

# *The Evolution of Curved Beads (Magatama 勾玉/曲玉) in Jōmon Period Japan and the Development of Individual Ownership*



Yoko NISHIMURA

## ABSTRACT

Curved or comma-shaped stone beads known as *magatama* (勾玉/曲玉) are often considered to have been used as amulets, talismans, or ritual items in ancient Japan. They are connected with beliefs in the magical power of various symbolically represented animals and the celestial world, the moon, or the soul and spirit. Throughout the Jōmon period, *magatama* were embedded within common household objects and tools as well as ritual items and they were used, lost, or discarded within houses. The specific functions and meanings of the *magatama* found in Jōmon houses are not clear, but these beads were consistently present for thousands of years in everyday settings where daily household activities were carried out. In Late Jōmon, however, some *magatama* beads were included in grave goods in northern Japan (Tōhoku and Hokkaidō). This transformation in their role occasionally spread to central parts of the main island of Japan, such as Hokuriku and Kantō. Other bead types made of talc or jadeite had already been buried in tombs since Early Jōmon, but it was not until Late Jōmon that *magatama* became regularly buried in tombs, apparently being worn by or given to the deceased at the time of entombment. The dramatic increase in the production of these small curved stone beads and their deployment in clusters of grave pits in cemeteries suggest that this was a personalization process leading to more individualized ownership of the *magatama*. After Late Jōmon, much smaller and more varied *magatama* shapes began to occur in graves along with other personal items such as combs, pendants, and earrings. The increased production and individual ownership of these body ornaments suggest that the Jōmon people enjoyed relative material comfort in northern Japan. KEYWORDS: *magatama*, comma-shaped beads, grave goods, material comfort, contextual analysis, Jōmon.

## INTRODUCTION

THE CHARM OF THE COMMA-SHAPED BEADS known as *magatama*, found throughout the Japanese archipelago and the Korean peninsula, has long attracted much interest from archaeologists, prehistorians, and the general public. These cashew-shaped stone beads are usually about 2–5 cm in length, and have a perforation through the larger, bulging end for hanging on a cord and wearing as a single pendant or as a chain necklace or bracelet interspaced with other kinds of beads (Ōtsubo 2015:29–30) (Fig. 1). Mizuno

Yoko Nishimura is a Lecturer in Archaeology of East Asia and the Near East at the University of Pennsylvania.



(a)



(b)



(c)



(d)



(e)

Fig. 1. Slit earring and *magatama* beads: (a) slit-earring, Kagota site, Early Jōmon period (image from Iijimamachi Kyōiku linkai 1978); (b, c) standard-type *magatama*, Yayoi-Kofun periods (images by University of Pennsylvania, December 2016); (d) standard-type *magatama*, Early Kofun (artifact owned by Izumo City Cultural Properties Division, image from Taishamachi Kyōiku linkai 2004); (e) U-shaped *magatama* beads, Kyūshū, Final Jōmon period (artifact owned by Beppu University, image from Matsumoto 2000: frontispiece 5).

(1992:58–62) postulated that the ancient Japanese wore stone beads as talismans since they might have believed in the magical power of gemstones in general.

Ōtsubo's (2015) recent comprehensive investigation of the stone body ornaments during the Jōmon period (ca. 14,000–300 B.C.), primarily in Kyūshū, reflects the continuing interest among scholars in ancient body ornaments including *magatama*. *Magatama* beads in particular excite enduring popular interest because, after having served as important ritual paraphernalia in the Kofun period (ca. A.D. 250–600) this type of stone bead was exalted to the status of one of the Three Imperial Regalia (*sanshu no jingi* 三種の神器) in Japan. As our knowledge of Jōmon *magatama* in Kyūshū continues to accumulate, it is important to systematically investigate the emergence and development of these peculiar beads in the eastern and northeastern parts of Japan. Particularly necessary is a detailed study of the precise archeological contexts from which these beads were recovered during excavation. Clarifying the artifacts and features associated with these beads may elucidate the emergence and evolution of *magatama* beads during the Jōmon period.

By illuminating the contexts of the find-spots of these peculiar stone beads, this study aims to disentangle a transitional process that occurred in Late Jōmon (ca. 2400–1200 B.C.) in northern Japan, during which some *magatama* seem to have transformed from being collectively owned to personal items associated with individuals. Since their first appearance, *magatama* were consistently associated with dwelling areas. In Late Jōmon, however, some *magatama* beads began to serve as grave goods in northern Japan (Tōhoku/Hokkaidō). This trend occasionally spread to the central parts of the main island such as Hokuriku and Kantō (Fig. 2). New significance may be attached to these beads when they are found as funerary goods in the more ritualistic and formalized contexts of burials. *Magatama* were not discernibly associated with mortuary contexts until this transitional period, even though other body ornaments made of various gem stones, such as slit-earring beads and large jadeite pendants, had already been employed as grave goods since Early Jōmon (ca. 5000–3500 B.C.). The divergence in meaning and function did not occur for all *magatama*, however; many of them remained household items throughout the Jōmon period.

Some scholars have previously put forward the idea that ancient people interred *magatama*, particularly those made of jadeite, in graves as a symbol of high status or wealth (Sakaguchi 2011). The transition from ordinary household good to funerary good was not caused by an increase in status or wealth differences, however. Instead, this evolutionary step coincided with and was probably enabled by expanding trade networks and an increase in the production of smaller stone beads. There was a dramatic increase in the production of small stone beads and their deployment in clusters of grave pits in cemeteries during Late Jōmon. It appears that *magatama* became personally-owned items during this period, as indicated by their association with single burials along with increased use of other personal items such as combs, pendants, and earrings as grave goods. After Final Jōmon (ca. 1200–300 B.C.), however, various types of both utilitarian and ritual objects, including pots, stone tools, stone rods, and *dogū* 土偶 (clay figurines), were increasingly mixed with personal items in graves.

By placing body ornaments in individual burials, such objects could no longer re-enter circulation and their ownership could no longer be transmitted to others. It is not known when the body ornaments in tombs became associated with the tomb

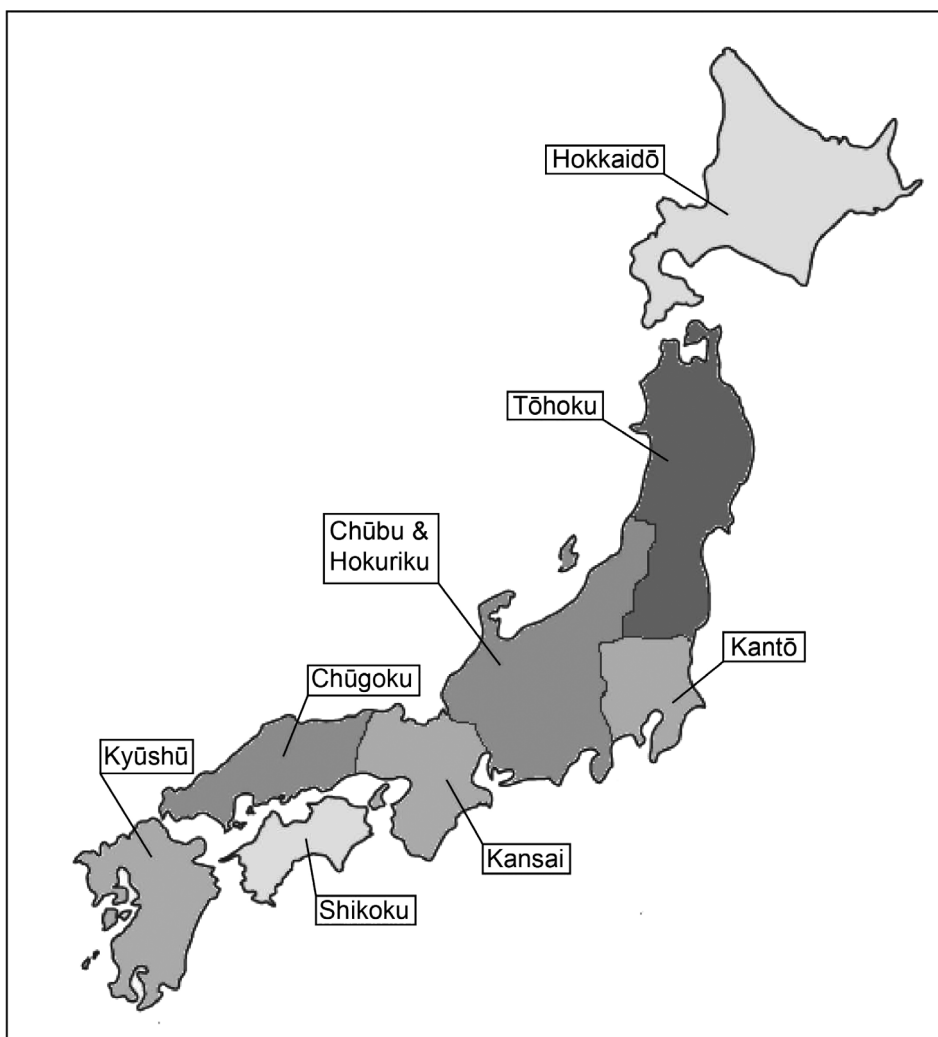


Fig. 2. Map of Japan showing the different regions (base map [Davidson 2017](#)).

occupants in terms of the use-life of the objects, however ([Gosden and Marshall 1999](#)). The objects may have been given by the living to certain individuals at the moment of their deaths or they may have been used by the grave occupants while they were still alive, perhaps as intimate, personal items.

The development of ownership of personal ornaments in antiquity is a topic that has not received much attention in archaeological discussions. The anthropological theme of property for the most part addresses the ownership of land or people; much is still to be learned regarding collective or individual possession of portable objects. Given the strong interest in material culture studies in anthropology, understanding the development of group or personal ownership of artifacts, particularly personal items like body ornaments, would shed light on the various forms of attachment between persons and things ([Brightman et al. 2016:11](#)).

The use of body ornaments can be connected with various aspects of status, identity, and ritual. For instance, when the use of body ornaments is not widespread, it may be that individual ownership is restricted to particular segments of the society. Such unequal access to objects may entail the artifacts as symbols of status and wealth or as markers of group affiliation. It is also often difficult for archaeologists to determine whether body ornaments in ancient societies functioned only as decorative items or as amulets and talismans. Harunari (1997), for example, postulates that body ornaments were believed possessed of magical power in addition to serving as symbols of successful hunting and abundant harvest. Since body ornaments can serve as shamanistic and ceremonial items, their unequal social distribution can be studied as an aspect of the emergence and changing nature of religious specialists (Santos-Granero 2009).

Interpretations of the shift or overlap between collective and individual ownership of ornamental objects may extend beyond status, identity, and ritual. The change from collective to individual ownership may indicate a concomitant shift in the meaning, function, and context of use of body ornaments. For example, a stronger association of certain types of body ornaments with individuals rather than with social segments such as family, household, kin, and so on may suggest a wider circulation and greater availability of the material or rising popularity of the items. It may also indicate a general increase in wealth or in the overall material culture of the people who owned and used the ornaments.

#### EXPLANATIONS REGARDING *MAGATAMA*

Due to the association of *magatama* with elite mortuary customs and Shintō rituals as early as the mid-first millennium B.C. in Japan, many scholars have previously proposed theories that focus on their use in religious rites and possible underlying beliefs in an attempt to account for the meaning, symbolism, and function of these artifacts. These explanations can be divided roughly into two groups. The first group sees the meaning and function of *magatama* as derived directly from their unique shape and asserts that these beads represent a specific object. The second group asserts that the comma-shape has nothing to do with the meaning and function of the beads. Both representational and non-representational theories have tended to focus on possible cultic and religious purposes of *magatama*.

Takioto (2012) lists some well-known theories in both groups. Representative accounts treat the *magatama* shape as emulating a bear- or wolf-fang, fish or fish-hook, animal liver, crescent moon, constellation, or fetus, spirit, or soul. As well as suggesting a specific referent for the *magatama* symbol, these accounts explore connections with beliefs in the magical powers of symbolically-represented animals, the moon or the celestial world, or the soul and spirit. Non-representational accounts suggest that the meaning of *magatama* is not patterned after any specific shape, but that people may use *magatama* for specific purposes, such as to possess their magical powers, contact and pacify gods and the dead, exorcise evil spirits, restore youth, pray for a safe journey or good harvest, or securely attach the soul to the body.

When scholars discuss the evolution of these beads from the Jōmon to the succeeding Yayoi period (ca. 300 B.C.–A.D. 250), some have emphasized their different uses and meanings between these two periods. Kinoshita (2000) considers Jōmon *magatama* to be individual body ornaments used by the living as necessary magical devices for preserving life by hooking the soul. The general absence of these items in

burials in the Kyūshū region during the Jōmon period supports this idea, since the function of *magatama* as life-preserving charms would have ended with death. She further proposes that this magical function was lost at the turn of the Yayoi period when *magatama* transformed into status-oriented body ornaments for elites.

Fujita (2013), on the other hand, links the different uses of *magatama* to subsistence strategies, stating that Jōmon examples represent wild animals and hunting game, while those in the Yayoi period served as group ritual objects connected with agrarian village life. Fujita proposes that the ownership of *magatama* became collective as these items began to play a role in communal rites in farming villages during the Yayoi period. In the same vein, Kawamura (2010) suggests that, whereas the Jōmon people wore *magatama* on an individual basis, the Yayoi people wore them as collectively-owned objects, representing their familial and other group affiliations in social relations. The use of these objects is, according to Kawamura, linked to the expression of identity in cultural and social interactions with immigrants from the Korean peninsula at the onset of the Yayoi period.

#### THE EVOLUTION OF MAGATAMA











Curved, ornamental stone beads in their archaic forms and materials first appeared at the beginning of Early Jōmon (ca. 5000–3500 B.C.) and became widespread by Late Jōmon (ca. 2400–1200 B.C.) in the Japanese archipelago (Esaka 1989; Fujita 2013; Suzuki 2004a). According to Takioto (2012:13), the earliest *magatama* are often made of talc and appear in a dogleg-shape (Type A in Table 1) or C-shape (Type B in Table 1). The dogleg shape is commonly understood as representing a canine tooth, while the C-shape is thought to be a recycled half of a slit (*ketsujō*) earring (Fig. 1a).

During Middle Jōmon (ca. 3500–2400 B.C.), considerable technological improvement led to manufacturing beads out of jadeite. The highest quality hard stone comes from the Itoi River region in Hokuriku; this area has been the source of jadeite for *magatama* since the Jōmon period. In Late and Final Jōmon, not only did the variety of materials used for *magatama* production significantly increase to include jadeite, nephrite, serpentine, agalmatolite, quartzite, and slate, but the shapes of the beads also became more variable (Esaka 1989; Fujita 2013; Kawamura 2010; Suzuki 2004a). For example, L-shaped *magatama* (Type D1 in Table 1) appeared often in eastern Japan, while U-shaped ones became common in Kyūshū (Matsumoto 2000:131) (Fig. 1e). During these times, *magatama* began to be buried in tombs, largely in eastern and northern Japan.

Ōtsubo (2015:3) systematically presents the emergence of a “Kyūshū brand” of stone beads used in body ornaments and describes its spread from Kyūshū to eastern Japan during Late and Final Jōmon. The Kyūshū style was created when small comma-shaped (*magatama*), cylindrical, and round beads were circulating widely throughout the island. The style involved combining *magatama* with cylinder beads made of fuchsite (a variety of the mineral muscovite) into sets for bodily ornamentation. Unlike earlier ornamental bead types that evolved in eastern Japan and were exported westward to Kyūshū, Ōtsubo contends that this “Kyūshū brand” represents the transmission of influence in the reverse, eastward direction.

*Magatama* that were standardized in terms of form and material became a major component of grave goods in Kyūshū during the Yayoi period (ca. 300 B.C.–A.D. 250). At this time, the jadeite stone type was incorporated into preexisting morphological traits from the preceding Jōmon period (Kawamura 2010:21). According to Kinoshita





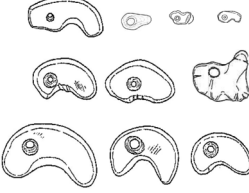
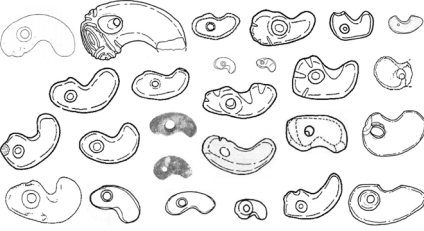
TABLE 1. MORPHOLOGICAL TYPES OF JŌMON MACGATAMA

TIME PERIOD (NUMBER OF EXAMPLES), SCALE (CM)						
TYPE	OVERALL SHAPE	OTHER TRAITS	EARLY	MIDDLE	LATE	FINAL
A	Slightly bent or moderately arched, slender bead with pointy end	1–5 cm long; perforation at the edge	(2) 	(2) 	(2) 	(2) 
B	Semi-circular, slender bead with continuous inner edge, and pointy end	2–4 cm long; almost symmetrical, perforation close to terminal point	(5) 	(0)	(0)	(1) 
C1	Slightly curved bead with shallow, continuous inner edge. Broader than Type B	1–5 cm long; some inner edges almost straight	(2) 	(4) 	(7) 	(10) 

(Continued)



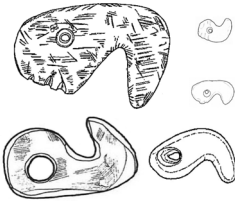

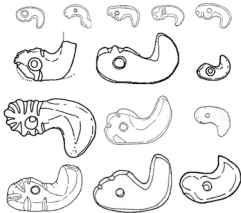





TABLE 1. (Continued)

TIME PERIOD (NUMBER OF EXAMPLES), SCALE (CM)						
TYPE	OVERALL SHAPE	OTHER TRAITS	EARLY	MIDDLE	LATE	FINAL
C2		3 cm long; 4 of 5 from one site	(0)	(0)	(4)	(1)
						
C3		1–5 cm long; some with incised lines near perforation; some resemble later “standard” shape	(1)	(2)	(10)	(26)
						

(Continued)





















TABLE 1. (Continued)

TIME PERIOD (NUMBER OF EXAMPLES), SCALE (CM)						
TYPE	OVERALL SHAPE	OTHER TRAITS	EARLY	MIDDLE	LATE	FINAL
D1	Sharply curved bead with V- or L-shaped notch in inner edge and pointy end	1-7 cm long; many with incised lines near perforation	(0)	(5) 	(3) 	(14) 
D2	Same shape as D1, with broader and less pointy end	1-4 cm long	(0)	(0)	(5) 	(10) 
E1	Curved bead with small, angled notch in inner edge	2-5 cm long, some with incised lines	(0)	(2) 	(4) 	(15) 

(Continued)

TABLE 1. (Continued)

TYPE	OVERALL SHAPE	OTHER TRAITS	TIME PERIOD (NUMBER OF EXAMPLES), SCALE (CM)			
			EARLY	MIDDLE	LATE	FINAL
E2		1–5 cm long, some with incised lines	(0)	(1)	(8)	(3)
					       	
F	Curved bead with small bump(s) in inner edge	3–5 cm in length	(0)	(1)	(0)	(5)
						       

(2000:197–198), the “standardized” version of the bead typically has a spherical head with a tapering hook (see Fig. 1b, c, d). Standardized *magatama* are often green in color, over 3 cm in length well-polished, and have grooves radiating from the perforation. Unlike in eastern and northeastern Japan, the inhabitants of Kyūshū did not put *magatama* beads in tombs prior to the Yayoi period (Matsumoto 2000:139; Ōtsubo 2006:152). However, by late Yayoi, *magatama* had become a component of sumptuous funerary offerings, including bronze mirrors and bronze daggers that were deposited in mounded elite tombs.

Theories concerning the evolutionary sequence of *magatama* are manifold. Scholars are particularly in disagreement regarding the continuity or discontinuity of this bead type in the transitional phase between the Jōmon and the Yayoi periods. After Mori (1980) defined and classified *magatama* types into these consecutive time periods, a number of scholars argued for there having been continuity from the earlier to the latter types (Fujita 2008, 2013; Kawamura 2010; Kinoshita 1987, 2000, 2003; Koyama 1992). The claim that Yayoi *magatama* developed out of the Jōmon model was based largely on similarities of shape and other morphological traits, such as incised lines radiating from the perforation (see incised lines in Fig. 1b, c), as well as on continuities in manufacturing techniques. Suzuki (2004a:25), for instance, treats the “Jōmon *magatama*” as a transitional type between the curved stone beads of Middle Jōmon to the more standardized Yayoi model. Kawamura (2010) argues that the Yayoi style emerged when jadeite stone imported from the Itoi River region was used to make beads in the same shapes as preexisting Jōmon models. While treating this as a unique local development in northern Kyūshū, Kawamura admits there may have been influences from the Korean peninsula, including a newly introduced manufacturing technique used in bead production.

Kōmoto (1992) and Matsumoto (2000) disagree with Kawamura in attributing the emergence of Yayoi stone beads including *magatama* in Kyūshū to greater cultural influence from the Korean peninsula. Considering a variety of stone types and ritual uses of the stone ornaments, Ōtsubo (2007, 2010) concludes that these stone objects evolved under strong influence from eastern Japan during late Late Jōmon (ca. 1800–1500 B.C.), but that these beads changed to peninsular types along with the transmission of agricultural rituals from the peninsula during the succeeding late Late to Final Jōmon (ca. 1500–300 B.C.).

Comma-shaped beads are called *gogok* 曲玉 in Korean; a number of arch-shaped or half-moon-shaped beads made of amazonite stone have been found associated with dolmens and pit burials in the Korean peninsula dated after the eighth century B.C. (Esaka 1989:47; Fujita 1992:142; Kōdera 2006:1; Ōtsubo 2001:fig. 2). It is not clear if these incipient models evolved to become the much later types found in the royal tombs of the Three Kingdoms era (ca. A.D. 300–668). A considerable number of *gogok* are known, primarily from mounded elite tumuli of this era across the southern regions of the Korean peninsula (Douglas et al. 2002; Lee 2012; Park 2008; Yi 2009). Based on the chronological distribution of these beads and on the absence of production centers and jadeite sources in relevant areas of the peninsula, Park (2008:129–131) argues that the latter types found in royal tombs were imported from the Japanese archipelago. As is the case with contemporary *magatama* in Japan, the production of these beads largely employed jadeite, most likely from the Itoi River region in Japan, but they also utilized other semi-precious stones, including agate and quartz (Kawamura 2014). Dozens of these beads were used to decorate gold crowns found in elite tumuli such as the Gold

Crown Tomb, the Great Tomb at Hwangnam, and the Heavenly Horse Tomb, all of which are located in Kyongju, the capital of the Silla Kingdom (ca. A.D. 300–668) (Kadota 2005). The use of *gogok* ornaments in the southern parts of the peninsula declined after the sixth century A.D. (Kadota 2005).

In the Japanese archipelago, the increase in production and use of both jadeite and non-jadeite *magatama* starting in Late Jōmon culminated in large quantities and standardized forms of these beads being produced during the Kofun period (ca. A.D. 250–600). Many archaeological studies have centered on Yayoi and Kofun examples excavated from workshops (Katō and Yanagiura 2011), residential areas (Sakurai 2004), and elite burials (Nago 2002; Takioto 2012; Tatsumi 2003, 2006). Their frequent inclusion as grave goods in mounded elite tombs strongly suggests that owning and wearing these stone ornaments became associated with the expression of high status, prestige, and power.

In addition to their use as expressions of status and power, there is little doubt that by the fifth century A.D., religious or ritual specialists also used these beads in funerary arrangements. The evidence comes from *haniwa* figurines in Kofun tombs that are adorned with *magatama* worn around their necks on a single strung pendant or as a multi-bead chain necklace, often interspaced with beads of different shapes (Fig. 3). Both male and female *haniwa* figures are depicted wearing these beads, but they appear more frequently on so-called “shamaness” or “shrine maiden” figurines wearing formal attire (Fujita 2008:99–100; Saitama 1998:69). Shamaness *haniwa* are often simultaneously equipped with other cultic paraphernalia such as small cups, circular mirrors, and flat, square-shaped hair ornaments. Examples include *haniwa* unearthed in the mounded tumuli at Tsukamawari in Gumma Prefecture and Iizuka in Tochigi Prefecture (Gunmaki 1980; Tochigi 2013:35). Unlike such clay *haniwa* figurines, the *dogū* figurines produced during the Jōmon period do not exhibit *magatama* beads. Different uses and ideas attached to *dogū* figurines may explain their absence.

The bronze mirror, bronze dagger, and jadeite *magatama* had become significant symbolic objects by the eighth century A.D. These are famously known today as the three items of Imperial Regalia and are closely associated with Shintō rituals (Inada 2008). Archaeological data has proven that Han bronze mirrors and Korean bronze daggers already had pronounced cultural significance by the mid-Yayoi period. Serving primarily as symbols of the ruling class, gift-giving networks introduced these artifacts and circulated them widely across the archipelago. Stone beads may have represented local powers, while mirrors and daggers symbolized associations with macro-regional hegemonies. According to Fujita (2000, 2008:98), a passage in the *Book of Wei* (*Wei-zhi* 魏志) account mentions curved beads possibly made of jadeite: “five thousand white gems and two pieces of carved jade” (白珠五千孔青大句珠二枚). This is evidence that this object type may already have begun to serve as a representative product of the land of Wa (Japan) by the third century A.D. (Tsunoda et al. 1958:9). After around A.D. 600, *magatama* were occasionally added to Buddhist statues as decorative ornaments, but, as in Korea, they gradually disappeared in Japan.<sup>1</sup>

Even though stone *magatama* went out of use, their standard shape seems to have survived in other symbolic depictions. Interlocking comma-shapes frequently appeared as religious and family emblems in ancient China and Japan, including the Shintō *tomoe* symbol. In contemporary Japan, stone *magatama* have recently regained popularity particularly among young women and children, who own and wear them as talismans, charms, or amulets.



Fig. 3. Kofun-period *haniwa* with *magatama* necklaces: (top left) “dancing shamaness” (踊る巫) and (top right) “man playing harp” (琴弾きの男子) and “shamaness offering a bowl” (杯を奉獻する巫女), Iizuka 31 (photographs courtesy of Tochigi Prefecture Oyama City Board of Education); (bottom left) “a girl in beautiful attire” (盛装の女子), Harayama 1 (photograph courtesy of Fukushima Museum); (bottom right) “a girl offering a cup” 杯捧げ女子, Tsukamawari 4 (artifact owned by Agency for Cultural Affairs, Government of Japan, photograph courtesy of Gunma Prefectural Museum of History).

#### THE *MAGATAMA* TRANSITION IN LATE JŌMON

When *magatama* first emerged during Early Jōmon, their numbers were quite limited. Their scarcity and sporadic presence in domestic contexts suggest that they were owned at the household level rather than by individuals. *Magatama* are rarely found in graves from Early to Middle Jōmon, despite the fact that other types of stone beads

were buried with the deceased. Many archaeological sites including Kuwano and Negoyadai show the inhabitants having been interred with large jadeite pendants as well as cylindrical, spherical, and slit-earring beads (Asano 2004:31). *Magatama* show little association with the realm of the dead during those periods; instead, they consistently appear in domestic contexts within the framework of everyday activities in residential areas.

Starting in Late Jōmon, the use of some *magatama* deviated from this long-term household tradition and they became fundamentally associated with mortuary rituals. They were added to funerary items such as other stone-bead types and combs to accompany certain deceased individuals, as had long been the custom in northern Japan. This new development linking *magatama* to funerary rituals seems to have immediately spread to other regions including Hokuriku and Kantō, but it was not as widely practiced there as in northern Japan. Furthermore, the transition in meaning and function of *magatama* did not apply to all of them; many *magatama* continued to appear in the same household settings as before, suggesting that they remained family items at the same time as they became included in ritual funerary contexts. A concomitant increase in the production of small stone beads, including *magatama*, may have facilitated their becoming personalized possessions. As personal possessions, that they became mortuary goods accompanying individuals in the more formalized contexts of funerals can be interpreted that the Jōmon people began to consider these beads as personal possessions used by the owners while alive.

#### CONTEXT OF *MAGATAMA* DURING THE JŌMON PERIOD

To understand this transitional process, this study focuses on the circumstances and types of *magatama* excavated at Jōmon sites located in the eastern half of the Japanese archipelago, including the Hokuriku, Chūbu, Kantō, Tōhoku, and Hokkaidō regions (Fig. 2). The “archaic” *magatama* of Early and Middle Jōmon are concentrated at Jōmon sites in these regions. Changes in forms and usage of *magatama* seem to have originated in northern Japan in Late Jōmon and gradually spread west and southwest after Final Jōmon into the Yayoi period.

Ornaments are categorized as *magatama* if they have one end that is slightly larger than the other end, and if there is a clear contrast between an outer convex edge and an inner concave edge between the two rounded ends. Excluded from these examples are a number of stone beads with circular or semi-circular shapes that were clearly recycled slit earrings (Fig. 1a).<sup>2</sup> Slit earrings are often the most common stone-bead types of Early and Middle Jōmon. However, these beads are not included in this study since they were initially made for different purposes and it is not clear how they are situated in the evolution of early *magatama*.

This study also excluded a large number of samples for any of the following five reasons: (1) the beads were made of non-stone materials such as clay or amber; (2) the shapes of the reported beads could not be confirmed as *magatama*; (3) their find-spots were still unclear or their contextual information has been completely lost; (4) they were acquired from surface collections; or (5) their time periods were not precisely established and therefore stretch between sub-periods (e.g., Late–Final Jōmon). Thus, the examples presented here do not represent a comprehensive dataset and data collection is still ongoing. More examples with precise contextual and chronological information are needed to further illuminate the evolution of Jōmon *magatama*.



Archaeological finds of stone *magatama*, especially in their initial stage of occurrence, are not numerous and those unearthed in direct association with archaeological features are rarer still. Suzuki (2004a:26) and Fujita (2013:77) put together some representative examples dating to Early and Middle Jōmon. Their lists exhibit some well-known cases, but the contextual information for each of these pieces is largely missing. Their figures demonstrate the difficulty of compiling a comprehensive list of early *magatama*, due mostly to the uncertainty about dating and ambiguity in classifying the shapes of beads as *magatama* from these early time periods.

Nevertheless, a total of 157 *magatama* with known proveniences and time periods were retrieved from published excavation reports. These include ten examples from ten Early Jōmon sites, 17 examples from 11 Middle Jōmon sites, 43 examples from seven Late Jōmon sites, and 87 examples from 23 Final Jōmon sites. Even though many of the examples are described simply as coming from cultural layers without clear association with specific features, the data provide general patterns regarding time periods, find-spots, forms, and stone types of these bead ornaments.

Based on morphological traits, I classified the 157 examples into six types (A–F in Table 1). Morphological traits include: lines and notches in the inner edges of each bead, thickness length, and perforations. Type C was divided into three subtypes, C1, C2, and C3, based on the shape of the inner edge. I also classified types D and E into two subtypes each (D1, D2, E1, E2). Type D2 has a less pointy end and is broader overall than Type D1, so it exhibits a boot-shape rather than the hook-shape of Type D1. The difference between subtypes E1 and E2 is the location of the perforation. The lengths of the beads were measured and the range in length among the bead examples for each type was noted.








More examples of Type A and Type B occur during Early (ca. 5000–3500 B.C.) and Middle (ca. 3500–2400 B.C.) Jōmon, while Type C1 is consistently seen throughout all Jōmon sub-periods. Similar in shape to C1, C2 and C3 became common during Late Jōmon (ca. 2400–1200 B.C.). Type D1 emerged in Middle Jōmon and its variant Type D2 after Late Jōmon. E1, E2, and F also became numerous only after Late Jōmon. Overall, all types, except Types A and B occurred much more frequently in Late and Final Jōmon (ca. 1200–300 B.C.) than in earlier periods. Regardless of morphological type, Jōmon *magatama* became larger during Middle Jōmon (ca. 4–7 cm in length). After Late Jōmon, there was a clear reduction in size (ca. 1–4 cm in length) across morphological types, but their numbers progressively increased for many of the types.

### *Magatama During Early and Middle Jōmon*

Among the 27 examples excavated from the Early (ca. 5000–3500 B.C.) and Middle Jōmon (ca. 3500–2400 B.C.) sites, nine examples were reported from pithouse contexts (Tables 2, 3). *Magatama* first appeared in Early Jōmon. These early examples were unearthed in house contexts that are described as within pit-houses or in the fills of pit-houses. While these early examples were often associated with other types of stone ornaments such as slit earrings, they were also always found embedded among a variety of both utilitarian and ritual objects in domestic settings, including pots, dishes, pounders, scrapers, spoons, arrowheads, axes, weights, stone rods/swords, and *dogū* figurines.







TABLE 2. EXCAVATED MAGATAMA FROM EARLY JŌMON SITES (CA. 5000–3500 B.C.)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Hakodatekūkō (Hokkaidō)	Pit	Type C3	Mudstone		None (?)
Hebinai (Hokkaidō)	Cultural layer	Type B	Serpentine		Sherds, stone blade
Yumitehara A (Fukushima)	Fill of a pithouse	Type B	Talc		Sherds, stone pounder, round stones
Happōzuka A (Fukushima)	Cultural layer	Type B	Talc		None (?)
Motomachinishi A (Fukushima)	Cultural layer	Type B	Chalcedony		Possibly <i>dogū</i>
Nakanoyamatsubara (Gunma)	Fill of a pithouse	Type B	Serpentine		Arrowheads, weights, scrapers, spoons, axes, dishes, miniature pots, stone rods, clay discs, cores, flakes, circular stone object


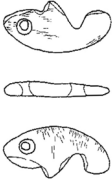

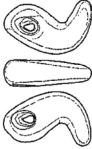
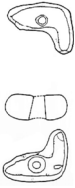

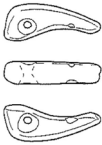
(Continued)

TABLE 2. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM)	ASSOCIATED ARTIFACTS
Niiborihigashigengahara (Gunma)	Cultural layer	Type A	Talc		Sherds, beads, miniature pots, clay discs, earrings, stone tools
Ogakuchi (Nīgata)	Cultural layer	Type A	Talc		Not clear
Matsunokida (Nagano)	Pithouse	Type C1	Talc		Arrowheads, weights, stone spoon, polished ax, stone dishes
Matsubara (Nagano)	Cultural layer	Type C1	Talc or serpentine		Earrings, beads, axes, weights, knives, stone dishes, arrowheads, sherds, pots


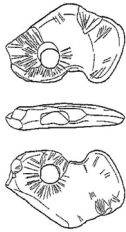
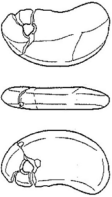





Sources: Hakodatekūkō: Hakodate Hakubutsukan (1977); Hebinai: Kikonaichō Kyōiku Inikai (2001); Yumitehara: Fukushima Bunka Sentā (1997) and Fukushima Bunka Sentā Iseki Chōsaka (1998); Happōzuka: Fukushima Bunka Sentā (1999); Motomachinishi: Fukushima Bunka Shinkō Jigyōdan (2002); Nakanoyamatsubara: Annakashi Kyōiku Inikai (1998); Niiborihigashigengahara: Sanbu Kōkogaku Kenkyūjo (1997); Ogakuchi: Ogakuchi Iseki Hakutsu Chosadan (1979) and Niigataken Kyōiku Inikai (2006); Matsunokida: Naganoshi Kyōiku Inikai (1996); Matsubara: Naganoken Maizō Bunkazai Sentā (1998).

TABLE 3. EXCAVATED MAGATAMA FROM MIDDLE JŌMON SITES (CA. 3500–2400 B.C.).

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Hamachō A (Hokkaidō)	Fill of a pithouse	Type F	Jadeite		Stone spearheads, arrowheads, stone spoons, scrapers, points, axes, hammer stones, stone rods, sherds, flakes, pots
Hagigaoka (Hokkaidō)	Cultural layer	Type C3	Jadeite		Clay and stone tools, etc.
Miyato 4 (Hokkaidō)	Cultural layer	Type D1	Serpentine		Only the <i>magatama</i>
Izumiyama (Aomori)	Grave pit	Type E2	Jadeite		Only the <i>magatama</i>
Sannaimaruyama 6 (Aomori)	Cultural layer	Type C1	Talc or tuff		<i>Dogū</i> , miniature pots, pendants, clay discs, stone arrows, earrings, pierced stone objects
	Cultural layer	Type A	?		



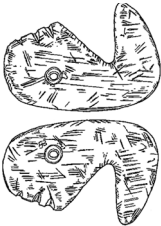



(Continued)

TABLE 3. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Kamiyonai (Iwate)	Cultural layer	Type E1	?		
					
	Cultural layer	Type C1	?		
					Sherds, clay discs, stone arrowhead, pierced clay object, flakes
	Pithouse	Type D1	Tuff		
Tanabatake (Nagano)	Fill? of a pithouse	Type D1	Chalcedony		
		Type E1	Chart		
		Type D1	Talc		Pendant, pots, stone drill, arrowhead, axes, knife, stone spoon, flakes

(Continued)

TABLE 3. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Nizayamashin (Toyama)	Cultural layer	Type C1	Serpentine		Axes, hammers, grinding stones, stone weights, arrowheads, sherds
Teraji (Niigata)	Cultural layer	Type D1	Talc		Not clear
Meijiyakkadaigaku (Tōkyō)	Pithouse	Type C3	Serpentine		Pot, axes, stone dish, pendant, flakes
Ōtsukurodanomori (Ishikawa)	Cultural layer	Type A	Talc		Pots, arrowheads, spoons, axes, drills
★Late Middle Jōmon to early Late Jōmon	Cultural layer	Type C1	?		Pots, clay discs, dogū frags, arrowheads, axes, scrapers, drills

*Sources:* Hamachō: Toichō Kyōiku Inkai (1991); Hagigaoka: Ebetsushi Kyōiku Inkai (1982); Miyato: Hokkaidō Maizō Bunkazai Sentā (2003); Izumiyama: Aomoriken Kyōiku Inkai (1976) and Aomoriken Maizō Bunka Sentā (1996); Sannaimaruyama: Aomoriken Kyōikuchō Bunkazai Hōgoka (2009, 2013); Kamiyonai: Iwateken Bunka Shinkō Jigyōdan Maizō Bunkazai Sentā (1995*a*, 1995*b*); Tanabatake: Tanabatake Hakkutsu Chōsadan (1990); Nizayamashin: Toyamaken Kyōiku Inkai (1973); Teraji: Ōmichō (1987); Meijiyakkadaigaku: Meijiyakkadaigaku Iseki Chōsakai (2000); Ōtsukurodanomori: Ishikawaken Kyōiku Inkai (2002).

During Early and Middle Jōmon, *magatama* may have occasionally been buried in tombs, but it seems to have been very rare and they do not seem to have been buried with other grave goods. For Early Jōmon, one from Hakodatekūkō was reported from a pit located within a cluster of pit-houses, but this pit showed no sign of having been a tomb (Hakodate Hakubutsukan 1977:328–329). The Izumiyama site reports the first and only example of a *magatama* coming from a grave pit dated to Middle Jōmon (Aomoriken Kyōiku Inkai 1976:44, 163). Besides the *magatama* bead, nothing else was found in this grave pit, so there is uncertainty even regarding defining the pit as a grave pit. However, this *magatama* dates to the very end of Middle Jōmon. It likely represents an early example of the transitioning usage of some *magatama* starting in Late Jōmon. As noted above, the custom of depositing stone beads to accompany the deceased had existed since Early Jōmon for non-jadeite beads and since Middle Jōmon especially for jadeite ones throughout the archipelago, but *magatama* were mostly not part of the funerary beads of Early and Middle Jōmon.

Unfortunately, the remaining 16 examples came from cultural layers without clear association with specific features. Nonetheless, at least half of their find-spots are located within residential areas, mostly in close proximity to pithouses or to pits that may have been pithouses. One clear exception to this is the example that was unearthed in a wet-field at Miyato in Hokkaidō (Hokkaidō Maizō Bunkazai Sentā 2003:150).

A variety of morphological types of *magatama* is present during Early and Middle Jōmon. Many of the Early Jōmon examples have shapes that resemble a half of a slit earring or a canine tooth. These shapes became much less common after Middle Jōmon. Early Jōmon *magatama* also tend to be slender in shape, compared to the broader ones of the later sub-periods. The location of the perforation tends to be at the furthest end of the “head” (broadest part), but this pattern seems to have disappeared after Middle Jōmon.

The Middle Jōmon examples show a greater variety in morphological types, including the first appearance of the comb-, animal-, hook-, J-, and L-shapes, as well as lines in the head. Particularly noticeable during this period is the large size of some of the beads. This clearly reflects the widespread trend during Middle Jōmon of producing large pendants (*taishu* 大珠), many of which were over 5 cm long. The large stone pendants produced during this time period were made primarily of jadeite, along with some of talc, mudstone, or serpentine.<sup>3</sup> Their forms include leaves, triangles, axes, and *magatama* (Kurishima 2004; Suzuki 2004b). Kawarabuki (2004) collated data on over 250 such large beads reported from graves, pit-houses, stone structures, and pots buried in the ground. Many of the large pendants came from graves. In some instances, their precise positions in relation to skeletal remains indicate that the deceased had them on their bodies at the time of inhumation (Fujita 2006; Kawarabuki 2004). Table 4 shows a list of Early–Middle Jōmon sites where large pendants were reported from both grave pits and pithouses. The equal presence of the large pendants in both mortuary and domestic contexts differs from the situation of contemporary *magatama* in the same regions that came almost always from houses, not from graves. The large pendant type gradually fell into disuse during Late Jōmon, as though the *magatama* being produced in larger quantities had taken over the role of the large pendants in accompanying the deceased.

Like the large pendants, Early and Middle Jōmon *magatama* were made of various stone types, including serpentine, talc, chalcedony, jadeite, and green tuff. There is a degree of uncertainty in the determination of the stone types in some cases, but

TABLE 4. LARGE PENDANTS REPORTED TO HAVE BEEN EXCAVATED FROM GRAVE PITs AND PITHOUSES

JŌMON SUB-PERIOD	SITE NAME	PREFECTURE	STONE TYPE	SOURCES
<b>Grave Pit</b>				
Early	Tenjin	Yamanashi	Jadeite	Yamanashiken Maizō Bunkazai Sentā 1994
Middle	Sakae-hama 1	Hokkaidō	Jadeite	Yakumochō Kyōiku Linkai 1987
Middle	Fugoppe 2	Hokkaidō	Jadeite	Hokkaidō Maizō Bunkazai Sentā 1991
Middle	Yamabuki 1	Aomori	Jadeite	Aomorishi Kyōiku Linkai 1991
Middle	Nishida	Iwate	Jadeite	Iwateken Kyōiku Linkai 1980
Middle	Hariyama	Iwate	Jadeite	Tōnoshi Kyōiku Linkai 2006
Middle	Iwanohara	Niigata	Jadeite	Nagaokashi Kyōiku Linkai 1981
Middle	Umataka	Niigata	Jadeite	Nakamura 1966
Middle	Uekido	Nagano	Jadeite	Naganoken Maizō Bunkazai Sentā 1988
Middle	Shichirōuchi C	Fukushima	Jadeite	Fukushimaken Bunka Sentā Iseki Chōsaka 1982
Middle	Hoshōjiri	Fukushima	Jadeite	Fukushimaken Bunka Sentā Iseki Chōsaka 1991
Middle	Miyaushiro	Ibaraki	Jadeite	Ibarakiken Kyōiku Zaidan 2002
Middle	Tsubotue	Ibaraki	Jadeite	Ōmiyamaichi Rekishi Minzoku Shiryōkan 1995
Middle	Kitatsukaya	Saitama	Jadeite	Saitamaken Maizō Bunkazai Chōsa Jigyōdan 1983, 1985
Middle	Shijimizuka	Shizuoka	Diopside/Actinolite	Hamamatsushi Kyōiku Linkai 1962

(Continued)



TABLE 4. (*Continued*)

JŌMON SUB-PERIOD	SITE NAME	PREFECTURE	STONE TYPE	SOURCES
<b>Pitthouse</b>				
Early	Tōbuhachimanbara	Nagano	Jadeite	Ikusakamura Kyōiku Linkai 1999
Middle	Aonae	Hokkaidō	Jadeite	Okushirichō Kyōiku Linkai 1978; Sato and Yamada 1979
Middle	Herokaruusu	Hokkaidō	Jadeite	Hokkaidō Bunkazai Kenkyūjo 1987
Middle	Nishinagane	Aomori	Jadeite	Hachinoheshi Kyōiku Linkai 1995
Middle	Futatsumori	Aomori	Jadeite	Aomorikenritsu Kyōdokan 1984; Tenmabayashimura 1981
Middle	Natsumoto	Iwate	Jadeite	Iwateken Bunka Shinkō Jigyōdan Maizō Bunkazai Sentā 1989
Middle	Teraji	Nīgata	Pagodite	Ōnimachi 1966; Teramura et al. 1987
Middle	Yamayashiki 1	Nīgata	Jadeite	Jōetsushi Kyōiku Linkai 1978; Jōetsushishi Hensan Linkai 2003
Middle	Banbayama G	Toyama	Jadeite	Toyamaken Maizō Bunkazai Sentā 1985, 1987
Middle	Masinoshinkiri	Nagano	Nephrite	Naganoken Kyōiku Linkai 1972
Middle	Shimohirooka	Ibaraki	Jadeite	Ibarakiken Kyōiku Zaidan 1981
Middle	Kajidai	Ibaraki	Jadeite	Kashimamachi Kyōiku Linkai 1990
Middle	Shimazu	Ibaraki	Jadeite	Shimazu Iseki Chōsakai 1998
Middle	Tsutsudo A	Ibaraki	Jadeite	Ibarakiken Kyōiku Zaidan 1984

serpentine and talc are the most common minerals, particularly during Early Jōmon. In addition to the various stone types seen in Early Jōmon, *magatama* examples made of jadeite and tuff also emerged in Middle Jōmon. The jadeite examples do not show any difference from other contemporary *magatama* types in terms of their location of find. In general, there is no correlation between stone types and their contexts of find.

### *Magatama During Late and Final Jōmon*






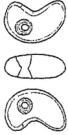

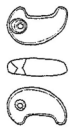
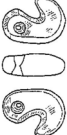
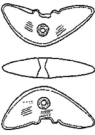
A few notable sociocultural trends clearly demarcate Late-Final Jōmon from preceding Early-Middle Jōmon. For example, the Early-Middle Jōmon centers of prosperity were located in central Japan. They moved to two separate regions, one centered in northern Tōhoku and another in central Kyūshū, during the Late and Final Jōmon (Imamura 1996:111–125). Late and Final Jōmon also witnessed the production of small beads including *magatama* in progressively larger quantities across the Japanese archipelago (Esaka 1989; Esaka and Watanabe 1998). This tendency was probably a result of expanding trade networks. As a result of a climatic change during this time period, hunter-gatherer-fishers began actively participating in supra-communal interactions (Uchiyama 2008). Another socio-cultural change was the physical separation of burial and ritual locations from mundane living spaces in Late-Final Jōmon settlements in northern Japan (Nakamura 2009). According to Nakamura (2009), a pronounced social differentiation was expressed in mortuary practices in association with this physical distance.

To compare with the general trends observed among the Early-Middle Jōmon *magatama* and understand the transitional process through which these artifacts became integrated into the realm of the deceased, this study also investigated the circumstances of find and types of *magatama* dating to the Late (ca. 2400–1200 B.C.) and Final (ca. 1200–300 B.C.) Jōmon periods (Tables 5, 6). Demarcation between these sub-periods is often unclear in the reports. They are often presented as a single subperiod (e.g., LateFinal) for many of the sites. As was the case with the clustering of Early and Middle Jōmon examples in northern Japan, the distribution of the Late and Final Jōmon samples are also predominantly seen in the northern regions.

Burying *magatama* in graves became radically salient in Late Jōmon. This practice is especially associated with clusters of burial pits in cemeteries. These burial pits were generally not very large and, when skeletal remains are preserved, usually contained only one individual, sometimes two, in a flexed position. Among the 130 examples of *magatama* from Late and Final Jōmon sites, 92 have been unearthed from grave contexts. This new location of find for *magatama* developed in Late Jōmon and became prevalent during Final Jōmon. Many of the Late-Final Jōmon sites where *magatama* were found in graves are located in northern Honshū and Hokkaidō. The practice of entombing these stone items with corpses seems to have burgeoned in these northern regions of Japan.





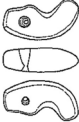

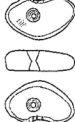
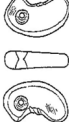



Unlike the few Middle Jōmon *magatama* found in grave contexts, *magatama* excavated from Late Jōmon burials are often found together with other body ornaments, including combs, beads, pendants, and earrings. *Magatama* in grave pits continued to be buried with other ornamental items toward the end of the Jōmon period, but were also accompanied by more practical objects including pots, scrapers, axes, knives, and arrowheads. Concomitant with this development was the inclusion of

TABLE 5. EXCAVATED MAGATAMA FROM LATE JŌMON SITES (ca. 2400–1200 B.C.)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Karimba 3 (Hokkaidō)	Grave pit	Type E2	Talc?		Combs, pendants, beads
		Type C1	Talc?		
	Grave pit	Type A	Talc?		Combs, fragment of lacquer container, beads
	Grave pit	Type C2	Talc?		Beads
		Type C3	Talc?		
	Grave pit	Type C2	Talc?		Beads
		Type C2	Talc?		
	Grave pit	Type D1	Talc		Comb, beads, axe, sherds
		Type E2	Talc		





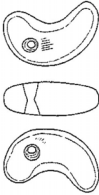

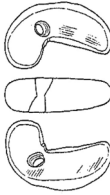
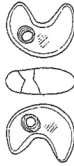
(Continued)

TABLE 5. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (cm) 	ASSOCIATED ARTIFACTS
	Grave pit	Type C1	Talc		Comb
		Type C1	Talc		
		Type E2	Talc?		
		Type C3	Talc?		
	Grave pit	Type E1	Talc?		Bead
		Type C3	Talc?		
		Type C3	Talc?		
		Type C1	Talc?		
	Grave pit	Type C1	Talc		Shell bracelets, comb, beads
		Type C1	Talc		



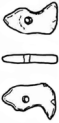







(Continued)

TABLE 5. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (cm) 	ASSOCIATED ARTIFACTS
		Type C2	Talc		
		Type A	Talc		
		Type E2	Talc		
	Grave pit	Type C3	Talc		Earrings, combs, bracelets, beads
		Type E1	Talc		
		Type E2	Talc		
		Type C3	Talc		












(Continued)

TABLE 5. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Yagi B (Hokkaidō)	Stone tombs	Type E2	Talc		Beads
		Type D2	Jadeite		
		Type E2	?		
Korekawanakai (Aomori)	Pithouse	Type E2	?		Pots, arrowheads, stone hair ornaments, flakes, scrapers, axes, dogū fragments, stone discs
		Type C1	Jadeite		Beads, sherds
		Type E1	?		Not clear
Mawaki (Ishikawa)	Cultural layer	Type C3	Jadeite		Sherds, others not clear
Chiyoda (Chiba)	Pithouse	Type C3	Jadeite		Sherds, fragment of dogū, clay earrings, stone swords
Motoyashiki (Niigata); *Late Jōmon to the beginning of Final Jōmon	Stone tomb	Type D2	Jadeite		32 beads, small stone tool

(Continued)

TABLE 5. (*Continued*)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
	Stone tomb	Type D2	Jasper		16 beads, stone rod
		Type C3	Jasper		
		Type E2	Jasper		
	Stone tomb	Type D2	Jadeite		68 beads
	Stone tomb	Type C3	Quartz schist		Not clear
	Stone tomb	Type D1	Talc		Not clear
	Stone tomb	Type C1	Jadeite		Not clear
	Stone structure	Type D2	Jadeite		Not clear
	Stone structure	Type E1	Jadeite		Not clear
	Cultural layer	Type D1	Tuff		Not clear

*Sources:* Karimba: Eniwashi Kyōiku Linkai (2003); Yagi: Kōsaku Nakamura (2014); Korekawanakai: Hachinohe Iseki Chōsakai (2004), Hachinohe Iseki Chōsakai (2002) and Hachinoheshi Kyōiku Linkai (2002); Kazahari: Hachinoheshi Kyōiku Linkai (2008); Mawaki: Notochō Kyōiku Linkai (2002); Chiyoda: Yotsukaidō Chiyoda Iseki Chōsakai (1972); Motoyashiki: Asahimura Kyōiku Linkai (2002).













TABLE 6. EXCAVATED MAGATAMA FROM FINAL JŌMON SITES (CA. 1200–400 B.C.)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Bibi 4 (Hokkaidō)	Grave pit	Type C1	Talc		Sherds, knives, scraper, axes, chips, flakes
	Cultural layer	Type C1	Peridotite		Beads, clay object, stone tools
		Type C1	Peridotite		Not clear
		Type F	Peridotite		Not clear
		Type C3	Peridotite		Not clear
	Cultural layer	Type F	Peridotite		Beads, stone tools, stone rods, earrings
Ōkawa (Hokkaidō)	Grave pit	Type C3	Jadeite		Grave goods include stone swords, ear plugs, etc.
	Grave pit	Type D1	Jadeite		

(Continued)

TABLE 6. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Sawamachi 5 (Hokkaidō)	Grave pit	Type C3	Jadeite		None
	Grave pit	Type D1	Jadeite		
	Grave pit	Type D1	Jadeite		
	Grave pit	Type E1	Jadeite		
	Grave pit	Type D1	Jadeite		
	Grave pit	Type D1	Jadeite		
	Grave pit	Type D1	Serpentine or talc		
	Grave pit	Type B	Talc		
	Grave pit	Type C1	Jadeite		
	(Continued)				
					Arrowhead, sherds

Miniature pot,  
stone objects

Arrowhead, sherds

TABLE 6. (Continued)


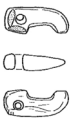







SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Misawa 1 (Hokkaidō)	Grave pit	Type C3	Jadeite or serpentine		Sherds, pendants, beads
	Cultural layer	Type E1	Jadeite		Not clear
	Grave pit	Type A	?		Sherds, earrings
		Type C3	?		Not clear
	Grave pit	Type C1	?		Comb, beads, sherds
	Grave mound	Type A	?		Sherds, beads
Shadai 1 (Hokkaidō)	Grave mound	Type D2	?		Sherds
	Grave pit	Type D2	Jadeite?		Sherds, beads
		Type D2	Jadeite?		
	Grave pit	Type C3	Nephrite		Pot

(Continued)

TABLE 6. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Korekawanakai (Aomori)	Grave pit	Type D1	Nephrite		Pots, arrowhead, beads, sherds
		Type C3	Jadeite?		
	Discard area	Type F	Mudstone		Sherds, stone tools, wooden objects
		Type E1	?		
Genjōtai (Aomori)	Grave pit	Type C1	Jadeite		Arrowhead, pendant
	Cultural layers	Type F	Jadeite		Not clear
Izumiyama (Aomori)	Green tuff	Type D2	Green tuff		Not clear
		Type C1	Green tuff		
(Continued)					

TABLE 6. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Asahiyama 1 & 2 (Aomori)		Type C2	Shale		
	Grave pit	Type E1	Jadeite		Pendants
	Grave pit	Type D1	Jadeite		Arrowhead, stone object
	Grave pit	Type C3	Jadeite		Not clear
	Grave pit	Type C3	Jadeite		Not clear
	Grave pit	Type C1	Jadeite		Sherds
	Grave pi	Type E1	Jadeite		Not clear
	Grave pit	Type E1	Jadeite		Pendant

(Continued)

TABLE 6. (Continued)


























SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
		Type C3	Jadeite		Not clear
	Grave pit	Type C3	Jadeite		Pendant
	Grave pit	Type C3	Jadeite		Pendants
	Grave pit	Type E1	Jadeite		Pendant
	Grave pit	Type C3	Jadeite		Pot
	Grave pit	Type C3	Jadeite		None (?)
		Type C3	Jadeite		
(Continued)					










TABLE 6. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (cm) 	ASSOCIATED ARTIFACTS
Akedo (Aomori)	Grave pit	Type C3	Jadeite		None (?)
Kaniobuchi 1 (Aomori)	Grave pit	Type E2	Jadeite or Green tuff		Beads
					
					
					
	Grave pit	Type D1	Jadeite or Green tuff		Not clear
					
					
					
					
					
Ishigame (Aomori)	Pit (thought to be a pithouse)	Type E1	Jadeite		Not clear
					
					
					
	Tuff	Type F	Tuff		None (?)

(Continued)













TABLE 6. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Nowaki (Aomori)	Ditch	Type D1	Jadeite		Beads, sherds, clay discs, etc.
		Type C1	Green tuff		Not clear
		Type C1	Jadeite		Sherds, dogū fragments, clay discs, arrowheads, stone disc, stone tools
Ōhinata 2 (Iwate)	Pithouse	Type C3	Jadeite		Beads, stone dish, sherds, clay object
					Various stone and clay objects
	Cultural layer	Type C3	Jadeite		
		Type C3	Green tuff		
Hiraka (Akita)	Discard area	Type E1	Jasper		Sherds, arrowheads, scrapers, axes, beads, spoons, dogū fragments, stone tools, beads, pendants







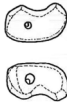
(Continued)

TABLE 6. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (CM) 	ASSOCIATED ARTIFACTS
Yudeno (Akita)	Grave pit	Type E1	?		None
	Grave pit	Type D2	Jadeite		Beads, arrowhead
		Type D2	Jadeite		
Kamishinjō (Akita)	Grave pit	Type D2	Green tuff		Beads
	Grave pit	Type D2	Jadeite	(size unclear) 	Bead
	Grave pit	Type D2	Jadeite	(size unclear) 	Bead
	Grave pit	Type E1	?	(size unclear) 	Bead, sherds
	Cultural layer	Type E2	?		Various stone and clay objects
Mushinai III (Akita)	Grave pit	Type D1	Jadeite		Stone sword, bead, pendant, stone weight







(Continued)

TABLE 6. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (cm) 	ASSOCIATED ARTIFACTS
Honden (Ibaraki)	Fill of a pithouse	Type C3	Jasper		Sherds, clay discs, stone dishes, flakes
	Pit	Type C3	Sandstone		Sherds, flakes
	Cultural layer	Type C3	Sandstone		Sherds, stone tools, clay objects, cores, flakes
Hosoike (Nigata)	Pithouse	Type E2	Talc		Sherds, axes, stone rod, stones
Teraji (Nigata)	Stone structure	Type E1	Blue quartz		Dogū fragments, clay discs, ear plugs, axes, stone swords, arrowheads, stone weights, stone rods, stone dishes, beads, flakes, cores
Shimohuda (Tokyō)	Pit	Type C3	Jadeite		Sherds, stone dish

(Continued)

TABLE 6. (Continued)

SITE NAME (PREFECTURE)	CONTEXT OF FIND	SHAPE	MATERIAL	SCALE (cm) 	ASSOCIATED ARTIFACTS
Kinsei II (Yamanashi)	Pithouse	Type D1	Jadeite		Sherds, clay earrings, dogū fragments, axes, arrowheads, pounder, stone rod/sword, polished stones
	Stone structure	Type D1	Jadeite		Sherds, dogū fragments, earrings, arrowheads, axes, stone swords, etc.
	Cultural layer	Type C3	Jadeite		Dogū fragments, arrowheads, earrings, axes, stone swords, stone rods, etc.
		Type E1	Chalcedony		
		Type D1	Jadeite		

*Sources:* Bibi: Hokkaidō Maizō Bunkazai Sentā (1998); Ōkawa: Miya (1996); Sawamachi: Yoichichō Kyōiku linkai (1989), Misawa: Hokkaidō Kyōiku linkai (1977); Shadai: Hokkaidō Maizō Bunkazai Sentā (1981); Korekawanakai: Hachinohe Iseki Chōsakai (2004), Hachinohe Iseki Chōsakai (2002), and Hachinoheishi Kyōiku linkai (2002); Genjōtai: Aomoriken Kyōikuchō Bunkazai Hogoka (1978); Izumiya: Aomoriken Kyōiku linkai (1976) and Aomoriken Maizō Bunka Sentā (1996); Asahiya: Aomoriken Maizō Bunkazai Chōsa Sentā (1993); Akedo: Aomorikenshi Hensan Kōkōbukai (2013); Kamiobuchi: Aomoriken Kyōiku linkai (1988); Ishigame: Aomorikenshi Hensan Kōkōbukai (2013), Watanabe and Minami (1997); Nowaki: Aomoriken Kyōikuchō Bunkazai Hogoka (1993), Ōhinata: Iwateken Bunka Shinkō Jigyōdan Maizō Bunkazai Sentā (1995*a*, 1995*b*); Hiraka: Akitaken Maizō Bunkazai Sentā (1983); Yūdeno: Akitaken Kyōiku linkai (1978); Kamishinō: Akitashi Kyōiku linkai (1980, 1992); Mushinai: Akitaken Maizō Bunkazai Sentā (1994); Honden: Ibarakiken Kyōiku Zaidan (2009); Hosoike: Itoigawashi (1986); Teraji: Ōmichō (1987); Shinohuda: Edo Tōkyō Tatemonoen (2015); Kinsei: Yamanashiken Kyōiku linkai (1989).

ritualistic objects such as stone rods/swords, miniature pots, and *dogū* figurines, but these types of objects were not abundant in burial pits.

Although a large number of *magatama* began to accompany the deceased in tombs, they also continued to be used in household settings. While mortuary *magatama* are concentrated in the northern regions of Japan, those found in domestic settings are not clustered in any particular region. Seven examples were unearthed in pithouse contexts. As was the case in Early and Middle Jōmon, these examples were accompanied by objects that are thought to be ritualistic in nature as well as various utilitarian household objects and tools.

In Late Jōmon, two examples of *magatama* were found in stone structures at Motoyashiki.<sup>4</sup> In Final Jōmon, two *magatama* came from stone structures at Teraji and Kensei and two more from pits.<sup>5</sup> Three other *magatama* were reported from discard areas and two from a ditch. Such contexts often contain both utilitarian and ritual objects. As was also the case with many of the Early-Middle Jōmon collections, the excavation reports present a considerable number of examples (20 examples) from simple cultural layers.

An even greater variety of morphological types emerged in Late and Final Jōmon than in the previous periods. For example, some have a boomerang-shape with the perforation at the mid-point; the boot-shape (a modified version of the hook-shape) also made its appearance during the later periods. Along with comb-shape examples, the bean-shape with a semi-circular inner edge, resembling the “standard” shape of the later Yayoi and Kofun periods, also became more numerous. The large *magatama* of Middle Jōmon mostly disappeared and overall the size of *magatama* was reduced after Late Jōmon.

Changes were also made in the stone types used for *magatama* production. The jadeite *magatama* that began to appear in Middle Jōmon progressively increased in number during Late Jōmon and even more so in Final Jōmon. Other stone types (i.e., tuff, siliceous rock, peridotite, serpentine, jasper, quartz) are also abundantly present. *Magatama* made of talc continued to dominate the collections, being second in number only to those made of jadeite. As was the case with the Early and Middle Jōmon *magatama*, there is no correlation between stone types, morphological types, and contexts of find among the Late and Final Jōmon *magatama* collections.

#### THE EVOLUTION OF MAGATAMA IN THE JŌMON PERIOD

*Magatama* began to appear in Early Jōmon. For thousands of years, these beads were consistently found in house contexts in association with many utilitarian and ritual objects including pots, dishes, pounders, scrapers, spoons, arrowheads, axes, weights, rods/swords, and *dogū* figurines. The rarity of the Early and Middle Jōmon *magatama* and their frequent association with residential archaeological contexts imply that these were shared at the household level and used in domestic settings. Not all households owned these objects, however. Even when they were present, they were few in number; it seems very rare for a household to own many *magatama*.

In Late Jōmon, however, some *magatama* began to be buried as mortuary objects. While *magatama* in household contexts continued, the cases of *magatama* findings in cemetery settings increased dramatically in northern Japan. This trend may well have been related to the using of communal cemeteries that were spatially demarcated from residential areas. Communal cemeteries developed after Late Jōmon and contained clusters of small burial pits for mostly individual use. The production of large amounts

of small stone beads and their wider circulation via expanding trade networks after Late Jōmon probably facilitated individual ownership.

### *Jadeite Magatama as Status or Wealth Markers in Burials*

Although *magatama* made of jadeite may have acted as symbols of high status or wealth, an increase in status or wealth differences probably did not cause the transition to burying *magatama* as grave goods. Some scholars assert that *magatama* were placed in graves to mark the status or wealth of the deceased while alive. Kinoshita (2000) believes that *magatama* began to appear in elite graves during the Yayoi period because they had become symbols of wealth for Yayoi elites. Kinoshita (2005) further argues that various *magatama* types were differentiated in terms of their forms, materials, and colors, and that these types were linked to different levels of status and wealth in the stratified society. While Kinoshita's supposition may be correct for the Yayoi elite burials, the Late Jōmon transition in the use of *magatama* is not associated with elite symbols. First of all, there seems to be no association between the richness of grave furnishings, indicating wealth and high status, and the presence of these stone beads in Late Jōmon burials. Their presence in tombs appears to show no correlation with the degree of lavishness of other funerary items or with any specific sex or age categories. Second, jadeite *magatama* are rarely found in graves before Late Jōmon, even though they were already being produced in Middle Jōmon. Third, jadeite was not the only material used for funerary *magatama*; there are also talc, peridotite, serpentine, and jasper examples (Tables 5, 6). Fourth, *magatama* made of jadeite continued to show up in domestic settings. As described above, jadeite examples from pit-houses of Late and Final Jōmon are not rare. Lastly, more than half of the Jōmon *magatama* made of jadeite did not come from graves or houses, but from pits, stone structures, and simple cultural layers. While contextual information may have been lost due to poor preservation of the sites, this pattern nevertheless indicates that the association between *magatama* and graves was by no means exclusive.

### CONCLUSION

The use of *magatama* in formal mortuary rituals burgeoned in Late Jōmon. These beads began to accompany certain deceased members of households when they were buried. This custom developed in northern Japan, but may have occasionally spread to other regions in the main island. Parallel to this new development, the long-term tradition of using *magatama* in household settings continued from Early Jōmon on.

A few thousand years prior to Late Jōmon the Jōmon people had already begun to bury their dead with stone body ornaments, including slit earrings, cylindrical beads, and large pendants. However, *magatama* were not included in graves until Late Jōmon, which is also when the large pendant type gradually fell into disuse. The dramatic increase in the number of *magatama* beads after Late Jōmon shows that *magatama* became quite popular as a result of acquiring a new emphasis and meaning.

The increased production of *magatama* and other small stone beads after Late Jōmon is linked to their new role as individual grave goods. This personalization process led to more individualized ownership of *magatama*, often in sets with other body ornaments such as combs, pendants, and earrings that also served as grave goods. The abundance and the presence of these body ornaments in individual graves indicate that the Late Jōmon inhabitants of northern Japan enjoyed a relatively comfortable material culture.

After Final Jōmon, household items of a more utilitarian nature, such as clay pots and stone tools, increasingly served as grave goods along with *magatama*. Objects that are often considered ritualistic, such as stone rods, *dogū* figurines, and miniature pots, were also found in graves, though not abundantly.

The trend in the succeeding Yayoi and Kofun periods, in which *magatama* became major funerary objects for elite individuals across the Japanese archipelago, thus has roots in a process that operated two millennia earlier, before *magatama* had become symbols of high status. This marked one of the significant early stages in the evolution of this peculiar bead type, which eventually became exalted by inclusion in Imperial Regalia.

## NOTES

1. The rising popularity of Buddhism among the elite coincides with and may have been linked to the decline of wearing stone jewelry such as *magatama* (Gina Barnes pers. comm. 8 June 2016).
2. A couple of examples (including from Yumitehara) fall into a gray zone. I have included them so long as published sources treat them as *magatama* and not as recycled slit earrings.
3. The examples from Hamachō, Sannnaimaruyama, Tanabatake, and Teraji can be categorized as large pendants (大珠), but only the example from Hamachō was made of jadeite.
4. The stone structures at Motoyashiki are concentrated within an area 30 m in diameter. They comprise about 99 stone tombs in the form of pits with circular and oval-shaped stone arrangements.
5. The stone structures at Teraji are distributed over an area of approximately 16 m × 10 m. They include a central hearth-like stone structure, rectangular- and circular-shaped stone arrangements, stone tombs, and wooden pillars. The stone structures at Kensei are in an area of approximately 60 m × 10 m that can be divided into several sections. Associated with these structures are rectangular- and circular-shaped stone arrangements.

## REFERENCES CITED

- AKITAKEN KYŌIKU IINKAI 秋田県教育委員会  
 1978 *Yudeno Iseki Hakkutsuchōsa Gaihō* 湯出野遺跡発掘調査概報 [The Excavation Report of Yudeno Site]. Akita-shi, Akita: Akitaken Kyōiku Iinkai 秋田県教育委員会.  
 1980 *Akita-shi Kamishinjō Chūgakukō Iseki: Rindō kōji Shō Gurando Zōsei ni Tomonau Kinkyū Hakkutsuchōsa Hōkokusho* 秋田市新城中学校遺跡: 林道工事・小ランド造成に伴う緊急発掘調査報告書 [The Akita City Kamishinjō Middle School Site: Emergent Excavation Reports accompanying the Construction of Forest Roads and Expansion of the Small Sports Field]. Akita: Akitashi Kyōiku Iinkai 秋田市教育委員会.  
 1992 *Kamishinjō Chūgakukō Iseki: Gakkō Kaichiku ni Tomonau Kinkyū Hakkutsuchōsa Hōkokusho* 上新城中学校遺跡: 学校改築に伴う緊急発掘調査報告書 [The Kamishinjō Middle School Site: Emergent Excavation Reports accompanying the School Renovation]. Akita: Akitashi Kyōiku Iinkai 秋田市教育委員会.
- AKITAKEN MAIZŌ BUNKAZAI SENTĀ 秋田県埋蔵文化財センター  
 1983 *Hiraka Iseki Hakkutsuchōsa Hōkokusho: Akitaken Masudamachi ni Okeru Iseki no Chōsa* 平鹿遺跡発掘調査報告書: 秋田県増田町に於ける遺跡の調査 [The Excavation Report of the Hiraka Site: The Excavation Report relating to the Site at Masudamachi in Akita Prefecture]. Akita: Akitashi Kyōiku Iinkai 秋田市教育委員会.  
 1994 *Mushinai 3 Iseki: Tōhoku Jyūkan Jidōshadō Akita-sen Hakkutsuchōsa Hōkokusho 17* 虫内 3 遺跡: 東北横断自動車道秋田線発掘調査報告書 17 [The Mushinai Site 3. The Excavation Report of Tōhoku Jyūkan Highway Akita Route 17]. Akita: Akitashi Kyōiku Iinkai 秋田市教育委員会.
- ANNAKASHI KYŌIKU IINKAI 安中市教育委員会  
 1998 *Nakanoyamatsubara Iseki: Annaka Ionohe Kōgyō Danchi Zōsei Jigyō ni Tomonau Maizōbunkazai Hakkutsuchōsa Hōkokusho 2 (Jōmon Jidai Ibutsuhen). 3 (Jōmon Jidai Ibutsu Honbunhen)* 中野谷松原遺跡: 安中横野平工業団地造成事業に伴う埋蔵文化財発掘調査報告書 2 (縄文時代遺物編), 3 (縄文時代遺物本文編) [The Nakanoyamatsubara Site: The Excavation Report of the Annaka Ionohe Industrial Park Development, 2 (Jōmon period artifact volume), 3 (Jōmon period artifact main volume)]. Gunma: Annakashi Kyōiku Iinkai 安中市教育委員会.

## AOMORI-KEN KYŌIKU IINKAI 青森県教育委員会

- 1976 *Izumiyama Iseki Hakkutsu Chōsa Hōkokusho: Ippankendō Kushibiki Kaminakui Sannoheesen Dōrokairyōkōji Maizō Bunkazai Hakkutsu Chōsa Shōwa 50 Nendo* 泉山遺跡発掘調査報告書: 一般県道櫛引上名久井三戸線道路改良工事埋蔵文化財発掘調査 昭和 50 年度 [The Excavation Report of the Izumiyama Site: The Investigation of Buried Cultural Properties at the Road Construction of Kushibiki Kaminakui Sannohe Line 1975]. Aomori: Aomoriken Kyōiku Iinkai 青森県教育委員会.
- 1988 *Kamiobuchi (1) Iseki C Chiku: Mutsukogawara Kaihatsu Yoteichinai Maizōbunkazai Hakkutsuchōsa Hōkokusho* 上尾駁 (1) 遺跡 C 地区: むつ小川原開発予定地内埋蔵文化財発掘調査報告書 [The Kamiobuchi (1) Site C-district: The Excavation Report of Buried Cultural Properties at the Mutsukogawara Planned Construction Site]. Aomori: Aomoriken Kyōiku Iinkai 青森県教育委員会.

## AOMORI-KEN KYŌIKUCHŌ BUNKAZAI HOGOKA 青森県教育庁文化財保護課

- 1978 *Genjōtai Iseki Hakkutsuchōsa Hōkokusho: Tōhoku Jyūkan Jidōshadō Kankei Maizōbunkazai Hakkutsuchōsa* 源常平遺跡発掘調査報告書: 東北縦貫自動車道関係埋蔵文化財発掘調査 [The Excavation Report of Genjōtai Site: The Excavation of Buried Cultural Properties at the Tōhoku Jyūkan Highway]. Aomori: Aomoriken Kyōiku Iinkai 青森県教育委員会.
- 1993 *Nowaki Iseki Hakkutsuchōsa Hōkokusho: 1-kyūgawa Iwakigawa Suikei Shisen Ushironaganegawa Kairyō Kōji Ni Kakawaru Maizōbunkazai Hakkutsuchōsa Hōkokusho* 2 野脇遺跡発掘調査報告書: 1級河川岩木川水系支川後長根川改修工事に係る埋蔵文化財発掘調査報告書 2 [The Excavation Report of the Nowaki Site: The Excavation Report on Buried Cultural Properties relating to the Renovative Construction at the First-grade River Iwaki-gawa Tributary Ushironegawa 2]. Aomori: Aomoriken Kyōiku Iinkai 青森県教育委員会.
- 2009 *Sannaimaruyama Iseki 35. Aomoriken Maizōbunkazai Hōkokusho 478. Kyū Yakyūjō Kensetsu Yoteichi Hakkutsuchōsa Hōkokusho 10: Minamimorido (2)* 三内丸山遺跡旧野球場建設予定地発掘調査報告書 10: 南盛土 (2) [Sannaimaruyama Site 35: The Investigation Report of Aomori Prefecture Buried Cultural Properties 10, South Mound (2)]. Aomori: Aomoriken Kyōiku Iinkai 青森県教育委員会.
- 2013 *Sannaimaruyama Iseki 40: Kyū Yakyūjō Kensetsu Yoteichi Hakkutsuchōsa Hōkokusho 13 Kitamorido (2)* 三内丸山遺跡 40: 旧野球場建設予定地発掘調査報告書 13 北盛土 (2) [Sannaimaruyama Site 40: The Excavation Report of the Old Baseball Stadium Planned Construction Site 13, North Mound (2)]. Aomori: Aomoriken Kyōiku Iinkai 青森県教育委員会.

## AOMORI-KEN MAIZŌ BUNKA SENTĀ 青森県埋蔵文化財調査センター

- 1996 *Izumiyama Iseki: Kendō Kushibiki Kaminakui Sannoheesen Dōro Kairyō Jigyōni Kakawaru Hakkutsuchōsa Hōkokusho 3* 泉山遺跡: 県道櫛引・上名久井・三戸線道路改良事業に係る発掘調査報告書 3 [The Izumiyama Site: The Excavation Report of the Road Construction of Kushibiki Kaminakui Sannohe Line 3]. Aomori: Aomoriken Kyōiku Iinkai 青森県教育委員会.

## AOMORI-KEN MAIZŌ BUNKAZAI CHŌSA SENTĀ 青森県埋蔵文化財調査センター

- 1993 *Asahiya Iseki Hakkutsu Chōsa Hōkokusho: Tōhoku Denryoku Kabushikigaisha Shin Aomori Hendensho Shinsetsu Jigyō ni Kakawaru Maizō Bunkazai Hakkutsu Chōsa Hōkokusho 2 (Heisei 4 Nendo)* 朝日山遺跡発掘調査報告書: 東北電力株式会社新青森変電所新設事業に係る埋蔵文化財発掘調査報告書 2 (平成 4 年度) [The Excavation Report of the Asahiya Site: The Excavation Report on Buried Cultural Properties relating to the Tōhoku Denryoku Company Electric Power Station New Construction Site at Shin Aomori]. Aomori: Aomoriken Kyōiku Iinkai 青森県教育委員会.

## AOMORI-KENRITSU KYŌDOKAN 青森県立郷土館

- 1984 *Aomoriken Kyōdōkan Chōsa Kenkyū Nenpō 9* 青森県立郷土館調査研究年報 9 [Annual Research Report of the Aomori Prefectural Museum 9]. Aomori: Aomorikenritsu Kyōdōkan 青森県立郷土館.

## AOMORI-KENSHI HENSAN KŌKOBUKAI 青森県史編さん考古部会

- 2013 *Aomori Kenshi. Shiryōhen: Kōko 2 (Jōmon Kōki Banki). Akedo Iseki Ishigame Iseki* 青森県史. 資料編: 考古 2 (縄文後期・晩期). 明戸遺跡 石亀遺跡 [The History of Aomori Prefecture. Reference: Archeology 2 (Late and Final Jōmon period). Akedo and Ishigame Site]. Aomori: Aomorikenshi Hensan Kōkōbukai 青森県史編さん考古部会.

## AOMORISHI KYŌIKU IINKAI 青森市教育委員会

- 1991 *Yamabuki (1) Iseki Hakkutsu Chōsa Hōkokusho. Aomorishi Maizō Bunkazai Chōsa Hōkokusho 16* 山吹 (1) 遺跡発掘調査報告書 16 [The Excavation Report of Yamabuki (1) Site 16]. Aomori: Aomorishi Kyōiku Iinkai 青森市教育委員会.



- ASAHIMURA KYŌIKU IINKAI 朝日村教育委員会  
 2002 *Motoyashiki Iseki 2 (Jōdan) Honbunhen. Asahimura Bunkazai Hōkokusho 22. Okumiomote Damu Kanren Iseki Hakkutsuchōsa Hōkokusho 14* 元屋敷遺跡 2 (上段)本文編. 朝日村文化財報告書. 奥三面ダム関連遺跡発掘調査報告書 14 [The Motoyashiki Site 2 (Volume 1) Main body text. The Report of Asahi Village Cultural Properties 22. The Excavation Report of Okumiomote Dam 14]. Niigata: Asahimura Kyōiku linkai 朝日村教育委員会.
- ASANO YOSHIHARU 浅野良治  
 2004 *Jōmon kudatama 縄文管玉 [Jōmon cylindrical beads]. Kikan Kōkogaku 季刊考古学* 89:31–32.
- BRIGHTMAN, MARC, CARLOS FAUSTO, AND VANESSA GROTTI  
 2016 Introduction, in *Ownership and Nurture: Studies in Native Amazonian Property Relations*: 1–35. New York: Berghahan.
- DAVIDSON, JOHN  
 2017 *Japan Travel Advice: The Complete Japan Travel Guide* (website). URL: japantraveladvice.com/.
- DOUGLAS, JANET, BLYTHE MCCARTHY, AND INSOOK LEE  
 2002 Gokok: Korean glass and stone comma-shaped beads at the Freer Gallery of Art. *Ornament* 25(4):34–39.
- EBETSUSHI KYŌIKU IINKAI 江別市教育委員会  
 1982 *Ebetsushi Bunkazai Chōsahōkokusho 15* 江別市文化財調査報告書 15 [The Report of Ebetsu City Cultural Properties 15]. Hokkaido: Ebetsushi Kyōiku linkai 江別市教育委員会.
- EDO TŌKYŌ TATEMONOEN 江戸東京たてもの園  
 2015 *Shimohuda Iseki: Musashino no Rekishi to Kōkogaku. Edo Tōkyō Tatemonoen* 下布田遺跡: 武蔵野の歴史と考古学. 江戸東京たてもの園 [The Shimohuda Site: The History and Archeology of Musashino]. Tokyo: Edo Tokyo Tatemonoen 江戸東京たてもの園.
- ENIWASHI KYŌIKU IINKAI 恵庭市教育委員会  
 2003 *Karinba 3 Iseki 1: Hokkaidō Eniwashi Meisai Bunpu Chōsa Hōkokusho* カリンバ3遺跡 1: 北海道恵庭市詳細分布調査報告書 [The Karinba 3 Site: The Detailed Distribution Report of Hokkaido Eniwa City]. Hokkaido: Eniwashi Kyōiku linkai 恵庭市教育委員会.
- ESAKA TERUYA 江坂 輝弥  
 1989 Kirikodama, kudatama, magatama no kigen wo saguru 切小玉, 管玉, 勾玉の起源を探る [An investigation into the origins of kirikodama, kudatama, and magatama beads]. *Matsusaka Daigaku Kiyō* 松阪大学紀要 7:45–51.
- ESAKA TERUYA 江坂 輝弥 AND WATANABE MAKOTO 渡辺 誠  
 1998 *Sōshingu to Kokkakuseigyogu no Chishiki* 装身具と骨角製漁具の知識 [The Knowledge of the Body Ornaments and Bone Fishing Tools]: 6–26. Tokyo: Tōkyō Bijutsu 東京美術.
- FUJITA FUJIO 藤田富士夫  
 1992 *Tama to hisui: kannihonkai no kōryū wo megutte* 玉とヒスイ: 環日本海の交流をめぐって [Bead and Jadeite: On the Interchange in the Circum-Japan Sea Areas]. Kyōto: Dōhōsha 同朋舎.  
 2000 Gishiawajinden no “白珠五千孔青大句珠二枚” wo meguru jakkan no kōsatsu 魏志倭人伝の“白珠五千孔青大句珠二枚”をめぐり若干の考察 [Some consideration on “five thousand white gems and two pieces of carved jade” in the Records of Wei]. *Kōkogaku Ronkyū* 考古学論究 7:94–104.  
 2006 Jōmon jidai no sōshingu 縄文時代の装身具 [Body ornaments in the Jōmon period], in *Kodai Hisui bunka no Nazo wo Saguru* 古代翡翠文化の謎を探る: 41–61, ed. Tatsuo Kobayashi. Tokyo: Gakuseisha 学生社.  
 2008 Magatama no kenkyū kara kangaeru 勾玉の研究から考える [Thoughts from magatama investigations]. *Rekishi Dokuhon* 歴史読本 53(6):96–103.  
 2013 Magatama towa nanika: sono kigen to katachi no henka 勾玉とは何かその起源と形の変化 [What is a comma-shaped bead? Its origin and changes in forms]. *Katachi no Kagaku* 形の科学会誌 28(1):76–77.
- FUKUSHIMAKEN BUNKA SENTĀ 福島県文化センター  
 1997 *Surigamigawa Damu Iseki Hakkutsu Chōsa Hōkokusho 3: Yumitehara A Iseki (Dai 2-ji Chōsa). Hanni Kakumin Chōsa (Yumitehara A Iseki). Fukushima Bunkazai Chōsa Hōkokusho 337* 摺上川ダム遺跡発掘調査報告 3: 弓手原 A A遺跡(第2次調査). 範囲確認調査(弓手原 A 遺跡). 福島県文化財調査報告書 337 [The Excavation Report of the Surigamigawa Dam Site 3: The Yumitehara A Site (2nd excavation). Investigation of the Excavation Area (the Yumitehara A

- site). The report of Cultural Properties of Fukushima Prefecture 337]. Fukushima: Fukushimaen Kyōiku Inkai 福島県教育委員会.
- 1999 *Surigamigawa Damu Iseki Hakkutsu Chōsa Hōkoku 7: Happōzuka A Iseki (Dai 1-ji Chōsa). Fukushimaen Bunkazai Chōsa Hōhokusho* 摺上川ダム遺跡発掘調査報告 7: 八方塚 A 遺跡 (第1次調査). 福島県文化財調査報告書 350 [The Excavation Report of the Surigamigawa Dam Site 7: The Happōzuka A site (1st excavation). The Report of Cultural Properties of Fukushima Prefecture 350]. Fukushima: Fukushimaen Kyōiku Inkai 福島県教育委員会.
- FUKUSHIMAKEN BUNKA SENTĀ ISEKI CHŌSAKA 福島県文化センター遺跡調査課
- 1982 *Bobata Chiku Iseki Hakkutsu Chōsa Hōkoku: Kokuei Sōgō Nōchi Kaihatsu Jigyō. [10] Shichirōuchi C Iseki • Shichirōuchi D Iseki* 母畑地区遺跡発掘調査報告: 国営総合農地開発事業 10. 七郎内 C 遺跡・七郎内 D 遺跡 [The Excavation Report of the Bobata Area Sites: National Farmland Development Project 10. Shichirōuchi C Site and Shichirōuchi D Site]. Fukushima: Fukushimaen Kyōiku Inkai 福島県教育委員会.
- 1991 *Tōhoku Ōdan Jidōshadō Iseki Chōsa Hōkoku 11* 東北横断自動車道遺跡調査報告 11 [The Investigation Report of the Tōhoku Transverse Highway Sites]. Fukushima: Fukushimaen Kyōiku Inkai 福島県教育委員会.
- 1998 *Surigamigawa Damu Iseki Hakkutsu Chōsa Hōkoku 5: Yumitehara A Iseki Dai 3-ji Chōsa • Nishinomukai E Iseki. Fukushimaen Bunkazai Chōsa Hōhokusho 345* 摺上川ダム遺跡発掘調査報告 5: 弓手原 A 遺跡 第3次調査・西ノ向 E 遺跡. 福島県文化財調査報告書 345 [The Excavation Report of the Surigamigawa Dam Site 3: The Yumitehara A Site 3<sup>rd</sup> Excavation • The Nishinomukai E site. The Report of Fukushima Prefecture Cultural Properties 345]. Fukushima: Fukushimaen Kyōiku Inkai 福島県教育委員会.
- FUKUSHIMAKEN BUNKA SHINKŌ JIGYŌDAN 福島県文化振興事業団
- 2002 *Kamigōri B Iseki, Motomachinishi A Iseki: Fukushimaen Bunkazai Chōsa Hōhokusho 391* 上郡 B 遺跡, 本町西 A 遺跡: 福島県文化財調査報告書 391 [The Kamigōri B Site: The Motomachinishi A Site: The Report of Cultural Properties of Fukushima Prefecture. Collection 391]. Fukushima: Fukushimaen Kyōiku Inkai 福島県教育委員会.
- GOSDEN, CHRIS, AND YVONNE MARSHALL  
1999 The cultural biography of objects. *World Archaeology* 31(2):169–178.
- GUNMAKEN KYŌIKU INKAI 群馬県教育委員会
- 1980 *Tsukamawari Kofungun* 塚廻り古墳群 [Tsukamawari Burial Mounds]. Maebashi: Gunmaken Kyōiku Inkai.
- HACHINOHE ISEKI CHŌSAKAI 八戸遺跡調査会
- 2002 *Korekawanakai Iseki: Nagatazawa Chiku. Hachinohe Iseki Chōsakai Maizō Bunkazai Chōsa Hōhokusho* 是川中居遺跡: 長田沢地区 [The Korekawanakai Site: Nagatazawa District. The Excavation Report of Buried Cultural Properties of the Hachinohe Site 2]. Hachinohe Iseki Chōsakai 八戸遺跡調査会.
- 2004 *Korekawanakai Iseki: Nakai Chiku G L M. Hachinohe Iseki Chōsakai Maizō Bunkazai Chōsa Hōhokusho 5* 是川中居遺跡: 中居地区 G・L・M [The Korekawanakai Site: Nakai area G・L・M]. Hokkaido: Hachinohe Iseki Chōsakai 八戸遺跡調査会.
- HACHINOHESHI KYŌIKU INKAI 八戸市教育委員会
- 1995 *Hachinoheshi Iseki Hakkutsu Chōsa Hōkoku 7: Shiseki Nejōato Okamaedate (Dai 32, 33 Chiten), Tamonoki Iseki (Dai 6-Ji Chōsa), Matsugasaki Iseki (Dai 2 Ji Chōsa), Sakanaka Iseki, Ichikobayashi Iseki (Dai 2-Ji Chōsa), Ushigasawa (4) Iseki (Dai 2-Ji Chōsa), Nishinagane Iseki, Nakamichi Iseki* 八戸市内遺跡発掘調査報告書 7: 史跡根城跡岡前館 (第32, 33地点), 田面木遺跡 (第6次調査), 松ヶ崎遺跡 (第2次調査), 坂中遺跡, 市子林遺跡 (第2次調査), 牛ヶ沢 (4) 遺跡 (第2次調査), 西長根遺跡, 中道遺跡 [The Excavation Report of the site of Hachinohe City 7: Nejōato Okamaedate Historic Site (No. 32, 33 area), Tamonoki Site (6th investigation), Matsugasaki Site (2nd investigation), Sakanaka Site, Ichikobayashi Site (2nd investigation), Ushigasawa (4) Site (2nd investigation), Nishinagane Site, and Nakamichi Site]. Aomori: Hachinoheshi Kyōiku Inkai 八戸市教育委員会.
- 2002 *Korekawanakai Iseki 1: Hachinohe-shi Maizō Bunkazai Chōsa Hōhokusho 91* 是川中居遺跡 1: 八戸市埋蔵文化財調査報告書 91 [The Korekawanakai Site 1: The Report of Buried Cultural Properties of Hachinohe City 91]. Aomori: Hachinohe Iseki Chōsakai 八戸市教育委員会.
- 2008 *Kazahari (1) Iseki 6: Hachinohe-shi Maizō Bunkazai Chōsa Hōhokusho 119* 風張 (1) 遺跡 6: 八戸市埋蔵文化財調査報告書 119 [The Kazahari (1) Site 6: The Report of Buried Cultural Properties of Hachinohe City 119]. Aomori: Hachinoheshi Kyōiku Inkai 八戸市教育委員会.

## HAKODATE HAKUBUTSUKAN 函館博物館

- 1977 *Hakodatekūkō kakuchōkōji ni tomonau iseki hakkutsu chōsa hōkokusho: Hakodatekūkō dai 4 chiten, Nakano iseki* 函館空港拡張工事に伴う遺跡発掘調査報告書: 函館空港第4地点, 中野遺跡 [The Excavation Report accompanying the Expansion of the Hakodate Airport: Section 4 at the Airport, the Nakano Site]. Hakodate: Hakodateshi Kyōiku Iinkai 函館市教育委員会.

## HAMAMATSUSHI KYŌIKU IINKAI 浜松市教育委員会

- 1962 *Shijimizuka Iseki: Sōkatsuhēn* 蜆塚遺跡: 総括篇 [The Shijimizuka Site: General Overview]. Shizuoka: Hamamatsushi Kyōiku Iinkai 浜松市教育委員会.

## HARUNARI HIDEJI 春成秀爾

- 1997 *Kodai no yosōi* 古代の装い [Clothes in the Ancient World]. Tokyo: Kōdansha 講談社.

## HOKKAIDŌ BUNKAZAI KENKYŪJO 北海道文化財研究所

- 1987 *Herokarusu Iseki: Tomari Hatsudensho Kensetsu ni Tomonau Maizō Bunkazai Hōzōchi no Hakkutsu Chōsa* ヘロカルウス遺跡: 泊発電所建設に伴う埋蔵文化財包蔵地の発掘調査 [The Herokarusu Site: Excavation Reports of Buried Cultural Properties accompanying the Construction of Tomari Nuclear Power Plant]. Hokkaido: Hokkaidō Bunkazai Kenkyūjo 北海道文化財研究所.

## HOKKAIDŌ KYŌIKU IINKAI 北海道教育委員会

- 1977 *Misawagawa Ryūiki no Isekigun 1: Shin Chitose Kūkō Kensetsuyō Chinai Maizō Bunkazai Hakkutsu Chōsa Hōhokusho 1* 美沢川流域の遺跡群 1: 新千歳空港建設用地内埋蔵文化財発掘調査報告書 1 [The Site at the Misawagawa Watershed 1: The Excavation Report of Buried Cultural Properties at the Shin Chitose Airport Construction Site]. Hokkaido: Hokkaidō Kyōiku Iinkai 北海道教育委員会.

## HOKKAIDŌ MAIZŌ BUNKAZAI SENTĀ 北海道埋蔵文化財センター

- 1981 *Shadai 1 Iseki, Kojōhama 4 Iseki, Chitose 4 Iseki, Tonkeshi Iseki: Hokkaidō Jyūkan Jidōshadō Noboribetsu Chiku Maizō Bunkazai Hakkutsu Chōsa Hōkokusho. Showa 55 Nendo* 社台1遺跡, 虎杖浜4遺跡, 千歳4遺跡, 富岸遺跡: 北海道縦貫自動車道登別地区埋蔵文化財発掘調査報告書 昭和55年度 [The Shadai 1 site, the Kojōhama 4 site, the Chitose 4 site, and the Tonkeshi site: The excavation report of buried cultural properties at the Hokkaidō Jyūkan highway Noboribetsu section. 1980]. Hokkaido: Hokkaidō Maizō Bunkazai Sentā 北海道埋蔵文化財センター.
- 1991 *Fugoppe Kaizuka: Kitashiribeshi Tōbu Chiku Kōiki Einōdanchi Nōdōseibi Jigyōyōchinai Maizō Bunkazai Hakkutsu Chōsa Hōkokusho* フゴッペ貝塚: 北後志東部地区広域営農団地農道整備事業用地内埋蔵文化財発掘調査報告書 [The Fugoppe Shell-midden: Excavation Reports of Buried Cultural Properties within the Wide Area Agricultural Housing Complex Maintenance Work of the Kitashiribeshi East area]. Hokkaido: Hokkaidō Maizō Bunkazai Sentā 北海道埋蔵文化財センター.
- 1998 *Misawagawa Ryūiki no Isekigun 1: Dai 1 Bunsatsu (Honbunhen) (Bibi 4 Iseki)* 美沢川流域の遺跡群 19: 第1分冊 (本文編) (美々4遺跡) [The Sites at the Misawagawa Watershed 1, vol. 1 (main text) (Bibi 4 site)]. Hokkaido: Hokkaidō Maizō Bunkazai Sentā 北海道埋蔵文化財センター.
- 2003 *Yonehara 4 Iseki (2), Miyato 4 Iseki (2), Hokkaidō Maizō Bunkazai Sentā Chōsa Hōhokusho 185* 米原4遺跡 (2), 宮戸4遺跡 (2) [The Yonehara 4 site (2), The Miyato 4 site (2)]. Hokkaido: Hokkaidō Maizō Bunkazai Sentā 北海道埋蔵文化財センター.

## IBARAKIKEN KYŌIKU ZAIDAN 茨城県教育財団

- 1981 *Jōban Jidōshadō Kankei Maizō Bunkazai Chōsa Hōkokusho 3* 常磐自動車道関係埋蔵文化財調査報告書 3 [The Excavation Report of Buried Cultural Properties relating to Jōban Highway 3]. Ibaraki: Ibarakiken Kyōiku Zaidan 茨城県教育財団.
- 1984 *Mitsukaidō Toshikeikaku Jigyō Kokimu Tōchikeikaku Seiri Jigyōyōchinai Maizō Bunkazai Chōsa Hōkokusho 2 (Tsutsudo A Iseki, Tsutsudo B Iseki)* 水海道都市計画事業 小絹土地区画整理事業地内埋蔵文化財調査報告書 2 (筒戸A遺跡, 筒戸B遺跡) [The Excavation Report of Buried Cultural Properties within the Mitsukaidō City and Kokinu Property Development 2 (Tsutsudo A site, Tsutsudo B site)]. Ibaraki: Ibarakiken Kyōiku Zaidan 茨城県教育財団.
- 2002 *Miyaushiro Iseki 1: Yasashisa no Machi (Sakura no Gō) Seibi Kōji ni Tomonau Maizō Bunkazai Chōsa Hōkokusho 2* 宮後遺跡 1: やさしさのまち「桜の郷」整備事業に伴う埋蔵文化財調査報告書 2 [The Miyaushiro Site 1: Excavation Reports of Buried Cultural Properties accompanying the Yasashisa no Machi (Sakura no Gō) Construction Site 2]. Ibaraki: Ibarakiken Kyōiku Zaidan 茨城県教育財団.
- 2009 *Honden Iseki: Ippan Kokudō 468 Gōsen Shutoken Chuōrenraku Jidōshadō Shinsetsu Jigyōyōchinai Maizōbunkazai Hakkutsuchōsa Hōkokusho* 本田遺跡: 一般国道468号首都圏中央連絡自動車道新設事業地内埋蔵文化財調査報告書 [The Honden Site: The Excavation Report of

Buried Cultural Properties at the New Construction Site of Route 468 Shutoken Chuōrenraku Highway]. Ibaraki: Ibarakiken Kyōiku Zaidan 茨城県教育財団.

IJIMAMACHI KYŌIKU IINKAI 飯島町教育委員会

1978 *Kagota Iseki: Maizō Bunkazai Kinkyū Hakkutsu Chōsa Hōkoku Showa 52 Nendo* カゴ田遺跡: 埋蔵文化財緊急発掘調査報告 昭和 52 年度 [The Kagota Site: The Excavation Report on the Urgent Excavation of Buried Cultural Properties 1978]. Iijimamachi: Ikusakamura Kyōiku linkai 生坂村教育委員会.

1999 *Tōbuhachimanbara Iseki: Tōbuhachimanbara Iseki Hojō Seibi ni Kakawaru Naganoken Higashichikumagun Ikusakamura Kinkyū Hakkutsu Chōsa Hōkokusho* 東部八幡原遺跡: 東部八幡原遺跡圃場整備に関わる長野県東筑摩郡生坂村緊急発掘調査報告書 [The Tōbuhachimanbara Site: The Emergent Excavation Report of Tōbuhachimanbara Site relating to the Agricultural Field Maintenance Work in Ikusakamura, Higashichikumagun, Nagano Prefecture]. Nagano: Ikusakamura Kyōiku linkai 生坂村教育委員会.

IMAMURA, KEIJI

1996 Questions in the Late-Final Jomon period, in *Prehistoric Japan: New Perspectives on Insular East Asia*: 111–125. New York: Routledge.

INADA TOMOHIRO 稲田 智宏

2008 “Sanshu no Jingi” Nyūmon: Kiso, Ōyō Chishiki 「三種の神器」入門: 基礎&応用知識 [A guide to Three Imperial Regalia: Basic and applied knowledge]. *Rekishi Dokuhon* 歴史読本 56(6):46–49.

ISHIKAWAKEN KYŌIKU IINKAI 石川県教育委員会

2002 *Tatsuruhamamachi Ōtsukurodanomori Iseki: Ippan Kokudō 470 Gōsen (Nōetsu Jidōshadō) Dōro Kairyō Kōji ni Kakawaru Maizōbunkazai Hakkutsuchōsa Hōkokusho* 6 田鶴浜町大津くろだの森遺跡: 一般国道 470 号線(能越自動車道) 道路改良工事に係る埋蔵文化財発掘調査報告書 6 [The Tatsuruhamamachi Ōtsukurodanomori Site: The Excavation Report of Buried Cultural Properties relating to the Renovative Construction Site at route 470 (Nōetsu highway)]. Ishikawa: Ishikawaken Kyōiku linkai 石川県教育委員会.

ITOIGAWASHI 糸魚川市

1986 *Itoigawa Shishi: Shiryōhen 1, Kōkohen* 糸魚川市史: 資料集 1, 考古編 [The History of Itoigawa City: Reference vol. 1, Archeological volume]. Niigata: Itoigawashi 糸魚川市.

IWATEKEN BUNKA SHINKŌ JIGYŌDAN MAIZŌ BUNKAZAI SENTĀ 岩手県文化振興事業団埋蔵文化財センター

1989 *Natsumoto Iseki Hakkutsu Chōsa Hōkokusho: Kokudō 45 Gō Ōtsuchi Baipasu Kanren Iseki Hakkutsu Chōsa* 夏本遺跡発掘調査報告書: 国道 45 号大槌バイパス関連遺跡発掘調査 [The Excavation Report of Natsumoto Site: The Excavation Report relating to Highway Route 45 Ōtsuchi Bypass]. Iwate: Iwateken Bunka Shinkō Jigyōdan Maizō Bunkazai Sentā 岩手県文化振興事業団埋蔵文化財センター.

1995a *Kamiyonai Iseki Hakkutsu Chōsa Hōkokusho: Kendō Kamiyonai Teishajōsen Kairyō Kanren Iseki Hakkutsuchōsa (Dai 1 Satsubun)* 上米内遺跡発掘調査報告書: 県道上米内停車場線改良関連遺跡発掘調査 (第 1 冊分) [The Excavation Report of the Kamiyonai Site: Excavation Reports of the Site relating to the Improvement of the Kamiyonai Stop (vol. 1)]. Iwate: Iwateken Bunka Shinkō Jigyōdan Maizō Bunkazai Sentā 岩手県文化振興事業団埋蔵文化財センター.

1995b *Ōhinata 2 Iseki Hakkutsu Chōsa Hōkokusho: Dai 2 ~ Dai 5ji Chōsa. Iwateken Bunkashinkō Jigyōdan Maizōbunkazai Chōsa Hōkokusho* 225 大日向II遺跡発掘調査報告書 第 2 2 次 ~ 第 5 次調査 [The Excavation Report of Ōhinata 2 Site: The 2nd to 5th Excavation]. Iwate: Iwateken Bunka Shinkō Jigyōdan Maizō Bunkazai Sentā 岩手県文化振興事業団埋蔵文化財センター.

IWATEKEN KYŌIKU IINKAI 岩手県教育委員会

1980 *Tōhoku Shinkansen Kankei Maizō Bunkazai Chōsa Hōkokusho 7: Nishida Iseki* 東北新幹線関係埋蔵文化財調査報告書 7: 西田遺跡 [Reports of the Buried Cultural Properties relating to the Tōhoku Shinkansen 7: Nishida Site]. Iwate: Iwateken Kyōiku linkai 岩手県教育委員会.

JŌETSUSHI KYŌIKU IINKAI 上越市教育委員会

1978 *Iwaki Chiku Iseigun Hakkutsu Chōsa Gaihō* 岩木地区遺跡群発掘調査概報 [The Excavation Report of the Iwaki Area Site]. Niigata: Jōetsushi Kyōiku linkai 上越市教育委員会.

JŌETSUSHISHI HENSAN IINKAI 上越市史編さん委員会

2003 *Jōetsushishi Shiryōhen 2: Kōko* 上越市史: 資料編 2: 考古 [The History of Jōetsu City 2. Reference volume: Archaeology]. Niigata: Jōetsushi 上越市.



KADOTA SEI'ICHI 門田誠一

- 2005 Chōsen hantō no magatama 朝鮮半島の勾玉 [Magatama in the Korean peninsula], in *Hisui Bunka Fōramu 2005* ヒスイ文化フォーラム 2005: 22–27. Itoigawa: Hisui Bunka Fōramu linkai ヒスイ文化フォーラム委員会.

KASHIMAMACHI KYŌIKU IINKAI 鹿島町教育委員会

- 1990 *Kashima Jingū Eki Hokubu Maizō Bunkazai Chōsa Hōkokusho: Kashimamachi no Bunkazai 69* 島神宮駅北部埋蔵文化財調査報告: 鍛冶台遺跡. 鹿島町の文化財 69 [The Excavation Report of Buried Cultural Properties of Kashima Jingū Station North Section: Kashimamachi Cultural Properties 69]. Ibaraki: Kashimamachi Kyōiku linkai 鹿島町教育委員会.

KATŌ SATOMI 加藤 里美 AND YANAGIURA SHUN'ICHI 柳浦俊一

- 2011 Shimaneken mihojinja keidai iseki shutsudo no tamatukuri shiryō 島根県, 美保神社境内遺跡出土の玉作資料 [Report on the bead production at the Miho Shrine site in Shimane]. *Kokugakuin Daigaku Dentō Bunka Risāchi Sentā Kenkyū Kiyō* 國學院大學伝統文化リサーチセンター研究紀要 3:61–74.

KAWAMURA YOSHIMITSU 河村 好光

- 2010 *Wa no gyōki: Tamatukuri to wakoku no jidai* 倭の玉器: 玉つくりと倭国の時代 [Gem Articles in Ancient Japan: Bead Manufacture and the Age of Wa]. Tokyo: Aoki Shoten 青木書店.
- 2014 *Nihon kōkōgākushi ni okeru jiminzoku ninshiki* 日本考古学史における自民族認識 [How Japanese archaeologists recognized the origin of the Japanese people]. *Nihon Kōkōgaku* 日本考古学 37:19–36.

KAWARABUKI, KEN 瓦吹 堅

- 2004 Taishu no shutsudo jōtai wo kangaeru 大珠の出土状態を考える [Considerations on the circumstances of the find-spots of jadeite large pendants]. *Kikan Kōkōgaku* 季刊考古学 89:79–80.

KIKONAICHŌ KYŌIKU IINKAI 木古内町教育委員会

- 2001 *Hebinai Iseki: Minamioshima 3-ki Chiku Kōiki Einōdanchi Nōdō Seibijigyo ni Tomonau Hakkutsu Chōsa Gaiyō Hōkokusho* 蛇内遺跡: 南渡島3期地区広域営農団地農道整備事業に伴う発掘調査概要報告書 [The Hebinai Site: The Excavation Report relating to the Wide Area Agricultural Road Maintenance Work of Minamioshima 3rd District]. Hokkaido: Kikonaichō Kyōiku linkai 木古内町教育委員会.

KINOSHITA NAKO 木下 尚子

- 1987 Yayoi teikei magatama kō 弥生定形勾玉考 [Consideration on Yayoi standardized magatama], in *Higashiajia no Kōko to Rekishi* 東アジアの考古と歴史: 542–591. Kyōto: Dōhōsha 同朋舎.
- 2000 Sōshingu to kenryoku, danjo 装身具と権力, 男女 [Body ornaments and power, man and woman], in *Kodaishi no Ronten 2* 古代史の論点 2 [Issues in Ancient History 2]: 187–212, ed. Tsude Hiroshi 都出 比呂志 and Sahara Makoto 佐原 真. Tokyo: Shōgakukan 小学館.
- 2003 Nōminteki sōshingu no seiritsu 農民的装身具の成立. [The formation of peasant body ornaments]. *Senshigaku Kōkōgaku Ronkyū* 先史学考古学論究 4:437–460.
- 2005 Kaikyū shakai no tarekazari: hisui magatama no tanjō to tenkai: Yayoi jidai kara Nara jidai made 階級社会の垂飾: ヒスイ勾玉の誕生と展開 – 弥生時代から奈良時代まで – [Pendants in the hierarchical society: The emergence and development of jadeite magatama: From the Yayoi to Nara periods], in *Hisui Bunka Fōramu 2005* ヒスイ文化フォーラム 2005: 16–21. Itoigawa: Hisui Bunka Fōramu linkai ヒスイ文化フォーラム委員会.

KODERA CHIZUKO 小寺 智津子

- 2006 Yayoi jidai heikōki ni okeru chōsen hantō no garasu seihin: Kudatama, magatama wo chūshin to suru yōsō 弥生時代併行期における朝鮮半島のガラス製品: 管玉, 曲玉を中心とする様相 [Glass products in Korean peninsula in the contemporary Yayoi period: Aspects centered on bugle and curved beads]. *Kōdaigaku Kenkyū* 古代学研究: 1–19.

KŌMOTO MASAYUKI 甲元眞之

- 1992 Kudatama ni kansuru oboegaki 管玉に関する覚書 [Memorandum on bugle beads], in *Kyūhan: Maizō Bunkazai Kenkyūkai 15 Shūnenkinen Ronbunshū* 究班: 埋蔵文化財研究会 15周年記念論文集 [Kyūhan: The Research Group of Buried Cultural Properties, 15th Anniversary Proceedings]: 15–24. Toyonaka: Maizō Bunkazai Kenkyūkai 15 Shūnenkinen Ronbunshū Henshū linkai 埋蔵文化財研究会.

KOYAMA MASATO 小山 雅人

- 1992 Kinkichihō no Yayoi magatama 近畿地方の弥生勾玉 [Yayoi magatama in the Kinki region]. *Kyōtofu Maizō Bunkazai Jōhō* 京都府埋蔵文化財情報 46:12–26.

KURISHIMA YOSHIAKI 栗島 義明

- 2004 Kōgyokusei taishu no kōeki, ryūtsū 硬玉製大珠の交易, 流通 [Trade and distribution of large jadeite pendants]. *Kikan Kōkogaku* 季刊考古学 89:83–87.

LEE, HYUN JOO

- 2012 Features and development of the Pokch'on-dong cemetery in Tongnae, in *Early Korea 3: The Rediscovery of Kaya in History and Archaeology*: 171–193, ed. Mark E. Byington. Cambridge: Harvard University, Korean Institute.

MATSUMOTO NAKO 松本 直子

- 2000 *Ninchi Kōkogaku no Riron to Jissenteiki Kenkyū* 認知考古学の理論と実践的研究 [Theory and Practical Research of Cognitive Archaeology]: 113–141. Fukuoka: Kyūshū Daigaku Shuppankai 九州大学出版会.

MEIJIYAKKADAIGAKU ISEKI CHŌSAKAI 明治薬科大学遺跡調査会

- 2000 *Meijiyakkadaigaku Iseki: Tōkyōto Setagayaku Nozawa 1-chome 35-ban no Hakkutsu Chōsa Kiroku* 明治薬科大遺跡: 東京都世田谷区野沢 1丁目 35 番の発掘調査記録 [The Meijiyakka-daigaku Site: The Excavation Report of the Tōkyōto Setagayaku Nozawa 1-chome 35-ban Site]. Tokyo: Setagayaku Kyōiku Inkai Shōgai Gakushūka 世田谷区教育委員会生涯学習課.

MIYA HIROAKI 宮 宏明

- 1996 *Kita no Umi no Bunka Kōryū no Ato wo Saguru: Hokkaidō Yoichichō Ōkawa Iseki no Hakkutsu Chōsa* 北の海の文化交流の跡を探索: 北海道余市町大川遺跡の発掘調査 [Exploring the cultural exchange in the Northern seas: The excavation report of the Hokkaido Yoichi town site]. *Gekkan Bunkazai* 月刊文化財 390:4–18.

MIZUNO YŪ 水野 裕

- 1992 *Magatama* 勾玉. Tokyo: Gakuseisha 学生社.

MORI TEIJIRŌ 森 貞次郎

- 1980 Yayoi magatamakō 弥生勾玉考 [Considerations on Yayoi magatama], in *Kobunkaronchi: Kagaminaya Takeshi Sensei Kokikinen* 古文化論叢: 鏡山猛先生古稀記念 [Kobunkaronchi: The Anniversary of the 70th Birthday of Professor Kagamiyama Takeru]: 307–341, ed. Kagaminaya Takeshi Sensei Kokikinen Ronbunshū Kankōkai 鏡山猛先生古稀記念論文集刊行会. Dzaifu: Kagaminaya Takeshi Sensei Kokikinen Ronbunshū Kankōkai.

NAGANOKEN KYŌIKU INKAI 長野県教育委員会

- 1972 *Naganoken Chuōdō Maizō Bunkazai Hozōchi Hakkutsu Chōsa Hōkokusho: Shimoinagun Takamorimachi Chinai Sono 2* 長野県中央道埋蔵文化財包蔵地発掘調査報告書: 下伊那郡高森町地内その 2 [The Excavation Report of Buried Cultural Properties of Nagano Prefecture Chuō Highway: Within Shimoinagun Takamorimachi Number 2]. Nagano: Naganoken Kyōiku Inkai 長野県教育委員会.

NAGANOKEN MAIZŌ BUNKAZAI SENTĀ 長野県埋蔵文化財センター

- 1988 *Chuō Jidōshadō Naganosen Maizō Bunkazai Hakkutsu Chōsa Hōkokusho 2 (Shiojirishinai Sono 1)* 中央自動車道長野線埋蔵文化財発掘調査報告書 2 (塩尻市内 その 1) [The Excavation Report of Buried Cultural Properties of the Chuō Highway Nagano Route (Shiojiri city limit series 1)]. Aichi: Nihon Dōro Kōdan Nagoya Kensetsukyoku 日本道路公団名古屋建設局.
- 1998 *Matsubara Iseki: Jōmon Jidai. Naganoken Maizō Bunkazai Sentā Hakkutsu Chōsa Hōkokusho 27. Jōshinetsu Jidōshadō Maizō Bunkazai Hakkutsu Chōsa Hōkokusho 4 (Naganoshinai Sono 2)* 松原遺跡: 縄文時代. 長野県埋蔵文化財センター発掘調査報告書 27. 上信越自動車道埋蔵文化財発掘調査報告書 4 (長野市内その 2) [The Matsubara Site: The Jōmon Period. The Excavation Report of Buried Cultural Properties of Nagano Prefecture 27. The Excavation Report of Buried Cultural Properties of Jōshinetsu Highway 4 (Nagano city limits series no. 2)]. Nagano: Naganoken Maizō Bunkazai Sentā 長野県埋蔵文化財センター.

NAGANOSHI KYŌIKU INKAI 長野市教育委員会

- 1996 *Matsunokida Iseki: Asakawa Senjōchi Iseigun. Naganoshi no Maizō Bunkazai 77* 松ノ木田遺跡: 浅川扇状地遺跡群. 長野市の埋蔵文化財 77 [The Matsunokida Site: The Asakawa Alluvial Fan Site. Buried Cultural Properties of Nagano City 77]. Nagano: Naganoshi Maizō Bunkazai Sentā 長野市埋蔵文化財センター.

NAGAOKASHI KYŌIKU INKAI 長岡市教育委員会

- 1981 *Maizō Bunkazai Hakkutsu Chōsa Hōkokusho: Iwanohara Iseki* 埋蔵文化財発掘調査報告書: 岩野原遺跡 [The Excavation Report of Buried Cultural Properties: Iwanohara Site]. Niigata: Nagaokashi Kyōiku Inkai 長岡市教育委員会.

NAGO HIROSHI 名護 博

- 2002 Yayoi jidai ni yurai suru ryūkyū shotō no shinka 弥生時代に由来する琉球諸島の神歌 [Divine poetry of the Ryukyu Islands originated in the Yayoi period]. *Setouchi Tanki Daigaku Kiyo* 瀬戸内短期大学紀要 33:1-16.

NAKAMURA KŌSAKU 中村 耕作

- 2014 Girei no Ba to Shite no Tateana: Hakodateshi Kakinoshima Iseki・Yagi B Iseki・Usujiri Shōgakkō Iseki no Doki Kuyō no Ichiduke 儀礼の場としての竪穴: 函館市垣ノ島遺跡・八木 B 遺跡・臼尻小学校遺跡の土器供養の位置づけ [The use of pits as ceremonial places: The Hakodate city Kakinoshima site, The Yagi B site. The role of pottery offerings at the Usujiri Shōgakkō site]. *Heisei 26 Nendo Hakodateshi Jōmon Bunka Tokubetsu Kenkyū Hōhokusho* 平成 26 年度函館市縄文文化特別研究報告書 [The 2016 Jōmon Culture Special Research Report]. Hokkaido: Hakodateshi Jōmon Bunka Kōryū Sentā 函館市縄文文化交流センター.

NAKAMURA KŌZABURŌ 中村 孝三郎

- 1966 *Senshijidai to Nagaoka no Rekishi: Nagaoka Shiritsu Kagaku Hakubutsukan Kenkyū Chōsa Hōkoku 8* 先史時代と長岡の歴史: 長岡市立科学博物館研究調査報告 8 [Prehistory of Nagaoka: Research Reports of the Nagaoka Municipal Science Museum 8]. Niigata: Nagaoka Shiritsu Kagaku Hakubutsukan 長岡市立科学博物館.

NAKAMURA, OKI

- 2009 Ritual landscape in Northern Jomon Japan: An outline. In *NEOMAP Interim Report 2008*: 115-121, ed. Junzo Uchiyama, Kati Lindström, Carlos Zeballos, and Oki Nakamura: Kita-ku, Kyoto: NEOMAP.

NIIGATAKEN KYŌIKU IINKAI 新潟県教育委員会

- 2006 *Ogakuchi Iseki: Hokuriku Shinkansen Kankei Hakkutsu Chōsa Hōkokusho 5* 大角地遺跡: 北陸新幹線関係発掘調査報告書 5 [The Ogakuchi Site: The Excavation Report relating to the Hokuriku Shinkansen Site 5]. Niigata: Niigataken Kyōiku Iinkai 新潟県教育委員会.

NOTOCHŌ KYŌIKU IINKAI 能都町教育委員会

- 2002 *Mawaki Iseki* 真脇遺跡 [The Mawaki Site]. Ishikawa: Notochō Kyōiku Iinkai 能都町教育委員会.

OGAKUCHI ISEKI HAKKUTSU CHŌSADAN 大角地遺跡発掘調査団

- 1979 *Ogakuchi Iseki: Kazaridama to Hisui no Kōbōto* 大角地遺跡: 飾玉とヒスイの工房址 [The Ogakuchi Site: The Remains of the Ornamental Bead and Jade Factory]. Niigata: Ōmimachi Kyōiku Iinkai 青海町教育委員会.

OKUSHIRICHŌ KYŌIKU IINKAI 奥尻町教育委員会

- 1978 *Aonae Iseki Hakkutsu Chōsa Gaihō: Dōdō Okushirisen Aonaeishi Shigai~kūkōkan Dōro Seibi Jigyō ni Kakawaru Kinkyū Hakkutsu Chōsa* 青苗遺跡発掘調査概報: 道々奥尻線青苗市市街~空港間道路整備事業に係る緊急発掘調査 [The Excavation Report of Aonae Site: The Emergent Excavation Reports relating to the Hokkaidō Road Maintenance Project between Aonae City and the Airport]. Hokkaido: Okushirichō Kyōiku Iinkai 奥尻町教育委員会.

ŌMIMACHI 青海町

- 1966 *Ōmi: Sono Seikatsu to Hatten* 青海: その生活と発展 [Ōmi City: Its Life and Development]. Niigata: Ōmimachi 青海町.
- 1987 *Shiseki Teraji Iseki: Niigataken Nishibigigun Ōmichō Iseki Hakkutsu Chōsa Hōkokusho* 史跡寺地遺跡: 新潟県西頸城郡青海町寺地遺跡発掘調査報告書 [The Shiseki Teraji Site: The Excavation Report of the Niigata Prefecture Nishibigigun Ōmichō Site]. Niigata: Ōmichō 青海町.

ŌMIYAMACHI REKISHI MINZOKU SHIRYŌKAN 大宮町歴史民俗資料館

- 1995 *Ōmiya no Kōko Ibutsu. Chōson Gappei 40 Shūnenkinen Tokubetsuten: Naka Kuji no Seiryū ni Hagakumareta Ōmiyamachi no Senshi Kodai* 大宮の考古遺物. 町村合併 40 周年記念特別展: 那珂・久慈の清流にはぐくまれた大宮町の先史・古代 [The Archeological Artifacts of Ōmiya. Special Exhibition Celebrating the 40th Anniversary of the Town Merger: Ancient Prehistoric Ōmiyamachi Nutured by the Naka and Kuji Streams]. Saitama: Ōmiyamachi Kyōiku Iinkai 大宮町教育委員会.

ŌTSUBO YUKIKO 大坪 志子

- 2001 Chōsen hantō no sekisei sōshingu 朝鮮半島の石製装身具 [Stone body ornaments in the Korean peninsula]. *Bungakubu Ronsō* 文学部論叢 73:129-153.
- 2006 Kyūshū ni okeru Yayoi jidai sekisei sōshingu no dōnyū to tenkai 九州における弥生時代石製装身具の導入と展開 [The introduction and development of stone ornaments of

- Yayoi period in Kyūshū]. *Kumamoto Daigaku Shakaibunka Kenkyū* 熊本大学社会文化研究 4:151–171.
- 2007 Jōmon–Yayoi ikōki ni okeru saishi to henka (Kyūshū) 縄文–弥生移行期における祭祀と変化 [Ritual and change on the transitional phase from Jōmon to Yayoi (Kyūshū)]. *Jōmon Jidai no Kōkogaku* 縄文時代の考古学 11:274–282.
- 2010 Jōmon jidai Kyūshūsan sekisei sōshingū no hakyū 縄文時代九州産石製装身具の波及 [The spread of stone body ornaments manufactured in Kyūshū during the Jōmon period]. *Senshigaku Kōkogaku Ronkyū* 先史学考古学論究 5:223–237.
- 2015 *Jōmon Tamabunka no Kenkyū* 縄文玉文化の研究 [Investigations on the Jōmon Bead Culture]. Tokyo: Yūzankaku 雄山閣.
- PARK, CHEUN SOO
- 2008 Kaya and Silla in archaeological perspective, in *Early Korea 1: Reconsidering Early Korean History through Archaeology*: 113–153, ed. Mark E. Byington. Cambridge: Harvard University, Korean Institute.
- SAITAMA KENRITSU HAKUBUTSUKAN 埼玉県立博物館
- 1998 *Joseihaniwa: Sono Yosōi to Shigusa* 女性埴輪: その装いとしぐさ [Female Haniwa: Their Attire and Gestures]. Ōmiya: Saitama Kenritsu Hakubutsukan 埼玉県立博物館.
- SAITAMAKEN MAIZŌ BUNKAZAI CHŌSA JIGYŌDAN 埼玉県埋蔵文化財調査事業団
- 1983 *Ippan Kokudō 140 Gō (Yoriimachi Hanazonomachikōku) Maizō Bunkazai Hakkutsu Chōsa Hōkoku 4 (Tsukaya Kitatsukaya)* 一般国道 140 号 (寄居町・花園村工区) 埋蔵文化財発掘調査報告 3 (塚屋・北塚屋) [The Excavation Report of Buried Cultural Properties of Highway Route 140 (Yoriimachi, Hanazonomachi Construction Area) 4 (Tsukaya, Kitatsukaya)]. Saitama: Saitamaken Maizō Bunkazai Chōsa Jigyōdan 埼玉県埋蔵文化財調査事業団.
- 1985 *Kokudō 140 Gō Baipas Kankei (Yoriimachi Hanazonomachikōku) Maizō Bunkazai Hakkutsu Chōsa Hōkoku 4 (Kitatsukaya 2)* 国道 140 号バイパス関係 (寄居町・花園町工区) 埋蔵文化財発掘調査報告 4 (北塚屋 2) [The Excavation Report of Buried Cultural Properties relating to Highway Route 140 Bypass (Yoriimachi, Hanazonomachi Construction Area) 4 (Kitatsukaya 2)]. Saitama: Saitamaken Maizō Bunkazai Chōsa Jigyōdan 埼玉県埋蔵文化財調査事業団.
- SAKAGUCHI, TAKASHI
- 2011 Mortuary variability and status differentiation in the Late Jomon of Hokkaido based on the analysis of *shuteibo* (communal cemeteries). *Journal of World Prehistory* 24:275–308
- SAKURAI HIDEO 桜井秀雄
- 2004 Jūkyōto shutsudo no komochi magatama 住居跡出土の子持勾玉 [Komochi-magatama excavated from pithouses]. *Kanazawa Daigaku Kōkogaku Kiyō* 金沢大学考古学紀要 27:19–28.
- SANBU KŌKOGAKU KENKYŪJO 山武考古学研究所
- 1997 *Niiborihigashigengahara Iseki (Okunada 3 Iseki): Kanetsu Jidōshadō Jyōetsusen Chiiki Maizō Bunkazai Hakkutsu Chōsa Hōkokusho* 新堀東源ヶ原遺跡 (行田 3 遺跡): 関越自動車道 (上越線) 地域埋蔵文化財発掘調査報告書 [The Niiborihigashigengahara Site (Okunada 3 Site): The Excavation Report of Buried Cultural Properties at the Kanetsu Highway Jōetsu route]. Gunma: Matsuidamachi Iseki Chōsa Kai 松井田町遺跡調査会.
- SANTOS–GRANERO, FERNANDO
- 2009 *The Occult Life of Things: Native Amazonian Theories of Materiality and Personhood*. Tucson: University of Arizona Press.
- SATO TADAO 佐藤 忠雄 AND YAMADA SHINOBU 山田 忍
- 1979 *Okushiritō Aonae Iseki* 奥尻島青苗遺跡 [The Okushiri Island Aonae Site]. Hokkaido: Okushirichō Kyōiku Iinkai 奥尻町教育委員会.
- SHIMAZU ISEKI CHŌSAKAI 島津遺跡調査会
- 1998 *Shimazu Iseki (Shimazu 1・2・3・4 Chiku): Hakkutsu Chōsa Hōkokusho* 島津遺跡 (島津 1・2・3・4 地区): 発掘調査報告書 [The Shimazu Site (Shimazu 1, 2, 3, and 4 Sections): Excavation Report]. Ibaraki: Amimachi Kyōiku Iinkai 阿見町教育委員会.
- SUZUKI KATSUHIKO 鈴木克彦
- 2004a Jōmon magatama 縄文勾玉. *Kikan Kōkogaku* 季刊考古学 89:25–27.
- 2004b Kōgyokusei taishu 硬玉製大珠 [Large jadeite pendants]. *Kikan Kōkogaku* 季刊考古学 89: 21–24.



TAISHAMACHI KYŌIKU IINKAI 大社町教育委員会

- 2004 *Izumo Ōyashiro Keidai Iseki* 出雲大社境内遺跡 [Izumo Shrine Precinct Site]. Izumoshi: Taishamachi Kyōiku Iinkai.

TAKIOTO HAJIME 瀧音 大

- 2012 *Magatama no Shūkyōteki seikaku ni tsuite* 勾玉の宗教的性格について [About the religious character of a comma-shaped bead]. *Kokusai Keiei Bunka Kenkyū* 国際経営・文化研究 17(1):13–28.

TANABATAKE HAKKUTSU CHŌSADAN 棚畑遺跡発掘調査団

- 1990 *Tannabatake: Yatsugatake Nishi Sanroku ni Okeru Jōmon Jidai no Shūzoku Iseki* 棚畑: 八ヶ岳西山麓における縄文時代中期の集落遺跡 [Tannabatake: The Settlement Site at the Base of the West Yatsugatake Mountain in the Middle Jōmon Period]. Nagano: Chinoshi Kyōiku Iinkai 茅野市教育委員会.

TATSUMI KAZUHIKO 辰巳和弘

- 2003 *Kofun bunka to shisen shisō* 古墳文化と神仙思想 [The Kofun culture and the Shinsen philosophy]. *Higashi Ajia no Kodai Bunka* 東アジアの古代文化 116:48–58.  
2006 *Shinkodaigaku no Shiten* 新古代学の視点 [Perspectives on Neocient Studies]. Tokyo: Shōgakusan 小学館.

TENMABAYASHIMURA 天間林村

- 1981 *Tennabayashimurashi* 天間林村史 [The History of Tennabayashimura]. Aomori: Tennabayashimura 天間林村.

TERAMURA MITSUAKI 寺村 光晴, AOKI SHIGETAKA 青木 重孝 AND SEKI MASAYUKI 関 雅之

- 1987 *Shiseki Teraji Iseki: Niigataken Nishibikigun Ōmimachi Teraji Iseki Hakkutsu Chōsa Hōkokusho* 寺地遺跡: 新潟県西頸郡青海町寺地遺跡発掘調査報告書 [The Teraji Historical Site: The Excavation Report of Teraji Site in Ōmimachi, Nishibikigun, Niigata Prefecture]. Niigata: Ōmimachi 青海町.

TOCHIGI KENRITSU SHIMOTSUKE FUDOKI NO OKA SHIRYŌKAN 栃木県立しもつけ風土記の丘資料館

- 2013 *Marishitenzuka, Biwazukakofun, to Iizukakofungun* 摩利支天塚, 琵琶塚古墳と飯塚古墳群 [Marishitenzuka, Biwazukakofun, and Iizukakofun Sites]. Tochigi: Tochigiken Kyōiku Iinkai 栃木県教育委員会.

TOICHŌ KYŌIKU IINKAI 戸井町教育委員会

- 1991 *Hamachō A Iseki* 2 浜町 A 遺跡 2 [The Hamachō A Site 2]. Hokkaido: Toichō Kyōiku Iinkai 戸井町教育委員会.

TŌNOSHI KYŌIKU IINKAI 遠野市教育委員会

- 2006 *Hariyama Iseki: Tōno Furusatomura Seibi ni Tomonau Hakkutsu Chōsa Gaihō. Tōnoshi Maizō Bunkazai Chōsa Hōkokusho* 8 張山遺跡: 遠野ふるさと村整備に伴う発掘調査概報 [The Hariyama Site: The Excavation Report of Buried Cultural Properties accompanying the Maintenance of Tōno Furusato Village 8]. Iwate: Tōnoshi Kyōiku Iinkai 遠野市教育委員会.

TOYAMAKEN KYŌIKU IINKAI 富山県教育委員会

- 1973 *Toyamaken Asahimachi Nizayama Shin Iseki: Dai 1-ji Hakkutsu Chōsa Gaihō* 富山県朝日町下山新遺跡: 第1次発掘調査概報 [The New Toyama Prefecture Asahimachi Nizayama Site: The 1st Excavation Report]. Toyama: Toyamaken Kyōiku Iinkai 富山県教育委員会.

TOYAMAKEN MAIZŌ BUNKAZAI SENTĀ 富山県埋蔵文化財センター

- 1985 *Hokuriku Jidōshadō Iseki Chōsa Hōkoku Asahimachi hen 2: Sakai A Iseki • Banbayama D Iseki • Banbayama E Iseki • Banbayama F Iseki • Banbayama G Iseki • Banbayama H Iseki* 北陸自動車道遺跡調査報告 朝日町編 2: 境 A 遺跡・馬場山 D 遺跡・馬場山 E 遺跡・馬場山 F 遺跡・馬場山 G 遺跡・馬場山 H 遺跡 [The Report of Hokuriku Highway Site Asahimachi Series 2: Sakai A Site, Banbayama D Site, Banbayama E Site, Banbayama F Site, Banbayama G Site, and Banbayama H Site]. Toyama: Toyamaken Kyōiku Iinkai 富山県教育委員会.  
1987 *Hokuriku Jidōshadō Iseki Chōsa Hōkoku Asahimachi hen 3: Banbayama D Iseki • Banbayama G Iseki • Banbayama H Iseki* 北陸自動車道遺跡調査報告 朝日町編 3: 馬場山 D 遺跡・馬場山 G 遺跡・馬場山 H 遺跡 [The Investigation Report of Hokuriku Highway Site Asahimachi Series 3: Banbayama D Site, Banbayama G Site, and Banbayama H Site]. Toyama: Toyamaken Kyōiku Iinkai 富山県教育委員会.

TSUNODA, RYUSAKU, WM. THEODORE DE BARY, AND DONALD KEENE

- 1958 *Sources of Japanese Tradition*. New York: Columbia University Press.

UCHIYAMA, JUNZO

- 2008 Vertical or horizontal landscape? The prehistoric long-term perspectives on the history of the East Asian inland seas, in *The East Asian Mediterranean: Maritime Crossroads of Culture, Commerce, and Human Migration*: 25–52, ed. Angela Schottenhammer. Wiesbaden: Harrassowitz Verlag.

UNIVERSITY OF PENNSYLVANIA MUSEUM OF ARCHAEOLOGY AND ANTHROPOLOGY

- 2016 *Object Collection: Jomon Beads*. Object numbers 2317 and 2318. Accessed on December 16, 2016. <https://www.penn.museum/collections/object/251307>. <https://www.penn.museum/collections/object/63880>.

WATANABE MAKOTO 渡辺 誠 AND MINAMI HIROSHI 南 博史

- 1997 *Aomoriken Ishigame Iseki ni Okeru Kamegaoka Bunka No Kenkyū. Kodaigaku Kenkyūsho Kenkyūhōkoku 5. Kodaigaku Kyōkai Kodaigaku Kenkyūsho* 青森県石亀遺跡における亀ヶ岡文化の研究. 古代學研究所研究報告 5 [Research Relating to the Kamegaoka Culture at the Ishigame Site in Aomori Prefecture. Archeology Research Center Reports 5]. Kyoto: Kōkogakukōkai and Kōgaku kenkyūjo 古代學協會・古代學研究所.

YAKUMOCHŌ KYŌIKU IINKAI 八雲町教育委員会

- 1987 *Sakachama 1 Iseki* 栄浜 1 遺跡 [The Sakaehama 1 Site]. Hokkaido: Yakumochō Kyōiku Iinkai 八雲町教育委員会.

YAMANASHIKEN KYŌIKU IINKAI 山梨県教育委員会

- 1989 *Kinsei Iseki: Kennei Hojō Seibi Jigyō ni Tomonau Hakkutsu Chōsa Hōkokusho 2 (Jōmon Jidai Hen)* 金生遺跡: 県営圃場整備事業に伴う発掘調査報告書 2 (縄文時代編) [The Kinsei Site: The Excavation Report related to the Prefectural Farmland Maintenance Project. (Jōmon Period Version)]. Yamanashi: Yamanashiken Kyōiku Iinkai 山梨県教育委員会.

YAMANASHIKEN MAIZŌ BUNKAZAI SENTĀ 山梨県埋蔵文化財センター

- 1994 *Tenjin Iseki: Kenei Hojō Seibi Jigyō ni Tomonau Hakkutsu Chōsa Hōkokusho* 天神遺跡: 県営圃場整備事業に伴う発掘調査報告書 [The Tenjin Site: The Excavation Report related to the Prefectural Farmland Maintenance Project]. Yamagata: Yamanashiken Kyōiku Iinkai 山梨県教育委員会.

YI, HYUNHAЕ

- 2009 The formation and development of the Samhan, in *Early Korea 2: The Samhan Period in Korean History*: 17–59, ed. Mark E. Byington. Cambridge: Harvard University, Korean Institute.

YOICHICHŌ KYŌIKU IINKAI 余市町教育委員会

- 1989 *Sawamachi Iseki: Yoichi Niki Chiku Dōei Hatake Chitai Sōgō Tochi Kairyō Jigyō Yoichimachi Dai 1-gō Kansen Nodō Chōdō Sawamachi Misonosen Hosō Kairyō Kōji ni Tomonau Maizō Bunkazai Hakkutsu Chōsa Hōkokusho* 沢町遺跡: 余市二期地区道営畑地帯総合土地改良事業余市町第 1 号幹線農道町道沢町美園線舗装改良工事に伴う埋蔵文化財発掘調査報告書 [The Sawamachi Site: The Excavation Report of Buried Cultural Properties relating to the Road Resurfacing Construction Work of Yoichimachi 1<sup>st</sup> Main Agricultural Road Sawamachi Misono Line Run by the Prefectural Farmland Improvement Operation of the Yoichi 2<sup>nd</sup> District]. Hokkaido: Yoichichō Kyōiku Iinkai 余市町教育委員会.

YOTSUKAIDŌ CHIYODA ISEKI CHŌSAKAI 四街道千代田遺跡調査会

- 1972 *Chiyoda Iseki: Chibaken Inbangun Yotsukaidōchō* 千代田遺跡: 千葉県印旛郡四街道町 [The Chiyoda Site: Yotsukaidōchō, Inbangun, Chiba Prefecture]. Chiba: Yotsukaidō Chiyoda Iseki Chōsakai 四街道千代田遺跡調査会.