

# Archaeology on the Eve of the Establishment of the Ryukyu State

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## ABSTRACT

*This paper approaches the cultural dynamics of the Ryukyu Islands from the standpoint of food-related pottery by clarifying the production and distribution of pottery, based on typological analysis of pottery. The author first points out rather unusual pottery assemblage in the northern Amami Ōshima island and Kikaijima island, consisting of Sue stoneware, Haji earthenware, and early porcelain. The author goes on to suggest a chronological framework of pottery in different islands of Ryukyu and discusses trade patterns of talc stone nabe pots made in Kyushu and porcelains imported from China. Furthermore, the author examines the production, distribution and origins of production techniques of gray stoneware called kamuiyaki. The author argues that the production techniques were originated from the Korean peninsula and that the production and distribution reached their significant turning point in the middle thirteenth century. Finally, the author suggests an overall chronological framework for the entire Gusuku period based on the production and distribution of food-related pottery. Based on these discussions, the author concludes that by the middle thirteenth century culture of differentiating porcelain, stoneware, and earthenware offering vessels according to social status appeared in Gusuku-period Ryukyu. This culture diffused to the whole Ryukyu islands from the Amami islands because the Amami islands were in an advantageous position in trades with Kyushu. However, these offering vessels representing the social class were only used at banquets and ceremonies, and this culture of differentiating offering vessels according to the social class was adopted as life culture rather than social system by the elite class. The author conjecture that a strict class society where the acquisition and ownership of artifacts was thoroughly controlled would emerge in the following Ryukyu Kingdom period.*

**KEYWORDS:** Ryukyu archipelago, Gusuku period, food-related pottery production, food-related pottery distribution, social status representation [status symbol culture]

## Introduction

The Ryukyu chain of islands between the Kyushu island and Taiwan is located on the southwestern end of the territory of Japan (Figure 1). With its subtropical climate, large and small coral reefs rim the coastlines of the islands. Findings of archaeological research conducted so far reveal that during the Gusuku period (from the mid-eleventh to the fourteenth centuries), which came after the more than 5,000-year-long Shell Midden period

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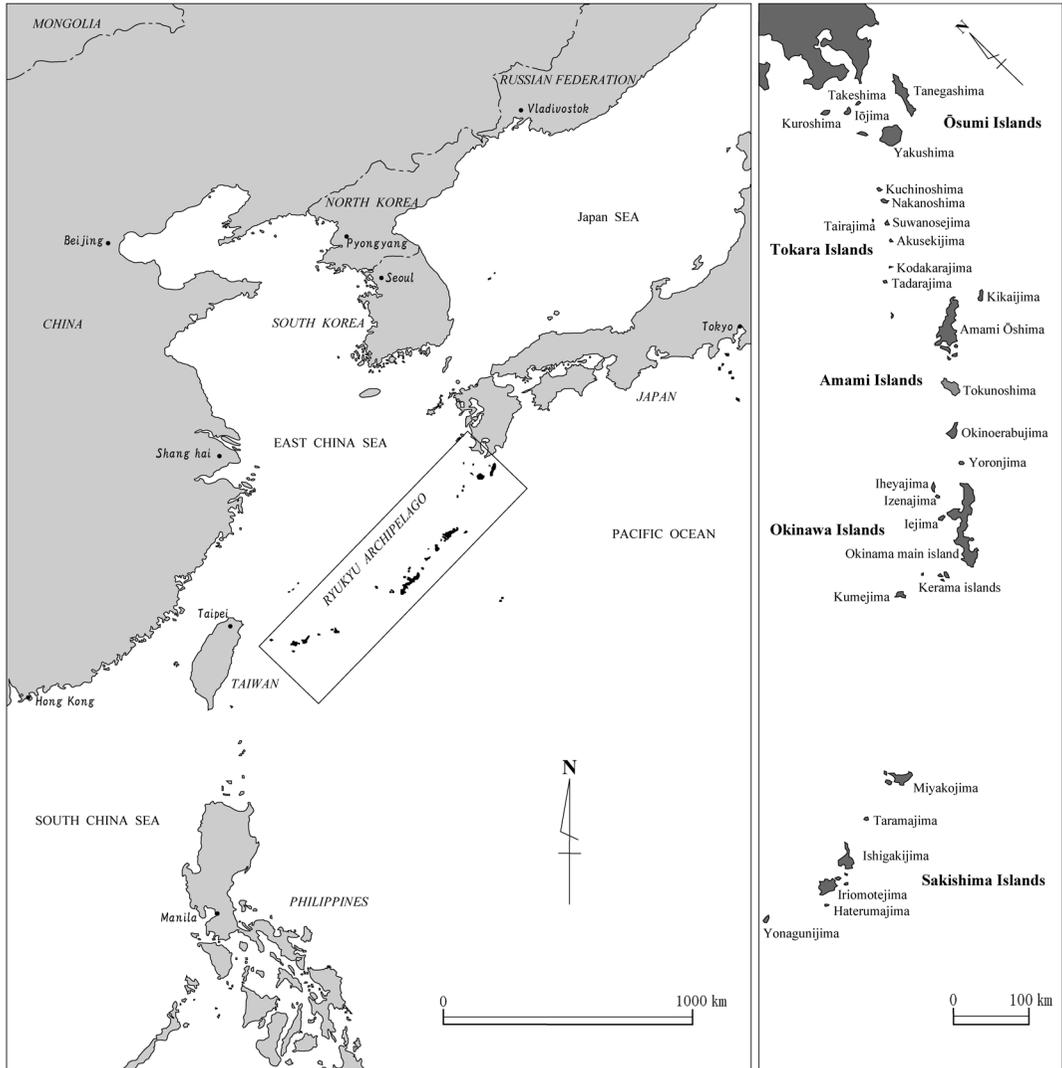


Figure 1. Ryukyu Archipelago and Its Island Groups

(a hunter-gatherer society), farming became prevalent and a common culture of food-related pottery (for cooking, serving, eating and drinking, storage) flowered in the Amami, Okinawa, and Sakishima (Miyako and Yaeyama) groups of islands. Around the beginning of the fourteenth century local leaders based in *gusuku* (castles or fortresses) held sway in their own sphere of influence. Historical accounts record that in the fourteenth century the rulers of the three kingdoms (“Sanzan”) of Hokuzan, Chūzan, and Nanzan sent tribute

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Table 1. Periodization by Island Group

Japanese archipelago	Ryukyu archipelago			*	Year
	Amami Islands	Okinawa Islands	Sakishima Islands		
Paleolithic period	Paleolithic period			Pre-history	5000 BC
Jōmon period	Parallel with Jōmon period	Okinawa Shell midden period	Prehistory		
Yayoi period	Parallel with Yayoi period				
Kofun period	Parallel with Kofun period				
Nara period	Parallel with Ancient period	Gusuku period	Protohistory and history	Old Ryukyu	mid-11 <sup>th</sup> century
Heian period	Parallel with Medieval period				
Kamakura period					
Muromachi period	Ryukyu Kingdom (First Shō Dynasty–Early Second Shō Dynasty)				1429
Edo period	Period under Satsuma domain rule	Ryukyu Kingdom (Late Second Shō Dynasty)		Early modern Ryukyu	1609
Modern period	Kagoshima prefecture	Okinawa prefecture		Modern and contemporary	1879
Contemporary period					

\*Period names according to philological history

Note: Shaded parts refer to the periods mainly dealt with in this study.

missions to the Ming dynasty of China and that Chūzan unified the three kingdoms. In 1429 the Ryukyu Kingdom, with its capital at Shuri Castle on the Okinawa main island, brought the entire area from the Amami to Sakishima groups of islands under its rule (Nagayama 2010; Tokuno 2010; Yuge 2010). This history is symbolized by UNESCO’s listing of the cultural heritage of the Ryukyus under the title “Gusuku Sites and Related Properties of the Kingdom of Ryukyu.”

Study of the Gusuku period has all too often focused mainly on the Okinawa islands,

home to the Ryukyu Kingdom. Despite limited archaeological research, the conditions of the Okinawa islands have tended to be extended as historical trends pertaining to the entire Ryukyu archipelago. The theory of social development as centered on the Okinawa main island was long predominant. Recent archaeological investigation of important sites in Amami and Sakishima, however, has shown that the Amami islands are dotted with special sites such as pottery production sites (Shintō & Aozaki eds. 1985a, 1985b; Aozaki & Itō eds. 2001; Shinzato ed. 2005), large castle sites (Nakayama ed. 2003), and trade-base settlement sites (Sumida *et al.* eds. 2006, 2008, 2009; Nozaki *et al.* eds. 2011, 2013a, 2013b; Matsubara *et al.* eds. 2015). Chinese-produced plain white porcelain rarely found in the Japanese archipelago and distinct stone-enclosed dwellings have also been found in the Sakishima islands (Kin 1988; Shimabukuro & Kinjō eds. 1990). These findings not only indicate the diversity of material culture unfolding on various islands during the Gusuku period but also suggest a hypothesis that an advanced social division of labor across the Ryukyu archipelago and close inter-island cooperation were driving forces behind the emergence of the Ryukyu Kingdom, urging archaeologists to present new historical perspectives. Paying attention to such historical trends, Richard Pearson (2007, pp. 145–146) looks at Gusuku-period Ryukyu from the viewpoint of the formation of the state. He considers that the Gusuku period was an epochal time during which the population grew, technology spread, the economy developed, consumption increased, society became more complex, and new identities were created, and that the Gusuku period made up part of the shift to the medieval period in Japan.

Based on these observations, an analysis was made of food-related pottery (Figure 2) that is unearthed from Gusuku-period sites in general. The pottery provides information—concerning broad-area distribution from production to consumption areas—that can be helpful in learning about the economy of the time. The analysis demonstrates the following three main historical phenomena:

- (1) The Gusuku period in the Ryukyus came into being in close connection with Japanese trade with Song China and Goryeo Korea in the eleventh century.
- (2) In the mid-thirteenth century, local leaders in the Ryukyus engaged in robust trade activities.
- (3) Flourishing trade promoted social stratification, which was most notable on the Okinawa main island.

The study also explains changes in the economy of individual island groups through observation of local developments in food-related pottery culture in the Amami, Okinawa, and Sakishima island groups as well as exploring the cultural and symbolic meaning of food-related pottery. Reexamining the interrelationships of trade, culture, and society in the Ryukyu archipelago from that point of view can make a significant contribution to reconstructing the process of how the port-city state of Ryukyu came into existence.

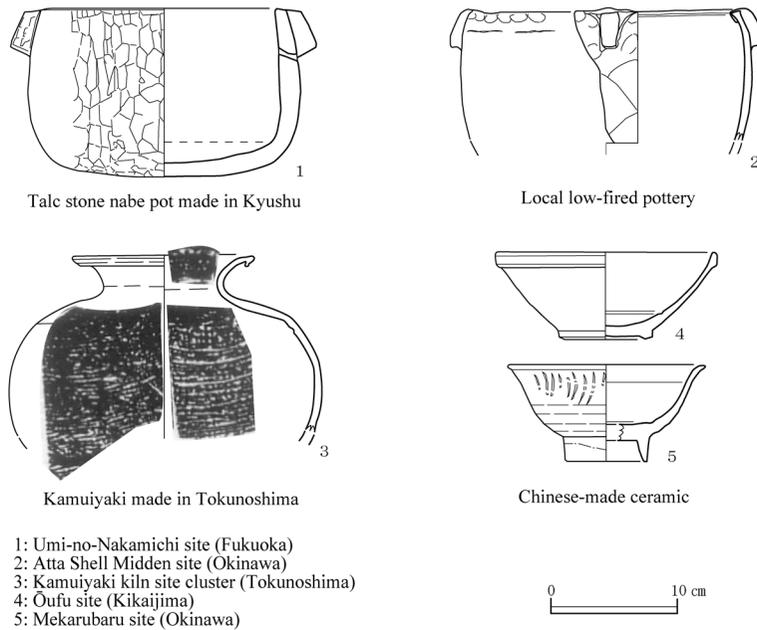


Figure 2. Main Archaeological Vessels to Examine

## I. Research on the Archaeological conditions immediately before the Gusuku period

The definition of “Gusuku period” differs among researchers (Asato Susumu 1987; Tōma 2000; Kin 1998). For this study, the main object of which is analysis of food-related artifacts, it will be defined as extending from the mid-eleventh to the fourteenth century. This is the period when “Gusuku pottery,” which originated not from traditional local pottery made since prehistoric times but from vessels widely distributed in medieval Japan, was used.

Investigation of Gusuku-period sites was launched, in the case of the Amami islands, by the Kyūgakkai Rengō (Council of Nine Learned Societies) (Kokubu *et al.* 1959) and, in the case of the Okinawa islands, by the Ryukyu government under U.S. control (Tawada 1956). The research revealed the basic trends of the Gusuku period (Takamiya 1965), and after the return of Okinawa to Japan in 1972 archaeological investigation became active on the Ryukyu island groups, yielding one new discovery after another of settlement sites, production sites, and so forth (Figure 3). Especially, the evidence that *nabe* cooking pots representing the Gusuku period emerged modeled after talc stone pots made in Kyushu (Kin & Higa, eds. 1979) indicates that the prehistory of Amami and Okinawa ended around



society (fortress construction and establishment of kingship) (Asato Susumu 1990). Some researchers point to mobilization of metal workers and roof tile makers for construction of the kings' tombs (Asato Susumu 2003, pp. 110–111; Uehara Shizuka 2013, pp. 156–157). Progress has thus been made in exploring the realities of Gufuku-period society with a view to a structural grasp of kingship.

Most of studies of the Gusuku period have focused on the Okinawa main island, where the kingdoms of the period were based. Historical images of that period, therefore, are based mainly on information coming from the Okinawa main island, not relativized through comparison with archaeological findings of the Amami and Sakishima groups of islands located at the northern and southern ends of the Ryukyu archipelago. Amami is dotted with sites of trade and pottery production centers, as mentioned earlier, and this northern island group in the Ryukyus most certainly played an important role in driving the Gusuku-period economy. To explore that background, it is useful to examine the peculiar situation of Amami immediately prior to the beginning of the Gusuku period.

Pre-historic sites in Amami's northern area (northern Amami Ōshima island and Kikaijima island) dating from the ninth to eleventh centuries—just before the beginning of the Gusuku period—sometimes yield Haji and Sue wares, leading pottery types of eighth to eleventh century Japanese mainland, as well as high-fired glazed pottery from Tang and Northern Song China (so-called early trade ceramic). Given the characteristics of their shapes and also compared with archaeological finds in Kyushu of the same period, the Haji wares found are estimated to date from the latter half of the ninth century to the first half of the tenth century. On the Tokara islands, Kikaijima island, and Tokunoshima island, discovery of Yuezhou-type celadon wares and Northern Song white porcelain wares dating to the end of the eighth century to the mid-eleventh century (Tang and Northern Song periods) have been confirmed (Sumida & Nozaki eds. 2008; Nozaki *et al.* eds. 2011; Shinzato Takayuki 2017); it is highly likely that these Chinese wares were carried to the islands in the same period as the abovementioned Haji wares (Figure 4). In response to these new influences, pottery made on the model of Kyushu's Haji pots was locally produced on Amami Ōshima and Kikaijima, giving birth to a pottery style specific to the north of Amami islands. This indicates that the northern part of the Amami island group right before the Gusuku period functioned as the cultural gateway to the Ryukyus through its dominant interaction and trade with Kyushu. That function provides valuable hints for conjecture about the subsequent Gusuku-period economy. The following sections will specifically examine Gusuku-period food-related vessels to shed light on economic relations between the Ryukyu archipelago and the areas around it. Let us first set forth a clear time division for the Gusuku period, and for that purpose, begin with a typological examination of the locally made pottery that makes up the majority of the food-related pottery that was found.

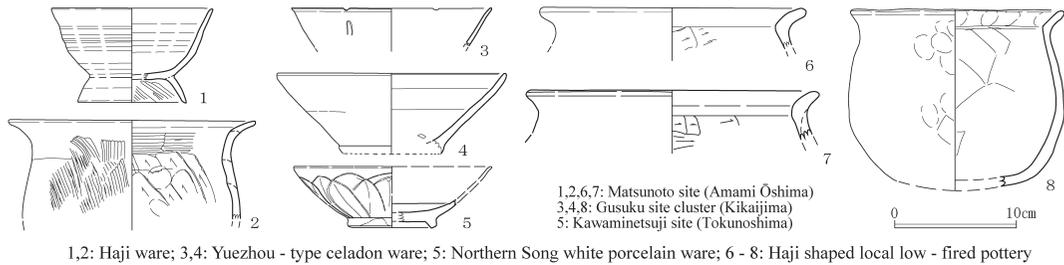


Figure 4. Unique Tableware Composition in the Amami Islands just before the Gusuku Period

## II. Transformation and Development of Local Pottery: Social Change in the Ryukyus

Pottery in the shape of pots (*nabe*) that mark the beginning of the Gusuku period is known to have been modelled on talc stone pots made in Kyushu (Kin & Higa, eds. 1979). Research on these pots was first conducted on the Okinawa islands where many examples were unearthed (Asato Susumu 1987, 1991; Kinjō Kamenobu 1990; Kinjō Shōko 1999; Miyagi & Gushiken 2007; Gushiken 2006, 2014; Miyagi 2015; Ikeda 2015). In recent years much has been learned about such artifacts found in the Amami and Sakishima island groups, too (Kin 1994; Shinzato Takayuki 1997, 2004, 2006, 2015). The vessels are of a number of types—*nabe* pot-shaped, *kame* pot-shaped, flanged kettle-shaped, jar (*tsubo*)-shaped, bowl (*wan*)-shaped, and dish (*tsuki*)-shaped. Since some of them have shapes originating in Chinese-made pottery and iron pots, they are considered to have been closely related to Japanese medieval pottery (Asato Susumu 1995, p. 213). Research on pottery until now has been conducted separately for the different groups of islands, so it will be an important task to extract local characteristics of each island group and obtain an overall grasp of the tendencies of the whole Ryukyu archipelago. This section makes a typological examination of pottery excavated from the island groups and considers the historical and cultural significance of the composition of food-related pottery of each region.

A look at the typological characteristics of talc stone *nabe* pots shows a tendency for these vessels, which make up a majority of excavated food-related pottery, to change in shape from those similar to stone *nabe* pots to those less similar. The typological classification presented here follows that tendency, and Figures 5–7 show changes in the composition of excavated vessels by region (island group) according to a relationship of association with other vessel types (*tsubo* jars, *kame* pots, *wan* bowls) found in the same site. The pottery production trends identified by region can be summed up as follows.

**First phase (mid-eleventh to mid-twelfth centuries):** *Nabe* pot-shaped vessels modelled on Kyushu-made talc stone *nabe* pots and *kame* pot-shaped vessels from a lineage of

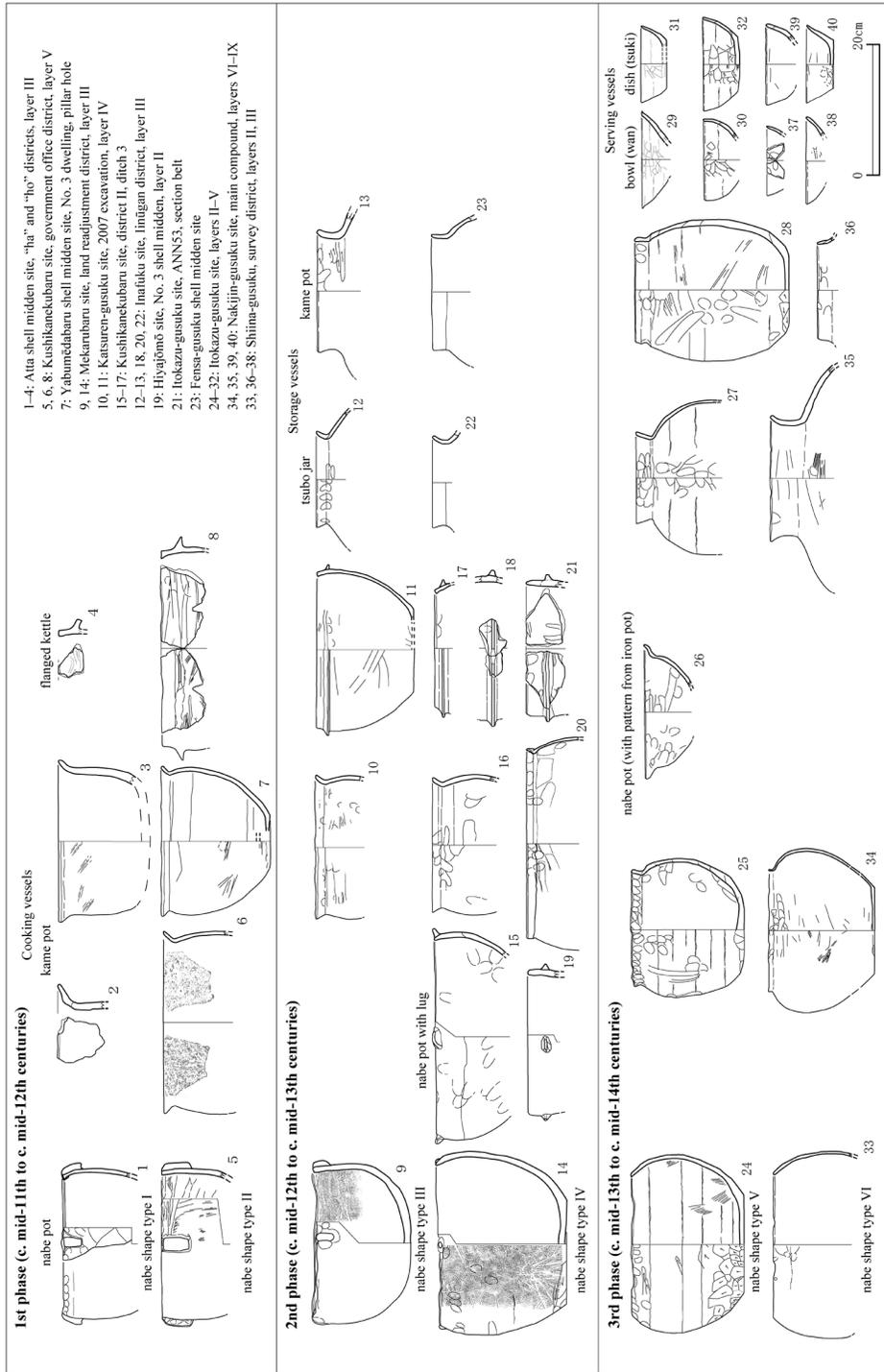


Figure 5. Changes in Composition of Vessel Types (Okinawa Islands)

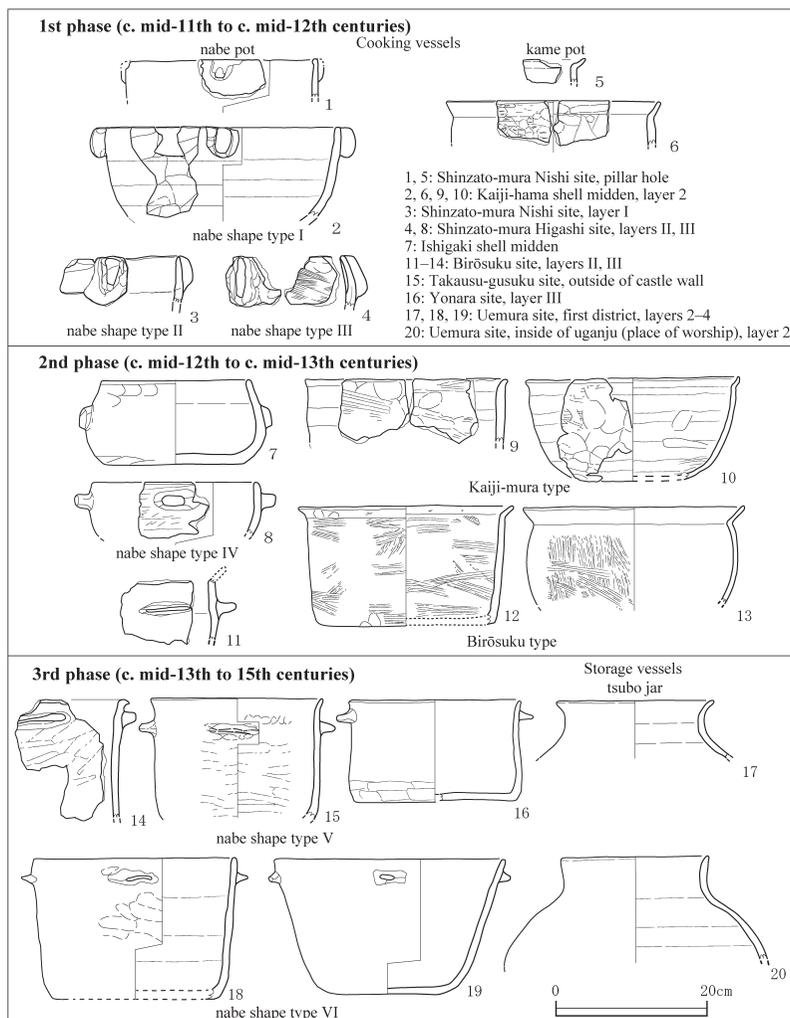


Figure 6. Changes in Composition of Vessel Types (Sakishima Islands)

Kyushu-made Haji ware *kame* pots began to be produced in the Amami, Okinawa, and Sakishima island groups. They were all pots for boiling water and cooking with no vessels for offering of food and drink; hence there emerged in the Ryukyus a distinctive pottery culture different from Japanese archipelagos.

**Second phase (mid-twelfth to mid-thirteenth centuries):** The *nabe*-shaped vessels began changing in shape in a way peculiar to each region. Regional differences emerged in the composition of vessels with production of storage jars (*tsubo*) in the Okinawa islands. With the passage of time, regional pottery culture unfolded according to local conditions.

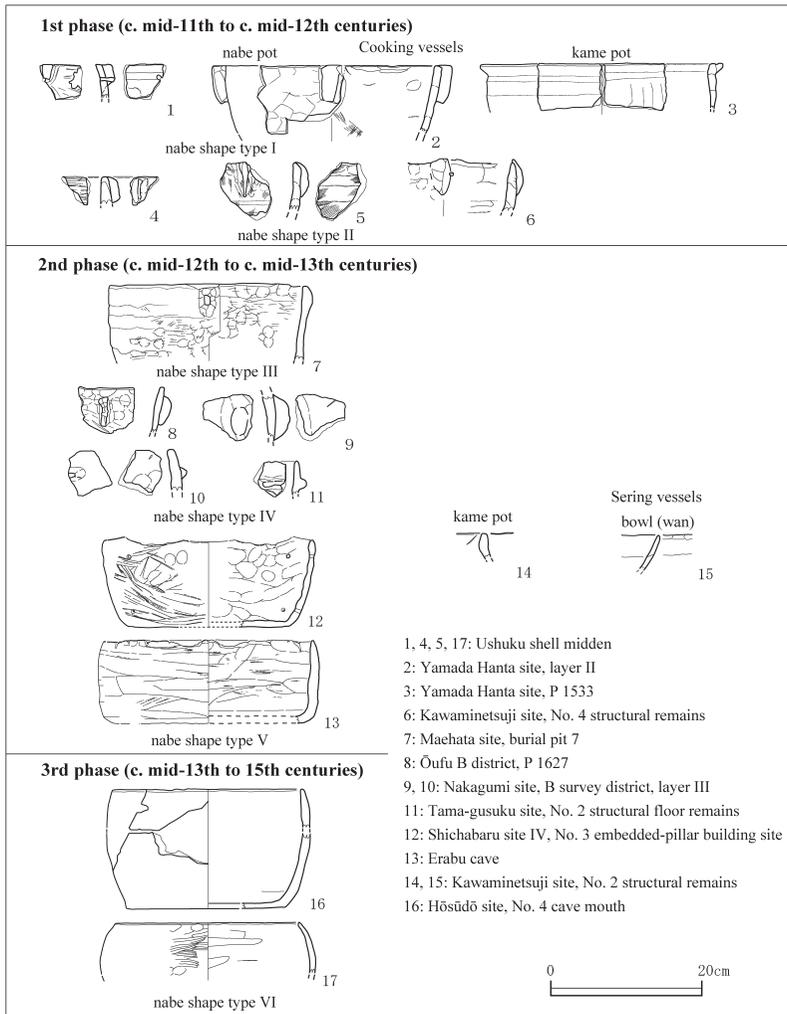


Figure 7. Changes in Composition of Vessel Types (Amami Islands)

**Third phase (mid-thirteenth to mid-fourteenth centuries):** The tradition of imitating stone *nabe* pots faded, and production of diverse kinds of pottery became pronounced in all the regions. In the Okinawa islands, the production of offering vessels was active, giving rise to a style of pottery greatly different from that of Amami and Sakishima.

The pottery style common in Amami, Okinawa, and Sakishima became established along with the spread of agriculture, signifying a major social change in the whole Ryukyu archipelago. Most of the pottery made in this period followed lineages of vessels in Kyushu and China; they are of historical significance for their strong connection with the culture of

medieval Japanese food-related pottery that is characterized by its distribution and popular use. Notably, the possibility is posited that pottery offering vessels in Okinawa in the third phase might have possessed some symbolism, rather than being utilitarian wares to augment the shortage of Chinese ceramic wares, given that they have often been found in castle sites that yield relatively many Chinese ceramic wares for presenting offerings. Most of the pottery items for offerings have shapes similar to those of Chinese ceramics. In research on medieval pottery in Japan, vessels imitating the shapes of overseas vessels are considered to be symbols of social status and those not imitating such shapes as having religious or ceremonial significance (Uno 1997, pp. 418–425). If we follow this line of thinking, then the presence in the Okinawa islands of earthenware offering vessels can be interpreted as indicating that the complicated social situation in the period immediately prior to Sanzan era or the establishment of the Ryukyu state is reflected in the composition of food-related pottery wares. It might be concluded that their presence is vivid testimony to the development of a stratified society in Okinawa.

### III. Reception of Overseas Cooking Vessels

The main factor that led to the flowering of Gusuku-period pottery culture is Kyushu-made talc stone *nabe* pots (Figure 8). Their presence was known in the Meiji era (1868–1912) (Fujii 1886), and old records and paintings of medieval Japan show they were used as cooking implements heated over a fire (Shimokawa 1995, pp. 183–185; Matsuo 2016, pp. 64–65). It is also known that they were used for salt making (Yamasaki 1993, p. 112). These findings indicated that talc stone *nabe* pots were multipurpose implements. The pots have roughly three different shapes, with handles, with a flange, and without a flange (*hachi* bowl shape). Excavation of large-scale production sites in Nagasaki prefecture in Kyushu has revealed that the differences in shape correspond to differences in the way of obtaining the talc stone material (Higashi 2003, pp. 38–40). To shed light on the economic relationship between the Ryukyus and Kyushu, this section examines the distribution trends of Kyushu-made talc stone *nabe* pots and how the pots were received in the Ryukyus.

The typological examination made over the past few decades shows that talc stone *nabe* pots with handles first appeared (the second half of the ninth century to the mid-twelfth century), followed by flanged pots (the second half of the twelfth century to the first half of the fourteenth century) and by flangeless pots (from the second half of the fourteenth century onward), in that order (Morita 1983; Kido 1995; Tokunaga 2010). Especially, among flanged pots, it has been confirmed that those in the shape of inverted trapezoid with a narrow flange and a small bottom diameter were distributed across the entire Japanese archipelago (Suzuki ed. 1998; Ishizuka 2006). Excavation findings in the Amami islands suggest that talc stone *nabe* pots appeared in the Ryukyu archipelago around the

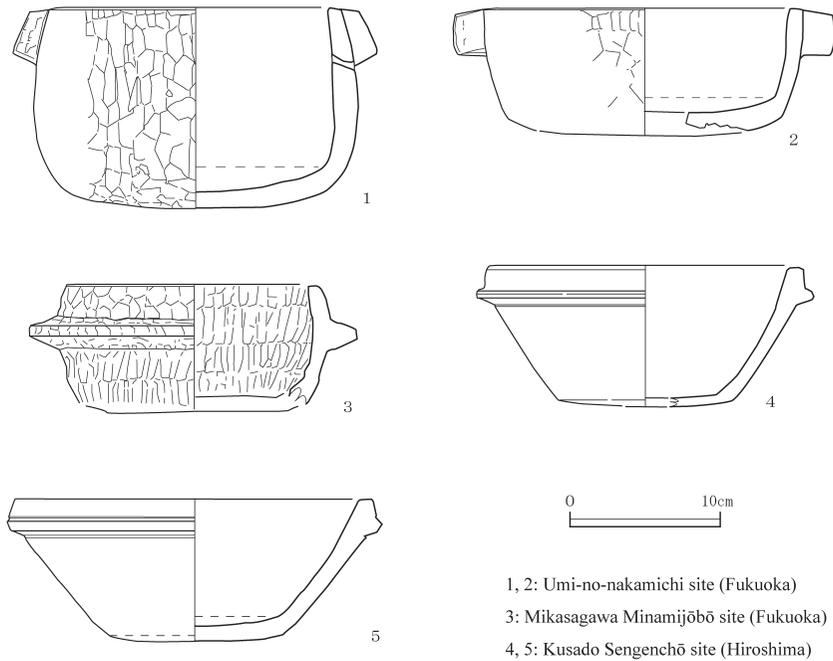


Figure 8. Various Types of Talc Stone Nabe Pots

eleventh century. Their number is still small, indicating the strong possibility that in those days the pots were brought in as household goods by groups of people from Kyushu. From the middle of the eleventh century onward, however, their number increased and the range of their distribution expanded as far as the Sakishima islands, suggesting that these pots were distributed as a commodity throughout the Ryukyu islands. Flanged pots, meanwhile, which were distributed throughout Japan, are rarely unearthed in the Ryukyus, where vessels imitating flanged pots were never widely used. As for stone *nabe* pots with handles, in the Ryukyus, the number of those excavated is the largest in the Amami islands—overwhelmingly large on Kikaijima—followed by the Okinawa islands. The number is very small in the Sakishima islands. As this shows, the closer to Kyushu, where talc stone pots were produced, the more likely excavations in groups of islands in the Ryukyus were to yield stone pots (Figure 9). However, the fact that these talc stone pots were excavated from the Sakishima islands, although their number is small, is of great significance. The Sakishima island group during prehistoric times (which is followed immediately by the Gusuku period there) had a potteryless culture and no traces of cultural relationships with any area from the Okinawa islands to the north; and so the excavation of talc stone pots and the appearance of pottery wares modelled after them are something so abrupt that we should presume that the talc stone pots were brought in not so much through inter-regional

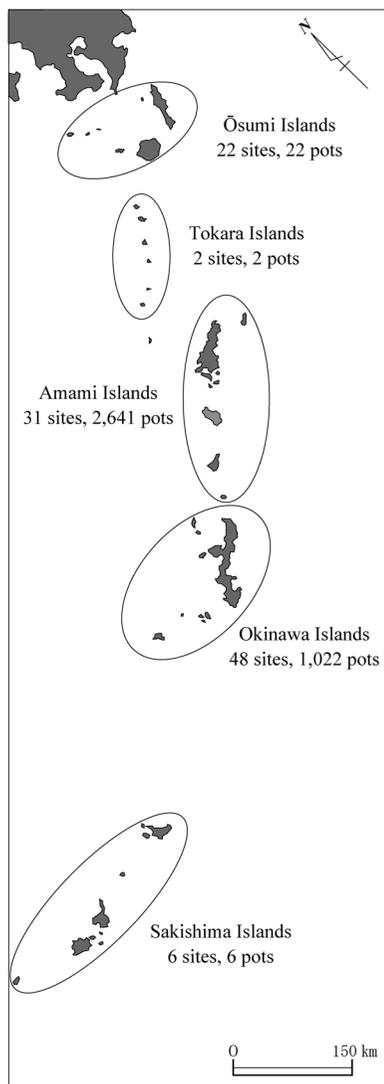


Figure 9. The Number of Talc Stone Nabe Pots Detected on Each Group of Islands in the Ryukyu Archipelago

#### IV. Reception of Imported Offering Vessels

In sections II and III, it was pointed out that: 1) local pottery offering vessels had a cultural meaning in that they represented the social strata of their users, and 2) the distribution of

connections within the Ryukyu archipelago as through merchants from distant places engaged in commodity distribution.

Hakata, a medieval-period international trade city in northern Kyushu, was where Chinese merchants/shipowners called “Hakata gōshu,” resided in the city. Traveling to and from their home country, they played a leading part in Japan-Song China trade (Kamei 1986, pp. 23–35). Given their presence, we can assume a composite distribution network in which long-distance traders like *Hakata gōshu* were involved in the commodity trade between Kyushu and the Ryukyus, joined by Kyushu merchants as well as local traders within the Ryukyus. As will be discussed in detail in the next section, given the state of Chinese ceramics distribution, Kyushu and the Ryukyus definitely maintained economic relationships even in the thirteenth century and onward. The fact that stone *nabe* pots with flange, which were distributed throughout the Japanese archipelago, were rarely used in the Ryukyu archipelago indicates the germination of an economy where commodities were supplied according to demand, which in turn suggests the establishment of a distribution economy led by local trade groups in the Ryukyus.

cooking implements from Kyushu had a strong correlation with the development of trade activities led by local leaders in the Ryukyus. This section, IV, sheds light on the routes through which Chinese-made ceramic that served as the model for local offering vessels was brought into the Ryukyu archipelago. It also examines the distribution economy of that time from the viewpoint of how these imported vessels were received.

Examination of local pottery and various types of Chinese pottery excavated from the same historic sites reveals that the composition of Chinese pottery changed as shown in Figure 10. Taking into account the quantities excavated from Ryukyu groups of islands, moreover, the shifts in consumption of Chinese pottery can be organized as follows.

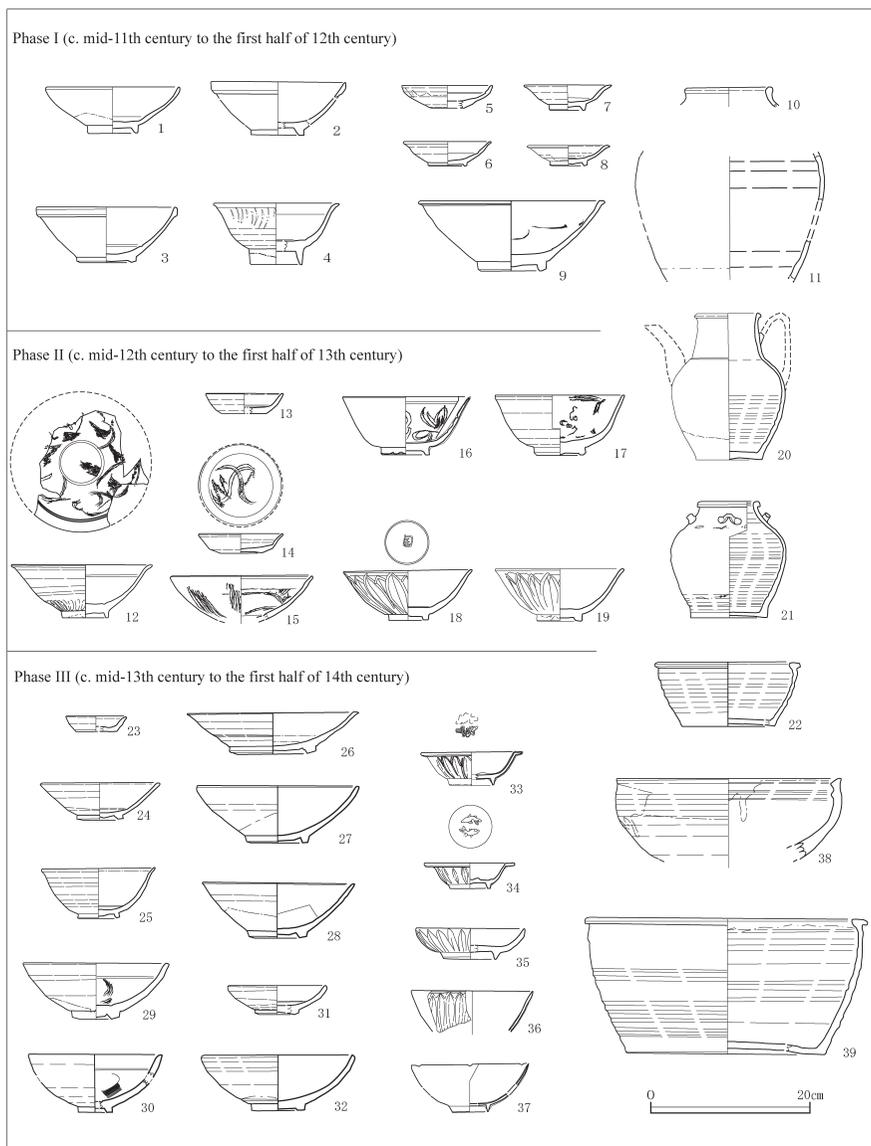
**Phase I (second half of eleventh century to the first half of twelfth century):** This phase saw the active reception of Chinese pottery, mainly bowls (*wan*) and plates (*sara*) of white porcelain. Sometimes, along with them, brown-glazed stoneware jars (*tsubo*) were brought into the Sakishima islands and Korean-made celadon and stoneware into the Amami islands. There is a high likelihood that these wares from the continent were distributed via Kyushu, given that the largest quantities of them have been excavated from the Amami islands, located closest to Kyushu.

**Phase II (second half of twelfth century to the first half of thirteenth century):** Compared with Phase I, quantities of excavated Chinese wares, mainly celadon bowls and plates, increased, making Phase II a stable period in terms of reception of Chinese pottery. Some historic sites have yielded brown-glazed stoneware jars, bowls, and water holders (*suichū*). Quantities of excavated wares increased dramatically in the Okinawa and Sakishima groups of islands, suggesting the possibility that some change might have occurred to the distribution routes.

**Phase III (second half of thirteenth century to the first half of fourteenth century):** Celadon bowls and plates make up most of excavated Chinese wares, as in Phase II, but plain white porcelain wares (Nakijin type, Birōsuku type) produced in China's Fujian province, rarely found in the Japanese archipelago, were also excavated (Kin 1988; Morimoto & Tanaka 2004). Quantities of excavated Chinese wares increased even more in the Okinawa and Sakishima groups of islands, and especially in Sakishima the excavation of brown-glazed stoneware of various kinds is conspicuous. The composition of Chinese pottery in the Amami islands is similar to that in Kyushu, but in Sakishima many plain white porcelain wares made in the Fujian province have been found. Regional characteristics of each group of islands became increasingly evident, and so this Phase III may be considered a turning point in the reception of Chinese pottery.

Organizing the reception of high-fired Chinese pottery in the three phases, we can see that regional differences among the groups of islands became increasingly pronounced with the passage of time. The outstanding features of Phase III, in particular, suggested a major change in the transportation routes of pottery. A route of ceramic wares transported

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1. Yamada Hanta site 2. Atta Shell Midden site 3. Ōfuu site 4. Mekarubaru site 5. Kawaminetsuji site 6. Ōfuu site 7. Kohane site 8. Ōfuu site 9. Yamada Hanta site 10. Atta Shell Midden site 11. Ōdomarihama Shell Midden site 12. Mekarubaru site 13. Kawaminetsuji site 14. Isamebaru No. 1 site 15. Tama-usuku site 16. Birōsuku site 17. Katsuren castle site 18. Mekarubaru site 19. Nakijin castle site 20. Shinzato-mura Higashi site 21. Shinzato-mura Nishi site 22. Shinzato-mura Higashi site 23. Kawaminetsuji site 24. Nakijin castle site 25. Kawaminetsuji site 26. Nakijin castle site 27. Nakijin castle site 28. Nakijin castle site 29. Nakijin castle site 30. Nakijin castle site 31. Mekarubaru site 32. Nakijin castle site 33. Nakijin castle site 34. Nakijin castle site 35. Kawaminetsuji site 36. Katsuren castle site 37. Nakijin castle site 38. Kawaminetsuji site 39. Shinzato-mura Nishi site

Figure 10. Chinese Ceramic Wares Excavated from Ryukyu Archipelago

by way of the Sakishima islands from southern China, instead of by way of Kyushu, was without doubt established. The new relationships between Sakishima and southern China had a great impact on the economy of the Ryukyu archipelago. Hints of that relationship are provided by pottery production on Tokunoshima Island, which will be discussed in the following section.

## V. Ceramics Production on Tokunoshima Island

The oldest site of pottery production in the Ryukyu archipelago is in Tokunoshima, part of the Amami island group. Gray stoneware called *kamuiyaki* was produced at the site. *Kamuiyaki* ware was shaped by beating and wheel-throwing the clay, and fired in a kiln. The vessels were used for preserving food and presenting offerings throughout the Ryukyus. Since the technique of making them had nothing to do with the pottery-making method that had been used locally, it is presumed that *kamuiyaki* came into being by introducing pottery-making techniques from outside (Ikeda 2000).

The existence of *kamuiyaki* had been known since before World War II (Hirose 1933, p. 14). After the war, as archaeological research and surveys became active in the Ryukyus, the importance of *kamuiyaki* drew increasing attention (Kokubu *et al.* 1959; Tomoyose 1964; Takamiya 1965). In 1983, a kiln site was discovered on a mountain in Tokunoshima, located 200 kilometers north of the Okinawa main island. Products produced there were formally named *kamuiyaki*, the name derived from the site's location (Shintō & Aozaki 1985a, 1985b). Subsequent investigations of the production area conducted through collaboration of government, universities, and other organizations revealed that there were seven groups of *kamuiyaki* production sites (Figure 11). The natural environment surrounding production sites was examined, the types of wood for fuel were studied, the age of kilns was estimated, and scientific analysis of the clay was made, among other efforts (Aozaki & Itō, eds. 2001; Shinzato ed. 2005; Ikeda ed. 2005).

Typological research on the various vessels focusing on shapes, patterns, and rim (lip) configurations was also conducted (Satō 1970; Asato Susumu 1975, 1991, 2006; Ōnishi 1996; Yoshioka 2002), revealing the presence of the vessel types that received the influence of Chinese pottery. Drawing on the findings of the study, I made a comprehensive examination of vessel types, rim configurations, shaping methods, and so on, and presenting the chronology of changes in type composition (Figure 12), I came to the following conclusions:

**Changes in form:** *Tsubo* jars, *kame* pots, and *hachi* bowls share the characteristic that three-dimensionally-formed rims gradually became simple and two-dimensional over the course of time, and typologically the rim area was continuous in shape.

**Production methods:** Based on those changes, the overall shapes of *tsubo*, *kame*, and

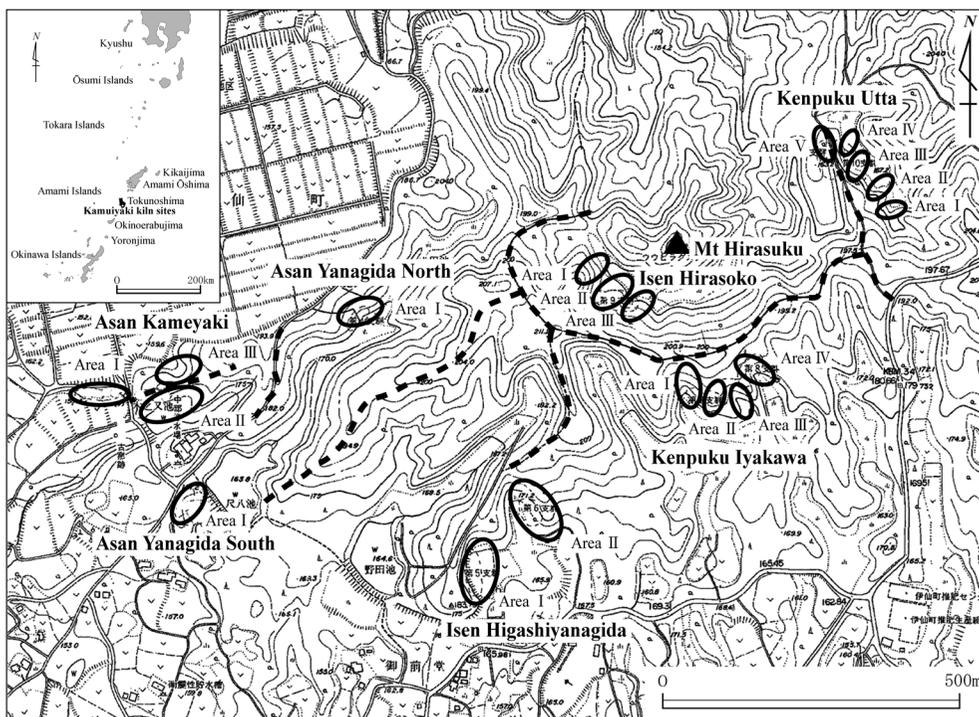


Figure 11. Distribution of Kiln Sites

*hachi* vessels, their thickness, presence or absence of wave patterns, paddle and other tool marks, and surface finish were studied. It was found that *kamuiyaki* can be roughly divided into two groups. Group A has thin walls, paddled patterns on the exterior surface, and a dense lattice pattern or wide parallel line pattern densely the interior surface. Group B has thicker walls, no pattern on the exterior surface (finger stroking smoothed over), and sparse slender parallel lines on the interior surface.

**Phases:** Of the *tsubo*, *kame*, and *hachi* vessel rim configurations, Group A corresponds to types 1 to 4 and Group B to types 5 and 6. The production period of *kamuiyaki* wares can be divided in two phases: Group A phase (eleventh century to the first half of thirteenth century) and Group B phase (mid-thirteenth century to fourteenth century). They are further divided in six sub-phases.

**Type composition:** Seven out of every ten excavated *kamuiyaki* are *tsubo* jars. At the Group A phase, mainly jars, large bowls (*hachi*), and small bowls (*wan*) were produced, but at the Group B phase a greater diversity of types were made, including very large *kame* pots and *hachi* bowls.

**Transition in production:** Chronological study shows that the middle of the thirteenth

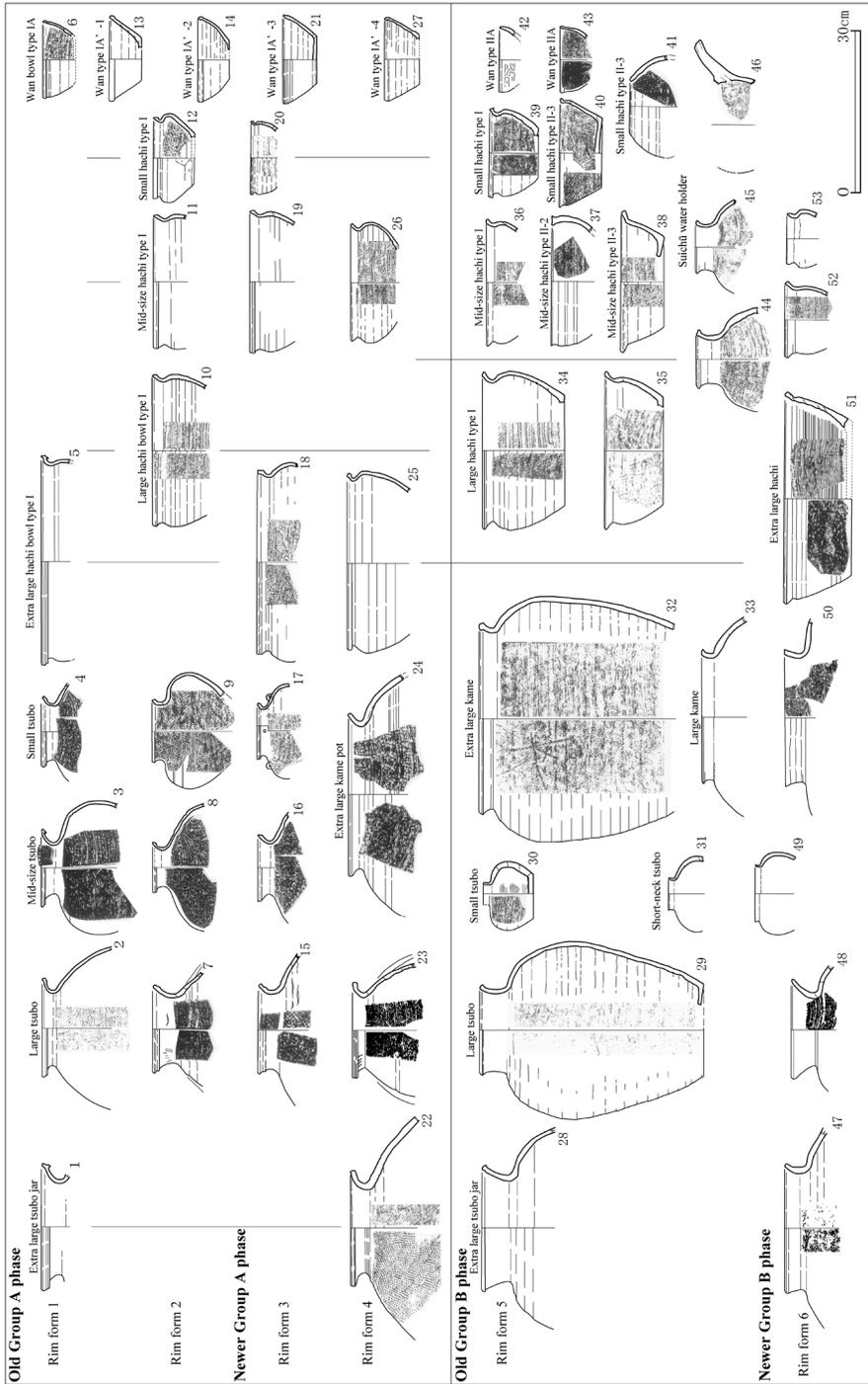


Figure 12. Changes in the Composition of Kamiyaki Types

century marks the boundary between the Group A and Group B phases. Considering major changes in the techniques of production and the composition of types, one can conclude that the production of *kamuiyaki* underwent a great change around that time.

In the archaeological sites on the Ryukyu archipelago, *kamuiyaki* have been found together with talc stone pots and Chinese pottery, forming sets. Since storage jars (*tsubo*) make up a major part of these *kamuiyaki*, one can say that its production was characterized by division of usage between *kamuiyaki* jars (for storage), talc stone pots (for cooking), and Chinese ceramics (for offerings). *Kamuiyaki*, produced in a technique unconnected with locally made wares, were widely distributed in tandem with the spread of farming across the Ryukyus, indicating a strong possibility that pottery production in Tokunoshima started with the introduction of pottery techniques that accompanied agricultural production techniques. The major change in *kamuiyaki* production occurred in the mid-thirteenth century, as mentioned earlier, and this coincided with the time when the routes of transportation of Chinese pottery into the Ryukyu archipelago diversified as discussed in the previous section. The great change in production techniques was highly likely the result of efforts at mass production as a way to escape competition with, and in preparation for the inflow of, Chinese storage pottery. Trade activities initiated by local leaders in various parts of the archipelago must have exerted a strong influence on the production of *kamuiyaki*. That we cannot find evidence of *kamuiyaki* production from the fourteenth century onward may be ascribed to the loss of their market to the overwhelmingly increase in the inflow of jar shaped Chinese ceramics. The cessation of its production appears to have been inseparably related to the fact that *kamuiyaki* was mainly used for storage.

## VI. Characteristics of *Kamuiyaki* Distribution

What relationship was there between the change in production of *kamuiyaki* and its distribution? This section discusses the economic situation of the time by looking at the distribution of *kamuiyaki* and the composition characteristics of offering vessels as found in the different groups of islands in the Ryukyus. Observing the location and number of sites that yielded the vessels on each group of islands (Figure 13), we can confirm differences in distribution range between the Group A and Group B phases. A look by region at the combinations of vessel types of *kamuiyaki* and Chinese ceramic excavated at consumption sites shows that these regional characteristics became conspicuous in the course of time. The changes over time can be summarized as follows:

**First-half Group A phase (mid-eleventh to mid-twelfth centuries):** Distribution range broadly extends from southern Kyushu to the Sakishima islands. It centers around the Amami and Okinawa island groups. In the Amami islands, consumption sites of *kamuiyaki* offering vessels (*wan* and *hachi* bowls) in addition to *kamuiyaki tsubo* jars, stand out,

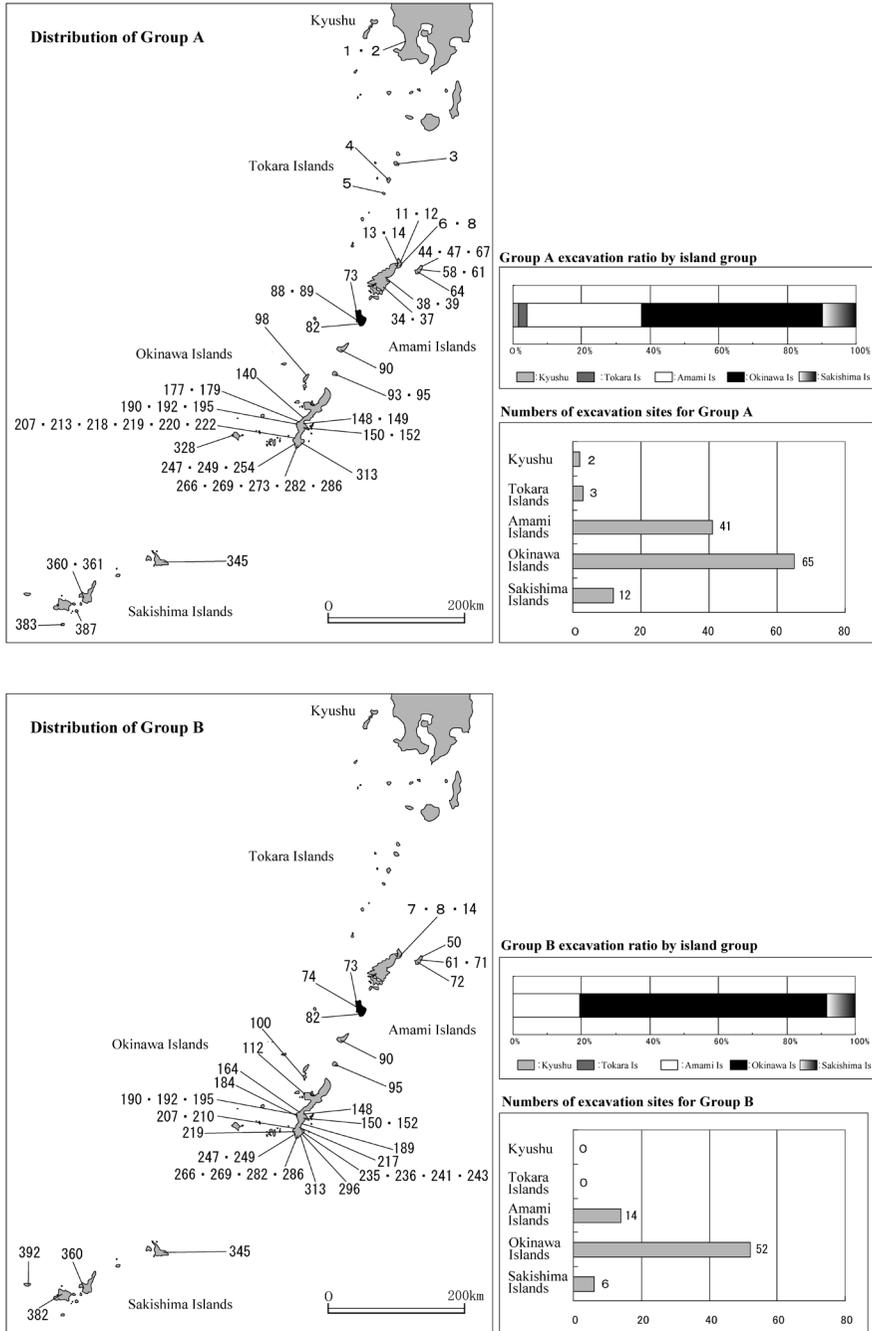


Figure 13. Numbers of Kamuiyaki Excavation Sites by Island Group

indicating diverse types of pottery were consumed there.

**Second-half Group A phase (mid-twelfth to mid-thirteenth centuries):** The central area of the distribution range is the same as in the preceding phase. In the Okinawa islands offering vessels (*wan* and *hachi* bowls) came to be used, indicating diverse types of pottery were consumed there as well.

**Group B phase (mid-thirteenth to the fourteenth centuries):** While distribution quantities considerably decrease in the Sakishima islands, the distribution range becomes narrower and is concentrated more on the Okinawa islands. Sites where Chinese high-fired pottery were mainly used are found across the Ryukyus, and the tendency is most conspicuous in the Sakishima islands.

That early-stage *kamuiyaki* vessels were excavated in Kyushu, too, is understandable, given the region's economy at that time. *Kamuiyaki* in the Group B phase, which were distributed mainly in the Okinawa islands, were rarely used in the Sakishima islands, which most likely had to do with Sakishima's stronger economic ties with southern China. This indicates that the epochal change of *kamuiyaki* production coincided with that of *kamuiyai* distribution, and that, as the result of lively trade activities between Sakishima and southern China, the production of Group B phase *kamuiyaki* started in the attempts both at mass production and at escaping competition with Chinese wares.

In the Amami islands, *kamuiyaki* offering vessels were consumed from early on. More such vessels were used there than the rest of the Ryukyus. Moreover, Amami had a strong economic relationship with Kyushu and has yielded the largest amount of excavated Chinese pottery of the Phase I period (second half of eleventh century to the first half of twelfth century) in the Ryukyus. These factors indicate that the *kamuiyaki* vessels used were not utilitarian pieces to make up for the shortage of Chinese offering pottery but were vessels with a symbolic meaning that were produced as society grew more complex. With that in mind, we can observe how the culture in which social hierarchy was represented by food-related pottery originated in the Amami islands [in the north] and gradually spread through the Ryukyu archipelago. This spread will be discussed in detail in the final section of this report.

## VII. Lineages of Pottery Technologies

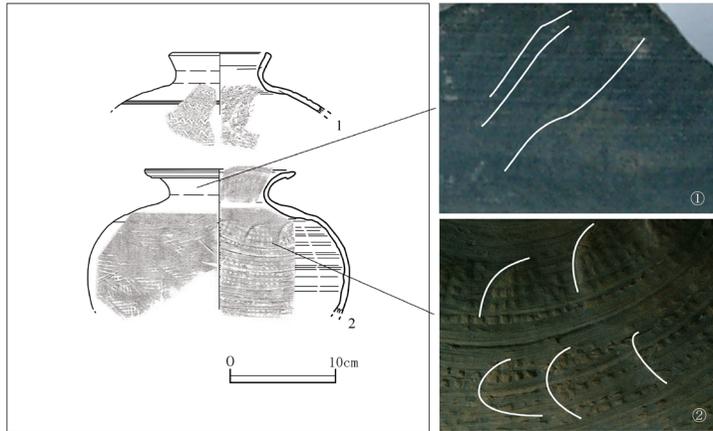
Through analysis of food-related pottery of various types, we have discussed economic relations between the Ryukyus and Kyushu. This section examines the history of pottery technologies and their introduction to the Ryukyus.

Before the discovery of kiln sites the greatest riddle in Ryukyu archaeology was where *kamuiyaki* had been produced (Shintō & Aozaki 1985b, p. 6). A number of different theories about the origin of *kamuiyaki* were proposed: according to one, it originated in the Japanese

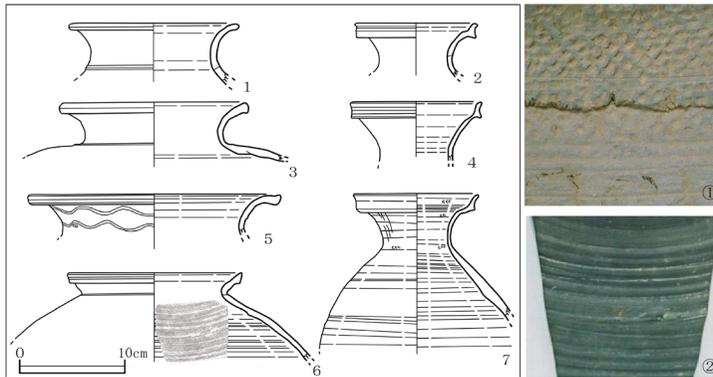
archipelago (Kokubu *et al.* 1959, p. 49); another claimed it began in the Okinawa islands (Tomoyose 1964, p. 19); still another placed its origins in the Korean peninsula (Mishima 1966, p. 51; Shirakihara 1971, p. 263, 1975, p. 122), and so on. As progress was made in typological research on *kamuiyaki per se* and as it was found that old roof tiles excavated in the main island of Okinawa had been under the influence of Korean roof tiles and that Korean celadon had been unearthed from castle sites in Okinawa, increasing attention was drawn again to the view that traced the lineage of *kamuiyaki* pottery techniques to the Korean peninsula (Nishitani 1981, p. 84). When the excavation of kiln sites clarified kiln structures in 1984, similarities were noted between the *kamuiyaki* kiln sites and Sagariyama *sue* ware kiln sites No. 1 and No. 3 in Nishiki-machi, Kumamoto prefecture. It was also confirmed that bowls (*wan*) modeled on Chinese pottery were made at Sagariyama. These served as the basis for connecting the origins of *kamuiyaki* pottery with southern Kyushu (Shintō & Aozaki 1985b). Based on successive discoveries of Goryeo stoneware being made in the excavations of the international trade city of Hakata, as well as the excavations of the national government agency of Dazaifu—both in northern Kyushu—Akashi Yoshihiko (1991, p. 64) regarded the wares as a strong evidence of trade between the Japanese archipelago and Goryeo. Akashi (1999, p. 57, 2007, p. 127) also pointed out a strong affinity between *kamuiyaki* and Goryeo stoneware, given the similarities in their production techniques. Emphasizing such historical developments, Ikeda Yoshifumi stressed the necessity to put East Asia into perspective in order to corroborate relations between *kamuiyaki* and Goryeo stoneware (Ikeda 2000, p. 37, 2003, p. 201).

To empirically demonstrate the origins of the *kamuiyaki* technique, I made a comparative study of the production techniques and kiln structures of *kamuiyaki* kiln sites, Sagariyama *Sue* ware kiln sites (southern Kyushu), and Munjun-ri kiln sites (South Chungcheong province, Republic of Korea). I found similarities in patterns and shaping techniques between vessels produced in *kamuiyaki* and Munjun-ri kiln sites (Figure 14). Although different in the angle of inclination of the flues, *kamuiyaki*, Sagariyama, and Munjun-ri sites share much in terms of basic kiln structure (Figure 15).

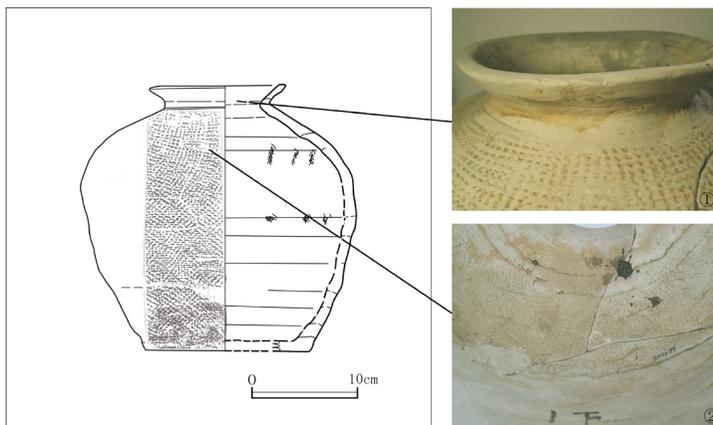
Looking at ceramic production in the Japanese archipelago, we can see Korean influence on medieval *Sue* vessels and roof tiles (Uehara Mahito 1980, p. 6; Yoshioka 2002, p. 432), clearly indicating that Goryeo's ceramic technology had a significant influence on Japan's medieval ceramic industry. The origins of the *kamuiyaki* technique do not have to be traced directly to southern Kyushu. The similarities in both shaping techniques and kiln structure support the assumption that *kamuiyaki* originated in the Korean peninsula. This makes it possible to argue that the *kamuiyaki* kiln with a strong tinge of Korean ceramic technique came into being in the Ryukyu archipelago where a tradition of stoneware production technique had been lacking. The vicinity of kiln sites in Tokunoshima was blessed with clay ideal for stoneware, wood for fuel, and the indispensable fresh water supply



**a. The vessel forming technique of kamuyaki**  
1. Isamēbaru site No. 1; 2. Kamuyaki kiln site cluster (Asan Yanagida South Group)



**b. The vessel forming technique of Koryeo ware**  
1.-4. Seosan Mujang-ni kiln site; 5, 6. Dazaifu site; 7. Hakata site



**c. The vessel forming technique of Sagariyama sue ware**

Figure 14. Study of Production Techniques

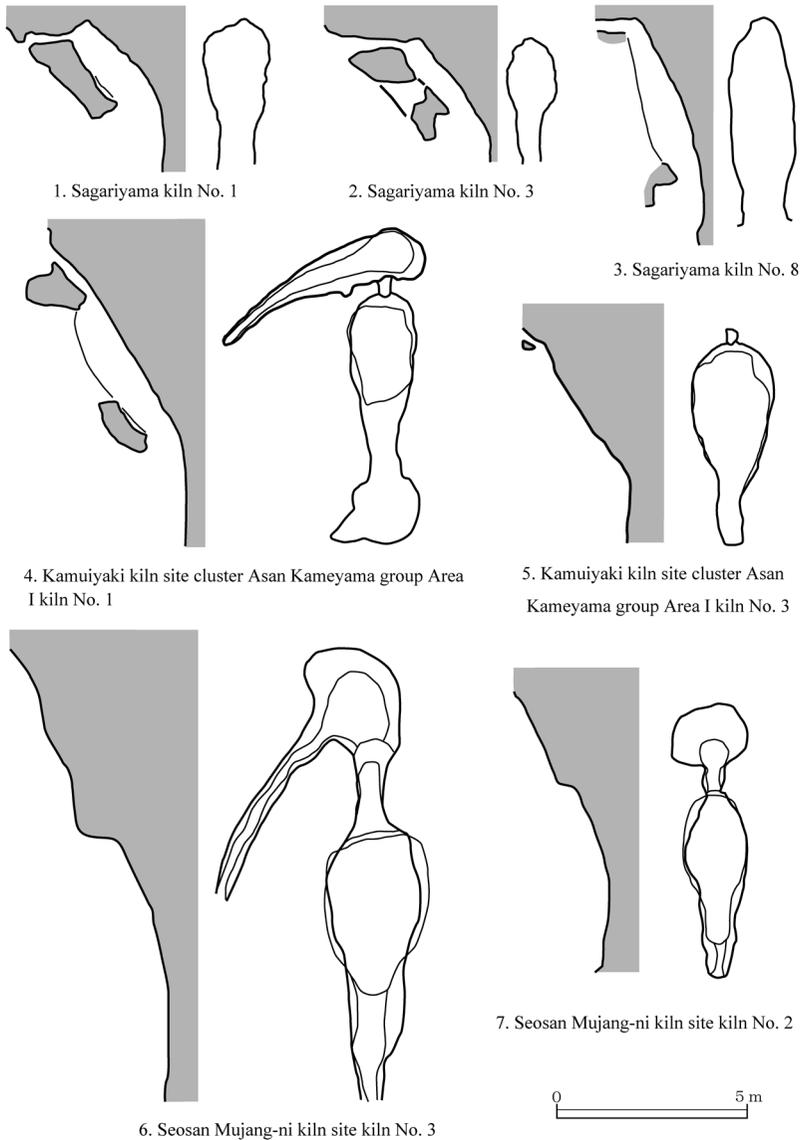


Figure 15. Comparative Study of Kiln Structures

(Terada 2015; Naruo 2015). The fact that the island of Tokunoshima had such a sufficient conditions for the start of ceramic production could have been a major factor behind the emergence of *kamuiyaki* under the influence of Korea.

The eleventh century, when the *kamuiyaki* kilns emerged, corresponds to the time when merchants were flourishing from trade between Japan and Song China and between

Japan and Goryeo. Goryeo stoneware and celadon from that time have sometimes been unearthed in the Amami islands. Although these excavated quantities were small, they tended to be found frequently in Kyusyu—especially in northern Kyusyu, home to Hakata and Dazaifu (Akashi 1991; Furiya 2002; Yamamoto 2003; Chikara 2016). Indeed, Kyushu-Ryukyu trade relations were driven by a strong connection between the Amami islands and northern Kyushu. A persuasive case may be made for the establishment of the pottery industry in Tokunoshima as part of the extension of Japan’s trade with Song and with Goryeo that was monopolized by northern Kyushu. Against this historical backdrop, Korean potters were sent to Tokunoshima and *kamuiyaki* spread around the Ryukyus through both distant Hakata-based distribution networks and the Ryukyu archipelago inter-island connections.

### VIII. Gusuku-period Trends in Food-related Pottery

The Ryukyu archipelago has the more than 5,000-year-long Shell Midden period (5000 BC to the tenth century AD) during which hunting and gathering were the principal means of subsistence. A study of settlements and graves based on an elaborate chronology of pottery shows that society gradually grew complex (settlement, investment of labor, division of labor) during the Shell Midden period (Takamiya & Shinzato 2013, p. 106). In those times, there were three cultural spheres in the archipelago: the “northern sphere” closely relating to the pottery culture of Kyushu (extending from the Ōsumi islands to the Akusekijima island of the Tokara islands); the “central Ryukyu sphere” with a distinctive pottery culture (the Takarajima and Kodakarajima of the Tokara islands, the Amami islands, the Okinawa islands); and the “southern Ryukyu sphere” assumed to have had relations with Taiwan and the Philippines (the Miyako islands, the Yaeyama islands) (Kokubu 1966, pp. 34–40). The cultural spheres as a whole border on Kyushu in the north and Taiwan in the south, and each sphere’s cultural features clearly correspond to their geographical locations. In the common natural environments of the subtropical island area the three different material cultures developed in their distinctive ways.

The following Gusuku period (mid-eleventh to fourteenth centuries) was a time of an emerging production-based economy supported by agriculture and stock farming (Asato Susumu 1990, pp. 110–112). In connection with the distribution of stone cooking implements from Kyushu, *nabe* pot-shaped vessels modeled after them were produced in the central and southern spheres, and thus, the Amami, Okinawa, and Sakishima island groups were integrated for the first time under the common pottery culture zone (sections II and III). The first half of the Gusuku period (mid-eleventh to mid-thirteenth centuries) witnessed the full-fledged development of stoneware production, iron production, and commodity distribution and the second half (late thirteenth to fourteenth centuries) was characterized

by the construction of *gusuku* (castles, fortresses). With these historical developments in the background, the three kingdoms of Hokuzan, Chūzan, and Nanzan, located in the main island of Okinawa, began tributary trade with Ming China in the second half of the fourteenth century. There emerged an even more complex society—featuring social division of labor, social hierarchy, organization, etc.—which paved the way for the subsequent Ryukyu state as a port state. The long, continuous hunting and gathering period, followed by the spread of agriculture, led rapidly to the establishment of the Ryukyu Kingdom. In my view, the history of the Ryukyu archipelago is characterized mainly by conspicuous disjunct between the long continuous hunting/gathering age, on the one hand, and rapid changes from the emergence of farming culture to the rise of the kingdom, on the other.

Japan’s medieval period, which roughly corresponds to the Gusuku period, was the time when high-fired Chinese pottery, which had once been a luxury, became mass-produced, lower-priced items due to the industrial growth of the Song dynasty and were imported to Japan in large quantities with the development of shipping, leading to the wide diffusion of Chinese wares among Japanese people. The diffusion is attributed to the Japan-Song trade and Japan-Goryeo trade that occurred in the international trade city of Hakata. Earlier-mentioned “Hakata *gōshu*” residing in Hakata going back and forth between Hakata and China supported the international trade by transporting large quantities of commodities from their home country (Kamei 1986, pp. 24–35). Deeply connected with this development, food-related pottery items were transported from far-away areas like China, Korea, and the Japanese archipelago and were widely used among the Ryukyuan people, while the turbo shell (*yakōgai*) and trumpet shell (*horagai*) that inhabited the shallow coral reefs were export products of the Ryukyu archipelago (Kinoshita 2002, pp. 129–134; Takanashi 2005, pp. 251–256), and so too was sulfur and other products from the Ōsumi islands (Yamauchi 2009, pp. 56–58). The Ryukyus were thereby linked to the East Asian commercial zone through Hakata. Paying attention to this strong correlation between the East Asian economic situation and the formation of Ryukyu’s Gusuku period, Asato Shijun (1991, p. 5) defines the new cultural realm of the Gusuku period as the “Ryukyu cultural sphere” (*Ryukyu ken*), pointing out that the cultural influence from the north determined the course of historical development of, and the characteristics of, the cultural sphere.

It is against the backdrop of that East Asian economic situation that Ryukyu-Kyushu relations were built. Organizing what we have discussed about the production of food-related pottery items and their distribution situation, we can divide the Gusuku-period historical development into the following three phases.

**Early Gusuku period (mid-eleventh to mid-twelfth centuries):** *Kamuiyaki* kilns were built in connection with Japanese trade relations with Song China and Goryeo Korea, and through active trade activities, talc stone *nabe* pots, Chinese-made pottery wares, and *kamuiyaki* vessels spread throughout the Ryukyus. Food-related vessels were established as a set of everyday

Table 2. Divisions of Gusuku Period and Epochs of Food-related Pottery

Century	Period/divisions		<i>Kamuiyaki</i>	Talc stone <i>nabe</i> pots	Local pottery	Chinese ceramics
11 <sup>th</sup>	Shell Midden period	Late 2			Group A	Dazaifu
			Group A, old phase 1	Phase I		Phase B
mid-11 <sup>th</sup>	Gusuku period	Early	Group A, old phase 2	Phase II	Group B, phase 1	Phase I
mid-12 <sup>th</sup>		Middle	Group A, new phase			Phase III
mid-13 <sup>th</sup>		Late	Group B, phases old and new		Group B, phase 3	
mid-14 <sup>th</sup>		Sanzan				
1429	Ryukyu Kingdom period					

items (sections II to V). Hence there emerged the common pottery culture of the Ryukyu sphere. Dominant in this sphere was the Amami island group, which had maintained close relations with Kyushu since prehistoric times. The presence of production and distribution bases and large-scale castles—as represented by the *Gusuku* site on Kikaijima island, the Akakina castle site on Amami Ōshima island, and the *Kamuiyaki* kiln sites on Tokunoshima island—indicates the progress of social division of labor and social stratification in the Amami group of islands ahead of the rest of the Ryukyu archipelago. In this connection, a culture came into being in the Amami area where pottery for offerings represented expressions of social status (see section VI). **Middle Gusuku period (mid-twelfth to mid-thirteenth centuries):** Distribution of talc stone *nabe* pots tapered off and the tradition of imitating the stone *nabe* pot in pottery production declined. Since the consumption of Chinese pottery wares was on an upward trend, it is judged that economic relations with Kyushu were maintained. The drastic decrease in the consumption of talc stone pots can be considered a consequence of the burgeoning of vigorous economic activities under the leadership of local leaders responded to demand by supplying items for daily use (section III). Meanwhile, *kamuiyaki* for offerings were consumed everywhere and, with the development of active trade society grew complex in all the groups of islands, and thus the culture characterized by expression of social status spread throughout the Ryukyus (section VI). **Late Gusuku period (mid-thirteenth to fourteenth centuries):** Establishment of new economic relations between the Sakishima island group and the coastal area of southern China

set in motion competition between Chinese-made pottery and the *kamuiyaki* ware made in Tokunoshima, marking a major turning point in the production and distribution of *kamuiyaki* (section V). In the Okinawa islands, where large-scale *gusuku* castles began being built, pottery offering vessels were produced, and the status-symbol culture advanced more rapidly than in the rest of the Ryukyus (section II). Trade routes diversified, which likely triggered the establishment of a stratified society in Okinawa immediately prior to the emergence of the Ryukyu Kingdom.

### IX. Social Dynamics on the Eve of the Founding of the Ryukyu State

The maps in Figure 16 offer a summary of the changes of trade routes and the degree of

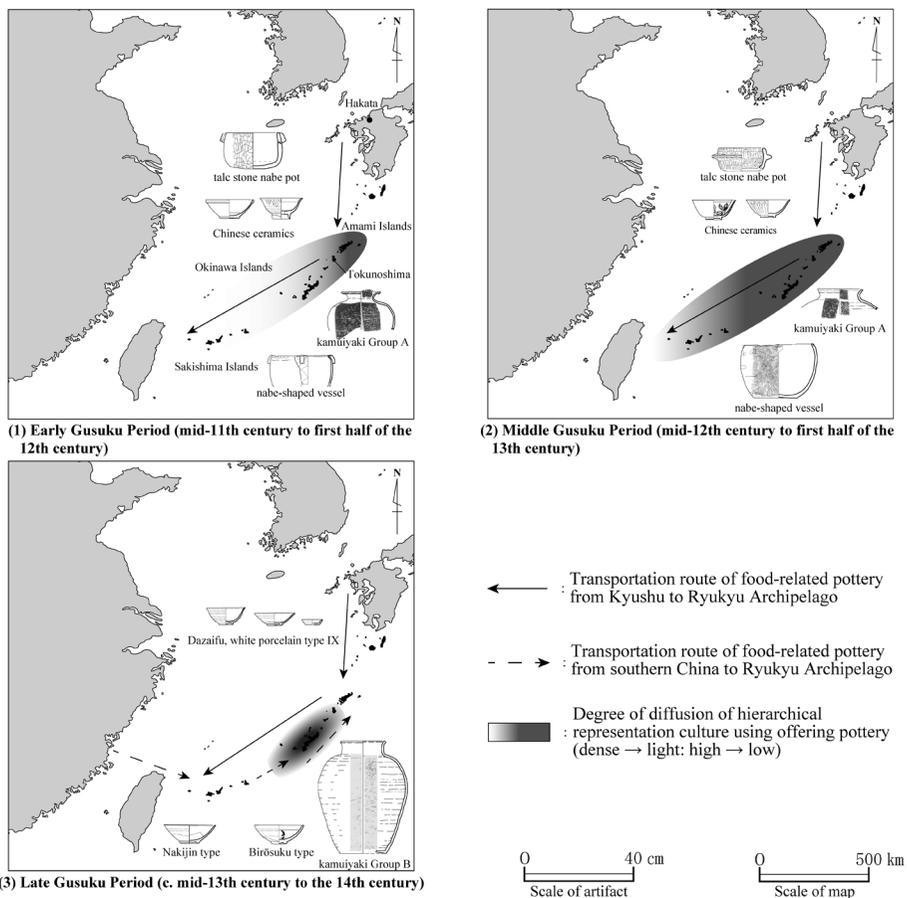


Figure 16. *Gusuku-period Economic Situation from the Viewpoint of Food-related Pottery and Degree of Diffusion of Hierarchical Representation Oriented Culture*

spread of the status-symbol culture as discussed in this paper. The maps show that the expression of social status through offering vessels appeared in the Amami islands, the region that held a superior position in trade activities in the mid-eleventh century, and then gradually spread through the Ryukyu archipelago. The mid-thirteenth-century food-related pottery culture characteristic of the Okinawa islands using various kinds of offering vessels can be seen as an aspect of the socially stratified society that grew increasingly multi-layered leading into the three-kingdom period and the subsequent Ryukyu state period. Around that time Chinese pottery wares were brought into the Okinawa islands by way of the Amami islands in the north and the Sakishima islands in the south. The study confirm Okinawa's close economic relations with these two island groups and the strong possibility that the signs of increasingly stratified society in Okinawa appeared in connection with the vigorous trade activities of local leaders who sought to maintain the economic relations with the rest of the archipelago. We may conclude that social stratification in the Ryukyus developed in strong connection with the increasingly active economic relations among the groups of islands in the archipelago.

Clarifying the actual state of production and distribution of food-related pottery in the

Gusuku period leads us not only to a grasp of the economic situation of that time but also to an understanding of the development of locally initiated trade activities within the Ryukyus. Meanwhile, observing the cultural and symbolic meaning inherent in the offering vessels that represented the social hierarchy of their owners, we find that the extent of the ownership of such vessels can serve as a measure of the level of development of social hierarchy. We can clearly see that food-related pottery is an important archaeological material for elucidating the formative process of the Ryukyu state.

If the quantities of offering vessels from around the middle of the thirteenth century are presented graphically (Figure 17), they display a shape (Figure 17-b) that is far from the ideal form of a hierarchical structure (Figure 17-a). This indicates that the pattern of consumption of offering

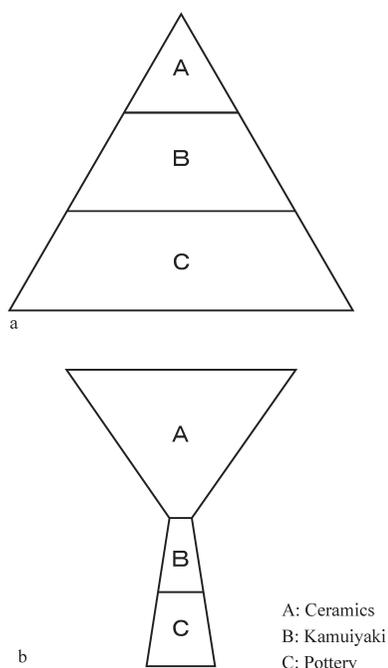


Figure 17. *Ideal Hierarchy (Top) and Actual Graphic Representation of Food Pottery Quantity in the Gusuku Period*

vessels during the Gusuku period was not one created by a strict class system. From this we can judge that the status symbol culture expressed through offering vessels as discussed above was no more than a means of representing social class on a limited number of occasions such as ceremonies and banquets. It can be conjectured that a strict class society where the acquisition and ownership of artifacts was thoroughly controlled would emerge in the following Ryukyu Kingdom period. Study of food-related artifacts during that period is indispensable. It is essential to demonstrate the stratification of food-related pottery through comparative study of the Gusuku and Ryukyu Kingdom periods. Continued research on this topic will proceed by closely observing future developments in ongoing archaeological research on Ryukyu Kingdom-period food-related pottery (Seto 2010, 2013, 2015; Shibata 2015), ports (Seto 2017), and Shuri, the capital of the kingdom.

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1: Matsumoto ed. 1980 - p. 130 - fig. 92, 2: Matsumoto ed. 1980 - p. 139 - fig. 110, 3: Matsumoto ed. 1980 - p. 149 - fig. 109, 4: Shintō & Aozaki eds. 1985b - p. 13-14 - fig. 4, 5: Shintō & Aozaki eds. 1985b - p. 21 - fig. 9, 6: Lee *et al.* eds. 2000 - p. 39 - fig. 14, 7: Lee *et al.* eds. 2000 - p. 35 - fig. 12

Figure 16

Drawing by the author

Figure 17

Drawing by the author