

# Interregional Interaction Strategies in the Early State Formation of Ancient Japan

NAKAKUBO Tatsuo<sup>1</sup>

## ABSTRACT

*This paper discusses the influences that cultural interaction with China and the Korean Peninsula from the third to sixth centuries AD had on the early state formation process of the Japanese Archipelago. The author proposes that the nature of interregional interaction during this period can be broadly divided into a “goods importation strategy”, in which technologically advanced goods were imported from the continent, and a “technology-knowledge adoption strategy”, in which the elite of the Japanese Archipelago were able to engineer and control technology innovation by inviting immigrant groups who were able to provide advanced technology and knowledge. By strategically employing one or the other, the central and regional elite of the archipelago were able to enhance their foundations of power. The author analyzes these strategies on the “macro scale and long term”, “medium scale”, and “local scale and short term”, marshaling a wealth of archaeological data. This paper adopts an archaeological approach in order to understand the nature of state formation in the Japanese Archipelago from the perspective of intercultural interaction strategies.*

**KEYWORDS:** Intercultural interaction, pottery, immigrants, state formation, ancient Japan

## Introduction: Theories of ancient Japanese state formation

How did the ancient state come to be in the Japanese Archipelago? In this paper, the author adopts an archaeological approach to suggest that the intercultural interaction conducted between the Japanese Archipelago and the various regions of East Asia played an essential role in the state formation process of this region. It is the author's expectation that further analytical treatment of the broad issues discussed in this paper will greatly contribute to our current understanding.

The ancient state of the Japanese Archipelago, characterized by a written legal code and bureaucratic system, reached completion with the enactment of the Taihō legal codes in AD 701. Many scholars assert that the *ritsuryō* system of the late 7<sup>th</sup> century, which formed the basis for the later Taihō codes, paved the way for the establishment of the ancient state. A major area of contention, however, is when this state formation process actually began. Needless to say, inquiry into the origins or workings of a state enables scholars to situate that

<sup>1</sup> Faculty of Humanities, Kyoto Tachibana University, Yamashina-ku, Kyoto 607–8175, Japan (nakakubo@tachibana-u.ac.jp)

Category: Original Article Received: 27 March 2020; Accepted: 4 November 2020

state within human history and is a welcome and necessary debate.

Within this debate over when the state formation process began, important junctures have been proposed for the 3<sup>rd</sup>, 5<sup>th</sup>, and 7<sup>th</sup> centuries. The three main positions can be summarized as follows: That which proposes a political consolidation over a wide stretch of the archipelago under the Yamatai polity, which is mentioned in the *History of the Three Kingdoms*, a 3<sup>rd</sup>-century Chinese chronicle; that which proposes an increased centralization of government during the 5<sup>th</sup> century, which saw tribute sent to the Chinese Song dynasty during the “age of the five kings of Wa”; and that which emphasizes the diplomatic missions sent to Sui China and the Taika Reforms (645) in the first half of the 7<sup>th</sup> century. Stretching the 350 years from the middle of the 3<sup>rd</sup> century to the 7<sup>th</sup> century, the Kofun period broadly encompasses each of these junctures, making an evaluation of its position within the state formation process a central area of inquiry essential to this debate.

It is important to note that each of these junctures coincides with significant changes in the political map of East Asia and significant changes in the nature of intercultural interaction between the Wa (the people of the Japanese archipelago) and its neighbors (Yoshida 1998): in other words, the decline of the Later Han and the political fragmentation of the Three Kingdoms during the 3<sup>rd</sup> century; the beginning of the Northern and Southern Dynasties in the 5<sup>th</sup> century; and the unification of China by the Sui and Tang in the 7<sup>th</sup> century. For polities in the Japanese Archipelago, located on the fringe of the sphere of Chinese influence, interaction with East Asian societies across the ocean was of no small importance. This has led scholars to consider state formation within ancient Japan to have been that of the secondary state, a process galvanized by the influence from the organically formed primary state (Fukunaga 2005).

Since 2000, attention has been increasingly given not only to Wa’s relationship with the Chinese dynasties, but also to its competitive relationship with other societies throughout East Asia, in particular Goguryeo, Baekje, Silla, and the Gaya polities on the Korean Peninsula (F. Tanaka 2005; Park 2007; Ban 2009; Inoue 2014; Takata 2014; Woo 2014; Lee 2016; Kim 2017). This is largely due to an increase in excavations in Korea, easier access to Korean site reports, and the advance of typological research aimed at clarifying the background of and changes in peninsula-style objects uncovered from the Japanese Archipelago. This has enabled archaeological debate on the movement of goods and people and the reality of interaction between these societies. Importantly, previous theories that once garnered considerable attention, such as EGAMI Namio’s “horse-rider theory” and the conception of *Mimana nihonfu* as a Wa outpost for control over the Korean Peninsula, have been thoroughly refuted with archaeological evidence (Isahaya 2012; Takata 2014). Furthermore, the ideas laid out in this paper are based on the significant amount of archaeological data amassed in Japan through excavation and typological research of artifacts.

East Asian archaeology has the potential to contribute invaluable case studies of

intercultural interaction to the global state-formation debate. Over the past ten years, numerous works have been published (Barnes 2007; Mizoguchi 2014; Byington *et al.* 2018; Knopf *et al.* 2018). As the diachronic impact of interregional interaction and the acceptance of immigrant culture has not been sufficiently investigated, however, the author aims to discuss in this paper the role these elements played in the state formation process.

**Overview of the Kofun period** In Japanese archaeology, the period when tombs covered with prominent earthen mounds were built is called the Kofun period. These mounded tombs or *kofun* were built for the central and local elite and can be considered political monuments functioning as a means of rule (Fukunaga 2018). The history of research on the Kofun period and the current state of research have been presented in several recent works (e.g., Wada 2011; Fukunaga 2014; Nakakubo 2018b).

The Kofun period was preceded by the Yayoi period, which saw the introduction and widespread adoption of wet-rice agriculture, moated settlements, and bronze and iron, which were used alongside traditional stone tools. It was followed by the Asuka period, which saw the construction of Buddhist temples as monuments and a full-fledged palace, in addition to the use of writing for administrative purposes. During the Kofun period, the moated settlements that characterized the previous Yayoi period fell into disuse and elite residences distinct from the living area of the general population appeared, coinciding with the accumulation of surplus beyond the needs of the community. Access to resources became unequal, a disproportionate amount of labor was invested in mounded-tomb construction, and differences in the quality and quantity of burial goods became more prevalent. Considering these circumstances, this period is considered to have witnessed the emergence of a class society, marked by the spread of disparity and inequality (Tsude 1991).<sup>1</sup> Wedged between two disparate historical periods, the issue of what mechanisms contributed to this spread of inequality during the Kofun period is an important area of inquiry within the state-formation discussion.

Within a class structure, ownership over the means of production and one's place in the organization of labor are contingent upon one's place in society, leading to an unequal distribution of wealth. Parsing this abstract relationship is difficult, however, even from the written record. Chinese chronicles, such as the *Book of Wei*, contained within the *History of the Three Kingdoms*, and the *Book of Song*, and domestic histories compiled in the 8<sup>th</sup> century, such as the *Nihon shoki* and *Kojiki*, are invaluable resources in the study of ancient Japan. Regional gazetteers known as *fudoki* also contain a wealth of information concerning 8<sup>th</sup>-century local society. However, the *Nihon shoki* and *Kojiki* were compiled approximately a century after the Kofun period ended by the governing elite in order to legitimize their rule and require careful textual criticism; these concerns also apply to the regional *fudoki*. In this regard, the archaeological record is useful in that it provides a contemporaneous account of the period in question. Having said that, it is of course difficult to reconstruct

relations of production from the archaeological record. It is more productive to analyze the labor invested in mounded-tomb construction, the size and arrangement of settlements, the scale and temporal development of storehouses, and other data from the archaeological record in order to attempt to understand the meaningful differences among these factors (Tsude 1991). It is also necessary to reconsider the theoretical background to the emergence of class and the creation of inequality.

**Theoretical background** How can the Kofun period be situated within the state formation process? Since the second half of the 20<sup>th</sup> century, both fields of ancient history and archaeology have been strongly influenced by Marxist views of history.

While Marxist influence remains strong in the field of ancient history, more attention has been given to outside influences on Japan's state formation since the 1970s (Ishimoda 1971). Within archaeology, since the 1960s, in addition to typological research on artifacts, the nature of production sites, such as those related to ironworking, ceramics, and salt-making, has been greatly clarified and a significant amount of research has amassed on the substructure of society. Since the 1970s, archaeologists have reconstructed the production–circulation–consumption process through analysis of artifact typology and geographic distribution and demonstrated the significance of intercultural interaction, shedding light on trade with distant places, trade routes, and the movement of people from other cultures.

In addition to the theoretical framework emphasizing the accumulation of surplus leading to the division of labor and increased specialization ushering in class separation, attention has increasingly been paid to the idea that the elite promoted the division of labor as an economic strategy, influenced strongly by theoretical research from the English-speaking world. Specifically, researchers have come to focus on foreign objects (prestige goods) that, while often having no intrinsic practical value, are prized as wealth goods in certain societies or cultures; research has focused on tracing the significance of their movement into and within a society. Additionally, researchers have categorized exchanged goods and the types of exchange in order to clarify the connection between exchange and power. Timothy Earle's systematic formulation of social relationships, economic power, military might, and ideology as sources of elite power has also been widely referenced within Japanese archaeology (Earle 1997).

Representative research includes that by TSUDE Hiroshi and FUKUNAGA Shin'ya. Within his treatment of the ancient state formation process, Tsude suggested a strong relationship existed between the procurement of iron raw materials and other goods from abroad and social reorganization (Tsude 1991). Based upon his analysis of imported Chinese bronze mirrors, Fukunaga suggested that control over goods symbolizing foreign authority promoted sociopolitical consolidation (Fukunaga 2005). These perspectives are consistent with the research trend seen across the world emphasizing the important role played by interregional interaction in the state formation process.

In this manner, intercultural interaction focused on the exchange of goods has come to be emphasized within the archaeological debate over state formation.

**Geographical backdrop** When considering intercultural interaction, scale is an important factor: Over what distance were goods or information exchanged or did people move?

The geographical area covered in this paper is focused on the East Asian region, comprising the eastern edge of the Eurasian continent, the southern Korean Peninsula, and the central Japanese Archipelago. Within the Japanese Archipelago, focus will be placed mostly on the Kinki region, located roughly in the center of the island of Honshū. A crescent arc of islands, the modern country of Japan spans approximately 3,000km north to south and 3,000km east to west. Meanwhile, the Korean Peninsula measures approximately 1,000km north to south. While the area of the Korean Peninsula measures 219,020km<sup>2</sup>, the area of the Japanese Archipelago's main island of Honshū alone measures 227,900km<sup>2</sup>.

The extent of mounded tomb (*kofun*) construction stretches from the southern Tōhoku region to the southern island of Kyūshū, a direct length of approximately 1,300km. As approximately 70% of Japan's land comprises mountains and hills, however, a transportation route in line with the actual terrain would measure approximately 1,800km. While water-borne travel utilizing rivers and the ocean was common throughout Japan's history, it was during Japan's ancient period that a land-borne travel network developed (Ichi 2016). Needless to say, contact with other societies throughout the East Asian world required travel by sea, making ocean travel indispensable for ancient intercultural interaction.

Owing to these geographical conditions, a treatment of interregional interaction during Japan's Kofun period requires a discussion of scale. Starting from the Kinki region, relations with the Korean Peninsula would require a range of over 1,000km. On the other hand, when considering the effect that immigrant culture had on the power base of the central polity, our focus narrows to the Kinki region, a range of less than 100km. Moreover, in a discussion of how immigrant culture affected the relationship between the elite and society, the range narrows further to less than 10km.

Such issues of scale are essential when weighing the viability of and formulating new theoretical models of state-formation. Theoretical models of state formation are varied: They include investigations of the relationship between center and periphery based on Immanuel Wallerstein's world-systems approach; Colin Renfrew's peer polity interaction model, which posits that competition between independent polities leads to social change (Renfrew 1972); Joyce Marcus' dynamic model that suggests that a polity does not continuously develop as if climbing stairs, but rather consolidates, expands, and dissolves in an oscillating cycle (Marcus 1998); and the dual processual approach, which categorizes elite power strategies into corporate and network strategies in its analysis of social change (Blanton *et al.* 1996).

Parkinson and Galaty suggest that layered temporal and geographic scales of analysis be applied: “The macro scale and the long term”; “the medium scale”; and “the local scale and the short term” (Parkinson & Galaty 2009, pp. 11–18). They suggest that the world-systems approach and dynamic model are more suited for exploring economic relations over the macro scale, such as the procurement of raw materials and long-distance trade of goods between center and periphery, and long-term variability in the organization of politics; these models are appropriate for long-term cases spanning several hundred to several thousand years and a geographical range of over 1,000 km. On the other hand, the peer polity interaction model, while often applied to politics of widely varying sizes, is proposed to be best suited for several decades to a century and a distance of five to 100 km. Additionally, under the dual processual approach, the network strategy translates into highly individualizing social differentiation through, for example, individual prestige or the exchange of wealth goods, while the corporate strategy translates into group-oriented dispersed power through the production of necessary agricultural goods, communal ritual, and the construction of public works; these factors make it appropriate for a temporal scale of a single generation or the geographical scale of a particular settlement (under 5 km) (Parkinson & Galaty 2009).

Considering the geographic environment elaborated above, the author considers this approach particularly useful when conducting an investigation of Japan’s ancient state formation process. Gina Barnes’ pioneering application of core-periphery and peer-polity interaction models to the relationship between the Japanese Archipelago and the Korean Peninsula is highly instructive. The author argues, however, that an understanding of the archipelago during the Kofun period would also greatly benefit from an approach that considers both (1) the independence of local areas (under 5 km) and (2) the widespread sharing of mortuary rituals and burial goods.

Political fluctuations that enveloped both the center and periphery during the first third of the 4<sup>th</sup> century, the last third of the 4<sup>th</sup> century, and the early 6<sup>th</sup> century are apparent in patterns of mounded-tomb construction and burial goods and were closely linked to changes in interregional interaction (Fukunaga 2005; Park 2007; Woo 2014). A “macro-scale and long-term” or “medium scale” approach is useful when considering the background of changes in hegemony and the decline in trade networks. On the other hand, a “local-scale and short-term” approach, making use of detailed mounded-tomb and settlement data, is appropriate for examining regime changes between politics and elite strategies within local society of importing foreign goods and adopting new technology. In this paper, the author attempts to decipher the strategies that characterized the various elite throughout the archipelago as they struggled to achieve and maintain political power.

Next, after briefly covering the theoretical background of the state formation theories seen in Japanese archaeology, the author will present the model used in this paper.



Recent research trends There are two main currents of thought in the discussion of interregional interaction during the Kofun period. The first reconstructs the interaction between the elite of East Asia through typological research and geographical distribution of burial goods uncovered from mounded tombs (Mizuno 1969; Fukunaga 2005; Park 2007, 2018; Isahaya 2012; Inoue 2014; Takata 2014; Kim 2017). The second reconstructs the activity of a wide swath of sociopolitical ranks, mainly focusing on trade, cultural influences, and the movement of people throughout East Asia through analyses of artifacts uncovered from settlement sites (Sekigawa 1988; Takesue 1991; Imazu 1994; Kameda 1993, 2012, 2018; K. Tanaka 2005; Kusumi 2007; Nakano 2008; Nagatomo 2010; Nakakubo 2012, 2017; Sakai 2013; Terai 2018). This can be called the immigrant-based approach (Seki 1956).

Research belonging to the former includes that on bronze mirrors imported from China (deity-and-beast mirrors with an image band, triangle-rimmed deity-and-beast mirrors, etc.), whorl- and cylindrical-shaped bronze implements and other military accessories, iron armor (lamellar helmets and framed helmets and cuirasses), horse trappings, accessories (belt buckles, gilt-bronze earrings, and crowns), gilt-bronze pommeled swords, and glass or gilt-bronze dining ware. This research has enabled the elucidation of political relations between the central polity and regional elite of the Japanese Archipelago and various regions throughout East Asia.

Within the second current, the advance of research on the pottery of the Japanese Archipelago and Korean Peninsula has enabled the reconstruction of trade networks and the determination of the homeland and destination of immigrants. Additionally, archaeology has been able to recreate to some extent the nature of interaction in cultural and religious arenas, such as clothing, horse-sacrificing rituals, and the acceptance of Buddhism.

These two currents, however, treat different datasets and have progressed relatively independent of one another in the field of East Asian archaeology. In this paper, the author presents a model of interregional interaction that encompasses both the elite and the general population and attempts to reconstruct the nature of interregional interaction during the Kofun period.

#### (1) Two types of interregional interaction

**Two types of interregional interaction** Interregional interaction during the Kofun period can be generalized into two model types (Figure 1).

The first type is called the “goods importation strategy” and describes efforts to obtain advanced goods and resources from China and the Korean Peninsula; the second type is called the “technology-knowledge adoption strategy” and describes efforts to control technological innovation by inviting foreign craftsmen with advanced technology. These two strategy types can represent differences in approaches by the elite, including the central elite, regional elite, and powerful families, with these differences not only greatly

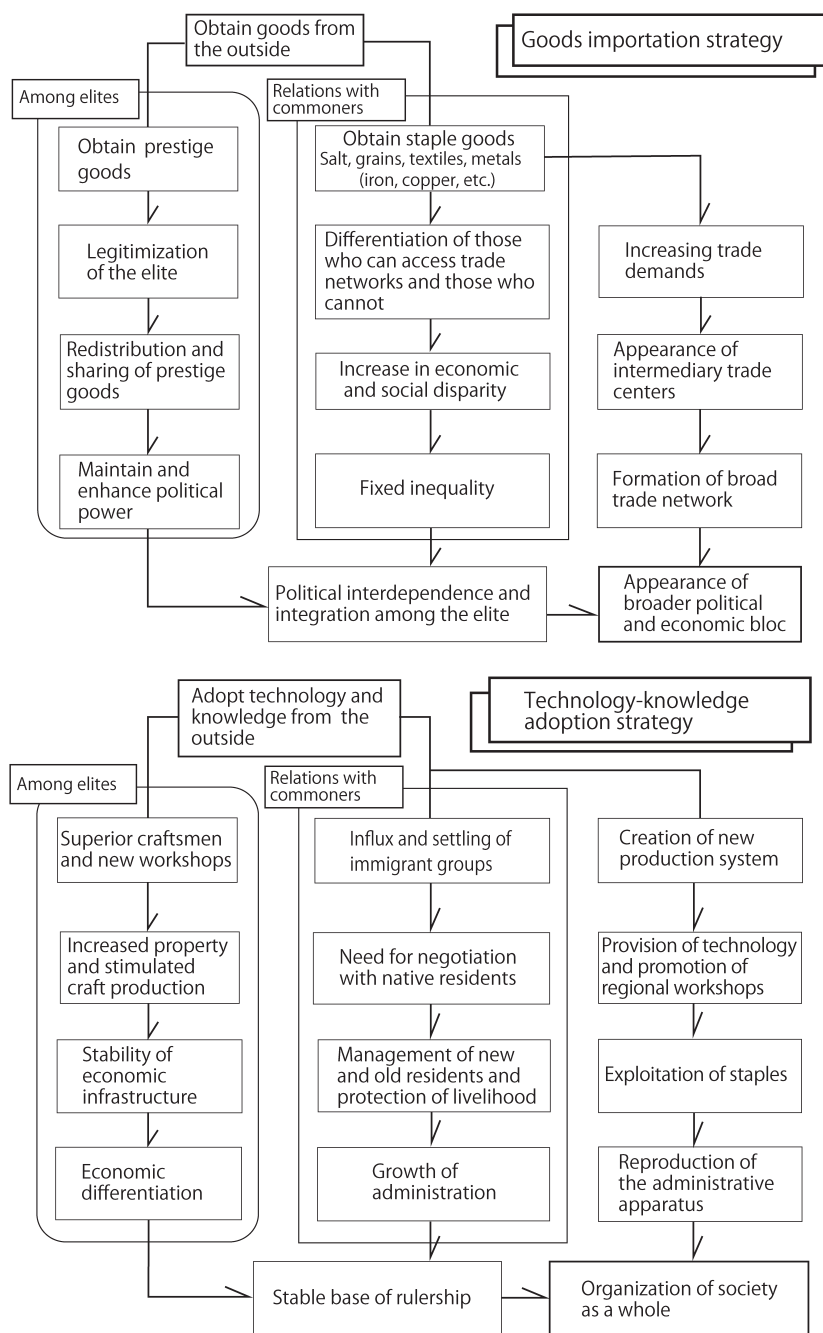


Figure 1. Two strategies of intercultural interaction



affecting their power base, but determining their very character, itself. While this approach operates mainly within the “local-scale and short-term,” analysis of the relationship between emergent political groups sharing similar strategies and spanning several generations or regions may necessitate the application of the “medium” and “macro-scale and long-term” models.

Let us first consider the goods importation strategy. Elites earned public esteem and admiration through the procurement of advanced goods and valuable materials through long-distance trade. If imported goods were items necessary for daily life, such as salt, grains, textiles, and metals, a definitive economic disparity would arise between those who were able to procure these goods and those who were not. Additionally, the procurement of exquisite imported wealth goods would bestow prestige and symbolize authority. Moreover, the efficacy of such prestige goods would be amplified if they originated in more advanced cultures or were made in, for example, an imperial workshop. Monopolizing the importation of prestige goods and distributing them to friendly elites would engender preeminence even within the elite community and strengthen political power. The discussion of staple finance and wealth finance is highly instructive in this regard (D’Altroy & Earle 1985).

The importation of goods from abroad through long-distance trade with outside societies required securing trade routes and prompted the creation of trade centers that acted as midway points. The growth of long-distance trade encouraged the establishment of points of trade along trade routes, allowing the formation of a broad trade network. In order to benefit from such trade, the elite of each region would need to cooperate with those who owned territory that included these trade centers. Through such efforts, elites playing a central role in the trade network could achieve preeminence, political and economic horizontal ties could be strengthened, and a far-reaching sociopolitical consolidation could be achieved.

This type of interregional interaction can cease to function properly, however, if the political situation behind the material resources becomes unstable. In other words, this type of interaction is an unstable source of power.

The other type of interaction, the technology-knowledge adoption strategy, actively encourages the immigration of outside groups with advanced technology and knowledge in order to realize the local production of advanced goods. Through the adoption of advanced technology and knowledge from the outside and control over production and distribution, elites were able to stably increase their economic power. Bolstered by their stable economic base, elites that succeeded in practicing this strategy were able to achieve political preeminence over other elites. While the successful formation of a new production system would incur costs in the management of technology, production, and distribution, its continued operation could be expected to galvanize the organization of a system of social governing. Additionally, the successful provisioning and transplantation of technology would be rewarded by the finished product. In other words, while this strategy encompasses

various costs, it is characterized by relative stability. Areas of instability may include tending to friction between immigrant and native groups. In such cases, a necessary function of the elite is the coordination and mediation among groups, requiring charisma and, at times, force. Various administrative functions are expected to develop, including control over residents, allocation of land for residence, and the development of necessary infrastructure. Additionally, in the event that the outside society in question is more advanced, knowledge surrounding ruling and administration may be adopted and utilized. In this way, vertical social relations gradually develop and organizational and administrative functions become increasingly necessary.

Within the technology-knowledge adoption strategy, sustained human interaction and the role of immigrants bringing advanced technology and knowledge are of particular importance. Most research on interregional interaction has focused on the movement of goods or the relations that formed the backdrop to such movement. The author suggests it is necessary, however, to move away from simple ideas of diffusion and focus on the introduction of new technologies and cultures through intercultural exchange.

The author suggests that the shift from the goods importation strategy to the technology-knowledge adoption strategy contributed to the expansion of the central polity's power base during the Kofun period. In the next section, let us consider the role these two strategies played in the state formation process of the Japanese Archipelago, marshaling case studies from East Asian archaeology.

## (2) Archaeological case study 1: The 3<sup>rd</sup> to 4<sup>th</sup> centuries

In this section, let us examine the interregional interaction of the 3<sup>rd</sup> to 4<sup>th</sup> centuries, paying attention to the historical background and marshaling archaeological data as necessary.

**Distribution of prestige goods and the necessity of iron** Interregional interaction during the Early Kofun period, from the middle of the 3<sup>rd</sup> century to the middle of the 4<sup>th</sup> century, was overwhelmingly based upon the goods importation strategy (Figure 2). Indeed, from a “macro-scale and long-term” perspective, relations with the East Asian world were especially important for the Japanese Archipelago, which was located on the fringe of the advanced Chinese sphere of influence. The importation and redistribution of goods deriving from China and the Korean Peninsula and the maintenance of such long-distance trade routes proved important for the elite composing the central Yamato polity.

In East Asia, bronze mirrors played an integral role in interregional interaction; in the case of the Japanese Archipelago, the importation of bronze mirrors was monopolized by the Yamatai polity of the Terminal Yayoi period and the Yamato polity of the Early Kofun period through tributary relations with the Wei and Jin Chinese courts. Queen Himiko sent envoys to the Wei in 239, 243, and 247, and the design behind the mission sent to the Western Jin by her successor Iyo in 266 was to receive outside acknowledgement of her position as

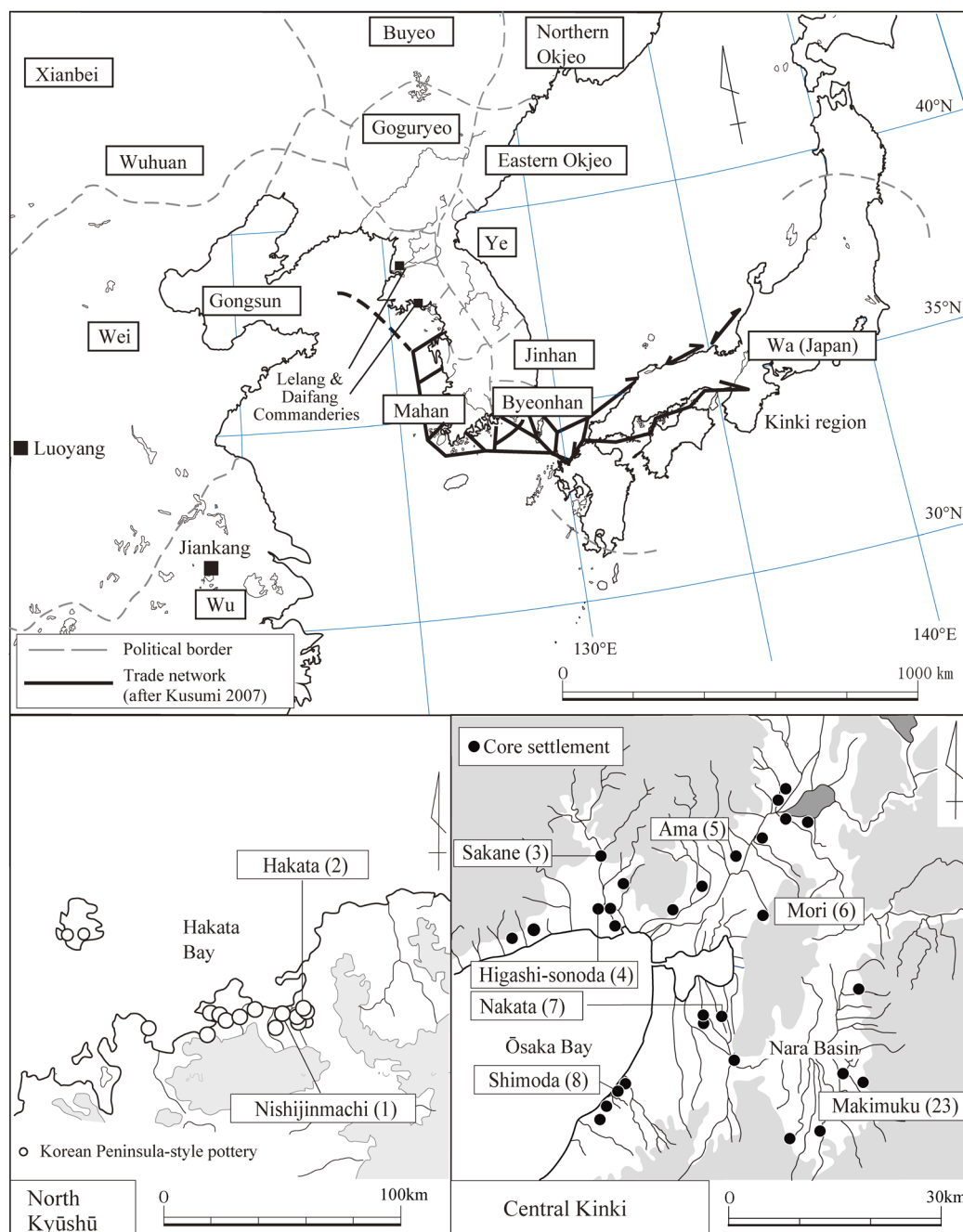


Figure 2. The political situation and trade network of East Asia during the 3<sup>rd</sup> century (numbers in parentheses correspond to the list of site reports at the end of this paper)

Wa paramount.

This is symbolized potentially by the triangle-rimmed deity-and-beast mirrors imported from China. KOBAYASHI Yukio interpreted the sharing of identical mirrors cast from the same mold as revealing the close political ties between the elite buried in the emergent mounded tombs (Kobayashi 1955). He demonstrated that supremacy was held by the powerful elite of the central Kinki region and masterfully reconstructed the historical significance of the establishment of the Yamato polity through archaeological data. The mounded tombs located in the paramount polity's stronghold of central Kinki have revealed the greatest number of Chinese bronze mirrors, as represented by the thirty-three triangle-rimmed deity-and-beast mirrors uncovered from Kurozuka Kofun in Nara Prefecture, and identical mirrors cast from the same mold have been found from mounded tombs across the archipelago.

The paramount group within the Yamato polity distributed the triangle-rimmed deity-and-beast mirrors imported from China to subservient elites throughout the archipelago in order to realize a far-flung political consolidation by displaying that its rule had been legitimized by the Chinese court (Kobayashi 1955; Fukunaga 2005). Applying a "local-scale and short-term" approach to the political activity of local elites reveals the existence of those elites who were given these mirrors and those that were not.

Let us now turn our attention from prestige goods to items of everyday life. Iron raw material for the production of agricultural implements, tools, and weapons, in addition to iron objects, themselves, were imported from China and the Korean Peninsula. As the archipelago was not yet technologically able to produce iron, it relied on imported iron raw material from the Korean Peninsula. According to the entry on Byeonhan and Jinhan contained in the *Account of the Eastern Barbarians, Book of Wei, History of the Three Kingdoms*, the southern Korean Peninsula produced high-quality iron, which traders from the Japanese Archipelago traveled to procure. This is supported by recent finds in Busan and Gyeongju in the southern Korean Peninsula of ironworking sites and wealthy burials rich in iron (Inoue 2014; Manabe 2015).

Procurement of iron resources through long-distance trade is suggested to have significantly changed the nature of domestic circulation, which had until then been based on reciprocal relations between neighboring regions. In the Kinki region, stone tools and weapons displayed a significant decrease from the end of the Middle Yayoi period and the shift to iron was completed by the latter half of the Late Yayoi period, relying fully on the importation of iron raw materials from China and the Korean Peninsula. This trade was conducted not by the general population, but rather by the elite, who succeeding in attaining a stable supply of necessary resources as community representatives.

Criticism has been leveled against this understanding of iron's role in social change based upon the low number of actual iron artifacts uncovered from the Kinki region

(Murakami 2007); indeed, the technological level and quality of Yayoi-period iron artifacts are significantly greater in North Kyūshū. It is important to realize, however, that the stable acquisition of iron was all the more vital for regions with less iron, and this necessity worked to change the nature of the community and role of the elite (Fukunaga 2005). The author interprets this common interest as the trigger that galvanized social consolidation.

Understanding the nature of the circulation of iron weapons is important when considering the military aspect of society. In recent years, typological research on iron weapons has greatly progressed. Joseph Ryan demonstrated that the Japanese Archipelago of the 2<sup>nd</sup> to 4<sup>th</sup> centuries AD was characterized by two levels in the circulation of iron weapons, with simple, locally produced iron weapons shared among the lower elite and centrally produced or imported weapons of higher quality provided to the upper elite across the archipelago (Ryan 2019). This division is suggested to have become more pronounced from the latter half of the 3<sup>rd</sup> century. The military strength to ensure the functioning of the trade network spanning over 1,000 km and connecting the Japanese Archipelago to the various regions of the East Asian world was no doubt essential for local society and the elite.

**The movement of pottery and the role of immigrants: Reconstructing the trade network** In addition to prestige goods buried in tombs and items necessary for daily life, pottery also provides a wealth of information.

The interconnected relationship between the trade centers throughout the Japanese Archipelago can be reconstructed through analysis of the movement of native and peninsular pottery. During the 3<sup>rd</sup> and 4<sup>th</sup> centuries, pottery from China and the Korean Peninsula is found from central sites throughout the archipelago, clustered most strongly in North Kyūshū, and imported and locally copied pottery enable the reconstruction of this trade network. KUSUMI Takeo proposed the existence of the “Hakata Bay Trade Network” and suggested that during the first half of the Early Kofun period, the Nishijinmachi site in Fukuoka Prefecture became the international trade center for the broader East Asian region (Kusumi 2007). Within the central Kinki region, a trade network connecting central settlements can be reconstructed centered on the Makimuku site in the southeastern Nara Basin, where a significant amount of pottery from the Korean Peninsula and other regions of the Japanese Archipelago has been found, and including the Nakata site group and Kyūhōji site in Kawachi, the Shimoda and Yotsuiki sites in Izumi, the Mori site group in North Kawachi, and the Ama, Higashi-sonoda, and Sakane sites in Settsu. Such pottery is not found at random, but often from geopolitically important areas, such as coastal areas and overland travel nodes. Application of a “local-scale and short-term” approach to settlement data reveals trade-center sites yielding a great amount of foreign pottery and typical sites yielding mostly local pottery. There can be no doubt that it was the former that was incorporated into the widespread trade network.

Closer inspection of the use and function of the pottery brought from China and the

Korean Peninsula reveals that many of them were small-sized jars and other pottery used for storage and transportation (Nagatomo 2010). On the other hand, pottery for cooking was mostly limited to the area around the Hakata Bay. This suggests that the interregional interaction with China and the Korean Peninsula strongly centered on trade; moreover, as pottery deriving from various other regions of the archipelago is found together with the imported pottery, it is reasonable to consider the central settlements of this period as centers of trade.

The existence of this widespread trade network was likely enabled through the political or military auspices of the Chinese court and the central polity of the Japanese Archipelago. It was such a network that maintained the goods importation strategy of interregional interaction.

**Craft production and settlements** Let us now turn our attention to craft production sites within the Japanese Archipelago. The existence of ironworking, beadmaking, and woodworking sites has been brought to light through careful archaeological excavation. In comparison with the 5<sup>th</sup> century, however, craft-production sites were still small-scale and insufficiently organized. It is therefore likely that strong emphasis was not placed on the realization of domestic production during the 3<sup>rd</sup> and 4<sup>th</sup> centuries.

North Kyūshū, where the nature of craft-production sites is relatively known, presents an illuminating case study. Kusumi suggests that the late-3<sup>rd</sup>- to early-4<sup>th</sup>-century Hakata Bay area was strongly functionally specialized, with, for example, the center of interregional interaction concentrated at the Nishijinmachi site, salt production focused at the Imagawa-imajuku site, and ironworking centralized at the Hakata site; he draws attention to the formation of a complementary production system and exchange network (Kusumi 2007). Compared with the Nishijinmachi site, only a small amount of pottery from the Korean Peninsula has been found at the Hakata and Imagawa-imajuku sites, obscuring the activity of immigrant craftsmen. On the other hand, while the Nishijinmachi site has yielded iron axe-heads and glass objects, no advanced kilns capable of operating at high temperature, such as those proposed for the Hakata site, have been found; rather than a craft-production site, the Nishijinmachi site can thus be considered an interregional interaction port specializing in trade.

**The “blank 4<sup>th</sup> century”** The goods importation strategy did not continue stably from the 3<sup>rd</sup> century through to the 7<sup>th</sup> century. The instability inherent in this strategy reached its peak in the early 4<sup>th</sup> century, with central settlements that once had acted as trade hubs ceasing to function (Figure 3).

In order to understand the backdrop of this development, let us adopt a macro-scale approach and turn our attention to the international situation. During the 4<sup>th</sup> century, the Western Jin, Wa’s target of diplomatic relations, fell after a time of civil strife (316), the Lelang and Daifang Commanderies, its recipients of tribute, ceased to exist (313), and China

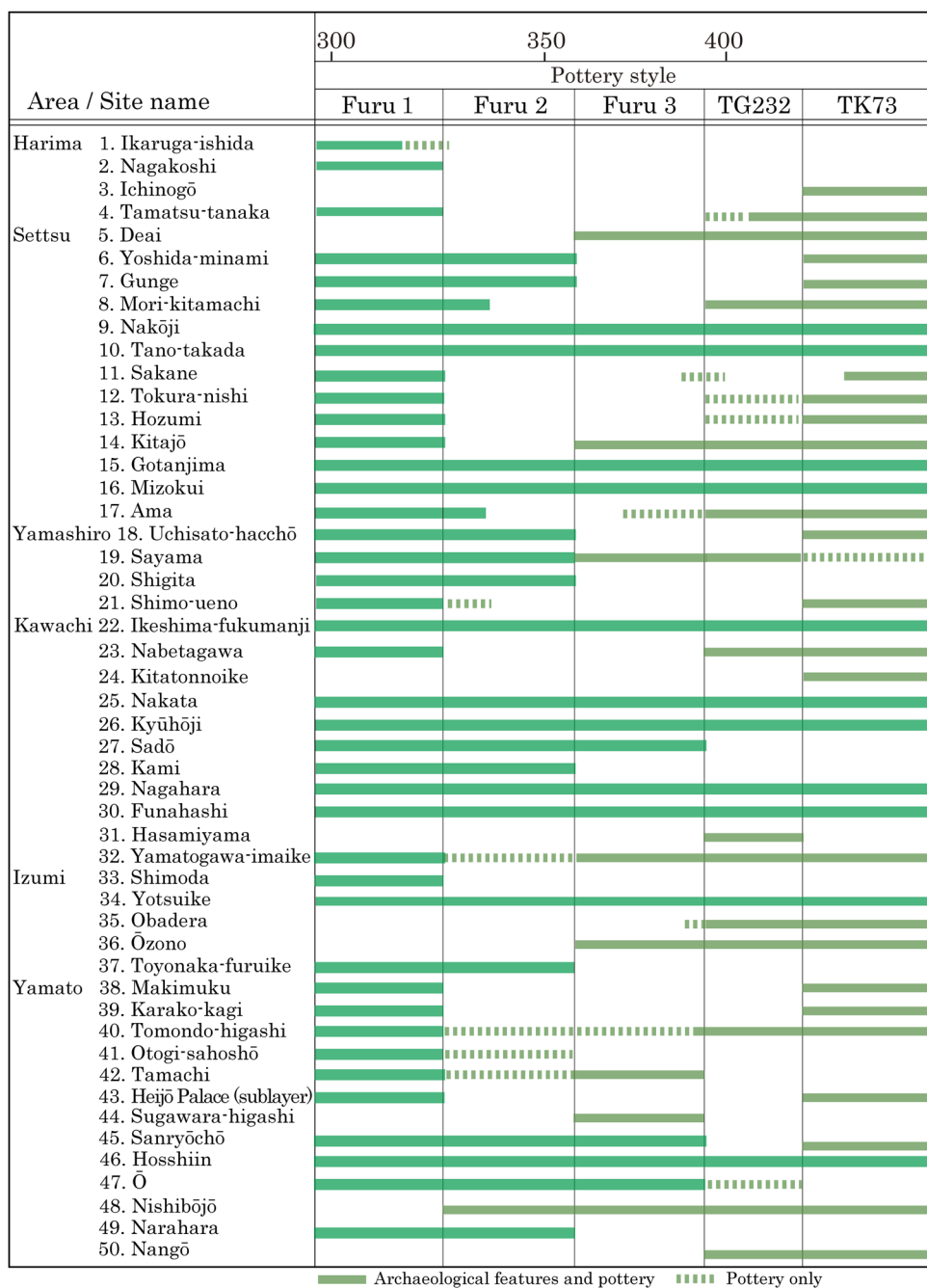


Figure 3. Changes in settlements during the 3<sup>rd</sup> and 4<sup>th</sup> centuries



entered the chaotic period of the Sixteen Kingdoms. On the Korean Peninsula, the states of Goguryeo, Baekje, Silla, and the Gaya polities matured, greatly changing the political map of East Asia. The weakening of China and the significant political changes on the Korean Peninsula led to the decline of the large-scale settlements throughout the western Japanese Archipelago that had acted as points of trade and greatly changed the trade network.

Based on the typo-chronology of pottery and an analysis of the changes in settlements and movement of pottery from the Korean Peninsula, it is apparent that the sites throughout the western archipelago that had functioned as nodes in the trade network continuously from the 3<sup>rd</sup> century ceased to function. This is supported not only by the decline in imported pottery found throughout the archipelago, but also by a decrease in the number of pit dwellings and posthole-type buildings, themselves. It is also telling when considering these settlements that pottery found often does not accompany a specific feature, making it difficult to elucidate the reality of the settlements of this period on a finer level.

**Alliance with Geumgwan Gaya and Wa-style pottery** Wa-style pottery found from the southern Korean Peninsula is especially instructive when considering the nature of relations between the peninsula and archipelago during the 4<sup>th</sup> century. A particularly representative example is the small, round-bottomed earthenware pottery found across a majority of the Japanese Archipelago, from the southern Tōhoku region to the southern part of the island of Kyūshū. In the 4<sup>th</sup> century, examples can also be found from the southeastern Korean Peninsula, where it was reproduced in stoneware iterations and used in offerings at mounded tombs (Takesue 1991). Furu-type pots, San'in-type pots, and pedestaled dishes, large-sized jars, and other types of Wa-style pottery have also been found, allowing researchers to reconstruct Koreo-Japanese relations in unprecedented detail (Inoue 2014; Cho 2016).

While the movement to the peninsula of Wa-style pottery, such as that deriving from the Kyūshū and San'in regions, can be seen during earlier periods as well, this increase seen during the 4<sup>th</sup> century coincides with the active exchange of wealth goods seen in the tombs of both regions, and can be understood within the context of the Wa elite acutely responding to the changing East Asian environment. According to Fukunaga, in response to the changing international political situation, an emergent polity comprising the elite of the northern Nara Basin and Kawachi Plain seized hegemony during the latter half of the Early Kofun period from the previous powers located in the southeastern Nara Basin who had relied on the authority of the Chinese Wei and Jin dynasties for support (Fukunaga 2005). In order to secure iron raw materials, this new polity successfully strengthened alliances with polities in the southern Korean Peninsula, in particular Geumgwan Gaya (Fukunaga 2005; Park 2007).

Meanwhile, tombs in the southeastern Korean Peninsula found with Wa-style artifacts, such as those in the Daeseong-dong, Bokcheon-dong, and Yangdong-ni tomb groups, also

contained a tremendous amount of iron goods and iron raw materials. Additionally, the 4<sup>th</sup>-century Buwon-dong site located in close proximity to the Daeseong-dong tomb group is considered a center for production and trade, bolstered by the evidence for ironworking and other craft production, a storehouse group, and a harbor. The existence of such a settlement suggests that an intercultural center for trade was established in Geumgwan Gaya in the southeastern Korean Peninsula, in place of the Nishijinmachi site.

The close relationship between the rise of Geumgwan Gaya on the peninsula and the emergent polity in the archipelago is apparent from the burial goods and Wa-style pottery found from Geumgwan Gaya tombs and settlements. As Geumgwan Gaya-style pottery is not found from settlement sites in the Japanese Archipelago, however, it can be surmised that the vector of trade became unilateral, aimed at Geumgwan Gaya. Throughout the course of the 4<sup>th</sup> century, which saw the decline of the Nishijinmachi site, the number of sites within the archipelago yielding Korean Peninsula-style pottery decreased drastically, and it is difficult to parse the existence of a specific center of trade within the archipelago from the current archaeological data. In other words, the active trade network that connected the various regions of the Japanese Archipelago in the 3<sup>rd</sup> century was replaced by a concentrated foreign-relations strategy.

### (3) Archaeological case study 2: The 5<sup>th</sup> century

**The East Asian political map of the 5<sup>th</sup> century** The political situation throughout East Asia changed drastically from the 4<sup>th</sup> to the 5<sup>th</sup> century. Adopting a “macro-scale” and “medium-scale” approach, let us turn our attention to the change seen across the region (Figure 4).

In China, Tuoba Gui, the chief of the Xianbei Tuoba clan who would later become the Emperor Daowu, established the Northern Wei in AD 386, embarking on a path to attain supremacy over central China. From 391, numerous battles with the expanding Northern Wei caused the might of the Later Yan, located in northeast China, to ebb, eventually resulting in its destruction in 407. As the ruling class of the Northern Yan, which arose following the Later Yan’s demise, initially comprised both Chinese and Goguryeo elite, they maintained a politically favorable relationship with Goguryeo. This alliance with the Northern Yan, in addition to the dissolution of military tension with the Later Yan, was a significant turning point for Goguryeo in the northern Korean Peninsula (Misaki 2012). Having removed the military threat in the northeast, which began with the Northern Wei’s incursion into central China, King Gwanggaeto of Goguryeo subsequently turned his attention to the southern Korean Peninsula.

The southern expansion of Goguryeo greatly influenced neighboring polities, causing a chain reaction throughout the southern Korean Peninsula. Owing to the incursion of Goguryeo and pressure from Silla, the polity of Geumgwan Gaya, which had developed

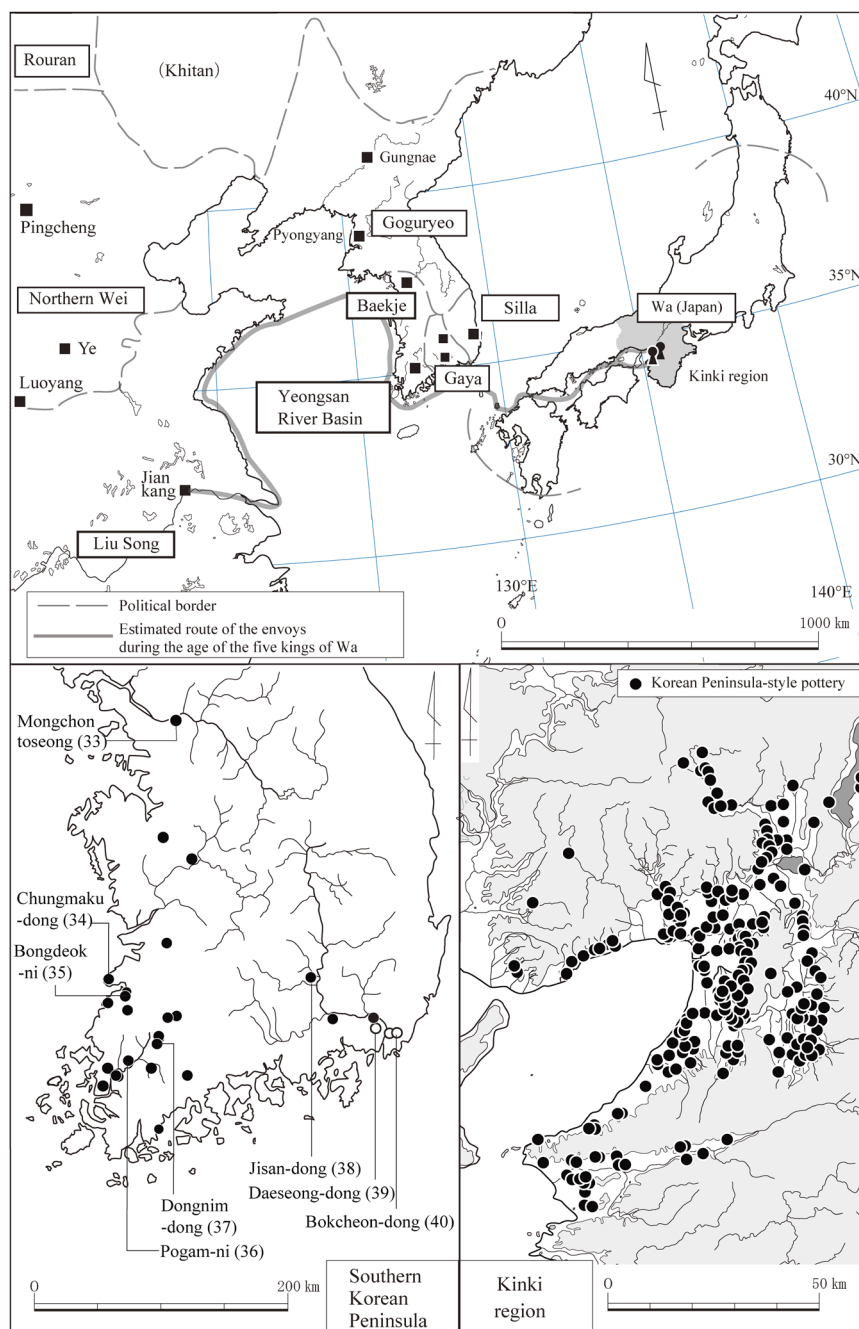


Figure 4. The political situation and distribution of Korean Peninsula-style pottery during the 5<sup>th</sup> century (numbers in parentheses correspond to the list of site reports at the end of this paper)

in the 4<sup>th</sup> century, began to weaken at the beginning of the 5<sup>th</sup> century. As the Daeseong-dong tomb group, royal tombs of the Geumgwan Gaya elite, entered a period of decline, significant Silla influence can be seen in the region from the early 5<sup>th</sup> century, attested to, for example, in the burial goods of the Bokcheon-dong tomb group.

The Northern Wei conquered the Northern Yan, who had established a stronghold in northeastern China, in 436, leading to its unification of northern China in 439 by Emperor Taiwu, while in southern China, Emperor Wu established the Song in 420. The subsequent Northern and Southern Dynasties began a period of relative stability.

Having experienced the turmoil and uncertainty throughout East Asia during the 4<sup>th</sup> century, the Japanese Archipelago's central polity began implementing an interregional-interaction strategy of technology (and knowledge) adoption during the 5<sup>th</sup> century (the Middle Kofun period). The author views this strategic change in policy as being prompted by the Yamato polity's desire to free itself from its significant dependency on the outside.

Applying a “medium-scale” approach to the political situation in the Japanese Archipelago reveals that power was rested from the polity in the Nara Basin, which had ruled from the middle of the 3<sup>rd</sup> century to the latter 4<sup>th</sup> century, by the Kawachi polity located on the Ōsaka Plain, a distance of some 30 to 40 km, or six to seven hours by foot. This emergent Kawachi polity achieved predominance and initiated strategic efforts to bolster the area under its control. A “local-scale and short-term” approach reveals that as local elites strengthened in concert with the Kawachi polity, those local elites tied to the previous polity of the southeastern Nara Basin declined.

Meanwhile, the goods importation strategy of interregional interaction continued to be implemented, evidenced by the importation of such items as horse trappings (Isahaya 2012), gilt-bronze goods, and glass objects from various regions throughout East Asia, including the Three Yan and Goguryeo of northeastern China and Silla and Daegaya of the southeastern Korean Peninsula (Park 2007); the emergent Kawachi polity was able to import essential goods, such as iron resources, by securing alliances with newly established powers throughout these regions.

Let us now consider four important archaeological phenomena: (1) The control of the military, economy, and ideology, as seen in the satellite tombs (*baichō*); (2) the increase in peninsular-style pottery and its relationship with local pottery; (3) the increase and trajectory of new settlements that functioned as hubs of development and craft production; and (4) the increase in dense tomb clusters attending the appearance of these new settlements.

**Interaction seen through prestige goods: Control over the military, economy, and ideology** Let us consider the nature of technology adoption during the period of state formation with several archaeological examples. First, let us consider elite sources of power through burial goods.

The satellite tombs surrounding the large keyhole-shaped mounded tombs are instructive

when considering this issue. While the Mozu-Furuichi Mounded Tomb Group, one of the archipelago's largest tomb groups, provides a wealth of archaeological data necessary to consider the sources of power held by the highest elite of the central Yamato polity, the designation of many of the tombs as imperial mausolea renders the structure of their burial facilities and the nature of their burial goods unknown. On the other hand, excavations of their surrounding satellite tombs have revealed much about the proto-bureaucracy that supported the paramount elite.

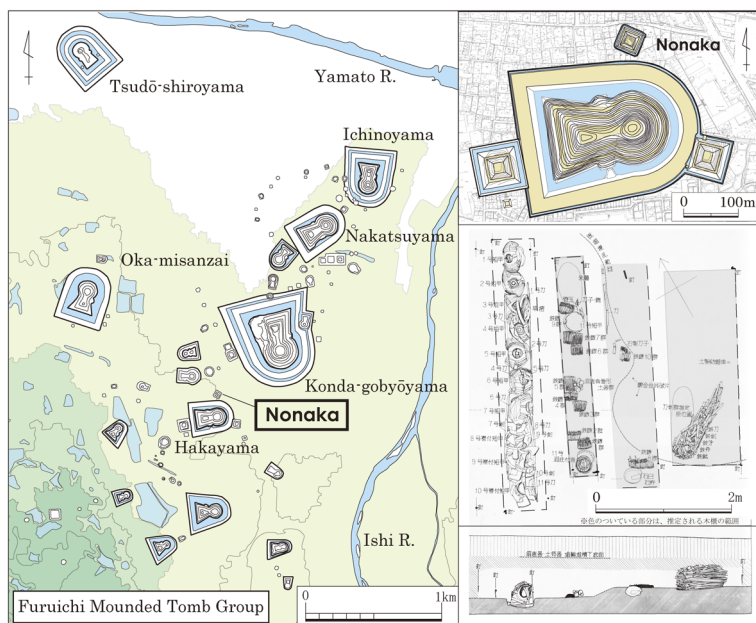
A representative example is Nonaka Kofun, located in the center of the Furuichi Mounded Tomb Group, one of the largest tomb groups in the archipelago. An astounding eleven suits of iron armor were uncovered from this small-scale mounded tomb (Figure 5).

The numerous suits of iron armor found from this 5<sup>th</sup>-century tomb suggest the stable importation of iron raw materials from the Korean Peninsula by the central Yamato polity, in addition to the use of advanced ironworking techniques. The iron armor of this period utilized a frame made of 4 cm-wide iron bands that wrapped around the body. Smaller iron plates would then be fixed with rivets between these bands. Some armor also used hinges to make it easier to put on. The use of rivets and hinges was introduced by craftsmen from the Korean Peninsula. On the other hand, the design of the armor was native to the Japanese Archipelago and greatly different from that of the Korean Peninsula. Therefore, while the advanced technology was imported from the outside, it was adapted domestically, producing objects unique to the Japanese Archipelago.

The introduction of advanced technology, as seen in the iron armor of this period, in addition to its deposition in tombs, allowed for the ostentatious display of military power. Around 740 iron arrowheads and 150 iron swords were also uncovered from Nonaka Kofun. Tombs with such mass burials of weapons and armor were not seen before the 5<sup>th</sup> century and suggest the existence of a military power significant enough to allow the removal of such quantities of armaments from circulation. The 5<sup>th</sup> century also witnessed changes in weapons. During this period, long-necked arrowheads with increased piercing strength replaced the previous shorter-necked arrowheads. These long-necked arrowheads were also introduced from the Korean Peninsula and can be understood as a functional response to the spread of iron armor. Additionally, the changes seen in weaponry were intimately related to the practice of horseriding. In the 5<sup>th</sup> century, horseriding was introduced from the Korean Peninsula, leading to an increase in the burial of horseriding equipment and sites dedicated to the rearing of horses. The practice of horseriding introduced from the Korean Peninsula also suggests that warriors began using horses.

In addition to iron armor and weapons, a significant amount of new types of iron tools and agricultural implements was found from Nonaka. During this period, the agricultural implements used to till fields and clear land, in other words to enable the functioning of agricultural society, were wooden and tipped with iron blades. Those found from Nonaka





Left: Furuichi Mounded Tomb Group and Nonaka Kofun  
 Upper right: Hakayama Kofun and its satellite tombs  
 Bottom right: Burial goods of Nonaka Kofun (after drawing by KITANO Kōhei)



Figure 5. Nonaka Kofun and its burial goods

included the traditional square-shaped blades and newly introduced U-shaped blades, the spread of the latter accompanying a significant increase in iron tools. This allowed a great increase in the efficiency of public-works projects and agricultural productivity, as it enabled the new construction of wet-rice paddies on plateaus, whose hard soil had been difficult to dig until then. From the archaeological record, we can trace the steady importation of iron resources, the introduction of new ironworking techniques, and the exploitation of surplus. Groups of large storehouses dating to the 5<sup>th</sup> century have been found, such as at the Hōenzaka site in Ōsaka, where it has been estimated that enough food to feed 1,211 people for one year could have been stored. This allows us to reconstruct the image of a central polity utilizing not only military power, but also economic power as a source of its authority.

Next, let us look at daily life during this period. The production of Sue stoneware began in the archipelago with the introduction of a new ceramic industry from the southern Korean Peninsula in the 5<sup>th</sup> century. While the roots of the earliest Sue ware can be traced to the southern Korean Peninsula, in particular Gaya, it gradually evolved into styles unique to the archipelago aimed at mass production and efficiency. Interestingly, analysis of the clay reveals that Sue ware was sent out from the central Kinki region to southern Tōhoku in the east and to southern Kyūshū in the west, a direct distance of over 1,200 kilometers. This far-flung circulation stands in contrast to the significantly more localized distribution of stoneware on the Korean Peninsula. It is important to note that not only was new technology adopted, but it was further developed within the Japanese Archipelago.

Before the appearance of Sue ware, pottery in the Japanese Archipelago consisted of earthenware called Haji ware. While vessels for storage were also found in Haji ware, the storage capacity of pottery increased significantly following the introduction of Sue ware. The capacity of Haji jars from the 3<sup>rd</sup> to 4<sup>th</sup> centuries was 10 to 20 ℓ; in comparison, that of 5<sup>th</sup>-century Sue ware reached a maximum of 360 ℓ, with Sue ware storage vessels being mass produced to hold a range of 50 to 300 ℓ, in accordance with their function. Interpreted in tandem with the fact that steaming vessels (*koshiki*) were also introduced from the Korean Peninsula at the same time and large-capacity storage vessels were used in later periods for brewing, this drastic increase in the storage and carrying capacity of Sue ware suggests that the nature of the feasts hosted by the elite also underwent significant changes.

This control by the central polity of the military, economy, and ideology, seen through the mortuary data, was made possible by the successful implementation of the technology adoption strategy.

**The movement of pottery and the role of immigrants** In order to understand the historical significance of this, let us once more consider the technology adoption strategy of foreign interaction, in which immigrants from the Korean Peninsula played an essential role (F. Tanaka 2005; K. Tanaka 2005). Using a “local-scale and short-term” approach, it is apparent that a stark disparity arose between those local elites and communities that



implemented a strategy of actively adopting new technology and knowledge and those that did not.

In the 5<sup>th</sup> century, new technologies, including iron- and metal-working, horse-riding, and a new ceramics industry, were introduced from the Korean Peninsula and sites yielding pottery from the peninsula greatly increased (Figure 6). Peninsula-style pottery has been unearthed from over 150 sites dating to this period within the Yamato polity's stronghold of the central Kinki region, an increase of over ten times over the preceding Early Kofun period, suggesting an increase in the number of immigrants from the peninsula. The roots of these immigrants has also become apparent in recent years through detailed typological analyses of unearthed artifacts (K. Tanaka 2005; Woo 2005; Kwon 2007, 2010; Nakano 2008; Ban & Nakano 2016; Nakakubo 2017; Terai 2018). While the homeland of these immigrants can be traced back to various areas across the peninsula, the majority were from the Yeongsan River Basin in the southwest and eastern Gaya along the southern coast. Interestingly, changes have been noted in the structure of settlements and the centralization of craft production during the 5<sup>th</sup> century in the Yeongsan River Basin (Lee 2016), displaying a situation very similar to that of the Kinki region in the archipelago. The finds of Sue ware in the southwestern Korean Peninsula that were brought from the Japanese Archipelago allow the reconstruction of bilateral contact between these two regions (Figure 4; Sakai 2013; Nakakubo 2017).

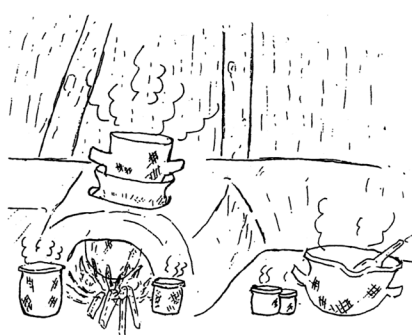
Nevertheless, the majority of pottery from settlements remained that of the local tradition, with peninsula-style pottery making up less than 10% of that found. This suggests that local settlements in the archipelago accepted immigrants from the Korean Peninsula into their communities.

**Craft production and settlements** Numerous iron and pottery workshops utilizing new technology innovations have been found from within and around settlements where immigrants from the Korean Peninsula settled (Horita 1993; Hanada 2002; Hishida 2007). The advanced technology and knowledge of these immigrants were highly prized.

Numerous archaeological sites exemplary of this have been found, in particular since 2000. Examples are found in particular from the area associated with the Furuichi Mounded Tomb Group, such as the Nagahara site group and Shitomiyakita site (Figure 7).

At the Nagahara site group, evidence for ironworking, woodworking, lacquer craft, which was also used in finishing weapons and armor, beadmaking, and horse rearing has been found (K. Tanaka 2005). Well known as horse-rearing settlements, the Shitomiyakita and Saragunjōri sites have also yielded evidence for various craft production activities, suggesting that these sites' purview extended beyond equestrian activities and included the production of weapons and horse gear.

Here it is important to note that the Nagahara and Shitomiyakita sites were home to settled groups of immigrants. Considering that the introduction of new technology and



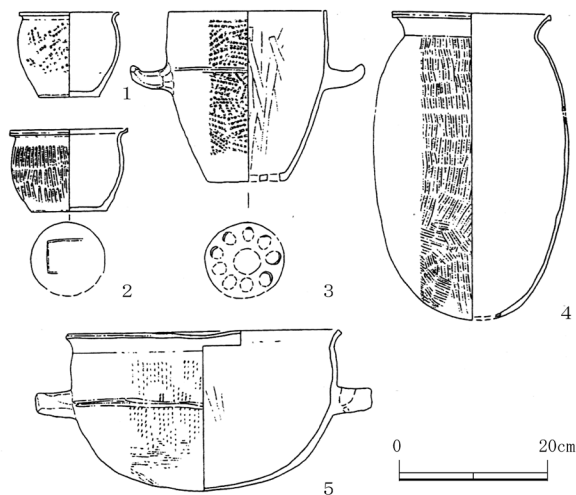
#### Cooking with Korean Peninsula-style earthenware

Elongated pots for boiling water over the stove

Steaming vessels placed atop the elongated pots

Cooking pots for providing food for large groups of people

Small flat-bottomed bowls for cooking soup or side dishes in front of the stove



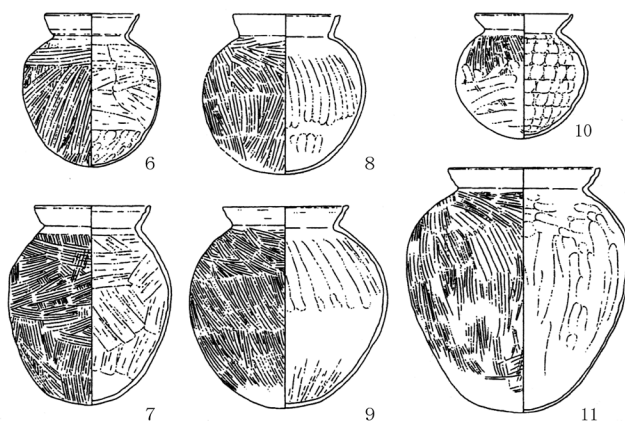
#### Cooking with Wa-style earthenware (Haji ware)

(4th century to the first half of the 5th century AD)

Large- and medium-sized spherical pots for rice cooking on fireplaces built on the dirt floor

Small- and medium-sized spherical pots used for cooking soup, rice, or side dishes

Dwellings with built-in stoves began to spread from the end of the 4th century through the 5th century



#### Korean Peninsula-style earthenware

Small flat-bottomed bowls (kogata hirazoko bachi): 1. Saragunjōri (10); 2. Fujiwara Palace Lower Stratum (25)

Steaming vessels (*koshiki*): 3. Kyūhōji (11); Elongated pots (*kame*): 4. Tajime-miyauchi (12)

Cooking pots (*nabe*): 5. Kitoragawa (13)

Wa-style earthenware (Haji ware)

Spherical pots (*kame*): 6. Yamadamichi sublayer (26); 7, 8. Tomondo-higashi (27); 9. Wani-morimoto (28); 10. Nagahara (14);

11. Kozakaai (7)

Figure 6. Comparison of Korean Peninsula-style earthenware and Furu-type Haji ware (numbers in parentheses correspond to the list of site reports at the end of this paper)

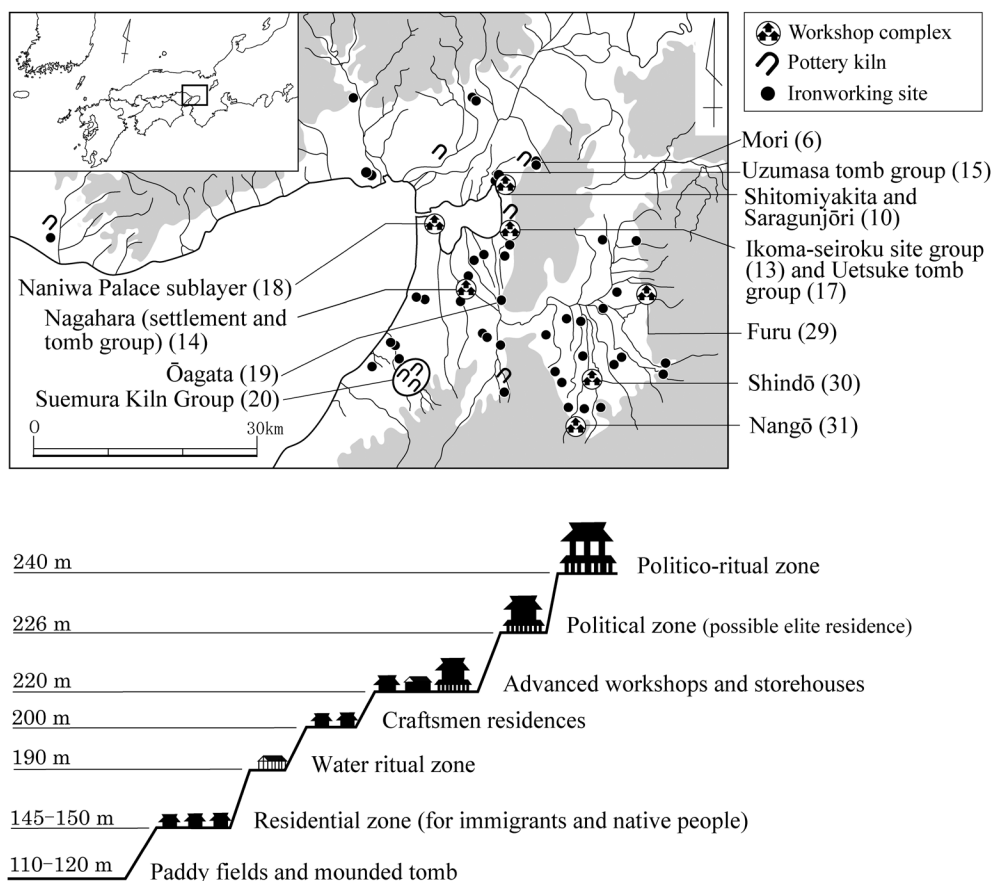


Figure 7. Distribution of craft-production sites in the 5<sup>th</sup> century (top) and the functional stratification of the Nangō site group (bottom) (numbers in parentheses correspond to the list of site reports at the end of this paper)

knowledge following the immigration and settling of peninsular groups and the transmission to local groups through close mutual interaction greatly contributed to the promotion and development of craft-production technologies, we can surmise that not only did the central polity attempt to develop this area around Kawachi Lake into a center of advanced technology, but also that the local elites working to actually implement these policies played important strategic roles.

We can understand the relationship between immigrants from the Korean Peninsula and local elite groups through an analysis of the Nangō site group in Nara Prefecture. This site group presented a hierarchical layout and was home to the Katsuragi family, a powerful elite family within the central polity. BAN Yasushi and AOYAGI Taisuke suggested that the sub-

sites within the site group displayed a functional specialization, with, for example, a ritual and political center at the Gokurakuji-hibiki site and a workshop complex at the Kadota site (Ban 2009; Aoyagi 2014). Let us consider this functional specialization in relation to the terrain at the base of Mount Kongō, where the site complex is located. The site complex was organized vertically in a planned and functional manner: At the highest elevation were large buildings forming a politico-ritual zone (the Gokurakuji-hibiki site); at the next lower elevation was a political zone or elite residence (the Nangō-yashida site); below that was a workshop complex utilizing advanced technology (the Kadota site), a large storehouse group (the Ido-otada site), a ritual zone equipped with an area for water rituals (the Ōhigashi site), and residences for immigrant and local groups (the Sadayunoki, Senbu, Shimochaya-kamata sites); finally, at the lowest elevation were wet-rice paddies and the Muromiyayama keyhole-shaped mounded tomb. The author interprets this as reflecting the strategy adopted by the political group that would come to be called the Katsuragi to carry out a technology adoption strategy. It may also be possible to interpret a similar hierarchical layout at the Furu site, which was home to the Mononobe family, another powerful elite family within the central polity. The author suggests that the appearance of such functionally stratified sites in the 5<sup>th</sup> century reflects the growth of the central polity's administrative system following the implementation of its "technology adoption strategy" of interregional interaction.

Within a "local-scale and short-term" framework, these agricultural settlements in the Kinki region were similar in their acceptance of immigrants from the Korean Peninsula; differences arose, however, based on the number of immigrants accepted and their level of embeddedness. The acceptance of outside groups required a myriad of tasks, such as arranging living quarters and provisions and safeguarding employment and livelihood; for the elite leaders of agricultural communities, these were new issues that needed to be addressed in the 5<sup>th</sup> century. Differences between settlements apparent in the nature of unearthed pottery exceed simple differences in archaeological data, indicating the tolerance of agricultural communities and the administrative strategies employed by their representative elite. Interestingly, this network of settlements with immigrants overlaps with the official road system established by the state in the 8<sup>th</sup> century. This suggests that the substratum of land-borne transportation in ancient Japan rested atop the infrastructure developed from the 5<sup>th</sup> century utilizing the knowledge of immigrants from the Korean Peninsula (Ichi 2016).

**Emergence of the proto-bureaucracy** We can also see the emergence of new settlements mirrored in elite mounded-tomb construction: For example, small-scale subsidiary or satellite tombs built around large-scale keyhole-shaped mounded tombs, such as Nonaka Kofun; or dense clusters of small-scale tombs (Shiraishi 1976; Wada 1992, 2004; Migishima 2012).

The early tomb clusters seen predominantly in the 5<sup>th</sup> century present several

commonalities: (1) Their construction period overlaps with that of the satellite tombs, appearing in the early 5<sup>th</sup> century and spreading throughout the Kinai region during the mid to late 5<sup>th</sup> century; (2) their construction continues even through periods of inactivity within lineages of chiefly tombs; (3) they display a strong connection to emergent settlements; and (4) they are equipped with characteristic *haniwa* and Sue ware, including that made by local kilns (Nakakubo 2017).

Interestingly, during the 5<sup>th</sup> century, the area surrounding Kawachi Lake was home to such emergent settlements and clusters of small-scale tombs. The promotion of concentrated craft production utilizing immigrant craft groups from the Korean Peninsula began around the beginning of the 5<sup>th</sup> century, typified by the Nagahara tomb cluster at the northern edge of the Kawachi Plateau; settlements subsequently expanded northward around Kawachi Lake, appearing along the western foot of Mount Ikoma (the Nishinotsuji, Kōnami, and Kitoragawa sites) and the Uemachi Plateau (the Naniwa Palace sublayer) in the mid 5<sup>th</sup> century and in North Kawachi (the Shitomiyakita-saragunjōri, Takamiya, and Mori sites) from the late 5<sup>th</sup> century. The growth of these settlements coincided with the construction periods of the Nagahara (Central Kawachi), Uetsuke (western foot of Mount Ikoma), and Uzumasa (North Kawachi) tomb clusters.

While the commencement of relations with the southern Chinese dynasty of Liu Song, political change on the Korean Peninsula, the evolution of a military organization (Toyoshima 2010), and the emergence of new settlements, in addition to numerous other complicated and multifaceted sociopolitical factors, must be taken into account when considering the appearance of these clustered tombs in the Kinki region, the author wishes to draw particular attention to their relationship with the construction of satellite tombs.

Subordinate elites, who increased in importance as facilitators of administration attending increasing complexity of the governing apparatus and are believed to have been buried in the satellite tombs, responded to the changing East-Asian atmosphere by strengthening the military organization and foreign relations and promoting and organizing craft production. Against this backdrop, they strengthened their ties with emergent elites in order to facilitate the carrying out of necessary activities, thereby preparing the groundwork for the formation of bureaucracy within the Japanese Archipelago's central polity.

When considered in this way, the increase in small tomb clusters, emergence of a bureaucracy, and the qualitative evolution of the elite that Mizoguchi suggested characterized the 6<sup>th</sup> century (Mizoguchi 2014) can actually be witnessed in the Kinki region of the 5<sup>th</sup> century. The author asserts that it was the technology-knowledge adoption strategy that galvanized this development.

Let us now turn our attention to the 6<sup>th</sup> century. During the Late Kofun period, miniature vessels for steaming rice and double-pronged metal hairpins have drawn attention as objects closely related to immigrant groups. Research by MIZUNO Masayoshi (Mizuno 1969), who

drew a connection between the miniature steaming vessels and Baekje immigrants with a strong connection to China, and SEKIGAWA Hisayoshi (Sekigawa 1988), who suggested that the miniature steaming vessels were influenced by the *mingqi* of China and that their burial, together with hairpins, betrayed the existence of Chinese immigrants, is highly instructive even today. Recent finds from Korea reward attention: Miniature steaming vessels, hairpins, and silver bracelets have been found on the periphery of Baekje, such as from the Yeobang-ri tomb group in Gunsan city; additionally, the excavation of the Gamil-dong tomb group in Hanam city revealed that miniature steaming vessels and silver hairpins were buried in pre-475 tombs in central Baekje. It may be possible to trace these artifacts back to the Eastern Jin (317–420) of China (The Nanjing Museum 2001). It has thus become possible to parse the existence of Chinese immigrants from within central Baekje.

Tombs with burials of miniature steaming vessels and hairpins concentrate in the Iware, Asuka, and Katsuragi areas of Yamato province, the Ishi River Basin and southern Ikoma area in Kawachi province, and to the southwest of Lake Biwa in Ōmi province, and similarities have been noted between the Ichisuka tomb group in Ōsaka Prefecture and the Shiga tomb group in Shiga Prefecture (Hori 2009). While these regions do not necessarily overlap with the area of dense concentration of peninsula-style earthenware during the Middle Kofun period, they nevertheless (1) display strong connections to newly developed areas dating from the end of the Middle Kofun period to the Late Kofun period and (2) are located on the environs of areas presumed to have been palaces. While it can be inferred that writing was transferred to the Japanese Archipelago from China via Baekje, we have now entered a stage where archaeological data can be marshaled to analyze the movement of related Chinese immigrants (Nakakubo 2018a).

## Conclusion

Over the approximately 400 years from the fall of the Han dynasty beginning in AD 220, through the reunification of China in 589 by the Sui, to the establishment of the Tang in 618, the East Asian world witnessed the rise and fall of numerous dynasties and experienced the movement and assimilation of various peoples. It is surely no coincidence that the central region of the Japanese archipelago began its maturation into a full-fledged ancient state during this period of innovation and rearrangement of the East Asian world order. It is within this context that we can understand the pivotal role played by intercultural interaction and foreign relations during the Kofun period.

While the largest keyhole-shaped mounded tombs were continuously constructed in the central Kinki region, each phase of the Kofun period witnessed 20 to 30km movements within this area: They were built in the southeastern Nara Basin during the Early Kofun period; the southern Ōsaka Plain during the Middle Kofun; and the northern Ōsaka Plain



during the Late Kofun. This has been interpreted as reflecting the transfer of hegemony among different groups in the Kinki region within the Yamato polity, and it has been suggested that the construction of various chiefly tomb lineages across the archipelago fluctuated in reaction to these changes at the paramount level (Tsude 1991). Moreover, these significant landmarks in mounded-tomb construction coincide with changes in the political situation of East Asia and related interregional-interaction strategies.

Because the goods and technology attained through foreign interaction became essential sources of power for emergent groups, the political repercussions of change were unavoidable.

In this paper, the author suggests that the focus of the interregional interaction strategy during the Kofun period shifted from the goods importation strategy to the technology-knowledge adoption strategy, thereby facilitating the stable development of the central polity's power. These two strategies were certainly not mutually exclusive, but rather coexisted in a dynamic interplay of change and development, with new strategies being grounded on those adopted previously and implemented progressively (Figure 8). In the case of the Japanese Archipelago, ancient state formation was significantly impacted by acute responses to changes in the East-Asian environment and the implementation of appropriately tailored strategies.

The central Japanese Archipelago thus presents a prime case study of elites located on

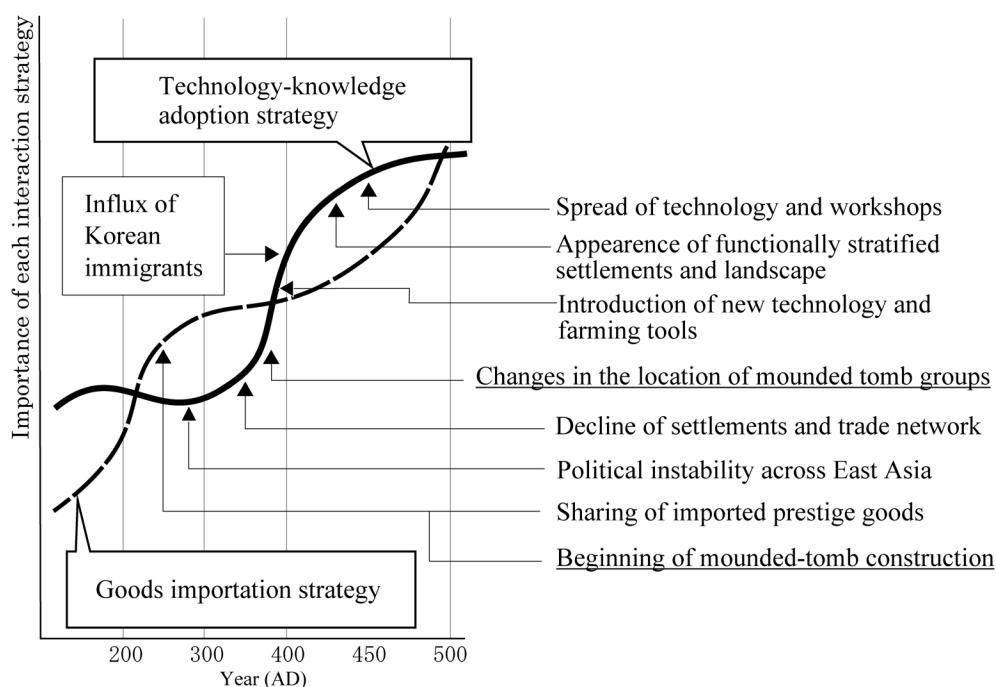


Figure 8. Changes in the intercultural interaction strategies of the Kofun period



the fringe of a primary state utilizing foreign-relations strategies to successfully enact social change. Fruitful avenues for future research include comparisons with other case studies from around the world.

## Notes

- 1) Conceptions of the preceding Yayoi period have changed greatly within Japanese archaeology. Traditionally, the Yayoi period was considered a time when difference in social rank increased, preparing the way for the emergence of a class society. From the 2000s, however, the conception of a considerably more egalitarian Yayoi period has gained traction. Additionally, some have suggested that a class society had yet to emerge even in the following Kofun period (Mizoguchi 2014). Further discussion grounded in cross-cultural comparison and fine-tuned analysis is necessary. In either case, a class society is positioned as having developed quickly over one to two centuries. Both positions find common ground in emphasizing fluctuations in the international environment and changes in interregional interaction networks as the catalyst for social change, albeit at considerably different junctures: Either during the period from the Late Yayoi to Early Kofun period or during the Terminal Kofun period.

## References

### Japanese

- Aoyagi, Taisuke 青柳泰介 2005. Yamato no toraijin 「大和の渡来人」 [Immigrants in Yamato]. *Yamato ōken to toraijin* 『ヤマト王権と渡来人』 [The Yamato polity and immigrants], edited by Ōhashi Nobuya 大橋信弥 and Hanada Katsuhiro 花田勝弘, pp. 38–64. Sanraizu shuppan サンライズ出版
- Aoyagi, Taisuke 2014. Nangō iseki-gun to Katsuragi chiiki: Kofun jidai chūki no doki yōsō to iseki no kankei kara mirareru kakki wo chūshin ni 「南郷遺跡群と葛城地域—古墳時代中期の土器様相と遺跡の関係からみられる画期を中心に—」 [The Nangō site group and Katsuragi region: Historical change as seen through the pottery of the Middle Kofun period and the nature of settlements]. *Kan-shiki-kei Doki Kenkyū* 『韓式系土器研究』 [Research on pottery from the Korean Peninsula] XIII, pp. 135–152. Kan-shiki-kei doki kenkyūkai 韓式系土器研究会
- Ban, Yasushi 坂靖 2009. *Kofun jidai no iseki-gaku: Yamato ōken no shihai kōzō to haniwa bunka* 『古墳時代の遺跡学—ヤマト王権の支配構造と埴輪文化—』 [Reading the sites of the Kofun period: The administrative structure of the Yamato polity and haniwa culture]. Yūzankaku 雄山閣
- Ban, Yasushi & Nakano, Saki 中野咲 2016. *Kofun jidai ni okeru torai-kei shūdan no shutsuji*

- to *yakuwari ni tsuite no kōkogaku-teki kenkyū* 『古墳時代における渡来系集団の出自と役割についての考古学的研究』 [Archaeological research on the lineages and roles of immigrant groups during the Kofun period]. 平成24～27年度日本学術振興会科学研究費補助金基盤研究 (C) 研究成果報告書 [Grants-in-Aid for Scientific Research (C) KAKENHI for FY2012 to FY2015 research results report]. Archaeological Institute of Kashihara, Nara Prefecture 奈良県立橿原考古学研究所
- Fukunaga, Shin'ya 福永伸哉 2005. *Sankakubuchi shinjūkyō no kenkyū* 『三角縁神獣鏡の研究』 [Research on the triangle-rimmed deity-and-beast mirrors]. Ōsaka Daigaku shuppankai 大阪大学出版会
- Fukunaga, Shin'ya 福永伸哉 2014. Kofun jidai to kokka keisei 「古墳時代と国家形成」 [The Kofun period and state formation]. *Kofun jidai no kōkogaku* 『古墳時代の考古学』 [Archaeology of the Kofun period] 9, edited by Fukunaga Shin'ya, pp. 7–20. Dōseisha 同成社
- Hanada, Katsuhiro 花田勝広 2002. *Kodai no tetsu seisan to toraijin: Wa Seiken no keisei to seisan soshiki* 『古代の鉄生産と渡来人—倭政権の形成と生産組織—』 [Ancient iron production and immigrants: Formation of the Wa polity and the production system]. Yūzankaku 雄山閣
- Hishida, Tetsuo 菱田哲郎 2007. *Kodai Nihon kokka keisei no kōkogaku* 『古代日本 国家形成の考古学』 [Archaeology of state formation in ancient Japan]. Kyōto Daigaku gakujutsu shuppankai 京都大学学術出版会
- Hori, Masato 堀真人 2009. Toraijin no haka: Shiga kofun-gun to Ichisuka kofun-gun 「渡来人の墓—志賀古墳群と一須賀古墳群—」 [Immigrant tombs: The Shiga and Ichisuka Mounded Tomb Groups]. *Shiga-ken Bunkazai Hogo Kyōkai Kiyō* 『滋賀県文化財保護協会紀要』 22, pp. 13–22.
- Horita, Keiichi 堀田啓一 1993. Toraijin: Yamato no kuni wo chūshin ni 「渡来人—大和国を中心に—」 [Immigrants: With a focus on the Yamato province]. *Kofun jidai no kenkyū* 『古墳時代の研究』 [Research on the Kofun Period] 13, edited by Shiraishi Taichirō 白石太一郎, pp. 142–157. Yūzankaku 雄山閣
- Ichi, Hiroki 市大樹 2016. Ritsuryōsei-ka no kōtsū seido 「律令制下の交通制度」 [Transportation systems under the *ritsuryō* state]. *Nihon kodai no kōtsū, kōryū, jōhō* 『日本古代の交通・交流・情報』 [Transportation, interaction, and information in ancient Japan] 1, edited by Tateno Kazumi 館野和己 and Ideta Kazuhisa 出田和久, pp. 2–30. Yoshikawa kōbunkan 吉川弘文館
- Imazu, Keiko 今津啓子 1994. Toraijin no doki: Chōsen-kei nanshitsu doki wo chūshin toshite 「渡来人の土器—朝鮮系軟質土器を中心として—」 [Pottery of the immigrants: An analysis of Korean Peninsula-style earthenware]. *Kodai ōken to kōryū: Yamato ōken to kōryū no shosō* 『古代王権と交流 ヤマト王権と交流の諸相』 [The ancient state and interaction: The Yamato polity and the nature of interaction], edited by Araki Toshio 荒木敏夫, pp. 111–139. Meicho shuppan 名著出版
- Inoue, Chikara 井上主税 2014. *Chōsen hantō no Wa-kei ibutsu kara mita nikkān kankei* 『朝鮮半島の倭系遺物からみた日朝関係』 [Japan-Korean relations as seen

- from Wa-style Artifacts uncovered from the Korean Peninsula]. Gakuseisha 学生社
- Isahaya, Naoto 諫早直人 2012. *Tōhoku Ajia ni okeru kiba bunka no kōkogaku-teki kenkyū* 『東北アジアにおける騎馬文化の考古学的研究』 [Archaeological research on the horseriding culture of Northeast Asia]. Yūzankaku 雄山閣
- Ishimoda, Shō 石母田正 1971. *Nihon no kodai kokka* 『日本の古代国家』 [The ancient state of Japan]. Iwanami shoten 岩波書店
- Kameda, Shūichi 亀田修一 1993. *Kōkogaku kara mita toraijin* 「考古学からみた渡来人」 [Immigrants seen through archaeology]. *Kobunka Dansō* 『古文化論叢』 30, pp. 747–778. Kyūshū Kobunka Kenkyūkai 九州古文化研究会
- Kameda, Shūichi 2012. *Toraijin* 「渡来人」 [Immigrants]. *Kofun jidai kenkyū no genjō to kadai* 『古墳時代研究の現状と課題』 [The current state of research on the Kofun period and issues for further consideration], edited by Habuta Yoshiyuki 土生田純之 and Kameda Shūichi, pp. 287–309. Dōseisha 同成社
- Kim, Woodae 金宇大 2017. *Kinkōhin kara yomu kodai Chōsen to Wa* 『金工品から読む古代朝鮮と倭』 [The Korean Peninsula and Japanese Archipelago as seen through metalwork]. Kyōto Daigaku gakujutsu shuppankai 京都大学学術出版会
- Kobayashi, Yukio 小林行雄 1955. *Kofun no hassei no rekishi-teki igi* 「古墳の発生の歴史的意義」 [The historical significance of the emergence of kofun] *Shirin* 『史林』 38(1), pp. 1–20. Shigaku kenkyūkai 史学研究会
- Kusumi, Takeo 久住猛雄 2007. *Hakata-wan bōeki no seiritsu to kaitai* 「博多湾貿易」の成立と解体」 [Establishment and Dissolution of the “Hakata Bay Trade Network”] *Kōkogaku Kenkyū* 『考古学研究』 53(4), pp. 20–36. Kōkogaku kenkyūkai 考古学研究会
- Lee, Yeongcheol 李暎澈 2016. *Shūroku kara mita Eizankō ryūiki, Kudara, Wa* 「集落からみた栄山江流域・百濟・倭」 [The Yeongsan River Basin, Baekje, and Wa seen through settlements]. *Kodai nikkān kōshō no jittai* 『古代日韓交渉の実態』 [The nature of ancient Japan-Korean interaction], pp. 71–83. *Rekihaku kokusai shinpojiumu shiryōshū* 歴博国際シンポジウム資料集 [National Museum of Japanese History international symposium materials]. National Museum of Japanese History 国立歴史民俗博物館
- Manabe, Seiji 真鍋成史 2015. *Tōi shokoku no kaji gijutsu* 「東夷諸国の鍛冶技術」 [Ironworking technology of the “eastern barbarians”]. *Mori Kōichi sensei ni manabu: Mori Kōichi sensei tsuitō ronshū* 『森浩一先生に学ぶ：森浩一先生追悼論集』 [Memorial collection in remembrance of Professor Mori Kōichi], pp. 817–827. Dōshisha Daigaku kōkogaku shiriizu kankōkai 同志社大学考古学シリーズ刊行会
- Migishima, Kazuo 右島和夫 2012. *Gunshūfun* 「群集墳」 [Dense tomb clusters]. *Kofun jidai kenkyū no genjō to kadai*, pp. 331–352. Dōseisha 同成社
- Misaki, Yoshiaki 三崎良章 2012. *Goko jūrokkoku: Chūgoku shijō no minzoku dai-idō* 『五胡十六国 中国史上の民族大移動』 [Period of the Sixteen Kingdoms: The great migration of people in Chinese history] (newly revised edition). Tōhō sensho 東方選書

- Mizuno, Masayoshi 水野正好 1969. Shiga-gun shozai no kanjin-kei kika shizoku to sono bosei 「滋賀郡所在の漢人系帰化氏族とその墓制」 [Chinese immigrant families and their burials in Shiga-gun]. *Shiga-ken Bunka Chōsa Hōkokusho* 『滋賀県文化財調査報告書』 4, pp. 77–92.
- Murakami, Yasuyuki 村上恭通 2007. *Kodai kokka seiritsu katei to tekki seisan* 『古代国家成立過程と鉄器生産』 [The ancient state formation process and ironware production]. Aoki shoten 青木書店
- Nagatomo, Tomoko 長友朋子 2010. Rakurō doki kara mita kōryū kankei 「楽浪土器からみた交流関係」 [Interaction seen through Lelang pottery]. *Machikaneyama kōkogaku ronshū* 『待兼山考古学論集』 [Machikaneyama archaeology collection] II, pp. 13–34. Ōsaka Daigaku kōkogaku kenkyūshitsu 大阪大学考古学研究室
- Nakakubo, Tatsuo 中久保辰夫 2012. Toraijin ga motarashita shin-gijutsu 「渡来人がもたらした新技術」 [New technologies introduced by immigrants]. *Kofun jidai no kōkogaku* 7, edited by Hōjō Yoshitaka 北條芳隆, pp. 159–169. Dōseisha 同成社
- Nakakubo, Tatsuo 中久保辰夫 2017. *Nihon kodai kokka no keisei katei to taigai kōryū* 『日本古代国家の形成過程と対外交流』 [The state formation process in ancient Japan and interregional interaction]. Ōsaka Daigaku shuppankai 大阪大学出版会
- Nakakubo, Tatsuo 2018. Kofun jidai no Kinki chiiki ni okeru toraijin to doki 「古墳時代の近畿地域における渡来人と土器」 [Immigrant pottery in the Kinki region of the Kofun period]. *Kōkogaku Jaanaru* 『考古学ジャーナル』 No. 711, pp. 10–14. Nyū saiensu-sha ニュー・サイエンス社
- Nakano, Saki 2008. Kan-shiki-kei nanshitsu doki bunpuron no genjō to kadai 「韓式系軟質土器」 分布論の現状と課題」 [The current state of research on the distribution of Korean Peninsula-style earthenware and issues for further consideration]. *Kashihara Kōkogaku Kenkyūsho ronshū* 『橿原考古学研究所論集』 [Collection of essays from the Archaeological Institute of Kashihara] 15, pp. 243–260. Aoki shoten 八木書店
- Park, Cheunsoo 朴天秀 2007. *Kaya to Wa: Kan-hantō to Nihon rettō no kōkogaku* 『加耶と倭—韓半島と日本列島の考古学—』 [Gaya and Wa: The archaeology of the Korean Peninsula and Japanese Archipelago]. Kōdansha sensho meche 講談社選書メチエ
- Ryan, Joseph ライアン・ジョセフ 2019. Kofun shutsugenki ni okeru tōkenrui no seisan to ryūtsū no nisō: Kibi chiiki wo chūshin ni 「古墳出現期における刀剣類の生産と流通の二相—吉備地域を中心に」 [Two Systems of Iron Sword Production and Circulation during the Kofun Period: An Analysis of the Iron Swords of the Kibi Region]. *Nihon Kōkogaku* 『日本考古学』 49, pp. 23–44. Nihon kōkogaku kyōkai 日本考古学協会
- Sakai, Kiyoji 酒井清治 2013. *Doki kara mita Kofun jidai no nikkān kōryū* 『土器から見た古墳時代の日韓交流』 [Japan-Korean relations during the Kofun period as seen through pottery]. Dōseisha 同成社
- Seki, Akira 関晃 1956. *Kikajin* 『帰化人』 [Immigrants]. Shibundo 至文堂
- Sekigawa, Hisayoshi 関川尚功 1988. Kofun jidai no toraijin: Yamato, Kawachi chiiki wo chūshin toshite 「古墳時代の渡来人—大和・河内地域を中心として—」 [Immigrants during the Kofun period: With a focus on the Yamato and Kawachi areas]. *Kashihara*

- Kōkogaku Kenkyūsho ronshū* 9, pp. 69–116. Archaeological Institute of Kashihara, Nara Prefecture 奈良県立橿原考古学研究所
- Shiraishi, Taichirō 1976. Sekkōzan kofun-gun no teiki suru mondai 「石光山古墳群の提起する問題」 [Issues surrounding the Sekkōzan Mounded Tomb Group] *Katsuragi, Sekkōzan Kofun-gun* 『葛城・石光山古墳群』 [The Sekkōzan Mounded Tomb Group in Katsuragi], edited by Shiraishi Taichirō, Kawakami Kunihiko 河上邦彦, Kameda Hiroshi 亀田博, and Chiga Hisashi 千賀久, pp. 457–464. Archaeological Institute of Kashihara, Nara Prefecture 奈良県立橿原考古学研究所
- Takata, Kanta 高田貫太 2014. *Kofun jidai no nicchō kankei: Shiragi, Kudara, Daikaya to Wa no kōshō-shi* 『古墳時代の日朝関係—新羅・百濟・大伽耶と倭の交渉史—』 [Japan-Korean relations during the Kofun period: A history of interaction between Silla, Baekje, Daegaya, and Wa]. Yoshikawa kōbunkan 吉川弘文館
- Takesue, Jun'ichi 武末純一 1991. *Doki kara mita nikkān kōshō* 『土器からみた日韓交渉』 [Japan-Korean relations seen through pottery]. Gakuseisha 学生社
- Tanaka, Fumio 田中史生 2005. *Wakoku to toraijin: Kōsaku suru uchi to soto* 『倭国と渡来人 交錯する「内」と「外」』 [The Japanese Archipelago and immigrants: The intertwining of “inside” and “outside”]. Yoshikawa kōbunkan 吉川弘文館
- Tanaka, Kiyomi 田中清美 2005. *Kawachi-ko shūhen no kan-shiki-kei doki to toraijin* 「河内湖周辺の韓式系土器と渡来人」 [Korean Peninsula-style pottery and immigrants in the Kawachi Lake area]. *Yamato ōken to toraijin*, edited by Ōhashi Nobuya and Hanada Katsuhiro, pp. 65–89. Sanraizu shuppan
- Terai, Makoto 寺井誠 2018. *Koshiki kara mita toraijin no kochi* 「甕からみた渡来人の故地」 [Tracing the lineage of immigrants through steaming vessels]. *Kōkogaku Jaanaru* 『考古学ジャーナル』 No. 711, pp. 15–19. Nyū saiensu-sha ニュー・サイエンス社
- Toyoshima, Naohiro 豊島直博 2010. *Tessei buki no ryūtsū to shoki kokka keisei* 『鉄製武器の流通と初期国家形成』 [The circulation of iron weapons and early state formation]. Hanawa shobō 塙書房
- Tsude, Hiroshi 都出比呂志 1991. *Nihon kodai no kokka keisei-ron josetsu: Zēnpōkōenfun taisei no teishō* 「日本古代の国家形成論序説—前方後円墳体制の提唱」 [Introduction of the theories of state formation in ancient Japan: Proposing the keyhole tomb system]. *Nihon-shi Kenkyū* 『日本史研究』 343, pp. 5–39. Nihon-shi Kenkyūkai 日本史研究会
- Wada, Seigo 和田晴吾 1992. *Gunshūfun to shūmatsuki kofun* 「群集墳と終末期古墳」 [Dense tomb clusters and mounded tombs of the Terminal Kofun period]. *Shinpan kodai no Nihon* 『新版 古代の日本』 [Ancient Japan, new edition] 5: Kinki 1, edited by Yamanaka Ichirō 山中一郎 and Kanō Hisashi 狩野久, pp. 325–350. Kadokawa shoten 角川書店
- Wada, Seigo 和田晴吾 2004. *Kofun bunka ron* 「古墳文化論」 [Treatise on Kofun culture]. *Nihon-shi kōza* 『日本史講座』 [Course on Japanese history] 1, edited by members of Rekishigaku Kenkyūkai [Society of Historical Studies] 歴史学研究会 and Nihonshi Kenkyūkai [Society for Japanese History] 日本史研究会, pp. 167–200. 東京大学出版会



- Wada, Seigo 和田晴吾 2011. Kofun jidai kenkyū shōshi 「古墳時代研究小史」 [An introduction to research on the Kofun period]. *Kōza Nihon no kōkogaku* 『講座日本の考古学』 [Course on Japanese archaeology] 7, edited by Hirose Kazuo 広瀬和雄 and Wada Seigo, pp. 54–99. Aoki shoten 青木書店
- Yoshida, Akira 吉田晶 1998. *Wa ōken no jidai* 『倭王権の時代』 [Age of the Wa polity]. Shin Nippon shuppansha 新日本出版社

### Korean

- Kwon, Oh-Young 권오영 2007. The settlement of Baekje immigrants in the Kinai region of the Japanese Archipelago seen through dwelling structure and cooking culture 「住居構造와 炊事文化를 통해 본 백제계 이주민의 일본畿内地域 정착과 그 의미」. *Hanguk sanggosa hakbo* 『韓国上古史學報』 56, pp. 53–94. Korean Ancient Historical Society 韓国上古史學會
- Kwon, Oh-Young 권오영 2010. The material culture of capital residents on the Baekje frontier 「백제 변경에서 확인되는 왕경인의 물질문화」. *Hanguk sanggosa hakbo* 67, pp. 91–114. Korean Ancient Historical Society
- Woo, Jaepyoung 禹在柄 2005. The spread of the Korean Peninsula-style cooking and heating system seen in the dwelling styles of the 5<sup>th</sup> century Japanese Archipelago 「5世紀頃 日本列島 住居様式에 보이는 韓半島系 炊事・暖房시스템의 普及과 그 背景」. *Baekje yeongu* 『百濟研究』 41, pp. 33–49. Chungnam National University Baekje Research Center 忠南大學校百濟研究所
- Woo, Jaepyoung 2014. The political situation in Baekje's southwestern region seen in the continuance and discontinuance of mortuary culture of the 5<sup>th</sup> and 6<sup>th</sup> centuries 「5～6世紀 墓制의 連續과 斷切로 본 百濟 西南部地域의 政治的動向」. *Seonsa wa godae* 『先史와 古代』 42, pp. 31–53. Korean Ancient History Society 韓国古代學會
- Cho, Seong Won 조성원 2016. Reevaluation of Haji-type pottery found in the Yeungnam region of the 4<sup>th</sup> and 5<sup>th</sup> century 「영남지역 출토4～5세기대 土師器系土器의 재검토」. *Hanguk kogo hakbo* 『韓國考古學報』 99, pp. 138–169. The Korean Archaeological Society 韓國考古學會

### English

- Barnes, G. L. 2007. *State formation in Japan: Emergence of a 4<sup>th</sup>-century ruling elite*. Routledge
- Blanton, R. E., Feinman, G.M., Kowalewski, S. A., & Peregrine, P. N. 1996. A dual-processual theory for the evolution of Mesoamerican civilization. *Current Anthropology*, 37(1), 1–14
- Byington, M. E., Sasaki, K., Bale, M. T. (Eds.). 2018. *Early Korea-Japan interactions*. Korea Institute, Harvard University
- D'Altroy, T., & Earle, T. 1985. Staple finance, wealth finance and storage in the Inka political economy. *Current Anthropology*, 26, 187–206
- Earle, T. 1997. *How Chiefs Come to Power*. Stanford Univ. Press.

- Fukunaga, S. 2018. Mounded tombs of the Kofun period: Monuments of administration and expressions of power relationships. In T. Knopf, W. Steinhaus, & S. Fukunaga (Eds.), *Burial mounds in Europe and Japan: Comparative and contextual perspectives*, pp. 195–204. Archaeopress
- Kameda, S. 2018. Ancient Kibi, western Japan and the Korean Peninsula. In M. E. Byington, K. Sasaki, & M. T. Bale (Eds.), *Early Korea-Japan interactions*, pp. 231–270. Early Korea Project, Korean Institute, Harvard University
- Knopf, T., Steinhaus, W. & Fukunaga, S. (Eds.). 2018. *Burial mounds in Europe and Japan: Comparative and contextual perspectives*. Archaeopress
- Marcus, J. 1998. The peaks and valleys of ancient states. In G. M. Feinman & J. Marcus (Eds.), *Archaic states*, pp. 59–94. School of American Research Press
- Mizoguchi, K. 2014. *The archaeology of Japan: From the earliest rice farming villages to the rise of the state*. Cambridge University Press
- Nakakubo, T. 2018b. Excavating the mounded tombs of the Kofun period of the Japanese Archipelago: A history of research and methods. In T. Knopf, W. Steinhaus, & S. Fukunaga (Eds.), *Burial mounds in Europe and Japan: Comparative and contextual perspectives*, pp. 31–46. Archaeopress
- Park, C. S. 2018. Kaya, Silla, and Wa: Changing relationships and their historical backgrounds. In M. E. Byington, K. Sasaki, & M. T. Bale (Eds.), *Early Korea-Japan interactions*, pp. 133–181. Early Korea Project, Korean Institute, Harvard University
- Parkinson, W. A., & Galaty, M. L. 2009. *Archaic state interaction: The eastern Mediterranean in the Bronze Age*. School for Advanced Research Press
- Renfrew, C. 1972. *Emergence of civilization: The Cyclades and the Aegean in the third millennium B.C.* Methuen

## Chinese

- The Nanjing Museum 南京市博物館 2001. The Eastern Jin Tombs at the Xianhe Temple in the outskirts of Nanjing 「江蘇南京仙鶴觀東晉墓」. *Wen Wu* 『文物』 [Cultural Relics] 2001-3. Wen wu chu ban she 文物出版社

## Site Reports (The numbers match those in Figures 2, 4, 6, and 7)

### Fukuoka Prefecture

1. Nishijinmachi 西新町 site  
 Matsumura Michihiro 松村道博 1989 *Nishijinmachi iseki* 『西新町遺跡』 [Nishijinmachi site]. Fukuoka Municipal Board of Education, Fukuoka.  
 Nagaya Shin 長家伸 1989 *Nishijinmachi iseki*, 3 『西新町遺跡 3』 [Nishijinmachi site, Vol. 3]. Fukuoka Municipal Board of Education, Fukuoka.  
 Shigefuji Teruyuki 重藤輝行, Morii Keiji 森井啓次, and Ōba Takao 大庭孝夫 2000 *Nishijinmachi iseki II* 『西新町遺跡 II』 [Nishijinmachi site, Vol. II]. Fukuoka Prefectural Board of Education, Fukuoka.  
 Shigefuji Teruyuki, Morii Keiji, Ōba Takao, and Karakida Yoshifumi 唐木田芳文 2001



- Nishijinmachi iseki, III* 『西新町遺跡 III』 [Nishijinmachi site, Vol. III]. Fukuoka Prefectural Board of Education, Fukuoka.
- Yoshida Tōmei 吉田東明 and Miyaji Sōichirō 宮地聡一郎 2002 *Nishijinmachi iseki, IV* 『西新町遺跡 IV』 [Nishijinmachi site, Vol. IV]. Fukuoka Prefectural Board of Education, Fukuoka.
- Yoshida Tōmei and Sakamoto Yūki 坂元雄紀 2001 *Nishijinmachi iseki, V* 『西新町遺跡 V』 [Nishijinmachi site, Vol. V]. Fukuoka Prefectural Board of Education, Fukuoka.
- Kishimoto Kei 岸本圭, Okadera Miki 岡寺未幾, and Sakamoto Yūki 2001 *Nishijinmachi iseki, VI* 『西新町遺跡 VI』 [Nishijinmachi site, Vol. VI]. Fukuoka Prefectural Board of Education, Fukuoka.
2. Hakata 博多 site group
- Obata Hiromi 小畑弘己 and Satō Ichirō 佐藤一郎, eds. 2006 *Hakata 37—Hakaka isekigun dai 65 ji hakkutsu chōsa gaihō*—『博多37—博多遺跡群第65次発掘調査概報—』 [Hakata site group: Preliminary report of the 65<sup>th</sup> Archaeological Investigation, Vol. 37]. Fukuoka Municipal Board of Education, Fukuoka.
- Ōtsuka Noriyoshi 大塚紀宜 2006 *Hakata—Hakaka isekigun dai 147 ji chōsa no hōkoku—106* 『博多106—博多遺跡群第147次調査の報告—』 [Hakata site group: Report of the 147<sup>th</sup> Archaeological Investigation, Vol. 106]. Fukuoka Municipal Board of Education, Fukuoka.

## Hyōgo Prefecture

3. Sakane 栄根 site
- Okano Yoshitaka 岡野慶隆 1989 *Kawanishi-shi Sakane iseki dai 19 ji hakkutsu chōsa hōkoku* 『川西市栄根遺跡—第19次発掘調査報告—』 [Sakane site in Kawanishi city: Report of the 19<sup>th</sup> Archaeological Excavation]. Kawanishi Municipal Board of Education, Kawanishi.
4. Higashi-sonoda 東園田 site
- Okada Tsutomu 岡田 務 and Yamagami Mako 山上 真子 2009 *Amagasaki-shi maizō bunkazai chōsa nenpō heisei 15 nendo* 『尼崎市埋蔵文化財調査年報 平成15年度』 [Annual Bulletin of Amagasaki City Buried Cultural Property Excavations for FY 2003]. Amagasaki Municipal Board of Education, Amagasaki.

## Osaka Prefecture

5. Ama 安満 site
- Hashimoto Hisakazu 橋本久和 1974 *Ama iseki hakkutsu chōsa hōkokusho* 『安満遺跡発掘調査報告書』 [Report of Archaeological Investigation at the Ama site]. Takatsuki Municipal Board of Education, Takatsuki.
- Morita Katsuyuki 森田克行 and Hashimoto Hisakazu 1977 *Ama iseki hakkutsu chōsa hōkokusho* 『安満遺跡発掘調査報告書』 [Report of Archaeological Investigation at the Ama site]. Takatsuki Municipal Board of Education, Takatsuki.

- Morita Katsuyuki 1983 *Takatsuki-shi bunkazai chōsa gaiyō VII: Shimagami gunga ato hoka kanren iseki hakkutsu chōsa gaiyō 7* 『高槻市文化財調査概要 VII 嶋上郡衙跡他関連遺跡発掘調査概要・7』 [Preliminary site reports of the Shimagami gunga and related sites, Vol. 7]. Takatsuki Municipal Board of Education, Takatsuki.
6. Mori 森 site group  
 Ogawa Nobuko 小川暢子 and Manabe Seiji 真鍋成史 1992 *Mori iseki*, IV 『森遺跡 IV』 [Mori site, Vol. IV]. Katano Municipal Board of Education, Katano.  
 Okuno Kazuo 奥野和夫 and Ogawa Nobuko 1992 *Mori iseki*, VII 『森遺跡 VII』 [Mori site, Vol. VII]. Katano Municipal Board of Education, Katano.
7. Nakata 中田 site group  
 Komai Masaaki 駒井正明, ed. 2000 *Kozakaai iseki* 『小阪合遺跡』 [Kozakaai site]. Osaka Prefectural Buried Cultural Properties Research Association, Sakai.  
 Honma Motoki 本間元樹 2004 *Kozakaai iseki sono 2* 『小阪合遺跡(その2)』 [Kozakaai site, Vol. 2]. Osaka Prefectural Buried Cultural Properties Research Association, Sakai.  
 Takahagi Chiaki 高萩千秋, Kiso Naomi 木曾直美, and Iwamoto Takako 岩本多貴子 1987 *Kozakaai iseki* (Shōwa 57 nendo dai ichi ji chōsa hōkokusho) 『小阪合遺跡〈昭和57年度 第1次調査報告書〉』 [Report on the 1<sup>st</sup> Archaeological Investigation of the Kozakaai Site in the FY 1982]. Yao Municipal Cultural Properties Research Society, Yao.  
 Takahagi Chiaki, Iwamoto Takako, Murata Hideko 村田英子, and Murata Keiko 村田圭子 1988 *Kozakaai iseki* (Shōwa 59 nendo dai 4 ji chōsa hōkokusho) 『小阪合遺跡〈昭和59年度 第4次調査報告書〉』 [Report on the 4<sup>th</sup> Archaeological Investigation of the Kozakaai Site during FY 1984]. Yao Municipal Cultural Properties Research Society, Yao.  
 Minamoto Hitoshi 湊斎 1995 Nakata iseki (94-312) no chōsa 「中田遺跡(94-312)の調査」 [On the 94-312<sup>th</sup> Archaeological Investigation of the Nakata site], *Yao shinai iseki heisei 6 nendo hakkutsu chōsa hōkokusho II* 『八尾市内遺跡平成6年度発掘調査報告書 II』 [Report on excavations of archaeological sites in Yao City during FY 1994, Vol. II]. Yao Municipal Board of Education, Yao.  
 Izumoto Tomohide 泉本知秀 and Yamada Ryūichi 山田隆一 2003 *Nakata iseki hoka hakkutsu chōsa hōkokusho* 『中田遺跡他発掘調査報告書』 [Report of Archaeological Investigation of Nakata sites]. Osaka Prefectural Board of Education, Sakai.  
 Yao-shi Kyōiku Iinkai 八尾市教育委員会 [Yao Municipal Board of Education]. 1981 *Shōwa 53・54 nendo maizō bunkazai hakkutsu chōsa hōkokusho* 『昭和53・54年度埋蔵文化財発掘調査年報』 [Annual Bulletin of Buried Cultural Property Excavations for FY 1978–1979]. Yao Municipal Board of Education, Yao.  
 Yoneda Toshiyuki 米田敏幸 1986 Nakata itchōme 39 shutsudo doki ni tsuite 「中田一丁目39出土土器について」 [On the pottery unearthed from Nakata itchōme 39].

- Yao-shi bunkazai kiyō* 2 『八尾市文化財紀要2』 [Yao City cultural properties bulletin, Vol. 2]. Yao Municipal Board of Education, Yao.
8. Shimoda 下田 site  
Nishimura Ayumu 西村歩, ed. 1996 *Shimoda iseki* 『下田遺跡』 [Shimoda site]. Osaka Center For Cultural Heritage, Sakai.
  9. Nonaka 野中 *kofun*  
Kitano Kōhei 北野耕平 1975 *Kawachi Nonaka Kofun no Kenkyū* 『河内野中古墳の研究』 [Report of the excavation of the Ancient Burial Mound at Nonaka in Kawachi county]. The Japanese History Laboratory of Osaka University, Osaka.  
Takahashi Teruhiko, Nakakubo Tatsuo, Ryan Joseph, Ueda Naoya, eds. 2016. *Nonaka Kofun and the Age of the Five Kings of Wa: The Government and Military of 5<sup>th</sup>-Century Japan*. Osaka University Press, Suita.
  10. Shitomiya-kita 部屋北 and Saragunjōri 讃良郡条里 sites  
Iwase Tōru 岩瀬透, Fujita Michiko 藤田道子, Miyazaki Taiji 宮崎泰史, and Fujinaga Masa'aki 藤永正明, eds. 2009 *Shitomiya-Kita iseki I* 『部屋北遺跡 I』 [Shitomiya-Kita site, Vol. I]. Osaka Prefectural Board of Education, Osaka.  
Okumura Shigeki 奥村茂輝 and Murata Masaya 村田昌也 2008 *Saragunjōri iseki VII* 『讃良郡条里遺跡 VII』 [Saragunjōri site, Vol. VII]. Osaka Center For Cultural Heritage, Sakai.  
Morimoto Tōru 森本徹, ed. 2009 *Saragunjōri iseki IX* 『讃良郡条里遺跡IX』 [Saragunjōri site, Vol. IX]. Osaka Center For Cultural Heritage, Sakai.  
Atokawa Keitarō 後川恵太郎, Jitsumori Yoshihiko 實盛良彦, and Inoue Tomohiro 井上智博, eds. 2015 *Saragunjōri iseki* 『讃良郡条里遺跡』 [Saragunjōri site]. Shijōnawate Municipal Board of Education, Shijōnawate.
  11. Kyūhōji 久宝寺 site  
Akagi Katsunori 赤木克規, Matsuoka Yoshinori 松岡良憲, Imamura Michio 今村道雄, Yamaguchi Takashi 山口隆, Moriya Yoshiharu 森屋義春, Okuda Hisashi 奥田尚, and Miyoshi Kōichi 三好孝一 1987 *Kyūhōji minami (sono 1)* 『久宝寺南 (その1)』 [Kyūhōji minami, Vol. 1]. Osaka Prefectural Board of Education and Osaka Center for Cultural Heritage, Sakai.  
Ichinose Kazuo 一瀬和夫, ed. 1987 *Kyūhōji minami (sono 2)* 『久宝寺南 (その2)』 [Kyūhōji minami, Vol. 2]. Osaka Prefectural Board of Education and Osaka Center for Cultural Heritage, Sakai.  
Terakawa Sirō 寺川史郎, Kanemitsu Masahiro 金光正裕, Nakanishi Yasuto 中西靖人, Odani Masahiko 尾谷雅彦, and Yamaguchi Seiji 山口誠治 1987 *Kyūhōji kita (sono 1-3)* 『久宝寺北 (その1-3)』 [Kyūhōji kita, Vol. 1-3]. Osaka Prefectural Board of Education, Osaka Center For Cultural Heritage, Sakai.  
Harada Masanori 原田昌則 and Nishimura Kōsuke 西村公助 1993 *Yao-shi iseki maizō bunkazai hakutsu chōsa hōkoku 37* 『八尾市埋蔵文化財発掘調査報告 37』 [Report on Archaeological Excavations in Yao city, Vol. 37]. Yao Municipal Cultural Properties Research Society, Yao.

- Nishimura Kōsuke and Tsubota Shin'ichi 坪田真一 2009 *Kyūhōji iseki* 『久宝寺遺跡』 [Kyūhōji site]. Yao Municipal Cultural Properties Research Society, Yao.
12. Tajime-miyauchi 多治米宮内 site  
Torama Hideki 虎間英喜 1988 *Tajime-miyauchi iseki* 『田治米宮内遺跡』 [Tajime-miyauchi site]. Kishiwada Municipal Board of Education, Kishiwada.
  13. Ikoma-seiroku 生駒西麓 site group (including Kitoragawa 鬼虎川, Kōnami 神並, and Nishi-no-tsuji 西ノ辻 sites)  
Miyazaki Taiji, ed. 2002 *Kitoragawa iseki dai 22 ji chōsa gaiyō hōkokusho* 『鬼虎川遺跡第22次調査概要報告書』 [Preliminary report on the 22<sup>nd</sup> archaeological excavation of the Kitoragawa site]. Osaka Prefectural Board of Education, Higashi-Osaka City Cultural Properties Association], Osaka.  
Nishiguchi Yōichi 西口陽一 and Miyazaki Taiji, eds. 1987 *Kōnami, Nishi-no-tsuji, Kitoragawa iseki hakkutsu chōsa gaiyō IV* 『神並・西ノ辻・鬼虎川遺跡発掘調査概要・IV』 [Preliminary site report on the Kōnami, Nishi-no-tsuji, and Kitoragawa sites, Vol. 4]. Osaka Prefectural Board of Education, Osaka.
  14. Nagahara 長原 site and kofun group  
Sakurai Hisashi 櫻井久之 and Ōba Shigenobu 大庭重信, eds. 1999 *Nagahara iseki hakkutsu chōsa hōkoku, VII Fuhē Kire-higashi iseki* 『長原遺跡発掘調査報告 VII 付篇 喜連東遺跡』 [Archaeological Reports of the Nagahara Site in Osaka, Japan, Vol. VII Appendix: Kire-higashi site]. Osaka City Cultural Properties Association, Osaka.  
Takahashi Takumi 高橋工, Tanaka Kiyomi 田中清美, Ikeda Ken 池田研, Kyōshima Satoru 京嶋覚, Ōba Shigenobu, Kinugawa Kazunori 絹川一徳, and Miyamoto Yasuharu 宮本康治 2002 *Nagahara iseki hakkutsu chōsa hōkoku, VIII* 『長原遺跡発掘調査報告 VIII』 [Archaeological Reports of the Nagahara Site in Osaka, Japan, Vol. VIII]. Osaka City Cultural Properties Association, Osaka.  
Ōba Shigenobu, ed. 2005 *Nagahara iseki hakkutsu chōsa hōkoku, XII* 『長原遺跡発掘調査報告 XII』 [Archaeological Reports of the Nagahara Site in Osaka, Japan, Vol. XII]. Osaka City Cultural Properties Association, Osaka.  
Terai Makoto 寺井誠, ed. 2006 *Nagahara iseki hakkutsu chōsa hōkoku, XV* 『長原遺跡発掘調査報告 XV』 [Archaeological Reports of the Nagahara Site in Osaka, Japan, Vol. XV]. Osaka City Cultural Properties Association, Osaka.  
Ueki Hisashi 植木久, Tanaka Kiyomi, and Kuroda Kei'ichi 黒田慶一, Kyōshima Satoru 京嶋覚, and Sekiyama Hiroshi 積山洋, eds. 1989 *Nagahara, Uriwari iseki hakkutsu chōsa hōkoku I* 『長原・瓜破遺跡発掘調査報告 I』 [Archaeological Reports of the Nagahara and Uriwari Sites in Osaka, Japan, Vol. I]. Osaka City Cultural Properties Association, Osaka.  
Kyōshima Satoru and Sekiyama Hiroshi 積山洋, eds. 1990 *Nagahara, Uriwari iseki hakkutsu chōsa hōkoku II* 『長原・瓜破遺跡発掘調査報告 II』 [Archaeological Reports of the Nagahara and Uriwari Sites in Osaka, Japan, Vol. II]. Osaka City Cultural Properties Association, Osaka.

15. Uzumasa 太秦 *kofun* group  
 Ichinose Kazuo 2003 *Uzumasa iseki Uzumasa kofungun* 『太秦遺跡・太秦古墳群』 [*Uzumasa iseki, Uzumasa kofungun*]. Osaka Center for Cultural Heritage, Sakai.  
 Ichimoto Yoshimi 市本芳三 and Matsushita Tomoyo 松下知世 2006 *Uzumasa iseki, Uzumasha kofungun II* 『太秦遺跡・太秦古墳群 II』 [*Uzumasa iseki, Uzumasa kofungun, Vol. II*]. Osaka Center for Cultural Heritage, Sakai.
16. Takamiya 高宮 site  
 Okumura Shigeki 奥村茂輝 2010 *Takamiya iseki* 『高宮遺跡』 [Takamiya site]. Osaka Center for Cultural Heritage, Sakai.
17. Uetsuke 植附 *kofun* group  
 Fukunaga Nobuo 福永信雄 2002 *Uetsuke iseki dai 5 ji hakkutsu chōsa hōkokusho* 『植附遺跡第5次発掘調査報告書』 [Report on the excavation of Uetsuke site (5<sup>th</sup> season)]. Higashi-Osaka City Cultural Properties Association, Higashi-ōsaka.
18. Naniwa 難波 Palace, Lower Stratum  
 Yagi Hisae 八木久栄, Nakao Yoshiharu 中尾芳治, Ueki Hisashi, Sekiyama Hiroshi, Kuroda Keiichi, Mori Atsushi 森毅, Minami Hideo 南秀雄, Itō Kōji 伊藤幸司, Mametani Hiroyuki 豆谷浩之, and Kubo Kazushi 久保和士 1992 *Naniwa no Miya ato no kenkyū dai 9* 『難波宮址の研究 第九』 [Studies on the Naniwa Palace Site, Vol. 9]. Osaka City Cultural Properties Association, Osaka.
19. Ōagata 大県 site  
 Kitano Shigeru 北野重 1988 *Ōagata iseki 1985 nendo* 『大県遺跡 1985年度』 [Ōagata site (FY1985)]. Kashiwara 柏原 Municipal Board of Education, Kashiwara.
20. Suemura 陶邑 kiln group  
 Tanabe Shōzō 田辺昭三 1966 *Suemura koyōshi-gun, Vol. I* 『陶邑古窯址群 I』 [Suemura kiln group, Vol. I]. Archaeology Club of Heian 平安 High School, Kyoto.  
 Nakamura Hiroshi 中村浩, ed. 1978 *Suemura III* 『陶邑 III』 [Suemura Vol.III]. Osaka Prefectural Board of Education, Sakai.  
 Okado Tetsunori 岡戸哲紀, ed. 1995 *Suemura Obadera Iseki IV* 『陶邑・大庭寺遺跡 IV』 [The Suemura Obadera site, Vol. IV]. Osaka 大阪 Prefectural Board of Education, Osaka Prefectural Buried Cultural Properties Association, Sakai.  
 Okado Tetsunori 岡戸哲紀, ed. 1995 *Suemura Obadera Iseki V* 『陶邑・大庭寺遺跡 V』 [The Suemura Obadera site, Vol. V]. Osaka Prefectural Board of Education and Osaka Prefectural Buried Cultural Properties Research Association, Sakai.  
 Okado Tetsunori 岡戸哲紀, ed. 1997 *Suemura Fuseo Iseki III* 『陶邑・伏尾遺跡 III』 [The Suemura Fuseo site, Vol. III]. Osaka Prefectural Board of Education and Osaka Center for Cultural Heritage, Sakai.  
 Nishiguchi Yōichi 西口陽一 1992 *Nonoike Iseki, ON231 gō yō seki* 『野々井西遺跡・ON231号窯跡』 [Nonoike nishi site and ON No. 231 kiln site]. Osaka Prefectural Board of Education and Osaka Prefectural Buried Cultural Properties



- Association, Sakai.
- Moriya Misako 森屋美佐子 and Shimizu Atsushi 清水篤 1992. *Kosaka Iseki* 『小阪遺跡』 [Kosaka site]. Osaka Prefectural Board of Education and Osaka Center for Cultural Heritage, Sakai.
- Nakai Sadao 中井貞夫, ed. 1984 *Fudō Matsubara Izumi Ōtsu sen kanren iseki hakkutsu chōsa hōkokusho Vol. I—Nishiurabashi iseki, Ryōgishita iseki, Manzakiike iseki, Taiheiji iseki* 『府道松原泉大津線関連遺跡発掘調査報告書 I 西浦橋遺跡・菱木下遺跡・万崎池遺跡・太平寺遺跡』 [Report on the excavation of sites related to the construction of the Matsubara-Izumi-Ōtsu-sen prefectural road Vol. I: Nishiurabashi iseki, Ryōgishita iseki, Manzakiike iseki, and Taiheiji iseki]. Osaka Center for Cultural Heritage, Sakai.
- Tanaka Hideo 田中英夫 1999 *Nigoriike sueki yōshi* 『濁り池須恵器窯址』 [Nigoriike Sueki kiln site]. *Ad Hoc* Team for Investigations into the Nigoriike kiln at the Shinodayama site, Sakai.
- Miyazaki Taiji, ed. 1995 *Suemura VIII: Senshū ni okeru iseki no chōsa I* 『泉州における遺跡の調査 I 陶邑 VIII』 [The Suemura kiln group VIII: Excavation in Senshū I]. Osaka Prefectural Board of Education, Sakai.
21. Yotsuie 四ッ池 site  
Higuchi Yoshiyuki 樋口吉之, ed 1984 *Yotsuie iseki—Dai 83 chiku hakkutsu chōsa hōkokusho—*『四ッ池遺跡—第83 地区発掘調査報告書—』 [Yotsuie site—Report of Archaeological Investigation at the No. 83 area]. Sakai Municipal Board of Education, Sakai.
22. Ichisuka 一須賀 *kofun* group  
Ōsaka-fu Kyōiku Iinkai 大阪府教育委員会 [Osaka Prefectural Board of Education]. 1992 *Ichisuka kofun gun shiryō mokuroku I* 『一須賀古墳群資料目録 I』 [Catalogue of tomb data from the Ichisuka cemetery, Vol. I]. Osaka Prefectural Board of Education, Osaka.

## Nara Prefecture

23. Makimuku 纏向 site  
Ishino Hironobu 石野博信 and Sekigawa Hisayoshi 関川尚功 1976 *Makimuku* 『纏向』 [Makimuku]. Sakurai Municipal Board of Education, Sakurai.
- Aoki Katsue 青木香津江 1998 Makimuku iseki dai 102 ji 纏向遺跡第102次 [Makimuku site No. 102]. *Nara ken iseki chōsa gaihō* 『奈良県遺跡調査概報 1997年度』 [Preliminary excavation reports of archaeological sites in Nara Prefecture (FY 1997)]. Archaeological Institute of Kashihara, Nara Prefecture, Kashihara.
- Hashimoto Teruhiko 橋本輝彦, Fukutsuji Jun 福辻淳, Niwa Keiji 丹羽恵二, Koba Yoshiko 木場佳子, Shimizu Satoshi 清水哲, and Okuda Hisashi 2004 *Heisei 15 nendo kokko hojo jigyo ni yoru hakkutsu chōsa hōkokusho* 『平成15年度国庫補助事業による発掘調査報告書』 [A report on the excavation supported by the



- FY2003 government subsidy project]. Sakurai Municipal Board of Education, Sakurai.
- Hashimoto Teruhiko, Hashizume Asako 橋爪朝子, Okuda Hisashi, and Toyofuku Keiko 豊福恵子 2007 *Makimuku iseki hakkutsu chōsa hōkokusho* 『纏向遺跡発掘調査報告書』 [Report of Archaeological Investigation at the Makimuku site]. Sakurai Municipal Board of Education, Sakurai.
- Hashimoto Teruhiko and Hashizume Asako 2007 *Makimuku iseki hakkutsu chōsa hōkokusho 2* 『纏向遺跡発掘調査報告書2』 [Report of Archaeological Investigation at the Makimuku site, Vol. 2]. Sakurai Municipal Board of Education, Sakurai.
24. Kurozuka 黒塚 *kofun*  
Okabayashi Kōsaku 岡林孝作, Mizuno Toshinori 水野敏典, Okuyama Masayoshi 奥山誠義, eds. 2018 *Kurozuka kofun no kenkyū* 『黒塚古墳の研究』 [Studies of the Kurozuka Tumulus: a report of Archaeological Excavations at the third-Century Keyhole-Shaped Burial Mound in Tenri-shi, Nara, Japan]. Archaeological Institute of Kashihara, Nara Prefecture, Kashihara.
25. Fujiwara 藤原 Palace, Lower Stratum  
Chida Takemichi 千田剛道 and Nishiguchi Toshiki 西口壽生 1997 *Seihō kanga minami chiku no chōsa—Dai 82 西方官衙南地区の調査—第82* [Excavation on the southern area of the government offices in the west of the Fujiwara Palace, No. 82]. *Nara kokuritsu bunkazai Kenkyūsho nenpō* 1997-II 『奈良国立文化財研究所年報1997-II』 [Annual Bulletin of Nara National Cultural Properties Research Institute 1997-II]. National Research Institute for Cultural Properties, Nara, Nara.
26. Yamada-michi 山田道, Lower Stratum  
Nara Bunkazai Kenkyū-sho [National Research Institute for Cultural Properties, Nara]. 1991 *Yamada michi dai 2,3 ji chōsa* 山田道第2・3次調査 [Excavation of Yamada michi (second and third season)]. *Asuka Fujiwarakū hakkutsu chōsa gaihō* 『飛鳥・藤原宮発掘調査概報』 [Preliminary reports of the excavations at the Asuka Fujiwara palace sites] No.26. National Research Institute for Cultural Properties, Nara, Kashihara
27. Tomondo-higashi 伴堂東 site  
Ban Yasushi 坂靖, Arimoto Shōko 有本昭子, Okuda Hisashi, and Nakura Satoshi 名倉聡 2002 *Tomondo-higashi iseki* 『伴堂東遺跡』 [Tomondo-higashi site]. Archaeological Institute of Kashihara, Nara prefecture], Kashihara.
28. Wani-Morimoto 和邇・森本 site  
Matsuda Shin'ichi 松田真一 and Sugiyama Hidehiro 杉山秀宏 eds. 1983 *Wani-Morimoto iseki, II* 『和邇・森本遺跡』 [Wani-Morimoto site, Vol.II]. Archaeological Institute of Kashihara, Nara Prefecture, Kashihara.
29. Furu 布留 site  
Ikeda Yasunobu 池田保信, Ishida Daisuke 石田大輔, Ishida Yukiko 石田由紀子, Ōta Mitsuyoshi 太田三喜, Okada Ken'ichi 岡田憲一, Kimura Rie 木村理恵, Kuwabara

- Hisao 桑原久男, Koizumi Shota 小泉翔太, Nakakubo Tatsuo 中久保辰夫, Matsumoto Hiroaki 松本洋明, Mizoguchi Yūki 溝口優樹, Miyoshi Yūtarō 三好裕太郎, Mori Noburō 森暢郎, and Yamamoto Ryō 山本亮 2020 *Yamato Furu iseki ni okeru rekishi teki keikan no fukugen* 大和布留遺跡における歴史的景観の復元 [Reconstruction of the historical landscape on Furu site in the Yamato province]. *Kenkyū kiyō* 『研究紀要』 Vol. 24 [Bulletin of Yura Yamato Ancient Culture Research Association]. Yura Yamato Ancient Culture Research Association, Kashihara.
30. Shindō site 新堂遺跡  
Ishizaka Taiji 石坂泰士 2020 *Shindō iseki, IV* 『新堂遺跡 IV』 [Shindō site Vol. IV]. Kashihara Municipal Board of Education]. Kashihara.
31. Nangō 南郷 site group  
Ban Yasushi 坂靖, eds. 1996 *Nangō isekigun, I* 『南郷遺跡群 I』 [Nangō site group, Vol. I]. Nara 奈良 Prefectural Board of Education and the Archaeological Institute of Kashihara, Nara Prefecture, Kashihara.  
Sasaki Yoshinao 佐々木好直 and Okuda Hisashi 1999 *Nangō isekigun, II* 『南郷遺跡群 II』 [Nangō site group, Vol. II]. Nara Prefectural Board of Education and the Archaeological Institute of Kashihara, Nara Prefecture, Kashihara.  
Ban Yasushi, eds. 2000 *Nangō isekigun, IV* 『南郷遺跡群 IV』 [Nangō site group, Vol. IV]. Nara Prefectural Board of Education and the Archaeological Institute of Kashihara, Nara Prefecture, Kashihara.  
Aoyagi Taisuke 青柳泰介, Kimoto Seiji 木本誠二, Okuda Hisashi, Fukuda Sayoko 福田さよ子, Kanahara Masaaki 金原正明, Matsui Akira 松井章, Nakagwa Masato 中川正人, Imazu Setsuo 今津節夫, Oguri Akihiko 小栗明彦, and Wada Atsumu 和田萃 2003 *Nangō isekigun, III* 『南郷遺跡群 III』 [Nangō site group, Vol. III]. Nara Prefectural Board of Education and the Archaeological Institute of Kashihara, Nara prefecture, Kashihara.  
Kitanaka Yasuhiro 北中恭裕 and Jūmonji Takeshi 十文字健 2007 *Gokurakuji Hibiki iseki* 『極楽寺ヒビキ遺跡』 [Gokurakuji Hibiki site]. Archaeological Institute of Kashihara, Nara Prefecture, Kashihara.  
Fujita Kazutaka 藤田和尊 and Kimoto Mamoru 木許守 1999 *Taifu 7 gō higai ni yoru Muromiyayama kofun shutsudo ibutsu* 『台風7号被害による室宮山古墳出土遺物』 [Artifacts found at damaged portions of the Muromiyayama Kofun resulting from typhoon No. 7]. Gose Municipal Board of Education, Gose.

## Shiga Prefecture

32. Shiga 志賀 *kofun* group 古墳群  
Hori Masato 堀真人 2009 *Toraijin no haka-Shiga kofun gun to Ichisuka kofun gun- 渡来人の墓—志賀古墳群と一須賀古墳群—* [Mounded tombs of immigrants—Shiga mounded tomb group and Ichisuka mounded tomb group]. *Shiga Bunkazai Hogo Kyōkai Kiyō* 『滋賀県文化財保護協会紀要』 [Bulletin of Shiga Prefectural

Association for Cultural Heritage], Vol. 22. Shiga Prefectural Association for Cultural Heritage, Ōtsu.

**Korea**

33. Mongchon Toseong 夢村土城  
Mongchon Toseong palgul chosa dan 夢村土城発掘調査団[Team for the excavation of Mongchon Toseong]. 1985 *Mongchon Toseong palgul chosa pogosŏ* 『夢村土城発掘調査報告書』 [Report on the excavation of Mongchon Toseong]. Team for the excavation of Mongchon Toseong, Seoul.
34. Chungmaku-dong 竹幕洞 ritual site  
Kungnip Chŏnju Pangmulgwan 国立全州博物館 1994 *Puan Chungmak-dong Chesa yujŏk* 『扶安 竹幕洞祭祀遺跡』 [The Chungmaku-dong ritual site in Puan]. Jeonju National Museum, Chŏnju.
35. Bongdeok-ni 鳳德里 site  
Kim Geon-su 金建洙, Noh Mi-sun 盧美善, Yang Hae-woong 梁海雄 2003 *Gochang Bongdeok-ni yujŏk I* 『高敞 鳳德遺跡 I』 [Gochang Bongdeok-ni site, Vol. I]. Honam Cultural Property Research Center, North Jeolla Province, Gwangju.  
Kim Geon-su 金建洙, Noh Mi-sun 盧美善, Yang, Hae-woong 梁海雄 2003 *Gochang Bongdeok-ni yujŏk II* 『高敞 鳳德遺跡 II』 [Gochang Bongdeok-ni site, Vol. II]. Honam Cultural Property Research Center, North Jeolla Province, Gwangju.
36. Pogam-ni 伏岩里 tomb group  
Im Yŏng-jin 林永珍, Cho Chin-sŏn 趙鎮先, So Hyŏn-ju 徐賢珠 1999 *Pogam-ni kobungun* 『伏岩里古墳群』 [Pogam-ni tomb group]. Chŏnnam National University Museum, Naju city, Naju.  
Kungnip Naju Munhwajae Yŏn'guso 국립나주문화재연구소 2001 *Naju Pogam-ni 3-ho pun* 『羅州 伏岩里3號墳』 [Tomb 3 at Pogam-ni in Naju]. Naju National Research Institute of Cultural Heritage, Naju.
37. Dongnim-dong site 東林洞遺跡  
Lee Young-cheol 李暎澈 and Noh Mi-sun 盧美善 2007 *Gwangju Dongnim-dong yujŏk III* 『光州 東林洞遺跡 III』 [Gwangju Dongnim-dong site, Vol. III]. Honam Cultural Property Research Center, Korea Housing Corporation, Gwangju.  
Lee Young-cheol 李暎澈 and Moon, Jiyeon 文智蠟 2007 *Gwangju Dongnim-dong yujŏk IV* 『光州 東林洞遺跡 IV』 [Gwangju Dongnim-dong site, Vol. IV]. Honam Cultural Property Research Center, Korea Housing Corporation, Gwangju.
38. Jisan-dong 池山洞 tomb group  
Park Seung-kyu 박승규, Kim Chang-Eog 김창억, Lee Jae-Heung 이재흥, Jang Eun-Jung 장은정 2004 *Goryong Jisan-dong kobungun I* 『高靈 池山洞古墳群 I』 [The Ancient Tombs Site at Jisan-dong, Goryong (I)]. The Yongnam Institute of Cultural Properties, Korea, Changwon.
39. Daeseong-dong 大成洞 tomb group  
Shin Gyeon-Cheol 申敬澈, Kim Jae-woo 金宰佑 2000 *Gimhae Daeseong-dong kobun*

- I 『金海大成洞古墳 I』 [Gimhae Daeseong-dong tombs, Vol. I]. KyungSung University Museum, Busan.
- Shin Gyeon-Cheol 申敬澈, Kim Jae-woo 金宰佑 2003 *Gimhae Daeseong-dong kobun II* 『金海大成洞古墳 II』 [Gimhae Daeseong-dong tombs, Vol. II]. KyungSung University Museum, Busan.
- Shin Gyeon-Cheol 申敬澈, Kim Jae-woo 金宰佑 (eds.) 2003 *Gimhae Daeseong-dong kobun III* 『金海大成洞古墳 III』 [Gimhae Daeseong-dong tombs, Vol. III]. KyungSung University Museum, Busan.
- Song Won-young 송원영, Shim, Jae-yong 심재용, Yoon Jung-eun 윤정은, Hwang Hyeon-seon 황현선, Lee, Hyun-ou 이현우 2011 *Gimhae Daeseong-dong kobungun—68-ho pun~72-ho pun* 『金海大成洞古墳群- 68 호부~72 호분-』 [Gimhae Daeseong-dong tomb group: Nos. 68-72]. Daeseong-dong Tombs Museum, Gimhae.
- Shin Jin-Young 심재용, Song Won-Young 송원영, Lee Sun-Min 이선민, Kim Da-bin 김다빈, Kim Ju-Hee 김주희, Kim Hye-Jin 김혜진, Je Mi-sung 제미성, Jang Dong-ock 장동옥 2016 *Gimhae Daeseong-dong kobungun—92-ho pun~94-ho pun* 『金海大成洞古墳群—92호부~94호분—』 [Gimhae Daeseong-dong tomb group: Nos. 92-94]. Daeseong-dong Tombs Museum, Gimhae.
40. Bokcheon-dong 福泉洞 tomb group  
 Busan Taehakkyo Pangmulgwan 釜山大学校博物館 1994 *Dong-nae Bokcheon-dong kobun I* 『東萊福泉洞古墳群 I』 [Tombs at Bokcheon-dong, Dong-nae, Vol. I]. Pusan National University Museum, Busan.
- Ahn Jae-ho 安在皓 (ed.) 1994 *Dong-nae Bokcheon-dong kobun II* 『東萊福泉洞古墳群 II』 [Tombs at Bokcheon-dong, Dong-nae, Vol. II]. Pusan National University Museum, Busan.
- Shin Gyeon-Cheol 신경철, Ahn Sung-Hee 안성희, Lee Hyun-woo 이현우, Cho Ji-hye 조지혜, Bae Jung-yun 배정연, Lim Jee-Young 임지영, Hosokawa Shintarō 細川晋太郎, Tanaka Yuri 田中由理 2012 *Pokcheon-dong kobungun IV* 『福泉洞古墳群 IV』 [Tombs at Bokcheon-dong, Dong-nae-Tomb Nos. 35 and 36]. Pusan National University Museum, Busan.
41. Yang-dong-ni 良洞里 tomb group  
 Im Hyo-t'ack 林孝澤 and Kwak Tong-Ch'öl 郭東哲 2000 *Gimhae Yangdong-ni Kobun munhwa* 『金海良洞里古墳文化』 [Kimhae Yang-dong-ni tomb culture]. Tongüi University Museum, Busan.
42. Buwon-dong 府院洞 site  
 Sim Bong-geun 沈奉謹 1981 *Gimhae Buwon-dong yujök* 『金海府院洞遺跡』 [Gimhae Buwon-dong site]. Tong'a University Museum, Busan.
43. Yeobang-ni 余方里 tomb group  
 Choi Wan-kyu 최완규, Kim Jong-moon 김종문, Lee Shin-hyo 이신효 2001 *Gunsan Yeobang-ni kobungun* 『群山余方里古墳群』 [Gunsan Yeobang-ni tomb group]. Wonkwang University Museum, Korea Expressway Corporation, Iksan.