Formation of the Silla and Gaya Ceramic Styles

Lee Sungjoo
Professor, Kyungpook National University

Introduction

During the Three Kingdoms Period, two distinct pottery styles, "Silla ceramic style" and "Gaya ceramic style," were prevalent in the southeast region of Korea, namely Yeongnam region which includes the present-day provinces of North and South Gyeongsang. For approximately 150 years, these two styles were geographically exclusive, separated by the Nakdong River. The Gaya ceramic style has been defined according to the stylistic characteristics of pottery found within the territory of the Gaya confederacy, but it must be noted that this style was not homogenous throughout the region. Indeed, significant stylistic differences can be observed between the pottery of Dae Gaya, Ara Gaya, and So Gaya (Park Seunggyu 1998). Such differences can also be observed (albeit to a lesser extent) between the pottery of the different areas that commonly adopted the Silla ceramic style (Lee Sungjoo 1993). "Changnyeong pottery," "Uiseong pottery," and "Seongju pottery" are examples of this. In other words, both Silla and Gaya ceramic styles comprised several constituent regional styles.

The ceramic assemblages of the primary pottery styles (i.e., Silla and Gaya ceramic styles) are clearly different in nature, not only in terms of the types of vessels, but also in the form of vessels of the same type. However, within the individual regional styles, the types of vessel and the standard form of each vessel type are identical. In fact, the styles can only be distinguished by minute stylistic differences. For example, the Changnyeong and Uiseong styles are distinguished by subtle differences in curvature and other slight variations in form.

In addition to geographical division, another interesting topic of study in this area is the change in ceramic style over time. Within the ceramic assemblage of any of the individual styles, small sequential changes can be seen in the vessel types of a specific pottery style, be it one of the two primary styles or a regional style. Hence, examinations of each vessel type according to region have allowed for the identification of regular patterns of change over time, making it possible to establish an extremely detailed chronological framework for both the Silla- and Gaya-style pottery of the Three Kingdoms Period, in which each century is divided into four phases.

However, previous studies have rarely undertaken a conceptual analysis of either of the primary ceramic styles, nor have they given thought to the potters responsible for their creation, or to the nature of the pottery production community. Studies have focused, rather, on attempts to associate certain ceramic styles and stylistic changes with political groups and historical events. But we must bear in mind that style emerges from the fingertips of the potter. As such, any discussion of the similarities and differences in ceramic styles must first recognize that style cannot be separated from the ideas, choices, and physical actions of the potter during the production process.

This paper aims to identify the stylistic differences between the Silla and Gaya pottery styles of the fifth to early sixth century, and to trace the processes that led to the establishment of each of these ceramic

styles. I also examine the reasons for the different degrees of variation in vessel form, both spatially and temporally, as well as the way in which such differences may manifest themselves in both the inclusive and regional ceramic styles. In addition, I explore why changes in ceramic style happened so slowly, in a sequential and regular manner, thereby making it possible to formulate a detailed chronological scheme consisting of 25-year phases for the pottery of a given region. Ultimately, this paper may be regarded as another study on the distribution and transition of the Silla and Gaya ceramic styles. However, its significance lies in the emphasis of two key points: ceramic style should be regarded foremost as the result of human practice and, as such, the technological choices made by the potter must also be examined.

Presenting the Problem

The history of research on Gaya and Silla pottery can be divided into three distinct phases. Studies from the first phase (1960s to 1970s) aimed to define Silla and Gaya-style pottery and to identify the regional styles associated with each of the two primary styles. In the absence of detailed chronological schemes for the pottery of either region, research focused mainly on roughly summarizing and describing the differences between them. Studies of the second phase, mostly carried out in the 1980s, attempted to construct a systematic chronology for the ceramics of the regional styles. Also in this phase, interpretations that associated sudden changes in ceramic style with political events also began to be presented. A key example of this is the suggestion that the emergence of the Silla ceramic style, and its differentiation from the Gaya ceramic style, in the early fifth century was due to the southern campaigns of Goguryeo's King Gwanggaeto. In the third phase, beginning in the 1990s, the formation and development of the polities of Silla and Gaya emerged as a key topic of research. Studies of this third phase attempted to use the spatial distribution of ceramic styles to infer the territorial boundaries of these polities.

It is indeed highly likely that the spatial distribution of ceramic styles coincided with the territorial boundaries of political units in the Three Kingdoms Period. As noted by Lee Heejoon (1995), in prehistoric times, the area of distribution for any single ceramic style may have been occupied by several different social groups, but the political integration of the ensuing historical periods resulted in the political and economic control of the production of goods within each region. Therefore, it is reasonable to expect that the material culture of each regional group was characterized by a distinctive style. In other words, we may expect the territory of Silla to coincide with the spatial distribution of Silla-style pottery, and the territory of Ara Gaya to coincide with the spatial distribution of Ara Gaya-style pottery. Therefore, the utility of associating the spatial distribution of ceramic styles with the territories of political units must be acknowledged. However, no study has yet addressed the validity of this assertion.

I argue that, at present, the field lacks a consideration of ceramic style itself, as well as why it emerges and changes. Ceramic style can be understood as comprising the external characteristics of a ceramic vessel, which inevitably result from the manufacturing practices of the potter. Hence, one way to explain the emergence of any ceramic style is to ask why potters adopted certain actions during the manufacture of ceramics. Indeed, ceramic vessels were "products" manufactured by individuals, which means that their production was structured by the knowledge and techniques of the potters, as well as the available equipment and infrastructure, and the social needs or constraints of the time. In fact, I have proposed that, in the study of ceramics, such factors may be more important than identifying the expansion of political units or the historical events that pottery has been seen to reflect (Lee Sungjoo 2003; 2004). Therefore, we must try to reconstruct the processes by which different styles of pottery were produced, and investigate how those processes were affected by technological choices made by the potter (Lee Sungjoo 2003).

Theoretical Premises for the Study of Ceramic Style

Technology and Ceramic Style

Dojil togi (陶質土器, "stoneware-like pottery")[1] of

1 *Dojil* ware refers to a type of pottery which was an advanced and transitional stage of ceramics from pottery to porcelain.

Silla and Gaya was produced in large numbers using a fast potter's wheel. It appears that the seven or eight most commonly used types of vessels were funerary or utilitarian vessels. In other words, it cannot be said that each vessel was produced according to a deliberate plan or purpose; rather, once the standard form of a given vessel type was developed and the procedures involved in its production were established, the vessels were repetitively produced by skilled potters who were familiar with those procedures and in particular with the use of the fast potter's wheel.

Of the five related components of techniques proposed by Pierre Lemonnier (Lemonnier 1992: 5), "gesture" may be considered the most significant factor in determining the outer appearance of pottery produced in such numbers. A similar concept would be "motor habit," as proposed by Arnold (1985: 146-9), which is unconscious, fixed, and automatic. Therefore, if style is to be defined in terms of the outer appearance of ceramic vessels, which derives from the above components of technique, then in the case of production of ceramics in large quantity, style may be understood as unintentional, and resulting from the potential scope of actions that the potter could have adopted during manufacture. In consideration of Sackett's discussion of style, which emphasized the passive nature of style and distinguished between active and passive style (Sackett 1992), the Silla and Gaya ceramic styles may be regarded as having been highly passive in nature.

Since the advent of post-processual archaeology, various discussions have taken place on the social role and meaning of style, and a common theme of these discussions has been the duality of style. More specifically, it is maintained that, if style has a meaning or function, then that meaning or function will be of a dual nature. For example, Wiessner (1983), in studying different types of spearheads in southern Africa, distinguished between "emblemic style" (a symbolic representation of group affiliation) and "assertive style" (which carries information about the individual identity of those who used or produced material culture). Macdonald (1990) later referred to the expression of group identity internalized within a social group as "protocol style" and the exaggerated emphasis of individual identity as "panache style." As will be later discussed in detail, Costin adopted a similar perspective and distinguished between intentional and mechanical attributes (Costin and Hagstrum 1995).

Although originally produced as funerary vessels, most of the Silla- and Gaya-style pottery discussed in this paper are similar in nature to utilitarian vessels as regards their appearance, but some vessels with special decoration have been found in large-scale tombs. For the potter, the use of such decoration not only represented an adherence to the internalized rules of the group regarding the treatment of the deceased, but was also an expression of individual intention and identity. In this sense, Silla- and Gaya-style pottery was imbued with a dual nature. However, given the repetitive nature of the production of these vessels, it is difficult to assert that the styles were meant to express either the intentions of the potter or the symbolic aspect of funerary rituals. Indeed, the minute differences in outer appearance that form the basis of stylistic analyses of Silla- and Gaya-style pottery are the result of varying techniques in forming the vessels. Thus, in ceramics, style is determined in large part by the manufacturing techniques.

Lechtman (1997) was the first in the field to argue that artifact style was contingent upon production technology, when she proposed that distinct methods of metallurgy and weaving that developed in the Andes shared a common stylistic mode, and that this technological style was an expression of social ideology or cultural ideas, while at the same time extending beyond simple expression and being involved in the formation and practice of those ideas. Thus, she stressed an understanding of style as being heavily associated with the symbolic and ideological ideas of the society to which the craftsmen belonged.

Lechtman's approach towards technology and style provided a theoretical model for later discussions on the social factors of technological development and the role of technology in a given social context (e.g. Dobres 2000). If ceramic styles are defined according to the external characteristics of pottery, then it may also be said that those styles are contin-

Compared to the previous pottery, it used more refined clay, and was fired at a higher temperature. It was fired in reduction firing by limiting the supply of air. Generally it has a grey color and tends to have an unintended glaze. *Dojil* ware would have been produced by a potter skilled in the difficult and meticulous forming techniques of wheel-throwing and paddling.

gent upon forming technology. This is especially true of Silla- and Gaya-style pottery, because, as wares produced in great numbers, the outer appearance of these ceramic vessels was determined solely and automatically by forming practices. In this sense, both styles were created by the familiar bodily practices involved in quantity production, and were expressed through the technological developments and refinements that emerged in association with social needs and consensus.

Transmission of the Pottery Production System and Technology

In order to explain how the Silla and Gaya ceramic styles were formed, we need to consider how the outer appearance and dimensions of the vessels became standardized. As discussed, the style of Silla and Gaya pottery can be seen as a direct expression of production practices that emerged through the repetitive actions of the potters. Both styles can be defined through an examination of common vessel types found in Silla and Gaya burial grounds. For example, the ceramic assemblage of both the Gyeongsan and Uiseong pottery styles are composed of the same types of vessels, so a detailed comparison of the forms of each vessel type is required to establish their respective styles. Actually, it is easier to define regional styles if they become standardized, because such styles show little variation over time. Thus, the ceramic types that were produced in numbers can be more easily associated with a specific ceramic style.

In exploring the issue of standardization, Costin and Hagstrum (1995) first distinguished between "intentional" and "mechanical" attributes, just as Sackett had distinguished between passive and assertive style. In this scheme, intentional attributes are those that emerge from the deliberate choices of the potter, whereas mechanical attributes are the result of unconscious production practices, repetitive gestures, efficiency and collective habits. Ceramic archaeologists have long focused on the relationship between production specialization and standardization, as well as the quality of the forming process (van der Leeuw 1977; Rice 1981).

However, product specialization need not necessarily coincide with product standardization, such as when a craftsman becomes more specialized by spending a long time producing a limited range of ceramic vessels that require certain intentional techniques. Certainly, standardization in ceramic vessels may be achieved through the unintentional and quasi-mechanical manufacturing practices of producing in large numbers, but standardization and specialization will not always directly correlate. Other factors must be considered, as demonstrated by several studies that have addressed the issue of standardization in terms of social demand and the volume of production, the organization of the production system, and the labor input and work experience of the potter (Hagstrum 1985; Benco 1986; Rice 1981; Costin and Hagstrum 1995).

When potters are not required to be inventive or to apply creative forms and decorations in the production of a type of ceramic vessel, then they will typically follow the procedure they have learned and inherited from previous generations. It is such learned habits and motions of production that lead to the formation of technological traditions (Gosselain 1998; Dietler and Herbich 1998; Stark 1999). Even potters who have the opportunity to observe more advanced production techniques will often be reluctant to implement those techniques, opting instead to adhere to the previously learned techniques that they are most comfortable with. Of course, skilled craftsmen may still attempt some innovations, usually when traditional technological elements are selectively merged with new technological elements (Lee Sungjoo 2008). However, so long as there is a demand for products manufactured according to the traditional technological system, that system will be maintained.

Evidence from kiln sites recently excavated in the Yeongnam region demonstrates that craft workshops could be maintained for up to a century. Excavations have revealed that pottery, primarily funerary vessels, was manufactured in large quantities at kilns dating to around the fifth century CE. At that time, funerary practices involved depositing ceramic vessels in burials, so the pottery production system and its technology would have been well maintained. The regional pottery production system that supplied the products to any given local area would have been focused around a single pottery workshop or a cluster of workshops. Such workshops would have been maintained by several generations of craftsmen, and production skills would have been transmitted from one generation to the next, resulting in a technological tradition. This process helps to explain how the

regional styles of Silla and Gaya pottery would have been established, and why they changed so gradually over time. This phenomenon may be understood to constitute a "regional tradition," which was established as skills were transmitted within a given production system. Thus, the central workshop or workshop cluster of a region served as the primary mechanism for maintaining and transmitting the pottery technology of the regional styles.

Foundations for the Formation of Ceramic Styles

Importance of Funerary Vessels

The main vessel types of Silla- and Gaya-style pottery were used on a large scale during funerary rituals in the Yeongnam region during the Three Kingdoms Period. These vessel types were established following the formalization of food offering rituals adopted by Jinhan and Byunhan polities in the wooden-chamber tombs of the late second century. The use of ceramic vessels in such ceremonies led to the emergence of various types of funerary vessels, and those funerary vessels form the core of the Silla- and Gaya-style pottery assemblage.

Chronological analyses of ceramic artifacts found in the tombs of the Three Kingdoms Period in the Yeongnam region (Lee Sungjoo 1993) indicate that the main Silla-style vessel types emerged around the early fifth century in Gyeongju, which was then the center of Silla. It is generally accepted that the standard forms and manufacturing processes were established in Gyeongju around Wooden Chamber phases 3 and 4, represented by Hwangnam-dong Tomb 109. In the early fifth century, the Silla Kingdom was no longer a minor polity based solely in Gyeongju. By that time, Silla had expanded to encompass the wide area east of the Nakdong River, loosely consolidating the smaller polities of the region into an early state (Lee Heejoon 1996). The areas not included in this "Silla region" are collectively referred to as the "Gaya region," just as the Gaya pottery style is a subsidiary classification referring to a ceramic style that is *not* the Silla pottery style. Hence, both Gaya territory and Gaya ceramic style can only be defined vis-à-vis Silla state formation.

The process by which Silla vessel types came to be formalized is closely associated with the development of the use of ceramic vessels in Silla funerary rituals. From the late fourth century, ceremonies developed that involved the deposition of a standard selection of vessel types within a wooden chamber in a stone mound tomb. Such ritual ceremonies were important ideological tools for maintaining and legitimizing the power of the central elite of Silla, which was still in the early stages of state formation. The leaders of the regional polities that were consolidated by Silla still maintained their autonomy in some aspects, and they also adopted the Silla method of tomb construction, leading to the construction

Fig. 1. Mounted cups as funerary vessels produced in large numbers in the 6th century in Gyeongsan. *Messages of Apdokguk Pottery* (압독국과의 통신: 토기의 메시지). (Gyeongsan: Yeungnam University Museum, 2006).

Fig. 2. Long-necked jars as funerary vessels produced in large numbers in the 6th century in Gyeongsan. *Messages of Apdokguk Pottery* (압독국과의 통신: 토기의 메시지). (Gyeongsan: Yeungnam University Museum, 2006).

Fig. 3. Deposition of ceramic vessels in funerary rituals, Seongsan-dong Tomb 38 in Seongju. *Seongsan-dong Tombs in Seongju* (성주성산동고분군). (Daegu: Keimyung University Museum, 2006).

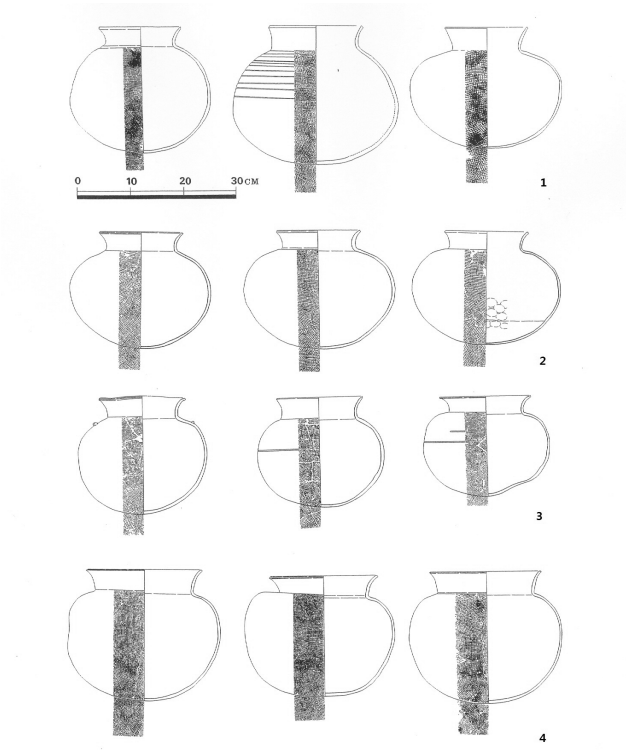

Fig. 4. *Chaîne opératoire* of the manufacture of short-necked jars with lattice-shaped paddled patterns over a 100-year period, beginning with (1) Yangdong-ri Tomb 235 (late third century), continuing with (2) Daeseong-dong Tomb 29 (late third century) and (3) Daeseong-dong Tomb 47 (late fourth century), and ending with (4) Bokcheon-dong Tomb 54 (late fourth century).

of large tombs in the central areas of Gyeongsan, Busan, Changnyeong, Uisung, and Seonsan. The Silla funerary rituals involving the deposition of ceramic vessels (Figs 1, 2 and 3) were also transmitted to the various local groups under Silla rule. This diffusion of funerary rituals involving ceramic vessels and the accompanying spread of the vessel types used in those rituals provided the foundations for the establishment of the Silla ceramic style.

Technological Foundations for the Formation of Style

The production of pottery prior to the early Proto-Three Kingdoms Period was based on the coil-building technique. The earliest evidence of the expert use of the potter's wheel and regular paddling to form ceramic vessels can be seen in the paddled short-necked jars of the Gimhae area, which date to the late third century CE. At present, the short-necked jars deposited as grave goods at Yangdong-ri Tomb 235 in Gimhae may be regarded as the earliest examples of wheel-thrown pottery produced in large quantity in the Korean peninsula. After this, new techniques appeared, such as the use of a rapid rotary device to finish the vessel surface and shape the vessel rim, and the use of paddling to form a rounded base. Such techniques were applied to approximately 50 short-necked jars from Daeseong-dong Tomb 29 (late third century), and can also be observed in the multiple short-necked jars deposited as grave goods in Daeseong-dong Tomb 47 and Bokcheon-dong Tomb 54 (late fourth century). These can be regarded as the earliest examples of techniques for the production of standard pottery vessels being transmitted over more than a century within a given production system (Fig. 4).

Until now, the adoption of high firing temperatures is considered as the primary factor explaining the emergence of *dojil* ware. But while high-temperature firing may indeed be regarded as a key technological innovation that enhanced the quality of ceramic vessels, it did little to contribute to the establishment of the large quantity production system needed to fulfill the social demand for pottery. Therefore, among the technological innovations represented by *dojil* ware, it may be argued that the forming method, rather than high-temperature firing, played a greater role in terms of the social aspect of pottery production (Lee Sungjoo 2008).

In considering the establishment of the *dojil* ware

Fig. 5. *Dojil* ware: high-fired short-necked jar from the early stage, not thrown on the wheel, excavated from Simcheon-ri Wooden-Chamber Tomb 50, Chilgok-gun, North Gyeongsang Province. (Author's photograph).

Fig. 6. *Dojil* ware: detail of high-fired short-necked jar, showing clear lines from being thrown on the wheel, excavated from Dohang-ri Wooden-Chamber Tomb 33 in Haman. (Author's photograph).

Fig. 7. *Dojil* ware: high-fired vessel, thrown on the wheel, excavated from Simcheon-ri Wooden-Chamber Tomb 50, Chilgok-gun, North Gyeongsang Province. (Author's photograph).

production system, the use of the fast potter's wheel, the well organized forming procedures, and the mechanical and repetitive use of skillful paddling have not been afforded much significance. Another fact that has been somewhat neglected is that, of all of the advances represented by *Dojil* ware, only high-temperature firing was implemented in the earliest phase (the late third century through the early fourth century) of its production (Fig. 5); only later did potters become aware of the technological innovation of throwing on a potter's wheel (Fig. 6). At first, the specialist producers of *dojil* ware focused only on the production of short-necked jars. However, during the next generation (around the mid fourth century), the *dojil* ware specialists of the Haman and Gimhae regions began to apply the efficient method of throwing on the wheel to other vessel types (Fig. 7). By the following generation, all vessel types were being produced as *dojil* ware. The development of *dojil* ware can therefore be understood to represent the establishment and organization of a system that could cope with the social demand for pottery within a given area, in terms of both the large number of vessels and the number of vessel types. Furthermore, it was through this system that the new production technology was transmitted over succeeding generations.

The ceramic assemblage of the Yeongnam region in the fourth century is generally referred to as "archaic *dojil* ware." In this period, it is difficult to definitively distinguish between the regional ceramic styles. However, archaic *dojil* ware vessels can be cat-

egorized into three phases, and these phases help to distinguish the regional ceramic styles. More specifically, the fourth-century distribution of ceramic styles varied according to differences in the geographical boundaries of the production and distribution system, whereas in the fifth century, the distribution of ceramic styles was determined by the geographical scope of political consolidation.

In Phase I of archaic *dojil* ware, large-scale specialized systems for producing pottery were found only in the areas of Haman and Gimhae. In Phase II also, only Haman and Gimhae had noticeably developed systems for producing *dojil* ware. Those two areas were also the only regions where a variety of vessel types were used as grave goods. In the inland basin areas, such as Gyeongju and Daegu, a very limited range of vessel types—mainly short-necked jars—can be observed. In particular, in Gyeongju, the range of vessel types of *dojil* ware remained extremely limited until Phase III.

In Phase III, however, a production system that used the forming method of *dojil* ware to manufacture various vessel types was established in the inland areas that link the Geumho River and the middle and lower reaches of the Nakdong River, albeit with a certain time lapse. The system of producing archaic *dojil* ware gradually and continuously spread from the southeastern coastal areas, where it was first established, to the other areas of the Yeongnam region. This transmission took place from Phase I, but the transition and adoption of the technology and production system of *dojil* ware that took place in Phase III is the most significant, because it was the technology and production system of this phase that had the greatest influence on the Silla and Gaya ceramic styles.

Hence, a mode of manufacture able to satisfy the social demands of a given region was set up within the production system, and it appears that the transmission of technology between generations of specialist potters began to take place. At the time, the Yeongnam region was effectively divided according to the presence or absence of this Phase III *dojil* ware technology and production system. This notable regional imbalance in the nature of the production system and ceramic technology may be the foundation for the differences in ceramic style that later appeared. In areas with skilled potters who were familiar with the process of making each vessel type, it was easier to copy newly-introduced types of vessels. However, in areas that lacked such skilled potters, the new vessel types could only be awkwardly imitated.

Regional Variation and Diachronic Change in Pottery Style

Uneven Dissemination of Ceramic Technology and Regional Variations in Style

From its earliest phase, the vessel types of Silla-style pottery, such as the mounted cup and long-necked jar, first emerged in Gyeongju and subsequently spread to the surrounding areas. Researchers have long regarded this phenomenon to represent the spread of the Silla pottery style. While this diffusion process was marked by some regional variations, it always originated in Gyeongju. Silla-style pottery made in Gyeongju was first distributed to the surrounding areas sometime around the early fifth century. The questions of why this distribution began in the early fifth century and how it took place require future consideration. One possibility is that the vessel types spread as the subsidiary political units of the kingdom adopted the funerary rituals of central Silla during the early stages of state formation.

Around the same time, in the early fifth century, Silla pottery produced in Gyeongju was transmitted to the surrounding areas (i.e., Busan, Gyeongsan, Sangju, Gangneung, etc.). Thus, the spread of the Silla ceramic style in these areas may have been facilitated by the imitation of this newly-introduced pottery—Silla-style mounted cups and long-necked jars, in particular.

At the Bokcheon-dong burial ground in Busan, pottery with Silla stylistic attributes cannot be observed in archaeological contexts dated prior to the phase represented by Tombs 21 and 22. Thus, it is from the Tombs 21 and 22 phase that Silla-style pottery appears. Notably, some of these vessels came from Gyeongju, while others were locally-produced copies, so it seems that Silla pottery was being copied from the time it was introduced. In the Busan area, a well-developed system for producing *dojil* ware and high-quality forming techniques had been in existence since the fourth century CE. Thereafter, using the throwing methods of *dojil* ware, which utilized the fast potter's wheel, Busan potters were

able to produce a wide range of vessel types, such as the mounted cup, long-necked jar, cylindrical vessel stand, and beaker-shaped vessel stand.

Bokcheon-dong Tombs 93 and 95, which date to the period prior to the introduction of Silla-style pottery, illustrate that all types of *dojil* ware vessels were being skillfully manufactured from an early period, which suggests that potters of the time had the technological ability to produce any type of ceramic vessel. Following the introduction of Silla-style vessel types in the Tombs 21 and 22 phase, the indigenous archaic *dojil* ware and the newly introduced Silla-style pottery were used in conjunction with pottery that combined the production procedures of both styles. The complexity of this ceramic assemblage indicates that Silla pottery vessels made in Gyeongju were successfully imitated upon their introduction, with the habitual actions of the indigenous production procedures being seamlessly applied to their manufacture. As a result, by the mid-fifth century (Bokcheon-dong Tombs 10 and 11 phase), all of the ceramics deposited in the tombs of the Bokcheon-dong burial ground consisted solely of Silla-style vessels.

In the Gyeongsan area, various *dojil* ware vessel types, demonstrating the skilful application of forming techniques, were found at Tombs 5 and 6 of Section G of the Imdang-dong site, dated to the phase just prior to the introduction of Silla-style pottery. It can be assumed that Silla-style pottery from Gyeongju was introduced and imitated in the following phase, but archaeological evidence of this has yet to be found. Ceramic vessels imitating Silla mounted cups and long-necked jars produced in Gyeongju have been found in contexts dating to as early as the early wooden chamber tombs of the Nobyeon-dong burial ground, which were constructed in the first half of the fifth century. It appears that, as in Busan, Gyeongsan potters were able to manufacture the various vessel types of Silla-style pottery with no technological constraints. Even vessels with complex forms, such as mounted cups and long-necked jars with stands, were manufactured as standardized products by potters who were evidently familiar with the production procedure.

In contrast, the potters of the Sangju area do not appear to have been familiar with the forming procedures needed to produce the various types of *dojil* ware. Although vessel types such as the mounted cup and mug-shaped cup have been found at the Cheong-ri burial ground in Sangju in archaeological contexts dating to the phase just prior to the introduction of Silla-style pottery, it is not clear whether these new vessel types had been indigenously developed in the Sangju area. At the Sinheung-ri burial ground, located in the Haman Basin, it is possible to observe that, prior to the introduction of Silla style pottery, *dojil* ware vessels used as grave goods consisted of only a limited number of vessel types. Therefore, the *dojil* ware production system of this area apparently lacked the necessary technology for the mechanical forming of various vessel types, and so pottery production around Sangju focused on the short-necked jar with paddled pattern.

Silla-style pottery began to be deposited in the burials of the Sangju area from the early fifth century. The Cheong-ri burial ground included locally made vessels that imitated Silla-style pottery from Gyeongju. At the Sinheung-ri burial ground, however, although the grave goods included Silla-style pottery that had been imported from Gyeongju, no local copies were discovered, which indicates that local groups reacted differently to Silla-style pottery, according to whether or not they had adopted the Silla funerary practices involving ceramic deposition.

The Cheong-ri burial ground in Sangju yielded indigenous copies of the Silla-style vessel types that had been introduced in the early fifth century, thereby confirming that such production was occurring from the late fifth century. However, at that time, the procedure for manufacturing each of the vessel types was not well organized, and the habitual forming technique had not been established, so the vessels were not yet standardized in terms of dimensions and detailed form. From a chronological perspective, it is difficult to identify any formal characteristics that were maintained over a period of time, since the production technology for each vessel type was not being passed on through generations of potters. Therefore, a regional style cannot be established for the pottery of this area. Because of the low standard of forming technology used in the area, the Silla-style pottery of Sangju shows notable variations from the pottery of the Silla center, and these variations in form make it difficult to classify a regional style.

Interestingly, the grave goods of the Sinheung-ri burial ground in Sangju consist only of short-necked jars, long-necked jars, and beaker-shaped vessels, which demonstrates that the Silla-style vessel types

introduced into this area were not necessarily copied. This might be interpreted as a rejection of the Silla ceramic style. Even as the funerary rituals of the fourth century continued strongly into the early sixth century, mounted cups, long-necked jars with band-shaped handles, and mug-shaped cups were neither used nor copied. Therefore, the case of the Sinheung-ri burial ground indicates that the mere introduction of Silla-style vessel types did not necessitate the adoption of the Silla ceramic style, if the Silla funerary rituals had not yet been adopted.

Conditions for the Establishment and Continuation of Regional Styles

For approximately 150 years, from the early fifth to the mid-sixth century, the Silla and Gaya ceramic styles existed side by side, divided by the Nakdong River, the boundary between the Gaya confederacy and the Silla Kingdom. Each of the regional polities on either side of the river maintained a distinctive ceramic style for a certain amount of time, which I have been referring to as the "regional styles." Thus, it is possible to construct detailed regional chronologies by examining the pottery assemblage of each regional style. There are, of course, some areas where no regional styles can be identified, even though Silla- or Gaya-style pottery was used. In addition, differences exist in the point of emergence and duration the lesser regional styles.

Based on the above, the process by which the Silla ceramic style was adopted in areas where the regional styles were also established and maintained may have taken place in the following way:

1. Vessel types of central Silla pottery were introduced from Gyeongju.
2. Indigenous potters in the regions imitated the style of these vessels.
3. Conventional techniques for producing certain vessel types emerged, allowing for the establishment of the regional style.
4. These conventional techniques were transmitted from one generation to the next, maintaining the regional style.
5. Eventually, new manufacturing procedures emerged, leading to the demise of the regional style.

For example, amongst the areas that adopted the Silla ceramic style, regional styles can be identified for Changnyeong, Gimhae/Busan, Uisung, and Gyeongsan. Even in these areas, however, the regional styles can only be observed for a limited number of vessel types, such as the mounted cup, long-necked jar, and long-necked jar with band-shaped handles. In Gimhae and Busan, the regional style appeared at an early date, in the mid-fifth century. In Gyeongsan, the regional style appeared around the late fifth or early sixth century, and existed for less than a century. On the other hand, no regional styles can be identified from the pottery found at the Gaya burial ground at Bonggye-ri in Habcheon or the Silla burial ground at Cheong-ri in Sangju, even though those cemeteries were used for a century or more. For example, although a number of sub-types of the mounted cup were in existence at the same time, none of these sub-types were made according to a shared set of habitual actions. A regional type cannot be established if the number of samples representing a vessel type is too small, nor can it be considered to have been maintained if no habitual techniques for production are transmitted between generations of potters (Lee Sungjoo 2004).

One of the places where the establishment and continuation of the regional style can clearly be seen—to the extent that it may be regarded as a representative example—is the Gyeongsan area (Fig. 8). The regional style of Gyeongsan had a unique, though relatively short, existence, being found only in the sixth century. The Gyeongsan-style of pottery can be used to formulate a chronological framework, consisting of four 25-year phases. Interestingly, this regional ceramic style was not established around the time that Silla-style pottery was first introduced into the Gyeongsan area. In Gyeongsan, certain Silla-style vessel types, such as the mounted cup and long-necked jar with band-shaped handles, were imitated by local potters, while pottery from Gyeongju and other areas was also introduced into the region, as can be seen from the Imdang-dong and Siji-dong burial grounds (Fig. 9) (Kim Daehwan 2006). While some locally produced ceramic vessels have been found, they were not produced in large numbers via habitual production techniques, and thus cannot form the basis for a regional style. It was only in the late fifth century that the regional style emerged (in the mounted cup with lid and long-necked jar with band-shaped handles), in coincidence with a sud-

den increase in the construction of small-scale burials at the sites of Imdang-dong and Nobyeon-Siji-Uksu-dong. Each of these burials included at least 4-5 mounted dishes and 2-3 long-necked jars with band-shaped handles, indicating that the demand for such vessel types had increased dramatically. Indeed, at that time, there was a significant increase in the use of certain vessel types that were produced and distributed from workshops in and around Gyeongsan. The regional style can be said to have emerged when certain vessel types were produced in large numbers via habitual forming procedures, such that certain attributes of form were clearly distinctive to the workshop(s) which produced the pottery. Indeed, these distinctive formal attributes provided the basis for the regional styles.

If these habitual forming techniques had not been transmitted from one generation to the next, the regional style obviously could not have been maintained for almost a century. Thus, some system for transmitting the techniques must have been in place at that time. In the case of both Silla- and Gaya-style pottery, ceramic style may have emerged when increased social demand resulted in large quantity production, which led to the formalization of the *chaîne opératoire* of production for each vessel type. In addition, in order for the lesser regional styles to be maintained, this *chaîne opératoire* needed to be passed down from master potter to apprentice.

Conclusion

Issues of style may be approached from various perspectives. In the case of Silla- and Gaya-style pottery, questions about how a style emerged and why it changed over time can be approached differently according to how "style" is defined. Two levels of style are addressed in this paper: the inclusive ceramic styles of Silla and Gaya, which co-existed for around 150 years, and the various regional styles that made up the larger category of Silla- and Gaya-style, which existed at different times in different areas. Unlike previous studies of style in Korean archaeology, this paper regards style foremost as the result of human practices. In particular, I have argued that the style of

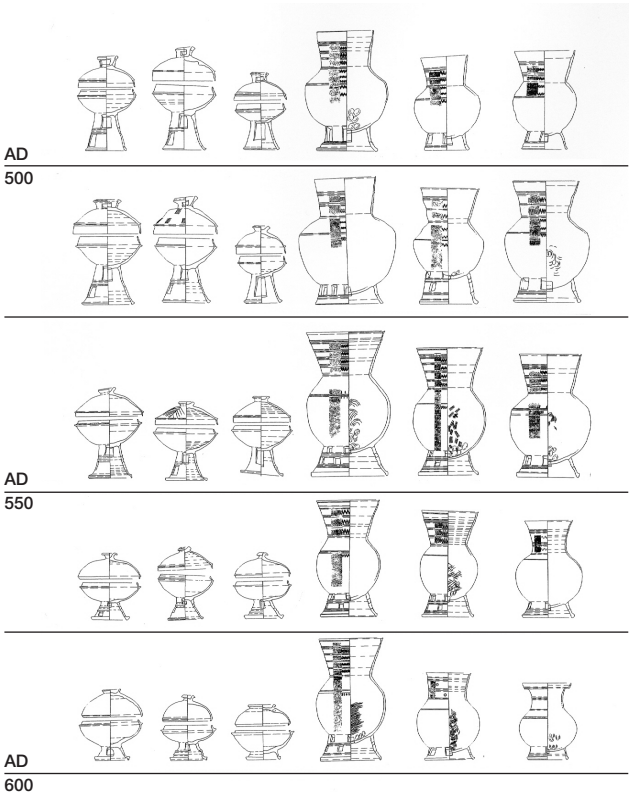

Fig. 8. Chronological scheme for the regional ceramic style of the Gyeongsang area, based on the pottery assemblage from the Siji-dong burial ground in Daegu. The mass production of certain vessel types in the late fifth century brought about the emergence of a clearly distinct regional style.

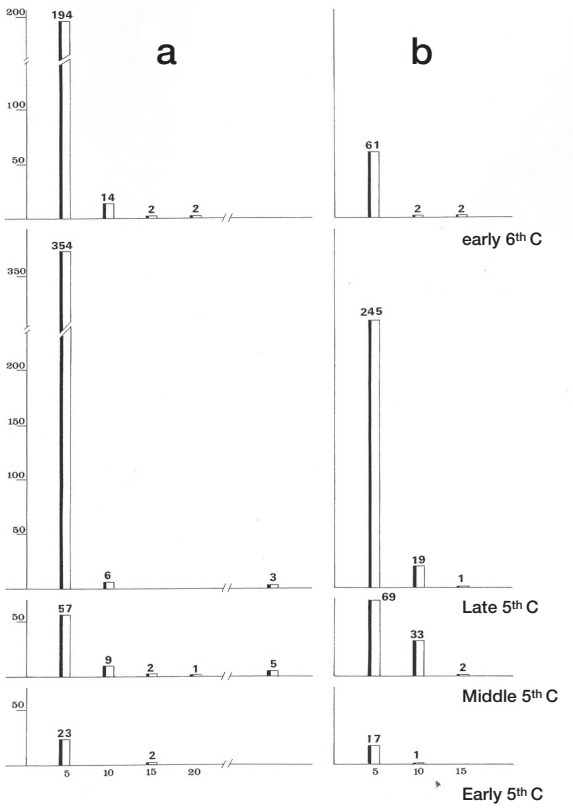

Fig. 9. Plan of the Siji-dong burial ground (excavated by Yongnam Cultural Heritage Research Institute) and the chronological distribution of small-scale burials, illustrating the sudden increase in the construction of these small-scale burials from the late fifth to the mid-sixth century. Tomb chamber size is presented (in square meters) along the horizontal axis, while the vertical axis represents the number of burials at the burial grounds of (a) Imdang-dong in Gyeongsan and (b) Siji-dong in Daegu, both in Gyeongsang Province.

dojil ware, which was produced in large numbers using the potter's wheel, emerged and was maintained as the result of habitual techniques of throwing the vessels. Therefore, the differentiation of the Silla and Gaya ceramic styles, as well as the emergence and continuation of the regional styles, can be explained by examining when such systematic methods for forming vessels were established and how they spread. In the process, rather than approaching the formation and continuation of the Silla and Gaya ceramic styles in terms of historical events (such as the development of polities or the cohesion of social units), which can only lead to an abstract and fragmented understanding of the matter, we must instead focus on the choices made by the potter during the manufacture process and try to understand these choices within the sociocultural context of the time.

Translated by Ko Ilhong

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