side divided with accuracy, low height, thin walls, a V-shaped foot in profile. However, by the time of production of celadon with cyclical year inscriptions in the late thirteenth century, the octagonal dish appears to have an inward rim, thick walls, and a more pronounced foot as its height was raised. These changes continued to appear in the later period, as we observe in the octagonal dish with inscription (*Junghae*)" (plate 10, fig. 9) dated 1347.

In the final years of the fourteenth century, celadon production methods became simplified and stylized, and the octagonal dish was no exception in this. The fragment of octagonal dish unearthed from kiln site number 10 at Sadang-ri (plate 11, fig 10) exhibits a bastardized form of this time that has each side divided by lines. Thus, it no longer has the refined quality of early octagonal dishes— much closer to the plain dish made on the potter's wheel— except it has inlaid lines to divide each side. The octagonal dishes disappeared by the end of the Goryeo dynasty and had no influence on Buncheong ware production. These examples suggest that less labor-intensive methods were preferred and adopted for mass-production (especially food vessels) by the late Goryeo period.

[3] Dish with an inward rim

Another shape of celadon ware that declined in the late Goryeo dynasty is a multi-sided dish with an inward formed by using a mold. The dish has a chrysanthemum shape and a mold was placed inside while the exterior was hand-pressed to form the shape, then partly trimmed.

The dish with chrysanthemum design (plate 12, Fig. 11), in the collection of the Haegang Ceramics Museum, offers a stunning example of thirteenth century celadon to show this transformation. This refined dish has a thin wall and a flat (or recessed) foot like the previously studied dish with a diagonally widened rim or the octagonal dish from the thirteenth century.

It is apparent, however, that this dish shape began to decline and disappeared by the fourteenth century. The flower-shaped dish with inscription (*Junghae*)" (plate 13, fig. 12),³⁷ unearthed when the museum of the National University of Jeollanam-do province undertook the excavation of the Unju Temple site in Hwasoon-gun, Jeollanam-do province, in 1989, has inlaid decorations on the surface much reduced than before, thick walls and a projecting foot. The degree of this bastardization became more pronounced by the late fourteenth century: for example, the dishes found in kiln number 10 at Sadang-ri show complete omission of inlaid decoration. Instead the ornamentations are stamped and each side is simply divided by lines using a sharp knife. This type of dish did not last and did not extend its influence on Buncheong ware production.

(2) New shapes

In the above, I have attempted to show the shapes of food vessels that were in decline in the late Goryeo dynasty. What is more significant in this transformation, however, is that new shapes appeared. Here I will study the newly developed shapes or forms that combined and modified the tradition with new trends. Examples such as the dish with an outward rim, dish with protruding design, dish with flat rim, and bell-shaped cup exhibit these significant changes of this period.

[1] Dish with an outward rim

This dish of deep rounded shape has an outward rim. Unprecedented in the twelfth and thirteenth centuries, this shape of dish was newly introduced from the fourteenth century.³⁸ The dish with crane and cloud design motif and inscription (宴禮色, *Yeonryesaek*) (plate 14, fig. 13), dated to the fourteenth century based on quality of its clay and design technique, can be linked to the Jingdezhen kiln's white bowl with stamped decoration of scrolling vines (plate 15, fig. 14) during the Yuan dynasty (rather than the shapes that appeared in domestic production of inlaid celadon).

This shape of dish continued to appear in Buncheong wares with stamped decoration. For example, a large bowl with stamped decoration and inscription (長興庫, *Jangheunggo*) (plate 16, fig. 15), in the collection of the the Ehwa Womans University Museum, is almost identical to the "Yeonryesaek" celadon ware except for the difference in design motifs; they both have a round interior bottom, an outward rim, and a base of the surface is sagging. Since this shape was mass-produced in Buncheong ware, it is likely that the new trend in shape originated with ceramic production during the transitional period between the Goryeo and Joseon dynasty with influx of the Yuan dynasty ceramics.

[2] Dish with protruding designs

It is worthwhile noting the advent of *dolgi-mun* (protruding designs, 突起文) dishes in the late fourteenth century that have an incurved mouth and thick protruding bands around the body. There is no evidence to prove that this type of dish was produced prior to the early fourteenth century. However, the excavated findings³⁹ (plate 17, fig 16) from kiln number 10 at Sadang-ri— the site which was active in the late fourteenth century— confirm that this new shape began to appear in inlaid celadon production around this time. Although this particular one is a bastardized form, we can observe some traces on the surface intended to emphasize the protruding band. This is one of the earliest examples for this type of dish.

It is likely that a thick band around the dish comes from foreign sources rather than domestic invention.⁴⁰ This hypothesis can be supported by comparing with a Longquan ware dDish" (plate 18) of the Yuan dynasty, discovered from the Sinan shipwreck and now housed in the National Museum. The sides of this Longquan dish are diagonal and its interior is divided by petal-shaped lines. On the surface,

a protruding band is thinly formed. Although these two dishes have different shapes, both the Yuan Longquan celadon and the Goryeo dish unearthed in Gangjin-gun have the protruding band on the surface. This verifies the close relation between them.

The protruding band gradually transformed into a double-line carved decoration from the final years of the Goryeo celadon wares production to the early Joseon Buncheong (plate 19, fig 17).

[3] *Jeon* dish (dish with a flat rim)

Another example that exhibits the new trends of this period is called *Jeon* dish; which typically has a wide-open mouth and a flat bottom. However, I will deal mainly with another type that has an inward mouth rim, a flat bottom, and a shallow body. Although the overall body of *jeon* dish is similar to a flower-shaped basin, the former is formed on the potter's wheel (while the latter was made by the press-relief method using a mold). This type of dish (plate 20, fig. 18) was unearthed from kiln number 10, at Sadang-ri. There is no evidence to prove that Jeon dish was originated from the peak time of the Goryeo celadon and it can be derived from a different line of production.

It is interesting to mention that the shape of the Longquan *jeon* dish of the Yuan dynasty retrieved in the Sinan shipwreck (plate 21) is similar to one of the dishes excavated from kiln No. 10 in Sadang-ri. They share certain features such as an inward tip of the mouth rim, a flat shape, and an evenly pressed interior bottom. Thus, this suggests that the two *jeon* dishes are related in terms of technique and style.

The *jeon* dish first appeared in the late Goryeo dynasty and it is certainly difficult to find out to what extent this shape continued to appear in Buncheong production during the early Joseon dynasty. This shape appears seldom in Buncheong wares. In this regard, it is assumed that this new shape of dish enjoyed a brief popularity in the late Goryeo period ten disappeared.

[4] Jongja (bell-shaped) cup

The *jongja*⁴¹ (bell-shaped, 鍾子形) cup is a shape newly introduced in the late fourteenth century along with new bowl and dish types; its size is between a small bowl and a cup. The characteristics of this cup can be described as a round wall, a slightly outward mouth rim, a recessed interior bottom.

One good example of this new shape is a fragment of a cup (plate 22, fig 19) unearthed in kiln number 10 at Sadang-ri. It is hard to reconstruct the whole body of the cup from this fragment missing the rim. The fragment shows the typical design motifs of the late Goryeo celadon: the inlaid chrysanthemum decoration in the center of the interior bottom and the fish design motif surrounding a cluster of chrysanthemums. The cup has three spur-marks on the surface of the foot ring (as also seen in the large celadon bowl unearthed in the Yeongjeonsa temple site) and this suggests that this cup was manufactured in the late Goryeo period. The cup with chrysanthemum design motif (plate 23, fig. 20), now in the collection of the Haegang Ceramics Museum, shows the same overall shape, design motifs, and arrangement of the ornamentations. Thus, it offers valuable clues to reconstructing a complete form of the Sadang-ri celadon.

It is assumed that this shape of celadon cup continued to be produced at least by the early fifteenth century. For example, the cup with wave design (plate 24), discovered from the tomb of Choe Unhae, in Junae-myeon, Paju-gun, Gyeongi-do province, is the chronology standard dated to 1404. Its shape is wider in profile than the two dishes previously studied and the interior design consists of fish and fish coming out of wave while the surface has swastika (卍) and rain dots decoration. This cup shows the characteristics of the late Goryeo inlaid celadon in terms of its shape, design motif, and arrangement and also shares the traits of the two celadon wares in the above.

However, we have no evidence to pinpoint for how long this type of cup continued to be produced after the early fifteenth century. It is likely that Jongja bell-shaped cup lasted for a short period of time from the late fourteenth to the early fifteenth century.

In the above, I have studied the trends and characteristics of the late fourteenth century inlaid celadon with focus on types of large bowls, dishes, and cups. The noticeable features in the shapes of inlaid celadon during this period can be summarized as below.

First, the small-size dishes made by using a mold were in decline in the late fourteenth century. This type of vessel was meant to be of high quality and did not last for a long time. It is thought that they were less competitive in the market due to intensive labor requirements, and lack of utilitarian purpose and lack of suitability for massproduction.

Next, the sources of the new shapes that appeared in the late fourteenth century can be traced from the Longquan celadon or Jingdezhen *qingbai* ware of the Yuan dynasty rather than the early domestic celadon wares. The ceramic trade with the Yuan dynasty as well as other neighboring countries was encouraged at the state level as a major source of income and many Yuan ceramics were also imported to Goryeo. Thus, it is assumed that some of the shapes newly introduced during this time can be linked with the Yuan wares through cultural exchange; they became alternatives to the shapes that fell out of fashion and in decline.

Design motifs

The most arresting change occurred in celadon production during the late fourteenth century is the simplified and stamped inlaid designs in contrast to the previously used natural and realistic expressions. In the case of big-sized bowls, there is more emphasis on the secondary design motifs than the main ones. It is almost like there is no division between the main and secondary decorations on small-sized vessels such as bowls and dishes. The stamped decoration was increasingly used and later only few lines appear as the ornamentation.⁴² The repertoire of decorative motifs was reduced than before and many of them were simplified and stylized.⁴³ In this section, I attempt to elucidate the transition and features of the newly introduced and declining motifs in the late fourteenth century.

(1) Decoration Motifs in Decline

As in the case of the shapes, there are also design motifs on celadon that disappeared during the late Goryeo period. The litchi, phoenix, and flower/bird/insect design motifs are often found on inlaid celadon wares until the late fourteenth century and disappeared shortly after.

[1] Litchi Design

First, it is worthwhile noting that the litchi design motif depicts a fruit not native to Korea. Litchi (*yeoji*, 荔枝) is originally from the subtropical zone in southeastern China and was introduced to Korea during the Silla period (57 BCE– 935 CE).⁴⁴ The litchi decoration conveys an image of a profile of fully

ripe pomegranates. This became one of the main design motifs to appear on inlaid celadon from the twelfth and thirteenth century.

One good datable example of the litchi decoration from the early thirteenth century can be found on the interior of the large bowl (plate 25, fig. 21) retrieved from the royal tomb of King Myeongjong, who died in 1202. This inlaid celadon, now in the collection of the National Museum, has five litchis arranged in each of five sprays. The fruits, leaves, and sprays of litchi are carved with a sharp knife first and inlaid in white. The detailed carving and realism in technique which this piece exhibits did not last and the litchi design disappeared by the late fourteenth century.

Among the large bowls unearthed from the late fourteenth century kiln site at Sadang-ri, there are few examples with stamped litchi decoration. Here, the litchi decoration is no longer the main design, but appears to be a part of the ornamental patterns (plate 26, fig 22). The litchi decoration was seldom used in early Buncheong and one can conclude that the litchi design discontinued along with demise of the Goryeo celadon.

[2] Phoenix design

Among the design motifs on celadon, we can also see a transition of the phoenix as in the case of the litchi. The phoenix was an explicit emblem of the royal family⁴⁵ along with the dragon and thus its use was reserved for high quality bowls, cups, and covered boxes. One example from the thirteenth century can be found on the interior of the large bowl with peony, scrolling vines and phoenix design motif" (plate 27, fig 23) in the collection of the Haegang Ceramics Museum. In this piece, the phoenix has a long neck and a head with crest and is depicted as if flying amid peonies and vinescroll patterns with its wings open backward and the serrated tail feathers waving in the air. The phoenix's eyes, beak, neck feathers, and spaces in between the long tail plumages are occasionally highlighted in black inlay. Here, the phoenix is not a main design but is paired with other pictorial images, such as cloud and phoenix or peonies, scrolling vines, and phoenix. This composition reflects a trend of this period which lasted until the final years of Goryeo.

By the late fourteenth century, phoenix design also became simplified along with other decorative motifs on celadon; the phoenix appears to have a bare head (without the crest) and the detail of its tail

feathers is omitted. Since the motif is a complicated one, there is no example to show stamped phoenix decorations on celadon. The large bowl with phoenix and lotus stem decoration (plate 28, fig 24) in the collection of the Haegang Ceramics Museum, exhibits the simplified phoenix design of this time. Since the degree of simplification and deformation is dramatic, it is hard to distinguish from a crane design on the contemporaneous celadon wares. Phoenix design gradually disappeared as ornamentation on celadon and Buncheong ware production did not inherit this tradition. Apparently, the phoenix design was no longer in use by the late fourteenth century.

[3] Flower, insect, and bird design

The combination of flower, insect, and bird (*hwahwejochoong-mun*, 花卉鳥蟲文) is another decorative motif that was discontinued in the late fourteenth century. This refers to an image of nameless flowers and sprays that appeared on celadons with cyclical year inscriptions. The precedent for this design can be found on a large bowl with flower, bird, and insect design (plate 29, fig 25) dated to the thirteenth century, now in the collection of the National Museum. In the interior, two kinds of flowers in bloom, a bird on the tree, and butterflies flying amid flowers are properly arranged. The delicacy and realism achieved with inlay technique on celadon are equally as stunning as flower and bird paintings.

This design motif tends toward stylization and abstraction in many aspects by the late thirteenth century. In the large bowl with flower, bird, and insect design and inscription (*gisa*) (plate 30, fig. 26), in the collection of the Haegang Ceramics Museum, the depiction of each motif is far from realistic and the stamp technique was used instead of hand carving with a sharp knife.

In contrast to other design motifs, the flower/bird/insect went through extreme simplification and abbreviation. For example, in "Large Bowl with Flower/Bird/Insect Design" (Plate 31, Fig 27), now housed in National Museum, the birds and butterflies are completely omitted and the flowers and sprays are only left for us to recognize the motif. This decorative motif disappeared by the late Goryeo period after radically transforming from representational to simplification and deformation.

New Design Motifs

Our attention turns now to study of the design motifs newly introduced on the interior and surface of vessels in the late fourteenth century. While the new shapes of this period had their origin inYuan China, the impetus forcreating new designs can be traced to domestic sources. Waves and lines appear to form the main design, while geometric designs comprise a secondary ornamental pattern.

[1] Wave design

The wave design often appears on the flat bottom of the small-sized dish that has an inward mouth rim. Its wavy line is reminiscent of the crane and cloud dots motif which appears on thirteenth century small dishes or covered boxes. Judging from its overall form and arrangement, however, this design is a new type that emerged in the late fourteenth century.

The prototype of the wave design can be seen on one of the excavated celadon wares, a dish with protruding band design (plate 32, interior of plate 17, fig 28) from kiln number 10 at Sadang-ri. The interior of the dish has a chrysanthemum design in the center and the double line encircles it. The wave lines are rendered as if fan strips are spread out. It is likely that a certain type of carving tool was used here to balance the size of each form and space in between them. This decoration evokes the image of a halo depicted on stone Buddhist sculptures or painting scrolls. Only a few examples of this design motif were unearthed in the late fourteenth century kiln sites within Daegu-myeon, in Gangjingun. A more abbreviated and smaller version (plate 33) was excavated in quantity from the fifteenth century Buncheong kiln site.⁴⁶ Thus, one can conclude that this design emerged in the late Goryeo period and became popular on Buncheong wares during the early Joseon period.

[2] Line design

Another example of newly introduced decoration is the depiction of several lines that forms the main design. Although it is not common to include this in a category of design motifs, these lines are clearly different from the basic lines devoid of inlay technique. Thus, I will classify it here as a main design.

The line design offers valuable information for studying the condition of celadon manufacture in the late Goryeo period, which tended toward mass-production and deformation. Originally, the lines

on inlaid celadon were used as an ornamentation pattern to frame each panel. Thus, it was rendered as a dividing line rather than a design motif until the early fourteenth century.

With the simplification of design motifs on inlaid celadon in the late fourteenth century, the mass-produced large bowls or dishes appear to have a set of simple lines instead of a design motif on the surface. This transition is exemplified by a large bowl with line design, (plate 5) bearing an inscribed date to the twenty-first year of Hongwu (1388),⁴⁷ excavated at the time of relocating the three-story stone pagoda of the Yeongjeonsa temple site. There are also other examples found in the late fourteenth century kiln site at Sadang-ri. Among the contemporaneous wares from the same kilns, this design more frequently appears on low-quality products rather than luxury ones. This suggests that this design on celadon was not aimed at the high class clientele.

The line design often appears on Buncheong ware during the early Joseon period. Fragments of inlaid Buncheong ware with lines design were unearthed at Dobong-dong, Dobong-gu, in Seoul; at Dosu-ri, Daecheon-myeon, Gwangju-gun, in Gyeonggi-do province; at Sajung-ri, Gunsu-myeon, Okchun-gun, in Chungcheoungbuk-do province, and so forth. In this light, we can assume that the line design enjoyed popularity at least until the early Joseon dynasty (plate 34).

[3] Geometric design

Among the new decorative motifs that appeared in the late fourteenth century, there is a type called the geometric design. Rather than representing any pictorial images, the geometric design consists of small and simple designs repetitively assembled as a group. There are many kinds of geometric forms and one of the arresting examples of inlaid celadon production at Sadang-ri from the late Goryeo period can be found in kiln number 10. Here, small circles which look like frog eggs are grouped together and arranged systematically. The small circles cross-divided fill empty space on the surface. The potter may have intended to invoke the inlay technique simply by using a stamp (plate 35).

Although slightly different, similar types of geometric designs continued to appear on Buncheong wares, as evidenced from the excavated materials from Jangcheon-ri, Sindeung-myeon, Sangcheong-gun, in Gyeongsamnam-do province (plate 36). Since both Sadang-ri and Jangcheon-ri

findings use transparent glazes and their decorations are rendered with delicacy, one can assume that these geometric forms were executed on high quality products. It is likely that the early Joseon Buncheong with stamped design had its origin in this design technique.

I have studied the new trends in inlaid celadon and impacts on later ceramic production with focus on food vessels. The characteristics of design motifs of this period can be summarized as follows:

First, the declining design motifs in the late fourteenth century consist of complicated forms which required delicate technique and skill and they were mainly intended for high quality products. The demands for mass production and simplification resulted in the demise of these decorative motifs.

Second, the new decorations of this period replaced the traditional design motifs by simplifying and modifying them. Stamped decoration was preferred to inlay technique for economic and practical reasons. Buncheong wares with stamped designs inherited this production method in the early Joseon period.

Technique

Mass production and its patterns geared toward food vessels resulted in inferior quality inlaid celadon wares in the late fourteenth century. Although these were products of social circumstances at the time, the changes in the manufacturing condition had more direct influences and visible impacts on them.

In this section, based on about forty excavated findings from the area within Daegu-myeon in Gangjin-gun, I will attempt to study technical elements such as a shape of foot, method of clay support and firing, kiln tools, colors of glazes, and condition of glazing.

A foot supports a vessel's base. Its shape is correlated with the type, size, and weight of a vessel. Generally speaking, in the case of the twelfth century food vessels, a smaller foot was formed and its profile was shaped like an upside-down triangle. Since the technique of inlaid celadon production reached its peak in the twelfth century, the potters were able to give physical stability to the vessels with a thin walled, light weight, small foot. As the celadon wares became heavier in the

bottom and the walls became thicker from the late thirteenth century, their foot also had to be modified and made to be U-shaped to support the weight. This became more apparent by the late fourteenth century when the surface of the footrim became wider; eventually the foot was shaped as wide and straight-sided.

The change in technique can be seen in the way that a foot was supported for firing. The early fourteenth century method of firing a foot placed on thick silica or sand was in decline and clay or thick sand replaced them from the middle fourteenth century.

The changes in the method of firing led to the change of foot supports during firing. From the early Goryeo period, the use of saggars⁴⁸ (*gapbal*, 匣鉢) was reserved for high-quality celadon wares. Thus it is not surprising that considerable quantities of saggars or silica supports were found in the thirteenth century kiln sites. Excavated materials from the late fourteenth century kiln sites, however, include celadon sherds with clay left on the surface (plate 37) or drum-shaped clay supports (*janggohyung dochim*, 長鼓形陶枕) (plate 38) rather than saggars or silica supports. Saggars were no longer in use by the late fourteenth century. These findings also yield the fact that stacking the vessels in multiple layers during firing⁴⁹ (*sangbeon*, 常燔) became more widely practiced for the production of bastardized celadon wares from the early Goryeo period. For the high-quality celadon wares, the method of firing involved placing each vessel individually on the kiln floor (*yebeon*, 例燔)⁵⁰ instead of the stacking method. The large bowl with peonies and vinescroll design motif and inscription (*Jeongneung*) (plate 4), an exemplar of the late fourteenth century luxury product, has debris adhered to the interior of its bottom, and it is likely that this vessel was not placed in a saggar for firing.

The inlaid celadon wares in this production method appear to be oxidized brown due to their dark-brown, dark-green, or brown glazes. The glazing thinly applied on the surface of inlaid celadon wares led to reduced bubbles and fine crackles overall. Regardless of high or low quality products, the entire body is glazed (while the surface of the foot or the inside of the foot ring is roughly wiped free of glaze).

By the late Goryeo period, the use of the potter's wheel was preferred to molding technique (plate 39) for shaping. The method of using a mold allowed the potters to achieve delicate shapes and design motifs easily, but it was a time-consuming technique. Thus, in the late Goryeo when economical production methods were much required, the molding technique was gradually abandoned. During this process, as the design in relief (plate 40) won over the inlaid decorations, the potters preferred much simpler techniques offered by using a mold, yet explored different methods to achieve the same effect.

Lastly, the demands for late Goryeo celadon production in large quantity led to the simplification of technique and difficulties in controling quality. The most bastardizing incident is when the base of a vessel is broken as the fired kiln cools, because its foot was not carved thinly enough. In order to prevent this, the bottom of a foot was pressed with a foot knife after forming on the wheel and light drying. The findings from the kiln sites in Gangjin yield the information to trace the origin of this pressed foot (plate 41) that appears in Buncheong production from the early Joseon dynasty.

V. Conclusion

Here I have attempted to analyze and elucidate the distinctive features in shape, decorations, and technique as Goryeo celadon wares tended toward massproduction and lower quality in the late fourteenth century. The new trends of this period can be summarized as follows:

First, the shapes of food vessels that disappeared during the late fourteenth century include the dish with a diagonally widened rim, the octagonal dish, and the dish with an inward rim and, among motifs, litchi, phoenix, and flower, bird, and insect designs. In terms of technique, the use of saggars and silica supports discontinued. The mass production of inlaid celadon transformed the quality, shape, decoration, and production methods to meet economic and practical ends in the late fourteenth century, and these elements did not last until the Joseon dynasty.

Second, the newly emerged trends of the late fourteenth century celadon include, among shapes, the large bowl with an outward rim, the dish with protruding band, the *jeon* dish, and the cup;

aong design motifs, waves, lines, and geometric decorations. In the method of firing, stacking the vessels in multiple layers and using clay sprinkled on the base gradually replaced earlier techniques. The trends of this period did not play a major role in Buncheong production, but their influence continued into the early Joseon period as evidenced in inlaid or carved decorations on Buncheong. The simplified and economical modes of celadon production reflect the increasing demands of this time for mass production.

The characteristics of the late Goryeo inlaid celadon are in the same vein as the contemporaneous currents of practical thinking and utility of Neo Confucianism emphasized by the Goryeo elites. In this light, it is possible to understand the transition of the late fourteenth century inlaid celadon in terms of evolutionary terms rather than decline or deterioration.

This article shed light on the noticeable features of inlaid celadon production during the late fourteenth century and attempted to give new meanings to this period, which has been regarded as a degenerating path to a decline. I leave to a separate study in the near future inquiries such as comparison of the late Goryeo inlaid celadon and Joseon Buncheong wares with inlaid and carved decorations, and the relationship between early Joseon inlaid porcelains and Joseon celadon. ³ The inscription *jungneung* on the dish with peony and vinescroll pattern refers to the tomb site of Queen Noguk Daejang (?–1365) during King Gongmin's reign.

⁴ Park Yong-un, *Goryeo sidaesa* [History of Goryeo Dynasty] vol.2, Iljisa, 1989, pp. 527–93.

⁵ lbid., pp. 581–93.

⁶ Lee Hee kwon, "Goryeo ui Gunhyunjedo wa jibang tongchi jeongchaek" [The Land System and Policy of Goryeo to Control Local Provinces], in *Goryeosa ui jemunje* [All the questions about Goryeo History], Samyeongsa, p. 257. ⁷ From the late thirteenth century to the fourteenth century, there are numerous incidents of reporting the corrupted collection of ceramics by private parties. These include

(1) Goryeosa Jeolyo [Goryeo History] vol.19, first year of King Chungryul's reign

(1279);

(2) *Goryeosa* [History of Goryeo] vol.38, twenty-fourth year of King Chungryul's reign (1298);

(3) Goryeosa [History of Goryeo) vol.38, fifth year of King Chungsuk's reign (1318);

(4) *Goryeosa* [History of Goryeo] vol.38, eleventh year of King Gongmin (1362).

⁸ Goryeosa [History of Goryeo], vol. 38, twenty-second year of King Chungryul's reign (1296).

⁹ Kitamura Hideto, "Koraijidai no 「sō」 seido ni tsuite" [About the Sō System of the Goryeo Period], *Chōsen gakuhō*, vol. 50 (1975): 53–60.

¹⁰ There is no extant historical record to study the operation of kilns during the Goryeo dynasty. However, I use the term "official kilns" meaning that a certain amount of wares produced in the ceramic bureau was collected as tribute for the royal court and state ceremonials. Strictly speaking, this was not an official kiln funded and directly controlled by the state.

¹¹ *Goryeosa* [History of Goryeo] vol. 31.

¹² It is hard to pinpoint whether *saong* refers to *saong won* or *saong bang* in this text. The *saseonseo* was in charge of supplying food for the royal court in the late Goryeo period. According to historical records, in the first year of King Taejo's reign of the Joseon dynasty, it was re-named *saong bang*. In this regard, it is likely that *saseon* was misspelled as *saong* in this text.

¹Lee, Taejin. *Hanguk sahoesa yeongu* (Korean Social History), Jisik sanupsa, 1986, pp. 107-108.

² Haegang Ceramics Museum and Gangjin Province, *Gangjin ui cheongja yoji* [Kiln Sites in Gangjin], 1992.

¹³ *Taejong sillok* (The Annals of Taejong), seventeenth year of King Taejong's reign, vol. 33 (1417). The Ministry of Finance took charge of tribute payment, census, money, and food, and it was authorized to collect vessel wares as tribute from the bureaus. If we assume that the ceramic bureau was under control of the government, it is most likely that *gongjo* was directly in charge of it.

¹⁴ *Goryeosa* [History of Goryeo] vol. 2.

¹⁵ *Songshi* [History of the Song Dynasty] vol. 487, quoted in Jin Hongsup. *Hanguk misulsa jaryo jipsung* I [The Collection of Research Materials in Korea Art History], Ilchisa, 1987, p. 602.

¹⁶ Xu Jing, *Xuanhe fengshi Gaoli tujing* (Illustrated Record of the Chinese Embassy to the Goryeo Court during the Xuanhe Era), vol. 20, quoted in *Minjok munhwa chujinhoe, Guk-yeok Goryeo dogyeong* [Translation of Illustrated Record of Goryeo in Korean], Gyeongin munhwasa, 1978, p. 602.

¹⁷ Xu Jing, vol. 22, quoted in ibid., p. 135).

¹⁸ Xu Jing, vol. 26, quoted in ibid., p. 158)

¹⁹ Choi Gun, "Buncheong sagi ui seongnip yeogun e gwanhan gochal" [The Studies on the Circumstances of

Buncheong Production], Munhwajae vol.21 (1988): 77-79.

²⁰ *Goryeosa* [History of Goryeo] vols. 25 and 30.

²¹ *Goryeosa Jeolryo* [Goryeo History] vol. 25, King Chunghye 5th year (1343).

²² Goryeosa Jeolryo [Goryeo History] vol. 25, King Chunghye 5th year (1344).

²³ *Goryeosa* [History of Goryeo] vol. 39, King Gongmin 6th year (1357).

²⁴ *Goryeosa* [History of Goryeo] vol. 39.

²⁵ *Goryeosa* [History of Goryeo] vol. 31.

²⁶ Kang Soonchun, "Goryeo sidae cheongja maebyeong ui yeongu" [The Studies of Goryeo Celadon *Maebyeong* (Plum Vase)], MA thesis, Hongik University, 1985, pp. 81–83.

²⁷ Chung Yangmo, "Kōrai tōji no yoji to shutsudohin" [The Excavated Goryeo Celadon from the Kiln Site], in *Kōrai* [Goryeo], Sekai tōji zenshū [World Ceramics Collection] vol. 18, Tokyo, 1979, p. 226.

²⁸ *Goryeosa* [History of Goryeo] vol. 39.

²⁹ Large quantities of celadon with cyclical year inscriptions are extant, but the dates of these celadons have been the subject of scholarly debates. Choe Sun-u, Chung Yangmo, and Choi Gun argued that most celadons inscribed with cyclical dates from *gisa* to *imo* were produced in the late thirteenth century and those with *junghae* can be dated in the middle fourteenth century. However, according to Gao Yuxie and Yun Yong-i, all eight cyclical years are products of the early and middle fourteenth century.

³⁰ To date, eight cyclical dates have been identified on celadon: *gisa* (己巳), *gyeongo* (庚午), *imsin* (壬申), *gyeyu* (癸酉), *gapsul* (甲戌), *imo* (壬午), *ulmi* (乙未), *junghae* (丁亥).

³¹ Nomori Ken, *Kōrai tōji no kenkyū* [Studies of Goryeo Celadon], Seikansha, 1944, 96–97.

³² It makes a big difference in terms of shape when plates have a wide recessed center. While some earlier plates had a center angled above the base, its form was established as decoration from the time when plates with cyclical year began to be produced. However, since the plate inscribed with *jungneung*, the diameter of the angled center became wider than that of the foot ring. The size of this plate's angled center, 7.2 cm, is much bigger than the diameter of the foot ring.

³³ There are two different views on identifying this design motif; one argues that it is a lotus and vinescroll pattern (see Kang Kyung-sook, *Hanguk dojasa* [History of Korean Ceramics], Ilchisa, 1990, pp. 208–209) while the other identifies it as a peony and vinescroll motif (see Chung Yangmo, "Ganjimyeong ul tonghae bon goryeo hugi sanggam cheongja ui pyeonnyeon" [Chronology of Late Goryeo Inlaid Celadon: Case Study of Celadons with Cyclical Date], p. 109 and Yun Yong-I, "Ganjimyeong sanggam cheongja ui jejak sidae e gwanhayeo" [The Time of Production of Inlaid Celadon with Cyclical Date], p.118. Both are from *Goryeo sidae hugi ganjimyeong sanggam cheongja* [The Late Goryeo Inlaid Celadon with Cyclical Date].

³⁴ Nomori Ken, *Kōrai tōjo no kenkyū* [Studies of Goryeo Celadon], p. 34.

³⁵ This has also been dated 1329.

³⁶ Some scholars have dated this 1348.

³⁷ Jeonnam National University Museum, *Yeongjeonsa III balgul josa bogoseo* [Report of Yeongjeonsa Temple Excavation and Investigation], 1990, pp. 18–22, 47–9.

³⁸ Chung Yangmo, "Sinan haejeo munnul ul tonghae bon 14 segi dong asia ui doja munhwa" [Ceramic Culture in 14th Century East Asia: Discovery of Sinan Shipwreck], *Jindan hakbo* vols. 71-72 (1991): 382–94.

³⁹ Haegang Ceramics Museum and Gangjin Province, *Gangjin ui cheongja yoji* [Kiln Sites in Gangjin], 1992, p. 289.
⁴⁰ Chung Yangmo, "Sin-an haejeo dojagi ui pyeonnyeonjuk gochal" [Chronology of Ceramics discovered in Sinan Shipwreck], *Sin-an haejeo munmul gukje haksul daehoe juje balpyo* (Proceedings of the International Conference on Cultural Relics Found off Sinan Coast), National Museum of Korea, 1977, p. 61.

⁴¹ It is also called *jongji*.

⁴² Choe Sun-u, "Kōrai tōji no hennen" [The Chronology of Goryeo Celadons], *Kōrai* [Goryeo], Sekai tōji zenshū [Catalogue of World's Ceramics] vol.18, Shōgakkan, 1978, pp. 131-78.

⁴³ Some decorations had already disappeared in the late thirteenth century, such as the chrysanthemum, bamboo, floral scrollwork, plum, parrot, person in a house, and boy motifs. The designs that continued to appear in the fourteenth century are the litchi, phoenix, chrysanthemum spray, peony spray, leaf, crane and cloud, crane and cloud dots, swastika, *ruyi*-head, lotus petal, beaded, willow, reed, duck, geese, fish, and peony scroll motifs as well as geometric and transformed decorations.

⁴⁴ In *Yeonjibo* (Pedigree of Litchi), Chae Yang of the Song dynasty quoted the anthology written by Su Shi, a Song dynasty literati, regarding this. Hwan Gwan-jung, "Song, yeomu yeokyeo munmul gyoryu" [Cultural Exchange between Song and Goryeo], *Chindan hakbo* vols.71-72, 1991: 336–347.

⁴⁵ *Goryeosa Jeolryo* [Goryeo History] vol.1.

⁴⁶ Kang Kyung-sook, *Buncheong sagi yeongu* [Research on Buncheong Ware], p. 372 and plates 113–114.

⁴⁷ Ibid., chapter 3.

⁴⁸ Seungjeongwon ilgi [The Daily Records of the Kings of Joseon Dynasty] vol.262, King Sukjong's 3rd year,

llseongrok [The Diaries of the Joseon Kings] vol. 544.

⁴⁹ *Gwanghaegun ilgi* [The Diaries of King Gwanghae] vol.102, *Ilseongrok* [The Diaries of the Joseon Kings] vol. 542.

⁵⁰ *Ilseongrok* [The Diaries of the Joseon Kings].