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Rice, Bronze, and Chieftains  
—An Archaeology of Yayoi Ritual—

Mark J. HUDSON

The Yayoi A-N't. was the period in which agriculture came to form the basis of society in a large part of the Japanese archipelago. It is often dated from 300 BC to AD 300, though in parts of western Japan wet rice farming began a century or more earlier. The end of the Yayoi was marked by the appearance in the third century of *kofun,* standardized keyhole-shaped tomb mounds. Although there is disagreement over both the exact chronology of this transition and the difference between standardized and pre-standardized mounds, the majority of Japanese archaeologists now believe the Yayoi ended by about AD 250 in the west­ern archipelago.

Limitations of space make it impossible to present a general discussion of Yayoi culture here. A recent review can be found in HUDSON (1990), but the reader should be aware that many areas of debate still remain. One such problem is the degree of continental immigration into Yayoi Japan—something that has obvious consequences for our understand­ing of ritual continuities with the JOrmon. The Yayoi is partially proto­historic, since the Eastern Han and Wei dynastic histories *(Hou Han shu* \*me and *Wei zhi fly)* contain short descriptions of the Wa people. Although there have been suggestions that "Wa" was used to refer to a distinct ethnic group, it is probably best understood as a general term for the inhabitants of at least western Japan in the third century AD. As the earliest historical account of Japan, the *Wei zhi* is a veritable mine of information on the customs and lifestyles of the Late Yayoi/Early Kofun periods. It tells us, for example, that "in their worship, men of import‑

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ance simply clap their hands instead of kneeling or bowing," behavior  
that is immediately recognizable to anyone who knows modern Japan)

Two main systems of subdividing the Yayoi are in general use. One, based on a series of five or six pottery styles, is used primarily for western Japan; the other, a threefold division into Early, Middle, and Late phases, has a more general applicability and will be used in this paper. The Early phase began about 300 BC and lasted for around two hundred years. The Middle Yayoi occupied approximately the same amount of time and thus came to a close ca. AD 100, although recently several Kyushu archaeologists have suggested an end in the first half of that century. The Late Yayoi will be understood here as ceramic style V which was replaced by the transitional Shonai Ph type during the third century. ShOnai was followed by Furu Iffe pottery, which marks the un­disputed start of the Kofun period at the end of the century.

This article is a review of Yayoi-period ritual practices. Rather than at­tempting an encyclopedic coverage, I have focused the discussion around six topics. It is hoped that these topics (many of which overlap) will give the reader some impression of the actual workings of ritual in Yayoi society. A word of warning is in order, however: I do not see these topics as defining a uniform "Yayoi religion." The Yayoi was a period of great regional and chronological variation in ritual, as in everything else. At the same time, much of the cultural change responsible for this variation was negotiated through a series of distinctively Yayoi ritual structures.

*Ritual and the JOmon-Yayoi Transition*

As the JOmon period drew to a close, ritual behavior became more and more prominent, reaching a peak in the Kamegaoka IW culture of the TOhoku region. Dating to the first millennium BC, this culture is marked by clay figurines, plaques, and masks; intricately decorated ce­ramics with a wide range of vessel shapes; and a variety of stone objects, some of which have shapes so strange that we are at at loss what to call them in both Japanese and English. Stone circles, often with phallic cen­terpieces, were still in existence although their popularity had waned somewhat after the Late JOmon.

Most archaeologists have interpreted the increasingly ritualized nature of the Final Jomon as a reaction to deteriorating climatic conditions and to the new foreign elements that later fused to make Yayoi culture. JOmon specialist KOBAYASHI Tatsuo (1991, 1992) has argued for a line of

3 The *Wei zhi* was compiled in the late 3rd century but the *Holt Han S/ut* was not written until 150 years later and incorporated most of the earlier document's descriptions of Japan. All translations of these Chinese histories are taken from TSUNODA and GOODRICH (1951).

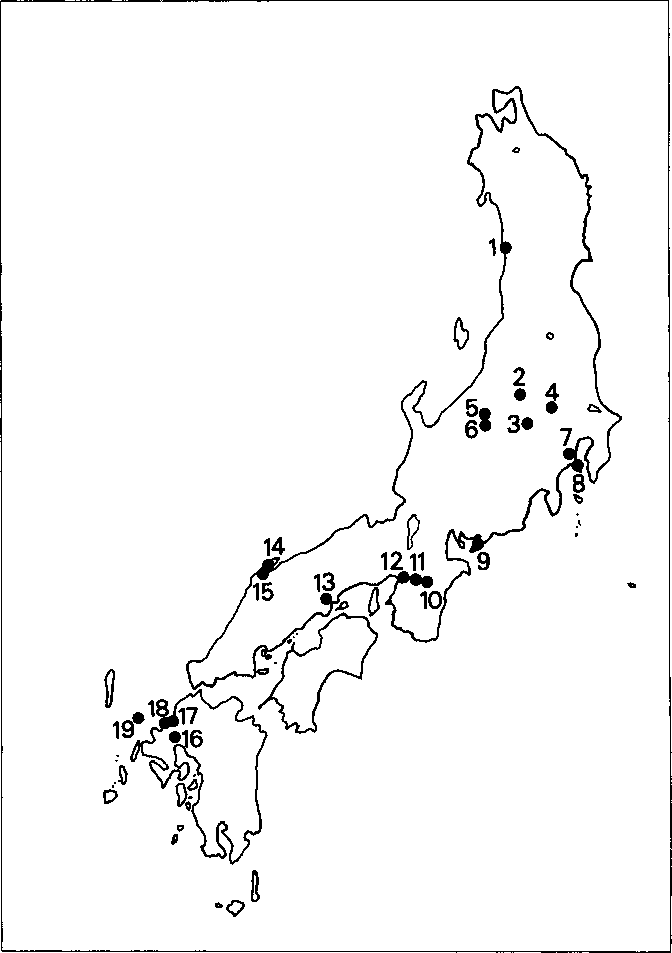
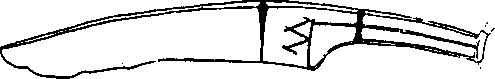
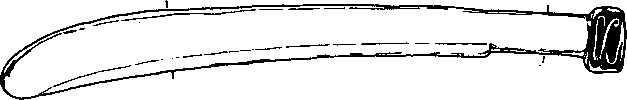


Fig. 1: Sites mentioned in the text. (1) Misakiyama; (2) Yatsuhagi; (3) Oki II; (4) Izuruhara; (5) Yotsuya; (6) Namani; (7) Otsuka-Saikachido; Miyanohara; (8) Miura Peninsula cave sites: Bishamon, Maguchi, and **Ourayama;** (9) Ikawazu; (10) Makimuku; Hashihaka; (11) Karako-Kagi; (12) Kami; (13) Tatetsuki; (14) Koura; (15) Kojindani; (16) Yoshinogari; (17) Mine; Yoshitake; Suku Okamoto; (18) Shinmachi; (19) Karakami, Iki Is.





**Fig. 2: Top: Bronze knife from Misakiyama, Yamagata. Length 26 cm. (From KASHIWAKURA 1961). Bottom: Stone "sword" from Bussawa, Hokkaido. Length 35cm. (From NOMURA 1985).**

Jomon "resistance" that moved slowly northwards as Yayoi culture ex­panded; behind this line Jomon groups produced clay figurines and other traditional ritual objects in order to maintain their identity *vis-d­vis* the new culture. While this remains an interesting hypothesis, its details have yet to be fully developed; in many ways it is a theory that highlights the deficiencies in our understanding of Final Jomon society. At that time the archipelago was divided into two main cultural zones: the Kamegaoka in the east, and the applique ridge *(tottaimon '7V4)* ceramic zone in the west. Although there was an area of overlap, the di­viding line ran roughly between Nagoya and the Kansai. Many readers will be aware that this is close to the traditional divide between west and east Japan, as determined from various dialectical, dietary, and cultural traits. It also marks the split between the broadleaf evergreen and deciduous forest zones. While some of the Final Jomon east-west differences may be explained by the presence of different subsistence economies within these contrasting environments, it is impossible to bring everything under that ecological umbrella. Until we understand the significance of these very different Final Jomon cultural zones, how­ever, we cannot begin to understand the ritual transition from Jomon to Yayoi.

In western Japan a trend towards plain pottery had existed from the Late phase; apart from the few sites mentioned by Kobayashi, Kamegaoka-type ritual artifacts are rare or nonexistent. Eastern Japan, in complete contrast, saw a flourishing of ritual artifacts in the Final Jomon followed by their sudden disappearance at the beginning of the Yayoi. I believe it is wrong, though, to see this ritual activity as a purely conservative reaction. Instead, new ritual patterns were both stimulated by and used to negotiate the social changes that were affecting all parts of the Japanese archipelago at that time. A distinctive type of Final

Jomon "stone sword," for example, may have been derived from a Chi­nese bronze prototype. First suggested in the 1920s, this hypothesis was given further credence in 1954 with the discovery of just such a bronze knife at Misakiyama OhlW in Yamagata (KASHIWAKURA 1961). This 26­cm-long knife is thought to date from the late 2nd millennium sc. It is a ring-handled bronze knife of a type common in north China in the Western Zhou. Although only one such bronze knife has been found in Japan, there is a very strong resemblance between the Misakiyama knife and the curved stone swords which were so important in the Final Jomon (see NOMURA 1985, pp. 125-67) (fig. 2).

Despite the real possibility that Final Jomon ritual was influenced by increased contact with the continent, most Jomon ritual artifacts disap­peared abruptly at the beginning of the Yayoi. One of the best-known late Jomon ritual sites is Kinsei 4kt. in Yamanashi Prefecture.2 Both Late and Final Jomon stone pavements with upright stones, some worked into phallic shapes, were found with sixteen cist graves. Artifacts from the site, many associated with the stone pavements, included 233 clay figurines, 560 clay earrings, nearly 30 miniature ceramic vessels, and 133 stone swords, clubs, and phalli. Many burnt deer antlers and wild boar mandibles were also uncovered (NIITSU *&* YAMAKI 1989; KIDDER 1991). The Yayoi period had already begun in western Japan by the time of the latest occupation at Kinsei. Recent discoveries at sites in Nirasaki on the northwest edge of the KOfu Basin mean that the earliest rice in Yamanashi can be traced back close to the time of Kinsei (see HUDSON 1991)— perhaps even within one generation. It would thus appear that the stone-based Final Jomon ceremonial facilities typified by Kinsei dis­appeared quite abruptly around the time of the introduction of rice.

From the figures given by NAKAMURA Yoshiyuki (1989, pp. 49-50), at least 70% of Jomon clay figurines in Hokkaido date from the Final phase; only one example is known after that. OSHIMA (1990, p. 83) makes the important point that the origin of many Ainu cultural traits can be found in the Epi-JOrmon rather than the Jomon proper. The Epi­Jomon is the culture of Hokkaido during the Yayoi, Kofun, and early historical periods in the main islands of Japan. It was clearly a contact culture in the sense that it was formed through interaction with the ag­ricultural, iron-using people to the south. Thus even in Hokkaido the beginning of the Yayoi marks a break with what went before in many aspects of society, including ritual.

Of course not all Jomon ritual artifacts completely disappeared with the Yayoi. Some, like phallic symbols and clay figurines, continued in new forms (cf. KANASEKI & SAHARA 1987, Plate 10; MIYASHITA 1983;

2

For the location of Kinsei, see the map in the preceding article by Yamagata.

NIITSU 1986). Other Jomon activities, such as tooth ablation, continued until the Middle Yayoi, probably to mark rites of passage such as initia­tion and marriage (HARUNARI 1987b).3 Although the idea that a society's ritual responses are predetermined by its technological level is an over­simplification that cannot explain the origins and development of specific behavior, we cannot deny the relation between the establish­ment of an agricultural society in the Japanese archipelago and the more or less sudden replacement of most Jomon ritual practices by a new set of activities in the Yayoi.

*The Wild and the Tame: A Ritual Menagerie*

As a result of ethnographic work conducted in the 1960s, it became clear that hunting and gathering was not the nasty, brutish, and short exis­tence that Hobbes had imagined. Indeed, SAHLINS (1972) suggested that foraging groups formed the "Original Affluent Society." This view had a profound effect on our understanding of the beginnings of agricul­ture. It came to be accepted that affluent foragers would only accept ag­riculture when forced to do so by resource stress of some sort. Farming not only involves more hours of labor but it also leaves farmers very vul­nerable to crop failure and exploitation by social elites. Yayoi farmers would have been no less vulnerable than others. Tension was strong be­tween the potential for the dietary and social affluence that rice could bring, and the reality of what might happen if the harvest failed, and, as we might expect, ritual negotiation of that tension was an important part of Yayoi culture. What is perhaps less expected, however, was the role played by wild animals, war, and hunting in that ritual.

Even a quick glance at Yayoi pictorial representations on pottery and bronze shows us that animals are extremely common. Dogs, birds, liz­ards, frogs, and various other creatures are found, but deer seem to hold a special place in Yayoi art. In the Jomon period both deer and wild boar were major sources of food, and, judging from the bones found at ar­chaeological sites, appear to have been exploited to a similar degree (NisHimoTo 1991a). Despite this there are only two Jomon representa­tions of deer, whereas a number of clay boar figurines exist.` In the Yayoi the opposite situation occurs: there are many deer but very few

3 H.kRUNARI (1990, p. 28) specifically suggests the following extraction sequence: upper ca­nines at initiation, lower canines and incisors at marriage, and upper incisors and upper and lower first premolars on the death of relatives.

4 According to a recent newspaper report, the two Jomon sites with deer are Usujiri

in Hokkaido and Nishiyama ffi al in Aomori Prefecture. The latter example is a Late Jomon pottery sherd with a deer in relief. See *Gekkan bunkazai shutsudo joho* (August 1991, p. 15).

representations of boar (INOUE 1990). Why is there such a difference be­tween the two periods?

It is widely argued that Jomon boar figurines were used to ensure suc­cess in hunting (e.g., Dot 1984), but it is not known why deer were not treated in the same way. One reason may have been the fact that boar are much more dangerous and difficult to hunt than deer. An alterna­tive explanation relates to the semi-domestication that has been sug­gested for Jomon boar. Neither approach really helps us to understand why deer were ignored in Jomon art, but the importance of deer in the Yayoi has been explained by a view of that animal as a local deity. A great deal of contextual evidence now supports this interpretation.

Much of the evidence derives from pictorial representations found on Yayoi pottery and bronze bells *(dOtaku Ma).* Fifty-four pictorial *dOtaku* are known, but as this figure includes bells cast from the same mold, the total of original works is 38. Four molds with engraved pictures have also been found, but as one of these was used to cast an extant bell, we are dealing with a total of 41 original pictorial works (HARUNARI 1991a, p. 443). According to Harunari's calculations, of the 364 pictorial items on these bells, deer ac­count for 129, humans for 58, fish for 31, cranes for 27, but wild boar for only 18.5 Twenty-six (63.4%) of the 41 bells have deer, 18 (43.9%) cranes, but only nine (22.0%) have fish and four (9.8%) boar. While the fish and boar are not always totally sec­ondary elements, Haru­nari points out that deer and cranes clearly form

the main elements in

*dOtaku* art (fig. 3). **Fig. 3: Pie diagram of animals represented**

A second major source **on Yayoi bronze bells. "Birds" are cranes**

**or herons;** D = **dragonflies; L = lizards; T** of Yayoi pictorial art is = **turtles; others = dog, snake, mantis,**

pottery. Incised drawings **spider, and crab. Calculated from** figures

were particularly common **given in** HARUNARI **(1991a).**

5 HARUNARI (1991a, pp. 444-45) also notes the following possible identifications: 6 deer, 5 boar, 9 fish, and I human. As is discussed later in the text, Harunari's view of the *dotaku* birds as cranes is not shared by everyone.

Fig. 4: HARUNARI's (1991b, p. 33) reconstruction of the picture in­scribed on a Middle Yayoi jar from Inayoshi, Tottori Prefecture. The site is also known as Sumita.

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on Middle Yayoi pottery in the Kinai area (SAHARA 1980). Although ac­cording to HARUNARI (1991a, p. 451) only 166 out of a total of less than 200 drawings are clearly intelligible, some of these are nevertheless of great importance in our understanding of Yayoi society (cf. fig. 4). Again deer are common, accounting for about 40%. A major difference be­tween the *dotaku* and pottery deer, however, relates to the antlers. Only seven *dotaku* deer have antlers compared with 122 without; in contrast, 32 of the deer incised on pottery have antlers, 22 are without, and 30 are unclear (HARUNARI 1991a, Tables 1 and 3). This difference is import­ant because Harunari argues that the annual growth of the antlers sym­bolized the growth of rice.

The eighth-century *Harima no kuni fudoki* Ig111151,±12 contains an account of rice germinating overnight after being planted in the fresh blood of a deer. Similar stories are known in other early texts (summa­rized by HARUNARI 1991a, pp. 469-71). All these stories relate to rice-planting rituals that were conducted in the spring or early summer — exactly the time when stags lose their antlers. As noted by KOBAYASHI Yukio (1959, p. 5) and others, the *Nihon shoki* story of Nintoku's tomb and the *Kojiki* account of Yamato-takeru killing a deer at Asi-gara suggest that the animal was considered a local deity. Planting rice in the deer's blood, therefore, ensured the deity's support in a suc­cessful harvest. Since the *dotaku* deer have no antlers, Harunari infers that the bells were used in spring rice-planting ceremonies. Similarly, the presence of antlers on many deer incised on ceramics implies that those vessels were used in harvest rituals at the time of year when the antlers had regrown (HARUNARI 1991a, pp. 471-72).

Another animal that played an important role in Yayoi ritual and be­liefs was the bird. The fact that birds were seen as intermediaries be­tween the secular and spiritual worlds is suggested by the *Kojiki* account of a funeral in which mourners dressed as birds (cf. PHILIPPI 1968, p. 126). Wooden birds have been excavated from at least eleven Yayoi sites.

Some of these have central holes by which they may have been attached to the top of wooden posts. Such a custom is known historically in Korea and is also seen, according to some scholars, in the *Wei zhi* account of Mahan ,fin agricultural ceremonies.' As already noted, representations of birds are common on Yayoi bronze bells. These are all long-legged, long-necked birds — either cranes or herons, though it is not clear which from the actual drawings. HARUNARI (1987a, pp. 17-18) argues that they are cranes from their body stance, but TERASAWA (1991a, p. 170) and others have made the obvious point that since cranes migrate to Japan in the late autumn, such an identification might imply a quite different ritual role from that of herons, which arrive in the summer.

A myth found in the Nara texts and in later historical Japan attributes the origins of farming to a bird that brought down rice seed in its mouth. HARUNARI (1987a, pp. 21-22) believes that a similar belief existed in the Yayoi and that an annual ceremony to call back the rice spirit symbol­ized by the bird was held to ensure a plentiful harvest. As "the world of the birds was across the sea, the priests donned bird outfits, boarded a boat, and went out to meet [or call] the birds" (HARUNARI 1987a, p. 38). Such scenes, which recall the *Kojiki* story of Sukuna-biko-na (cf. PHILIPPI 1968, p. 115), are known from a number of pottery vessels. Fig. 4 shows the incised drawing on a Middle Yayoi jar from Inayoshi at, in Tottori Prefecture. Harunari interprets the oarsmen as feathered "priests" row­ing towards a raised-floor storehouse; KANASEKI (1986, p. 295) sees the objects to the left of this as two bronze bells hanging from a tree, based again on the *Wei zhi* account of a Mahan ritual facility with bells and drums suspended from a tree. A deer also forms part of the design, al­though its original position on the vessel is not clear. Drawings of both boats and priests with feather-like plumes are known from a number of other ceramic vessels, many of which are illustrated in Harunari's rele­vant articles.

Many of the above aspects of Yayoi agricultural ritual come together in the scenes depicted on a bronze mirror thought to have been found in Takasaki, Gunma Prefecture, and now in the Tokyo National Museum. This is despite the fact that the mirror itself is believed to date to the Early Kofun period. As shown in fig. 5, the decoration consists of two concentric bands. In the inner band four figures are interspersed with four deer. Two of the figures carry long poles, one also has a bow, and one is holding a jar aloft. They are strange, faceless figures with three-pointed webbed feet and hands. Of the deer, two have antlers, one does not, and the fourth is unclear since the mirror is damaged in that place.

6 Mahan was the name given to a region of southwest Korea in the Proto-Three Kingdoms period (cf. BARNES 1990, pp. 131-35). The presence of bird poles in the *Wei zhi* account of this region is based upon interpretations of the word *sutu* (KANASEM 1986, pp. 287-92).

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| The outer band has ten figures, nine of which are armed with shields and swords or spears. The one unarmed figure stands with arms raised per­pendicular to the circumference of the mirror. Most of the outer figures have frond-like extensions from their bodies that recall the priests' "feathers" on the Inayoshi jar.  On the basis of |  |

the presence of

**Fig. 5: Bronze mirror from Gunma Prefecture now**

the deer and the **in the Tokyo National Museum. From** SHITARA

pottery jar (which **(1991a).**

is believed to have

been used to store rice grain for sowing in the following season), SHITARA (1991a, p. 60) interprets the inner band of the mirror as depicting an ag­ricultural ritual. The *Wei zhi* account of the Mahan mentions both spring and autumn farming rituals; Shitara argues that both seasons are rep­resented here also, since there are deer with and without antlers, and since the figure with the jar could signify either season, sowing seed in the spring or collecting it in the fall. Shitara compares the outer band of this Gunma mirror with the Mahan ritual dancing described in the Wei history; he also cites NAKAMURA Tomohiro's (1987) suggestion that the wooden weapons found at a number of Yayoi sites were used in mock battles. SHITARA (1991a, p. 61) thus hypothesizes that the outer band of the mirror represents such mock fighting as part of an agricultural ritual.

We have seen that the contextual evidence supporting the role of deer and birds in Yayoi ritual is very good, explaining to some extent many Yayoi ritual artifacts and their designs. It seems to me, however, that we should and can go further. In particular, Japanese archaeologists have yet to consider the question of how these ritual practices are related to the overall structures of Yayoi society. Why were deer and birds used in agricultural ritual? What was the relationship between rice farming and the hunting and war scenes found on the *dataku* and the Gunma mirror? In a recent book, Ian HODDER (1990) has argued that the domestication

of plants and animals mirrors the domestication of society in terms of the social control and constraints needed to build common facilities and structures. In Neolithic Europe this social domestication was negotiated in various ritual ways, often involving the tension between the wild and the tame. Interestingly, similar patterns can be seen in the Yayoi. In con­cluding this section I would like to suggest that there was a link between Yayoi agriculture, warfare, and hunting, a link that provided both a met­aphor and a rationale for the control of society.

The Yayoi period is thought to have been an age of "war and weap­ons" (SAHARA 1987b, pp. 283-98; and *in press).* This interpretation is based on the presence of true weapons, defensive settlements, remains of burnt houses, skeletons with embedded sword and spear points, and the *Wei zhi* account of the "Wa Unrest." In such a society there was a need for heightened social cohesion to construct moats, watchtowers, and so on— and to fight if necessary. There were thus ready opportuni­ties for individuals or lineages to gain power within Yayoi society.

The need for warfare and social cohesion was negotiated through the ritualization of war and its association with hunting. As will be discussed later, bronze daggers, spearheads, and halberds all evolved from actual weapons at the start of the Yayoi to wide-bladed, impractical ritual ob­jects. Weapons, in other words, became objects of worship. Ritual weap­ons were also made of wood and were probably used in performances such as those described in the *Wei zhi* and depicted on the Gunma mir­ror. This mirror provides a clear link between (mock) warfare and the hunting of deer. If we agree that the deer represented land spirits in ag­ricultural ritual, then I believe we can understand why hunting and warfare scenes are so common in Yayoi art. Hunting and warfare were a metaphor for the control of the wild or, in other words, the domesti­cation of both rice and society. This relationship may be illustrated as follows:

Hunting (= control of) deer:

agriculture (= control of) rice:

warfare (= control of) society

This relationship is complicated but not necessarily invalidated by the presence of domesticated pigs in the Yayoi. Though suspected for some time, the existence of pigs was confirmed only in 1989, when well-preserved skulls were found at the ShimogOri-kuwanae TEAM site in Oita (NismmoTo 1989). These animals are now known from at least eight sites in western Japan.' Many examples display evidence of the

ritual treatment of jawbones whereby a hole was cut at the back of the lower jaw and the bones were then suspended on a wooden pole. Pig jawbones still attached to poles were found at Nabatake kill in Saga and Karako in Nara.8 Since this ritual is known from the very beginning of the Yayoi, it is thought to have been brought to Japan by continental immigrants (NisHimuro 1991b). The exact nature of the jawbone cere­mony is still poorly understood, however, and in any event it was appar­ently limited to the Yayoi. Somewhat mysteriously, domesticated pigs seem to have disappeared completely from Japan after the Nara period (see SAHARA *in press).*

*Oracle Bones and Divination*

Divination has played an important role in Japanese religion since very early times (BLACKER 1981, 1983). The term refers to communication with the supernatural world for the purpose of determining an appro­priate course of future action through the answering of questions that transcend human understanding. Divination by the application of heat to animal bones was found widely throughout Eurasia. It reached a peak in Shang-dynasty China, when cattle and water buffalo scapulae and turtle shells were used, many being inscribed with the result of the div­ination. The first direct evidence we have of divination in Japan is the oracle bones of the Yayoi period. Divinatory practices are also men­tioned in the *Wei zhi:*

Whenever they undertake an enterprise and discussion arises, they bake bones and divine in order to tell whether fortune will be good or bad. First they announce the object of divination, using the same manner of speech as in tortoise shell divination; then they examine the cracks made by the fire and tell what is to come to pass.

Over 100 oracle bones have come from around 25 Yayoi-period sites. The exact figure varies between authors: KANZAWA (1990, p. 82) lists 116 examples, whereas HARUNARI (1991a, p. 466) has only 101.9 There is also disagreement over the date of the earliest bones. An example found at the Koura t/FR site in Shimane Prefecture is included by HARUNARI (1991a, p. 466) but discounted by KAN ZAWA (1990, pp. 84-85) on the grounds that it was not clearly associated with datable artifacts and that the style of burning suggests a Kofun-period date. Oracle bones from

8 The Nabatake find is illustrated in HUDSON and BARNES (1991 p. 232). Kofun-period rit­uals using wild boar bones are mentioned by ISHINO in this issue.

9 Kanzawa's figures in his Table 2 do not match, but elsewhere in the text and in his Table 5 (Table 1 of this paper) he mentions a total of 116.

Karako, Nara Prefecture are assigned to the Middle and Late phases by Kanzawa, but the excavators of the site clearly put some of them in the Early Yayoi (FuJITA 1986, p. 47, 1988, 1989). The Karako examples would thus appear to be the earliest oracle bones in Japan; all others date to the Middle Yayoi or later.

While to some extent biased by preservation factors, the distribution of oracle bones shows that divination was common throughout much of Yayoi Japan except for Kyushu and the Tehoku. Oracle bones are especially common in the Kinai and south Kanto. So far none have been discovered from Kyushu proper—only Iki and (in the Kofun period) Tsushima Is­lands. By far the majority of Yayoi oracle bones have come from coastal sites, but this seems to be related to preservation as much as anything else. Bones are better preserved in the alkaline conditions of shell mounds, and such contexts account for 69% of the sites. Finds at inland locations such as Yotsuya M and Namani It in Nagano, however, show that divination was not performed only by coastal populations.

Table 1 lists Yayoi oracle bones by species and body part. Deer scapu­lae were by far the most commonly used bones. The choice of deer was probably related to the ritual importance of that animal, as discussed in the previous section. It should be noted that divination using turtle plas­trons seems not to have appeared in Japan until the Kofun era.

Deer Wild boar Deer Dolphin Species TOTAL

*(Cervus nippon) (Sus scrap)* or boar *(Delphnudae)* Indef.  
Scapula Rib Verte- Meta- Scap. Scap. Rib Indef. Vertebrae Bone

brae tarsal Indef.

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| --- | --- | --- | --- | --- | --- |
| 71 15 1 1 | 16 | 3 5 2 | 1 | 1 | 116 |
| 88 75.86% | 16  13.79% | 7 6.03% | 1 0.86% | 1 0.86% | 116 100% |

Table 1. Yayoi oracle bones by species and body part.  
From KANZAWA 1990, p. 87.

Almost nothing is known about the actual divination rites of the Yayoi. Examination of excavated oracle bones has shown that the surface of the bone was polished and sometimes slightly shaved. Heat was then applied to points on either side, causing cracks to appear on both sides of the bone. According to KANZAWA (1990, p. 96), all Yayoi oracle bones used this technique, which is not found in other periods. We are completely ignorant as to how the cracks were interpreted and the aim of the divi­nation. KANZAWA (1990, p. 103) suggests that divination was mainly con­ducted for matters concerning the agricultural cycle and warfare, and this hypothesis may not be too far off the mark. Another problem is knowing by whom the divinatory rituals were performed. In later

**Fig. 6: Yayoi oracle bones: (1) Karako-Kagi, Early Yayoi. (2) Bishamon Cave C, Late Yayoi. (3) Maguchi Cave, Late Yayoi. (4) Karakami, Iki Is­land, Late Yayoi. From FUJITA (1986) and** KANZAWA **(1990).**

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periods there were specialist hereditary groups of diviners known as *urabe* FIN (cf. HASHIGUCHI n.d.), but divinations at the family or village level seem more likely for the Yayoi (KANzAwA 1990, p. 104).

Oracle bones were not found in the Jomon and were almost certainly introduced from the continent in the Yayoi. The direct source was prob­ably Korea, where at least five sites have produced oracle bones (WATA­NABE 1991). One of these sites — Hogok f -V- in North Korea — may date to a few centuries earlier, but the others are all from about the same time frame as the Yayoi. Most—but not all—peninsular oracle bones appear to have been subjected to the same divination technique as the Yayoi ex­amples, and after use they were disposed of in a similar fashion (WATA­NABE 1991, p. 5). Deer scapulae were also common in Korea. At the Kunkok-ri at,--.w shell mound at the southwest tip of the peninsula, deer replaced boar bones as the favored material after the 1st century BC (WATANABE 1991, p. 8). Although the Korean evidence is currently less abundant than the Japanese, the presence there of oracle bones and a few deer representations on bronzes suggests that the deer may also have played an important ritual role on the peninsula. Thus, as HARU­NARI (1991a, p. 475) points out, there is a possibility that Yayoi beliefs about the deer as a local deity in agricultural rituals may have been transmitted with oracle-bone divination from Korea.

*Bells and Blades: Bronzes, Hoards, and Ritual Zones*

The Yayoi period saw the introduction of both bronze and iron into Japan. Utilitarian objects were made of iron, as well as wood and stone; bronze, in contrast, was used almost entirely for ritual implements. The two most characteristic Yayoi bronze implements were bells *(dataku)* and weapons. Both of these were initially imported from the continent, but soon thereafter were produced in Japan. Both also underwent a similar process of exaggerated enlargement as they changed from practical ob­jects into ritual and political symbols.

In many ways *dOtaku* are an archaeologist's nightmare, because almost all have been found without any associated artifacts that might give clues to their date or function. They probably derived from a type of small bronze bell known on the Korean peninsula and also found in Kyushu (SAHARA 1987a, pp. 49-54), but there is still controversy over ex­actly when and where they were first produced in Japan. SAHARA (1960) worked out a typological sequence based on the handle. Early triangular handles became rounder, wider, and more ornate as their original func­tion of suspending the bell was lost. Sahara's Style II often has a flowing-water pattern common on Kinai ceramics of the early Middle Yayoi; assuming bell and pottery decorations were more or less contemporary, Sahara suggests the earliest *dOtaku* were made in the Kinai from the end of the Early Yayoi, a conclusion supported by KURAKU (1990, p. 44). Such a date was once seen as anomalous, since it appeared to precede the first bronze casting in Kyushu, contradicting the traditional view among Japanese archaeologists that bronze casting spread from west to east along the archipelago. Although more scholars now accept the pos­sibility of parallel origins in both Kyushu and the Kinai (e.g., KoNDO 1987a, p. 116), recent finds at Yoshinogari ARf ffi in Saga have put the beginnings of metalworking in Japan well back in the Early Yayoi, al­though it must be stressed that no such secure evidence has yet come from the Kinai. In addition, some archaeologists such as TERASAWA (1991a, pp. 149-50) argue on typological grounds that *dotaku* produc­tion began ih Kyushu and spread east.

As of January 1992 there were 430 *dOtaku* known from 302 sites. Fif­teen bell fragments and the 62 *dOtaku* whose provenance is unknown should be added to these to give a grand total of 507. At present, the whereabouts of 112 of these bells are unknown (OKITA *in press).* Most of the bells were found buried on isolated hillsides away from settlements, and there can be no doubt that they were buried there intentionally. To explain such behavior is difficult, but a number of possibilities exist: (1) underground storage as part of an annual ritual cycle; (2) concealment in times of unrest; (3) abandonment; (4) some sort of votive offering. SA­HARA (1960; 1987b, pp. 280-81) has argued for the first of these theories,

suggesting that *dOtaku* were kept buried in the soil in normal times and only brought out for special festivals. The ethnologist MISHINA Shoei (1968) proposed that the buried bell became a receptacle for the earth and crop spirits, which were then brought back from the soil when the bell was exhumed. Mishina thought that the disappearance of *dOtaku* at the end of the Yayoi represented the transition from such an earth-cult to a heaven-based one in the Kofun era, a transformation for which sup­port can be found in the *Kojiki.*

TERASAWA (1989, p. 71) doubts that bells were regularly buried and ex­humed, since (in the cases where such information is available) there is never more than one pit at a hoard site and it seems to have been sealed with clay or fine soil. He also points out that no attempt appears to have been made to protect the bell in its pit, yet its functions both as a musical instrument and as a symbol of power would presumably have been im­paired by letting it rust underground for part of the year. HARUNARI (1987a, p. 4) has criticized Mishina's earth-cult concept on the grounds that it is extremely difficult to match evidence from mythological and ar­chaeological sources. Mishina himself acknowledged that the earth cult was still present in the *fudoki* of the Nara period and thus any change must have been gradual.

According to Harunari, the thick borders of *dataku* designs symbolize its role of confining the rice spirit:

The bronze bell was a magical vessel that confined grain spirits within the unhulled rice, that guarded them from other earthly spirits such as drought, heavy rain, and wind. Therefore, the place where the bronze bell was stored was the same place where grain spirits were stored. When grain spirits dwelled in the rice paddies after the sowing [and] before the harvest, the bells might have been kept in the storehouse and taken out to ring when necessary. (HARUNARI 1982, p. 330)

While this scenario may seem attractive, it does not rule out burial over the winter when the grain spirit returned to its home. As Terasawa pointed out, however, the context of most bell finds implies a final rest­ing-place. The question of the final burial of *dOtaku* is inseparable from the problem of why the bells dropped out of use at the end of the Late Yayoi. An explanation seems to be linked with their changing function against a background of increasing social complexity. As *dOtaku* are hardly ever found in houses or graves, KOBAYASHI Yukio (1959, pp. 50­51) argued that they were used and possessed by communities rather than individuals or powerful families. We have already mentioned Kanaseki's interpretation of the incised pottery sherd from Inayoshi as two *dOtaku* hanging from a tree (fig. 4). Okita has argued that two bells were standard for each ritual unit, an idea that is supported by the fact

that the majority of finds have been of even numbers (OKITA in *press,* and personal communication). Thus hoards with more than two *dOtaku* —which became common in the Late phase—may have been made by larger regional units than previously existed. Also in the Late Yayoi, *dOtaku* became bigger and more ornate but no longer depicted agricul­tural ceremonies. TANAKA (1970) has called these "bells for looking at" in contrast to the earlier "bells for listening to." HARUNARI (1991b, p. 38) suggests that a similar degeneration can be seen in the change from in­cised drawings to abstract signs on pottery, and that the "bells for listen­ing to" were buried at this stage.

We cannot really understand bell hoards without discussing bronze weapons, which were deposited in a similar fashion. There were three main types of Yayoi bronze weapons: swords, halberds, and spearheads. Local casting had begun by the end of the Early phase, and weapons produced in Japan developed quickly from their original forms into blunt, wide-bladed, "weapon-shaped ritual objects." Just as "bells for lis­tening to" became "bells for looking at," so "weapons to kill with" be­came ceremonial "weapons to look at" (SAHARA 1987a, p. 50).

Since the end of the last century it has been noted that bronze weap­ons were found mainly in north Kyushu, whereas bronze bells were cen­tered in the Kinai. From an early stage historians and archaeologists have argued that these represented political and/or ritual zones (see TANAKA 1991, pp. 167-74). Particularly influential was the suggestion in 1939 of the philosopher WATSUJI TetsurO (1977) that the Kyushu polity represented by the "blade zone" moved east, conquering the Kinai *ddtaku* polity and forming the Yamato state; Watsuji linked this with the eastward expansion of Emperor Jinmu as recounted in the *Nihon shoki.*

The reality, of course, is not as straightforward as Watsuji supposed. To begin with, the bell and blade zones were never totally exclusive. We have already mentioned the possibility that bells were originally pro­duced in Kyushu. Although actual *dataku* have not yet been found there, eight casting molds are known from Saga and Fukuoka, and bells may have been made in Kyushu and transported to the Chfigoku region (HARUNARI 1989). Similarly, ritual bronze weapons are also known in the Kinai and surrounding regions. A number of hoards are known where different types of bronze implements were buried together. The most spectacular example of this is KOjindani Ar13-V- in Shimane, where, between 1984 and 1985, six bells and 16 spearheads were found buried together some 7 m from another pit containing 358 bronze swords. As UEDA (1986, p. 403) pointed out, this unprecedented discovery "has stimulated a reexamination of the peculiarities of the bronze cultur[al] sphere[s] of the time, as well as a rethinking of the likely political configuration of the ancient Izumo area."

The question of chronological variation is crucial in understanding

Yayoi bronze distributions. Details vary between individuals, but most archaeologists agree that bronze zones became more polarized over time. Three major stages can be recognized. In the first, bell and weapon production began in Kyushu or perhaps simultaneously in Kyushu and the Kinai. Either way, regional interaction was high, culmi­nating in the second stage in the latter half of the Middle Yayoi. This was when the zones overlapped the most (cf. TERASAWA 1991a, p. 177). In contrast, the Late Yayoi saw the most polarization: the zones posited by TERASAWA (1991a, p. 179) and KoNDO (1987b, p. 175) hardly overlap at all, although a few stray finds still come from outside their respective territories.

Fig. 7 shows KondO's six Late Yayoi ritual zones. TERASAWA (1991a, p. 181) argues that the two Chugoku sword zones may not be contempo­rary and he omits them from his scheme. A more serious problem is the social meaning of these distributions. Japanese scholars have usually as­sumed they represent actual sociopolitical units of some sort. As BARNES (1988, p. 12) reminds us, however, "it is an axiom in anthropological re­search that the distribution of cultural traits does not unequivocally imply political integration. . . ." Thus we cannot automatically assume that the bronze zones directly reflect separate ethnic or political units. At the same time, we cannot ignore the possibility that bells and weapons were used as symbols to cement regional alliances, just as keyhole-shaped tombs served a similar purpose in the Kofun period. This sce­nario is one favored by most Japanese archaeologists, who see the fixed bronze zones of the Late Yayoi as reflecting increasing political unification. In particular, the dOtaku/halberd division is thought to rep­resent growing tension between large chiefdoms based in the Kinai and north Kyushu (HARUNARI 1989; KoNDO 1987c, p. 104; TERASAWA 1991a).

Over the 400 years of their use, Yayoi bronze implements underwent major changes from original secular bells and weapons to ritual objects used in agricultural ceremonies of the type discussed in the previous section. In the Late Yayoi they took on an increasingly symbolic power through association with political elites. They were finally abandoned at the end of the Yayoi when those elites had become so powerful that they were no longer in need of the ritual legitimation provided by the tradi­tional bronzes. Power structures were now negotiated through a new rit­ual system based around mirrors and tomb mounds. That system will be discussed later in this article.

*Life after Death*

An almost bewildering variety of burial types appears in the Yayoi. Many  
were short-lived or confined to certain regions, while others spread

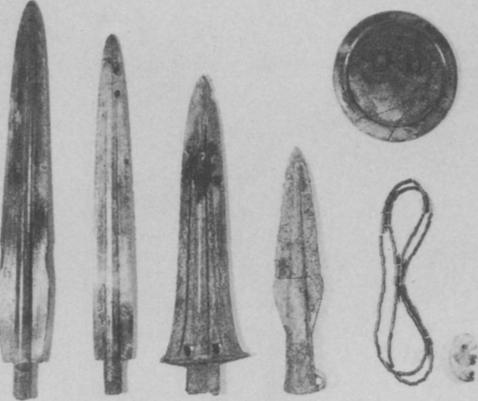
across wide areas or persisted for many centuries, with some continuing into the following Kofun period. A number of burial type's were discov­ered only in recent decades and are thus not mentioned in earlier En­glish reviews such as KANEKO (1968). The Yayoi period can be said to mark the beginning of large-scale formal cemeteries in Japan. Unlike in the Jomon, when many burials were made inside the village perimeter, Yayoi graves were usually separated from the actual settlement area.

Very few Yayoi burial types seem to have been directly copied from the continent, but one exception was the megalithic graves of Kyushu, which were clearly inspired by Korean dolmens. In this type of burial, the corpse was placed in an earthen pit, a jar, or a wooden or stone coffin; the grave was then marked by a monolithic capstone (fig. 8, no. 4). Though transmitted from Korea as early as the Initial Yayoi, these megalithic graves had a limited geographical and chronological distri­bution in Japan, centered in Saga and Nagasaki prefectures in the Initial and Early phases (see IWASAKI 1987).1° Contrary to expectation, this burial custom does not seem to have been limited to continental im­migrants. This is clear from the distribution of the megaliths, from the grave goods, and from the discovery of skeletal remains with JOmon characteristics from Initial and Early Yayoi megalithic graves at the Shinmachi VIBT site in Fukuoka (NAKAHASHI and NAGAI 1987). Not only were megaliths much less common in Japan than in Korea, they also seem to have been least popular with populations that came from the peninsula. An explanation for this unusual situation has yet to be found.

In the Fukuoka Plain area, pits with or without wooden coffins were the main burial type of the Early Yayoi. By the end of the Early phase burial jars for adults had appeared, marking the start of one of the most distinctive Yayoi burial customs (fig. 8, no. 1). These jars were made specifically for use in primary burials. They should thus be distin­guished from the small jars used for the secondary burial of adults known in eastern Honshu. Primary adult jar burials were not found out­side north KyfishU, except for a few examples in the south of that island. Although their appearance corresponds with a large influx of bronze, pottery, and other influences from the peninsula, adult primary jar burials are also unknown in Korea at this time and seem to have been an indigenous development.

An early jar burial site is Yoshitake-Takagi \*RA\* in Fukuoka City, where a cemetery dating from the end of the Early to the beginning of the Middle Yayoi contained 34 jar burials (of which 16 were for adults) and four wooden coffins. All of the coffin burials and eight of the jar

The term "Initial Yayoi" is used by some Japanese archeologists to refer to the period from the first evidence of rice agriculture to the beginning of the Early Yayoi (see HUDSON 1990, p. 65).



**Plate 1: Grave goods from coffin No. 3 at Yoshitake-Takagi, Fukuoka.**  
**Property of Bunka-cho; reproduced by permission.**

burials included grave goods. Most were limited to jasper, jade, or glass beads and/or a single bronze dagger, but in coffin no. 3 a bronze halberd, spearhead, and geometric-incised mirror were found in addition to two daggers (see FUKUOKA 1986). This grave, dating to the beginning of the Middle Yayoi, is thus the earliest example of the mirror-sword-jewel combination that was later adopted as the imperial insignia (Plate 1).

Jar burials *per se* cannot be interpreted as elite graves, since many sites have produced hundreds or even thousands of such jars, the majority of which contain no artifacts of any sort. Some jars, however, contain splendid collections of bronze weapons, mirrors, and other prestige goods. One jar at the Suku Okamoto Wkl\* site produced around 30 imported mirrors or fragments thereof. Such rich graves have been in­terpreted as the burials of the chieftains of the polities mentioned in the *Wei zhi.* These rich graves were often demarcated from other jar burials by position or by placement in an actual mound.

Traditionally it was thought that burial mounds only appeared in Japan in the Kofun period, but over the past twenty years or so it has become clear that mounds also existed in the Yayoi. There are a wide variety of Yayoi mounds and as many different opinions as to how they should be classified. As might be expected, terminology is a nightmare. The researchers can be roughly divided into two camps: the lumpers and the splitters. My own feeling is that lumping any grave with a raised mound into a single category may mask potentially meaningful varia‑

tion that is not yet undersood. I thus follow the terminology used in KANASEKI and SAHARA (1987), although I realize that it is not always easy to clearly distinguish between the categories they define.

The earliest Yayoi grave that can be called a mound-burial was, exca­vated at the Mine site in Fukuoka. Dating to the first half of the Early Yayoi, it is a rectangular feature some 18 m long, 13 m wide, 1 m high, and surrounded on three sides by a 1.7-in-deep ditch. This ditch may have continued on the fourth (south) side, but it had already been de­stroyed prior to excavation. At least seven pits that had possibly con­tained wooden coffins were found within this "mound" (KATAOKA 1991, p. 190; ODA 1990, pp. 91-92). The trend to demarcated burial features separate from other ordinary graves is clearly seen at Yoshinogari in Saga, where an oval mound some 40 m long and 30 m wide dates from the early first century BC. Its present height is 2.5 m, but it may origi­nally have been twice that size. Within the mound, the actual burials were placed in large jars. In that respect they did not differ from the jar burials of the contemporary cemetery surrounding the mound. In terms of grave goods, and placement within the huge mound, however, the in­dividuals entombed there were no doubt of the highest status at Yoshinogari (SAGA BOARD OF EDUCATION 1990, pp. 67-75; HUDSON and BARNES 1991, pp. 219-24).

Saving further consideration of Yayoi mounds until later, we must now look at eastern Honshu, where quite different burial practices ex­isted from those in the west of Japan. In the Early and first half of the Middle Yayoi, secondary burial was widely practiced from the TOkai to the south TOhoku regions. This custom was then replaced by moated burial precincts, which spread from the Kinai area. These precincts were only found as far north as Niigata and Ibaragi; beyond this line pri­mary pit burials, often containing jars, were the norm.

Secondary burials *(saisObo MfM )* involved the placement of human bones inside ceramic jars that are too small to have contained a primary adult burial. In the Yayoi they are thought to have appeared simulta­neously in the Mikawa and central Fukushima regions from the middle of the Early Yayoi: burials with one jar pit spread from the former re­gion and pits with multiple jars from the latter region (SHITARA 1988). There is considerable controversy over the origins of Yayoi secondary burials. SUGIHARA (1968) and HOSHIDA (1976) looked to the jar burials of the Final Jomon, but ISHIKAWA (1987, p. 152) notes that almost all such burials in eastern Japan are the primary interment of children. ISHIKAWA (1981, 1987), stressing the *process* of secondary burial, pro­poses Final Jomon bone pits and the reburial of cremated remains as more likely ancestors to this custom. Through recent work associated with the re-excavation of the Ikawazu 0+111\* site in Aichi, it has become clear that secondary burials did in fact exist in the Final Jomon

(HARUNARI 1988). Instead of ceramic jars, bones were reburied in simple pits. Cremated bones have also been found from this phase, providing another link with Yayoi practices (HARUNARI 1988, pp. 413-16; Ism­Kik VA 1988).

Our understanding of Yayoi secondary burial has been greatly ad­vanced by the work of a group of Gunma archaeologists (lijimA et al. 1986, 1987; ARAMAKI et al. 1988; TOYAMA et al. 1989). From a detailed analysis of the bones and teeth excavated from the Early Yayoi Oki N3 II site in Fujioka City, Gunma, they were able to suggest the following se­quence (ARAMAKI et al. 1988, pp. 81, 98): (1) death; (2) burial of the corpse in an earthen pit; (3) decomposition of soft tissue; (4) exhuma­tion of bones; (5) removal of several teeth for wearing by relatives; (6) insertion of bones and remaining teeth into a ceramic jar that was then buried in a separate pit; (7) cremation of bones that could not fit into the jar, followed by their return to the main pit; burnt animal bones were also included at this stage, possibly as offerings; and finally, (8) re­turn of teeth worn by relatives to the main pit after their deaths. Al­though it has not been possible to reconstruct all of these stages at any other site, at least some are present at many. Two reports on actual burial-jar pit sites excavated by Meiji University have quite long English summaries (SUGIHARA and OTSUKA 1974; SUGIHARA 1981). Cremated bones came from the Yatsuhagi Aril< cave in Gunma and human bones, and teeth with holes pierced for use as ornaments, are known from several sites (MIYAzAKI et al. 1985). Cut marks on bones from the Ourayama and Maguchi rHi n caves on the Miura Peninsula are interpreted by HARUNARI (1988, p. 417; 1991c, p. 101) as evidence of defleshing for secondary burial rather than cannibalism (an earlier in­terpretation by SUZUKI [1983, pp. 161-66]).

For various reasons interpretation of the meaning of secondary burial in Yayoi society is difficult. The actual bones were disarticulated and/or cremated so that they fitted into jars with narrow necks often of about 10 cm diameter. As these jars are usually found separate from settlement remains, the connection between village and cemetery is generally un­clear. TANAKA (1991, p. 115) writes that jars were buried in their pit on a single occasion.11 He further notes that many burial jars bear traces of having been carefully repaired, something which has been remarked upon by others. Of course, by its very definition multiple secondary burial involves a situation where individuals die at different times but are eventually reburied together. If Tanaka is correct, however, reburial may have been conducted only on special, limited occasions. As a possible ex‑

planation for this Tanaka proposes the existence of age groups, mem­bers of which were buried together. This hypothesis would be better supported if individuals of the same sex and similar age were found bur­ied together at a significant rate. Since no such examples have been found, Tanaka's hypothesis remains without supporting evidence. Al­though he further suggests that this type of age group-centered society was a continuation from the Jomon, this would seem to be ruled out in the case of grave no. 6 at Ikawazu, which contained two mature males, eight mature females, and three infants.

A related problem is the degree of social stratification represented by these secondary burials. TANAKA (1991, p. 115) takes the view that there were no status differences in east Honshu at this time, since everyone was buried in similar jars under similar conditions. Others, though, have interpreted the presence of grave goods and jars with sculptured faces as evidence of stratification. SUGIHARA (1981, p. 15) saw the beads from the Izuruhara secondary burials as evidence for the existence of "pow­erful chieftains," though it should be noted that such grave goods are rare at most other sites. SHITARA (1991b, p. 199) writes that since there is never more than one jar with a sculptured face in any given site, that jar must have contained the remains of a person with special standing.

With secondary burials, however, the link between grave goods and status is not direct. As TILLOTSON (1989, p. 7) points out, "A simple pot of secondarily transferred bones usually implies considerable funerary expenditure, even without other material remains." Secondary burial is a long term process with much scope for reinterpretation of status after death. For this reason it can be seen as a transitional custom, preceding the later moated burial precincts where status was already fixed before death.

The moated precinct was one of the most common types of Yayoi burial. They are normally either square or circular and contain wooden-coffin or pit burials in the center of the precinct and sometimes in the moat. Some Japanese archaeologists include these under the category of mound-burials. At the very least, the soil dug from the moat is likely to have been piled up inside the precinct. In most excavated examples, however, little or nothing of the original mound remains. More import­ant than the mere height of the burial is the role played by the grave in Yayoi society. Mound-burials such as that at Yoshinogari were clearly quali­tatively different facilities, designed for use by only the most powerful in­dividuals or families. Despite regional and temporal variation, moated precincts are interpreted us the resting ground of a wider segment of society.

The first moated burial precincts appeared in the Kinai around the middle of the Early Yayoi. From there they spread to the Kanto by the Middle phase and to Kyushu from the end of the Yayoi to the beginning of the Kofun period (TAsHIRO 1987). Within the basic form of a central

precinct surrounded by ditches, there is considerable variation in the way the moat was divided or "bridged." The division of space repre­sented by these burial precincts can be seen as a reflection of settlement space at a time when many villages were also surrounded by deep moats (MizuNo 1990, pp. 97-104). The ethnologist OBAvAsm TaryO (1987, pp. 170-72) has suggested that a symbolic link between the central burial area and the Onogoro island of the *Kojiki* land-creation myth might have served as a symbol of rebirth. It is not clear, however, how burials in the moat of the precinct might fit into such a scheme.

In the Kanto, moated burial precincts first appear in the Suwada

ill+1 phase of the early Middle Yayoi. This stage marked a major turn­ing point in that region since it witnessed, along with new mortuary cus­toms, the spread of moated villages and full-scale wet-rice agriculture. These trends culminated in the following Miyanodai I fi phase, when there was an explosive increase in the number of sites. The switch from secondary jar burials to moated precincts may be said to represent a major shift in beliefs about treatment of the dead and in social complex­ity, though it is possible that the same basic type of social organization was behind both burial practices. This is because the corporate groups stressing ancestral rights to land thought to be represented by moated precincts would also be a good way to explain secondary burials.

In contrast to the lack of consensus on secondary burials, it is quite widely accepted that these precincts were the graves of some sort of kin­ship-based agricultural production unit. Generally speaking, at any one site moated precincts are too numerous to have been elite burials, but too few to be the individual graves of every member of that settlement. Probably because the precinct mound was rather low and thus easily de­stroyed in later centuries, the actual burials are rarely recovered. From the few well-preserved cases, however, we know that in eastern Honshu the precinct usually contained a single central pit or coffin burial with occasional extra interments in the surrounding moat.

Let us look at some actual examples of moated precincts. At Miya­nohara p- in Kanagawa, a small Middle Yayoi settlement unit com­prised one large pit house, two to three small pit houses, and one square moated precinct. Such a site lends itself to interpretation as the remains of an extended family where the large building was the house of the family head and the moated precinct his grave (KomivA 1988, p. 153; NAKAYAMA 1989, p. 270).12 The type of unit apparently represented by Miyanohara conforms to what KONDO Yoshiro (1959) has termed a *tan'i shildan* MRXIal— literally "unit group," but which I translate here as

12 •

It IS assumed that the family head was, in fact, male, and HARUNARI (1991c, p. 101) sees

this as evidence for patrilocal residence in eastern Japan at that time.

"corporate group." Based on shared storage and paddy management, such groups have been widely posited for Yayoi society (e.g., TSUDE 1984; NAKAYAMA 1988). The corporate group is a concept that is partic­ularly effective for explaining moated precincts, though it assumes an unlikely equality between the component groups in any village. Otsuka JO\*, another site in Kanagawa, demonstrates this on a larger scale than Miyanohara. A moated village of about 22,000 m2, the Otsuka site dates primarily to the Miyanodai phase of the Middle Yayoi. Twenty-four square moated burial precincts were excavated 80 m southeast of the vil­lage, with which they were contemporary) Based on his analysis of this site, KOMIYA (1975) proposed the following hypotheses: (1) that each precinct was the grave of the smallest family unit, but (2) that there was considerable difference between the person interred in the center of the precinct and those buried in the moat; (3) that the cemetery could be divided into three main groups, which (4) could in turn be linked with three settlement clusters in the actual village (see also TSUDE 1984, pp. 136-39). These settlement and burial clusters seem to be the archaeo­logical correlates of corporate groups, possibly based on agnatic descent.

Even in east Honshu not all moated-precinct cemeteries follow ex­actly the same pattern as Otsuka and Miyanohara. In the Kinai quite different conditions obtained, with much clearer evidence of social stratification. Certain Kinai moated precincts were functionally more similar to the Kyushu mound-burials described earlier than to the Kanto precincts. At Kami bri in Osaka the late Middle Yayoi moated mound no. Y-1 had dimensions of 26 x 15m and was 2m high. Twenty-three wooden coffins were found on top of the mound, of which the cen­tral one was distinguished from the rest by both size and style of construction. Although grave goods were few—as was typical of the Kinai—social status appears to have been inherited, since even children were buried in the same way as adults. Furthermore, the Y-1 precinct was separate from the rest of the cemetery, like the Yoshinogari mound.

Yayoi mound-burials are currently such an active area of research that I am reluctant to write something that will, almost certainly, soon be out of date. Two aspects of these graves deserve special mention, how­ever. The first is the way they developed in tandem with growing social stratification throughout the Yayoi, both in terms of size and grave facilities and in their placement away from ordinary burials (see, e.g., PIGGOTT [1989] for the Izumo area). The second point is the great re­gional variation displayed by these mounds. In the following Kofun pe­riod many of those regional features came together to form a derivative

but remarkably standardized style of tomb mounds. These *kofun* will be discussed in the next section.

If preservation is good, it is usually easy to recognize prehistoric burial remains. A much harder task is to determine what sort of ceremonies were associated with the grave and its social and ideological meanings within a particular culture. In the case of the Yayoi we are fortunate that the *Wei zhi* provides some details of Wa funerals:

When a person dies, they prepare a single coffin, without an outer one. They cover the graves with [earth] to make a mound. When death occurs, mourning is observed for more than ten days, dur­ing which period they do not eat meat. The head mourners wail and lament, while friends sing, dance, and drink liquor. When the funeral is over, all members of the whole family go into the water to cleanse themselves in a bath of purification.

This passage is often taken as evidence of temporary interment of the type known in early historic Japan.14 The obvious concern with purifi­cation is reminiscent of later Shinto practices, though here it is strongly contrasted with a long period of uncleanliness during mourning. This contrast is developed in the next section dealing with the so-called "for­tune keeper":

When they go on voyages across the sea to visit China, they always select a man who does not arrange his hair, does not rid himself of fleas, lets his clothing get as dirty as it will, does not eat meat, and does not approach women. *This man behaves like a mourner* and is known as the fortune keeper. When the voyage turns out pro­pitious, they all lavish on him slaves and other valuables. In case there is disease or mishap, they kill him, saying that he was not scrupulous in his duties. [emphasis added]

The explicit analogy between the fortune keeper and the mourners suggests pollution may have been seen as a liminal state with its own spiritual power.

Some Yayoi mortuary rites are visible archaeologically. Features exca­vated around the Yoshinogari mound, for instance, have led to various suggestions as to ritual activities that may have been associated with that burial facility. Red-burnished ceremonial pottery found along a path that led from outside the village to the south "entrance" of the mound may have been used in rites conducted for the dead. TAKASHIMA (1990, p. 194) argues that the Yoshinogari mound served as a ritual focus of the

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The text may be interpreted as refering to this practice, but my statement in HUDSON and BARNES (1991, p. 218) that structures for temporary interment are mentioned in the *Wei zhi* is incorrect.

local polity centered on the site, and that in this function it can be compared to later *kofun* mounds.

Fig. 9: Jar with hole knocked into the side. Found in the moat of precinct No. 4 at Kane­no-O, Yamanashi. Height, 43 cm. Late Yayoi.

The majority of moated burial precincts produce pottery with a hole intentionally knocked in the side or bottom of the vessel (fig. 9). TASHIRO (1987, pp. 130-31) sug­gests that, rather than containing offerings for the dead, these vessels were used in funeral ceremonies like those described in the *Wei zhi,* after which they were symbolically destroyed and abandoned in the moat to remove the pollution of death from the living. Tashiro's theory has been criticized by ITO (1988) and YAMAGISHI (1989; 1991, p. 133) because it seems unable to explain the wide variation in find location and type of pottery. Some vessels, for example, are found lying on the bottom of the moat, while others appear to have been put in place after a certain amount of time had elapsed. Whatever the exact nature of the behavior represented by these vessels, it seems clear that we are dealing with funerary rites of some sort, rites that continued and became more formalized in the Kofun era.

This section has provided a general overview of Yayoi-period mor­tuary customs. Most of the discussion concentrated on classification of burial types and reconstruction of the social organization that the graves may represent. Both topics reflect the primary emphases of the Japan­ese archaeological literature. The first may seem a perfectly neutral ex­ercise, but even here we should be aware that we are forcing our own contemporary perspectives onto the past. In choosing whether to stress the mound or the moat of a grave, for example, we work on assumptions that may not have been held by the people who built that grave. As men­tioned in the introduction to this issue, there are also many problems with reconstructing social organization from mortuary remains. Al­though there has been little or no explicit discussion of the underlying assumptions, the approach to mortuary variability adopted by Japanese archaeologists is in many ways similar to that prevalent in Europe and America until the 1980s. Increasing burial complexity—as defined by the amount of labor involved in construction and the size of the grave—is held to mirror increasing social stratification (cf. Tanigawa in this

issue); development from communal to individual graves is another commonly posited scenario (e.g. TAKAKURA 1973, 1990). In the West this type of approach has been widely criticized over the past decade, mainly by archaeologists working within the British post-processual tradition. The main criticism is that, as BRADLEY (1989, p. 448) puts it, the dead do not bury themselves. Burials are not simply the passive reflection of so­cial relationships—they are actively created in the context of complex interests and social strategies. For such ideological reasons, real status may be masked or distorted in burials.

Interestingly, there was a partial realization of this problem at an early date in Japan. As noted above, there is an obvious difference between the quantity of grave goods in Yayoi Kyushu and the Kinai, a difference that cannot be explained by social status alone since the latter region was equally or more politically advanced than the former. Thus there could be no direct link between grave goods and social stratification (TAKAKURA 1973, p. 7). Despite this important exception, however, mortuary vari­ability has continued to be interpreted in a very passive way in Japan.

The post-processual critiques do not mean that the earlier approaches have no value whatsoever. Rather, like MORRIS (1991) we should attempt to combine the best of both worlds. Many aspects of Yayoi mortuary be­havior can be explained by the "traditional" hypotheses of SAXE (1970), BINFORD (1971), and others. With the rise of full-scale food production, the development of formal cemeteries can be linked to an increasing concern with ancestral rights to land. There is also a general correlation between mortuary heterogeneity, effort expenditure, and social stratification.15 What these hypotheses cannot explain, however, is the range of variability in Yayoi burial customs and clearly ideological fac­tors like the scarcity of grave-goods in the Kinai. The ostentatious grave-goods displays of Yayoi Kyushu represent exactly the sort of behavior that is best understood by a symbolic approach (cf. CANNON 1989), and

I look forward to further work on both of these aspects of Yayoi burials.

*Power, Gender, and Ideology: A Third-Century Religious Revolution?*

In the first section of this paper I discussed ritual change between the Jomon and the Yayoi. We must now move on to look at the transition from Yayoi to Kofun. The idea that this transition was marked by major ethnic, political, and religious changes has long been a common theme in Japanese scholarship.lb In a recent issue of this journal, Robert ELL‑

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Depending on one's definition, formal cemeteries may be said to have been present in theRmon period to some extent. One example would be the *kanjodori Iktk±li* of Late JOinon Hokkaido. Burial heterogeneity, however, clearly increased in the Yayoi.

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Of course there are numerous theories, which differ in matters of detail; in his

WOOD (1990) incorporated much of the traditional non-archaeological data relating to religious change in a theory that has a few original twists of its own. Ellwood takes the *Nihon shoki* and *Kojiki* accounts of the Em­peror Sujin's reign as the basis of his theory. This is a natural place to start, since all scholars are in agreement that important changes of some sort occurred during that reign. Sujin's Japanese name was Mimaki-iri­biko-iniwe-no-mikoto; the *iri-biko* element means "incoming prince," and the *Kojiki* further relates that his reign "was called [that of] Emperor Mimaki who first ruled the land" (PHILIPPI 1968, p. 208). In his "Horse-riders" theory EGAMI (1964) linked Mimaki with Mimana in south Korea and turned Sujin into a Korean usurper; in contrast, BARNES has made a good case that Mimaki was a Nara person (1988, pp. 18-19; see also 1984). Whatever his origins were, there seems little doubt that he marks a major political break. In Mizuno YU's influential three-dynasty scheme, Sujin's reign sees the start of the Old Dynasty, also known as the Miwa court since it was based around Mt Miwa in the southeast Nara Basin (MIZUNO 1952; cf. BARNES 1988, p. 11).

Based on the historical accounts, ELLWOOD (1990, pp. 204-205) pro­poses four basic themes of Sujin spirituality:

1 Female shamanism is repeatedly discredited, as in the story of the shamaness Yamato-to-momo-so-bime, who died by stabbing her­self in the genitals with a chopstick to atone for shaming her divine husband.

2 The simultaneous worship of both female (Amaterasu) and male (Yamato-no-Okunidama) gods in the palace was thought to be in­auspicious, causing Amaterasu to be removed to a nearby village in the care of a priestess, and later to be taken to Ise.

3 A vertical cosmology of ascensions to heaven via mountains became important.

4 Sujin's revelatory dreams appear to replace the trance-medium­ship of shamanesses, suggesting male spiritual supremacy.

Ellwood argues that these elements are the opposite of those that can be inferred for the time of the Empress Jingo, when religion centered on female shamanesses and a horizontal cosmology where spirits came across the sea; there was "no reference to the sun and little to heaven or to the masculine land deities" (ELLwoou 1990, p. 207). In the traditional chronology, of course, Sujin preceded Jingo, but Ellwood presents a convincing case that their order should be reversed. Associating Jingo with the queen Pimiko [Himiko] AM\* mentioned in the *Wei zhi,* he

"Horseriders" theory Eganti Namio, for example, argues for a split between the Yayoi/Early Kofun and the Late Kofun (Ec,.-kmi 1964). The actual oppositions involved, however, are re­markably similar in a majority of cases.

argues for a Sujin "religious revolution" that roughly coincides with the Yayoi-Kofun transition.

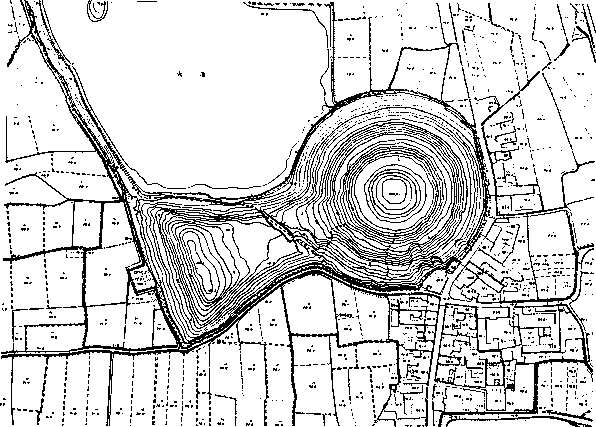
It is beyond my expertise or the scope of this article to evaluate all of the historical aspects of Ellwood's theory. What I want to do, however, is consider the archaeological evidence for ritual change at the end of the Yayoi to see how it may fit with hypotheses such as Ellwood's. There were two main aspects of this change: the abandonment of many Yayoi ritual practices and the establishment of a new ideological scheme cen­tered around tomb mounds. We have seen that bronze bells and weap­ons—the major ritual artifacts of the Yayoi—dropped out of use in the Late phase. As Ishino succinctly puts it in his paper in this issue of the *JJRS,* at the end of the Yayoi bronze ritual implements were "smashed, discarded, and buried." Ishino provides a number of concrete examples of that phenomenon. He also points out that such a dramatic negation of traditional ritual must have involved a major change in actual beliefs. Although his ideas are not developed in detail here, Ishino argues that Yayoi beliefs were replaced by a ritual complex based on mirrors and tomb mounds.

The Kofun period is widely defined as the period in which *kofun* ("tomb mounds") were in use (Y0sHIDA 1979, p. 399). The question thus becomes: What are *kofun?* While a precise definition is difficult if not im­possible, there are three main factors we need to consider: plan, size, and associated furnishings. In all cases the key word is standardization.

1. **Shape:** *Kofun* were constructed in a hierarchy of shapes, within which the keyhole plan was the most prestigious. The origin of the key­hole shape is unclear, although various theories have been proposed (cf. AMAKASU 1977, pp. 35-38; TSUDE *in press).* The contrast between the rather amorphous shapes of Yayoi mounds and the standardized sym­metry of the keyhole tombs seems hard to explain in the absence of con­tinental prototypes, yet recent research suggests that the front section may have developed from the projections on Yayoi mounds. The ideo­logical significance of the keyhole shape is unexplained, although it may reflect Chinese cosmological beliefs about the circle and the square as representations of heaven and earth. The rear part of the *kofun* (i.e., the circular part in the case of keyhole mounds) served as the actual burial. The front square section was attached onto this and is thought to have been a platform for conducting ceremonies for the deceased.
2. **Size:** Although small *kofun* also exist, the larger ones were of mon­umental proportions, comparable in size with the Pyramids of Egypt and the other great tombs of the ancient world. Apart from sheer massive­ness, many *kofun* were also built to strict proportions (see Hojo 1989).
3. **Burial facilities and grave goods:** *Kofun* possess distinctive burial furnishings. In the early part of the Kofun period these included stone-lined burial chambers dug down into the top of the mound, very long

cedar-log coffins, and grave goods comprising mirrors, swords, beads, and iron weapons and agricultural tools; around the mound were placed facing stones and special ritual ceramic jars and stands, which later evolved into *haniwa Mit .*

All of these features first appeared together at the Hashihaka *kofun* in Sakurai City, Nara in the late third century (fig. 10). Some 280 m long, Hashihaka is many times bigger than even the largest Yayoi mound. After Hashihaka, standardized keyhole-shaped *kofun* spread quickly, first around the Inland Sea and then east to the southern Tohoku in the fourth century. Shapes, tombs, and grave goods were re­markably similar within the hierarchy of *kofun,* suggesting a shared ideological system amongst the central and regional elites. Some ele­ments of the *kofun* ritual system show Chinese influence: TSUDE *(in press)* mentions coffin orientation, three-stepped rear mound construction, and a fondness for vermillion. In the Kinai and the regions directly influenced by Yamato power, chieftains were often buried with their heads pointing north (see fig. 2 in TSUDE *in press).* This was something that was not seen in the Yayoi period, and that Tsude believes indicates Confucian influence. The other two regions that made major contribu­tions to the *kofun* burial system were Kyushu and Kibi (Okayama). Fac­ing stones and the jars and stands that were ancestral to *haniwa* were derived from the Kibi area (KoNDO 1986; KONDO and HARUNARI 1967). We saw above how some Yayoi burials in Kyushu were very rich in grave goods, contrasting with the generally poor contents of Kinai graves. In



**Fig. 10: Hashihaka tomb mound, Sakurai. From SHIRAISHI et al. 1984.**

the Kofun period, the custom of burying the dead with sumptuous offerings spread to the Kinai. More importantly, the combination of mirror, sword, and curved jewel *(magatama )*—which first appeared in Kyushu in the Middle Yayoi—was adopted by the Yainato polity as a symbol of its authority.

As we defined *kofun* on the basis of standardization, it may seem strange to talk about "pre-standardized" *kofun.* Japanese archaeologists, however, use this term to refer to Late Yayoi mound burials that share certain pan-regional features. TERASAWA (1988) has argued for the exis­tence of what he calls "Makimuku-type keyhole tombs" dating to before Hashihaka. He defines this category primarily on the basis of plan pro­portions where the diameter of the rear circular mound is twice the length of the front projection. Like the building at the Makimukuidol site de­scribed by ISHINO *(this issue),* these *kofun* seem to have been built to a 32 cm unit of measurement known as the Lu Ban MIE *shaku.* Originating in eastern China during the Warring States era, this unit was considered auspicious and was used for temples and palaces in China; it is still used in contemporary Japan for temples and shrines, and is now known as the *mon-jaku PAR .* TERASAWA (1988, p. 105) provides a table of early *kofun* dimensions that appear very standardized when converted into this unit. The name "Makimuku-type" signifies his belief that these tombs drew their inspiration from the *kofun* of the Makimuku cluster in Sakurai, Nara, which was the center of the earliest Yamato polity. Mounds of this type, however, are found throughout a wide area from Shikoku to Chiba. The earliest, Tatetsuki *\*1M* in Okayama, dates from the end of the Late Yayoi (cf. KoNDO 1986). Tatetsuki is unusual in that it had two projections—both of which, however, fit Terasawa's Makimuku­type dimensions. The first easily recognizable keyhole form is found at Makimuku Ishizuka , which probably dates to the early ShOnai phase.

There can be little doubt, therefore, that major ritual changes did occur at the end of the Yayoi period. Before we can relate these archae­ological changes to historically-based theories such as Ellwood's "Sujin religious revolution," however, we need to consider their exact chronol­ogy. Early pre-standardized *kofun* appeared in the ShOnai ceramic phase or its regional equivalents. While there is considerable controversy over the time span occupied by this phase, most Japanese archaeologists place it within the third century. TERASAWA (1991b, pp. 117-18) argues that it began in the first and ended in the last quarter of that century. Terasawa's dates are slightly earlier than others, but there seems to be wide agreement that Shonai was produced during Pimiko's reign (TSUDE and YAMAMOTO 1990, pp. 154-55; SAHARA 1990, p. 186). It was still used after Pimiko's death around 250, and, since the Shonai ritual changes gained momentum as that phase proceeded, one could proba­bly argue (based on our present chronological understanding, or lack of

it) that a "religious revolution" occurred *after* Pimiko. This would fit with Ellwood's theory, but in reality most Japanese scholars have sug­gested that the major changes happened *during* the time of Pimiko.

According to the *Hou Han shu,* the country of Wa was in a state of un­rest during the reigns of Huan-di k\* (147-168) and Ling-di SA (168­189), although the *Liang shu* a narrows this down to the Guanghe

era (178-85) of the latter reign. Both the Wei and Han histories imply that Pimiko was made queen by communal consent in order to resolve the political problems of this unrest. The choice of a female apparently went somewhat against tradition:

[Yamatai] formerly had a man as ruler. For some seventy or eighty years after that there were disturbances and warfare. Thereupon the people agreed upon a woman for their ruler. Her name was Pimiko. She occupied herself with magic and sorcery, bewitching the people. Though mature in age, she remained unmarried. She had a younger brother who assisted her in ruling the country. After she became the ruler, there were few who saw her. She had one thousand women as attendants, but only one man. He served her food and drink and acted as a medium of communication.

This passage in the *Wei zhi,* more than any other, has fueled specula­tion about ritual and politics in late Yayoi Japan. Almost all scholars take it to mean that Pimiko's reign was politically and ritually different from what had gone before; many also believe that she marked a new stage of ritual unification (e.g., YAMAO 1990, pp. 129-37). If, as is widely ar­gued by both historians (e.g., YAMAO 1990) and archaeologists (e.g., SHIRAISHI 1991), this Kinai ritual confederacy (Yamatai?) was a direct predecessor of the early Yamato polity represented by standardized *kofitn,* then Pimiko's reign takes on an added importance.I

What was the exact nature of the changes that occurred during the time of Pimiko? The political status of the Kinai (Yamatai?-Yamato) con­federacy (both at the pre-standardized and standardized *kofun* stages) re­mains poorly understood. Certainly we cannot call it a state as Japanese historians once did. BARNES (1988) has pointed out that the existence of a shared ideological system symbolized by the *kofun* does not necessarily imply complete *political* unification from the very beginning of the Kofun

17 Some comments on my view of Yamatai may be appropriate here. I believe that in the Late Yayoi there were several regional chiefdoms of varying degrees of size and complexity. Two large chiefdoms, or confederacies of chiefdoms, appear to have been centered in north Kyushu and the Kinai, and one of these was probably Yamatai. Various lines of evidence sup­port the candidacy of both these areas, and it is possible that the compiler of the *Wei zhi* con­fused the two. Since the *Wei zhi* mentions places that we know were in Kyushu, a Kyushu location for Yamatai may be most reasonable. Such an identification, however, cannot avoid the fact that by the mid-third century, the Kinai polity was the more powerful of the two.

period. Neither does it imply, however, that the spread of *kofun* was a  
mere fashion, or that it did not involve some degree of political subor‑  
dination by the provincial polities, possibly in return for access to iron.

With respect to religious changes, our main source of evidence (apart from the archaeological data) is the *Wei zhi* passage quoted above. The "magic and sorcery" is Tsunoda and Goodrich's translation of the Chi­nese *guidao .* Most scholars have seen this as some sort of shaman­ism, although there is disagreement as to its origin and nature. Based on a comparative analysis of the use of the term *guidao* in the early Chi­nese texts, UEDA (1976, pp. 79-80) argued it may have contained Daoist elements. OBAYASHI (1977, pp. 187-88) suggests *guidao* can be under­stood as a type of "new religion" that suddenly gained popularity at a time of social crisis.

Both OBAYASHI (1977, pp. 166-68) and IsHINo *(this issue)* take up the proposal by the climatic historian YAMAMOTO (e.g., 1980) that a Little Ice Age at the end of the 2nd century caused an economic crisis, and argue that the decline of traditional Yayoi ritual was due to its perceived failure in the face of this crisis. Another factor may have been the rejec­tion of the traditional communal rituals based on bronzes after individ­ual status became highly developed. Whatever the ultimate cause, the Chinese historical accounts provide a good case for major ritual and po­litical changes occurring during the reign of Pimiko. Although the ar­chaeological transition continued after Pimiko, I believe that the major turning point occurred before her death.

Of course, moving this "religious revolution" back into Pimiko's time would seem to be fundamentally incompatible with Ellwood's theory, since he sees her reign as the embodiment of the archaic, female, Yayoi order. At this point it would be easy to argue that the archaeological and historical records are by nature so different as to offer little hope of re­solving a problem such as this. Their very lack of compatibility, however, means that the one cannot necessarily rule out the other. Three main points seem relevant here.

First, when characterizing the social and religious nature of the Yayoi we must be careful to avoid stereotyped generalizations of the Yayoi/ ritual/matriarchical versus Kofun/political/patriarchical type. Ellwood, like many before him, falls into the easy trap of seeing the Yayoi as the structural opposite of the Kofun. Likewise, EGAMI (1964, pp. 48-52) con­trasted a "peaceful, agricultural, magico-religious, South-east Asian" Yayoi and Early Kofun period with a "practical, warlike ... North Asian" Late Kofun, yet I would argue that the latter description fits the Yayoi better than the former. Of course this is not to deny there may be some truth in such contrasts, but they should be viewed as theories to be tested rather than received knowledge.

The second point is the need for careful and critical consideration of

the status of Pimiko. ELLWOOD (1990, p. 211) argues for a "patriarchal revolution" that replaced the "female spirituality characteristic of the Jingo/Pimiko religious era. . . ." As noted by EDWARDS (1985, p. 11), a similar view has been espoused by some Japanese scholars such as SAKIMA (1982[1926]) and TAKAMURE (1954), who accept "the notion of matriarchy as formulated by Morgan and others, and [see] Japanese his­tory as illustrating the shift from matriarchal to patriarchal society." This 19th century idea of matriarchy as an evolutionary stage preceding patriarchy has now been discredited in the West (EHRENBERG 1989, pp. 63-66), and the ethnographic record "offers no basis for assuming that female political roles were ever the rule " (EDWARDS 1985, p. 13). The work of historians and anthropologists who see Pimiko as a purely reli­gious leader sharing power with her brother who held secular authority (see OBAYASHI 1977, pp. 92-112) is also unconvincing, since the *Wei zhi* specifically mentions Pimiko conducted diplomacy in her own name and ethnographic parallels provide "no model for interpreting shamanistic abilities as a basis for achieving the kind of political power described for [Pimiko] in the *[Wei zhi]"* (EDWARDS 1985, p. 14). Edwards himself sees Pimiko not as filling the role of a female shamanistic queen, but as a woman who filled the primarily male role of a divine king.

Finally, even if a transformation from a horizontal to a vertical cos­mology and from female to male spiritual power did take place, such a change is likely to have taken a considerable time; the historical records may arguably telescope such a process into one reign, but the real change must have taken much longer. Archaeology is uniquely suited to the study of such long-term ritual phenomena, although it can be difficult to integrate archaeological data with that from other sources.

All this may seem rather pessimistic, but it is not intended to be so. Ar­chaeologically we can identify major ritual transformations that occurred in Japan during the 3rd century, a large chunk of which was occupied by the reign of Pimiko. The Chinese histories further imply that there were considerable religious and political changes during the time of this queen. To link these changes with those proposed by Ellwood and others from the native historical evidence is a difficult task, but one that should not be shied away from. At the very least we can agree on the pivotal im­portance of the third century in Japanese religious history.

*Conclusions: Ritual Continuity, Change, and the Yayoi*

While writing this article I have been aware of two major methodologi­cal problems that have no doubt been troubling many readers as well. These are the meaning of the ritual zones we recognized in the archae­ological record and the question of how we measure and explain ritual continuity and change. The first problem is part of a wider debate within

current archaeology as to the meaning of artifact variability. Earlier scholars assumed a direct link between ethnicity and different types of pottery or stone tools. Recently archaeologists have stressed the many cultural factors that can interfere in such a relationship, but serious the­oretical difficulties remain in their elucidation. This paper will have given some idea of the various ethnic, ideological, social, and political factors that can influence zone formation. Because of the phenomenal rate of excavation in Japan, the archaeological record there is suffi­ciently fine-grained to make study of the social meaning of prehistoric cultural zones extremely rewarding, and it is hoped that this will soon become a focus of Japanese research.

The second problem, of continuity versus change, also falls into a larger archaeological discourse as well as forming part of the debate on the origins of Japanese religion. In other words, we would like to know the relationship not just between Jomon, Yayoi, and Kofun ritual behav­ior, but also between Yayoi practices and "traditional" Japanese religion. Again, though, there are no easy answers. Apart from the question of recognizing and quantifying change in the archaeological record, there is the problem of assigning significance to those changes. In the case of the Yayoi, for example, we have seen that there was a distinctive set of burial customs and agricultural rites based around bronzes that were more or less unique to the Yayoi. On the other hand, we can recognize certain ritual practices that continue from the Jomon through the Yayoi and into modern Japanese society. One example is the use of miniature ceramic vessels in offerings. Similarities in such practices, however, do not rule out substantial changes in the meanings of the rituals con­cerned: formal similarities between ritual "hardware" does not mean that the "software" has remained the same. It is for this reason that I am unconvinced by the work of Japanese scholars who see prehistoric rit­ual not just as "primitive Shinto," but as a pure form of a native cult that was gradually overlain by foreign influences (e.g., UMEHARA 1992). As we have seen, the reality was quite different. Yayoi ritual was a rap­idly-changing mixture of beliefs and behavior, further complicated by high regional variation. While it is fair to say the Yayoi saw quite intense continental influences, that does not mean Jomon ritual was a static phenomenon, any more "pure" than the other stages of Japanese reli­gious history.

While keeping these reservations in mind, however, we cannot ignore the possibility of long-term structures in Japanese ritual. The reasonably detailed picture of Yayoi ritual we now possess means that it is possible to begin serious study of those structures. Through archaeology, Japan's ancient past can thus be interpreted in its own terms rather than through a priori assumptions derived from contemporary Japanese society.

REFERENCES

AMAKASU Ken

1977 The significance of the formation and distribution of *kofun. Acta Asiatica* 31: 24-50.

ARAMAKI Minoru , WAKASA T-OruSZ1C, MIYAzAxi ShigeOWMAft,

TOYAMA Kazuo , and IIJIMA Yoshio &AAA

1988 Oki II iseki ni okeru "sais-obo" no kozO: Shutsudo hone rui no bunseki kara IIIVIW--160-6 WWI apiCt—W±Vg©

-tfib, [On the structure of secondary burial at the Oki II site, Gunma Prefecture, Central Japan, from the study of the human bones]. *Gunma-ken ritsu rekishi hakubutsukan kiy5* 9: 59­98 (with English summary).

BARNES, Gina L.

1984 Mimaki and the matching game. *Archaeological Review from Cambridge* 3/2: 37-47.

1988 *Protohistoric Yamato: Archaeology of the First Japanese State.* Ann Arbor: University of Michigan Center for Japanese Studies and the Museum of Anthropology, University of Michigan.

1990 Early Korean states: A review of historical interpretation. In *Hoabinhian, JOmon, Yayoi, Early Korean States: Bibliographic Re­views of Far Eastern Archaeology 1990,* Gina L. Barnes, ed., 113­62. Oxford: Oxbow.

BINFORD, Lewis R.

1971 Mortuary practices: Their study and their potential. In *Ap­proaches to the Social Dimensions of Mortuary Practices,* J. A. Brown, ed., 6-29. Memoirs of the Society for American Archaeology 25.

BLACKER, Carmen

1981 Japan. In *Divination and Oracles,* Michael Loewe and Carmen Blacker, eds., 63-86, London: Allen and Unwin.

1983 Divination. Entry in *Kodansha Encyclopedia of Japan.* Tokyo: Kodansha.

BRADLEY, Richard

1989 Comment on Aubrey Cannon, "The historical dimension in mortuary expressions of status and sentiment." *Current Anthro­pology* 30/4: 448-49.

CANNON, Aubrey

1989 The historical dimension in mortuary expressions of status and sentiment. *Current Anthropology* 30/4: 437-58.

Doi Takashi ±BE

1984 Shury6 girei kara nOkO girei e mttiatb6mt1 L, [From hunting to agricultural ceremonies]. *In JOmon kara Yayoi e*

*b, t.^* [From Jomon to Yayoi], pp. 147-57. Edited and pub‑

lished by Tezukayama Kokogaku Kenkyujo, Nara.

EDWARDS, Walter

1985 Interpreting Himiko: Gender assumptions in the historiogra­phy of a third-century Japanese queen. Unpublished ms.

EGAMI Namio

1964 The formation of the people and the origin of the state in Japan. *Memoirs of the Toyo Bunko* 23: 35-70.

EHRENBERG, Margaret

1989 *Women in Prehistory.* London: British Museum Publications.

ELLWOOD, Robert S.

1990 The Sujin religious revolution. *Japanese Journal of Religious Studies* 17/2-3: 199-217.

FUJITA Sabur5 glEELEP13

1986 *Karako, Kagi iseki Fat •* NAM [The Karako-Kagi site] 22nd,

24th and 25th seasons. Nara: Tawaramoto-cho Kyoiku Iinkai. 1988 *Karako, Kagi iseki* [The Karako-Kagi site] 21st and 23rd seasons.

Nara: Tawaramoto-cho Kyoiku Iinkai.

1989 *Karako, Kagi iseki* [The Karako-Kagi site] 32nd and 33rd sea­sons. Nara: Tawaramoto-cho Kyoiku Iinkai.

FUKUOKA SHIRITSU REKISHI SHIRYOKAN tillmMAnt5MV-ht , eds.

1986 *Sawara Obo to sono jidai •• ATM* ©nit [The Sawara royal tombs and the period in which they were built]. Fukuoka: Fukuoka Shiritsu Rekishi Shiryokan.

HARUNARI Hideji 44 MM

1982 Dotaku no jidai nJa friM [The age of *ddtaku]. Bulletin of the Na­tional Museum of Japanese History 1:* 1-48 (English summary).

1987a DOtaku no matsuri X0 t [Rituals involving *dotaku* bronze bells]. *Bulletin of the National Museum of Japanese History* 12: 1-37. (English summary)

1987b Basshi fkikr [Tooth ablation]. In *Yayoi bunka no kenkyu 8: Matsuri to haka to yosooi,* KANASEKI & SAHARA, eds., 79-90.

1988 Mais5 no shomondaillx0)--arm [Various problems pertain­ing to burials]. In *Ikawazu iseki 133-)11C04* [The Ikawazu Site], Onoda et al., eds., 395-420. Atsumi, Aichi: Atsumi-ch5 Kyoiki Iinkai.

1989 Kyushu no dotaku )010MX *[DOtaku* from Kyushu]. *Kokogaku zasshi* 75/2: 1-50.

1990a Otoko to onna no tatakai [The interpretation of a

drawing of a fight sketched on *ddtaku]. Bulletin of the National Museum of Japanese History* 25: 1-30 (English summary).

1990b *Yayoi jidai no hajimari* I) [The beginning of the

Yayoi Period]. Tokyo: University of Tokyo Press.

1991a Tsuno no nai shika: Yayoi jidai no nolo girei 7 *is t l* —.34. 1141t0DA#Iiit [Deer without antlers: Agricultural rituals of the Yayoi period]. In *Nihon ni okeru shoki Yayoi bunka no seiritsu* H ic•$,,q-f" VJAH5t.'fL,OtAA [The formation of the earliest Yayoi culture in Japan], Takakura Hiroaki, ed., 442-81. Fuku­oka: Prof. Yokoyama Koichi's Retirement Memorial Committee.

1991b Kaiga kara e: Yayoi jidai ni okeru IVACO girei no seisui

kt1141-tK.- -6.vt6At4tSta) [From pic‑

tures to signs: The rise and fall of Yayoi agricultural ritual] *Bul­letin of the National Museum of Japanese History* 35: 1-65 (English summary).

1991c Shinzoku soshiki no henka EaogtiL [Changes in family

organization]. In *Yayoi bunka: Nihon bunka no genryi o saguru* [Yayoi culture: In pursuit of the origins of Japanese culture], Museum of Yayoi Culture, eds., 97-102. Tokyo: Heibonsha.

HASHIGUCHI, Naotake

n.d. The Izu Islands and the prehistoric and ancient culture of

eastern Japan. Ms submitted to *Asian Perspectives.*

HODDER, Ian

1990 *The Domestication of Europe.* Oxford: Basil Blackwell.

Hojo Yoshitaka

1989 The study of keyhole shaped tombs and Japanese archaeology. *Archaeological Review from Cambridge* 8/1: 81-90.

HOSHIDA Ryoji Fll

1976 Higashi Nihon Yayoi jidai shot() no doki to boseiV H \*kt.114ft VM0)±.X LAO [Pottery and burials of the earliest Yayoi pe­riod in east Japan]. *Shikan* 7: 10-52.

HUDSON, Mark J.

1990 From Toro to Yoshinogari: Changing perspectives on Yayoi period archeology. In *Hoabinhian, Jomon, Yayoi, Early Korean States: Bibliographic Reviews of Far Eastern Archaeology 1990,* Gina L. Barnes, ed., 63-111. Oxford: Oxbow.

1991 Miyanomae: An early rice paddy site in Yamanashi. *EAANnouncements* [Newsletter of the East Asian Archaeology Network] 5: 13-14.

HUDSON, Mark J. and Gina L. BARNES

1991 Yoshinogari: A Yayoi settlement in northern Kyushu. *Monu­menta Nipponica* 46/2: 211-35.

IijimA Yoshio AX aIii , MIYAZAKI Shigeo , and TOYAMA Kazuo

m-ufri\*

1986 Yatsuhagi (Mutsu iseki shutsudo jinkotsu ni okeru basshi no keifu AAT i17gilUW±Aiti,L1-60-Ztkit(v)API [On the extrac­tion of human teeth in the Yayoi period from the Yatsuhagi cave]. *Gunma-ken ritsu rekishi hakubutsukan kiyo* 7: 45-74 (with English summary).

1987 Iwayuru "saisObo" no saikento ni mukete no yosatsu—Tokuni shutsudo honerui ni shOten o atete TTF-M r-MVIJ opM4Irste-\_-

-c ayTo\_ iqra±littor\_iiw t c [Preliminary report of  
the reinvestigation on so-called "secondary burial"—with spe­cial emphasis on the human bones]. *Gunma-ken ritsu rekishi hakubutsukan kiyo* 8: 21-50 (with English summary).

INOUE YOichi

1990 Inoshishi kara shika e: DObutsu ishO kara mita JOmon shakai kara Yayoi shakai e no henka -f gAt,:a5ca-A-b,6t1±-k--NaDRIE [From wild boar to deer: An aspect of change in prehistoric society seen in the artistic representation of animals]. *Kokugakuin Daigaku kokogaku shiryOkan kiyo* 6: 27-39.

ISHIKAWA HideShi 31 I H lk

1981 Mikawa, Owari ni okeru Yayoi bunka no seiritsu ER • WIK `st.3Zta-DA.i.k [The formation of Yayoi culture in the Mikawa and Owari regions]. *Sundai shigaku* 52.

1987 SaisObo N#K [Secondary burials]. In *Yayoi bunka no kenkyil 8: Matsuri to haka to yosooi,* KANASEKI & SAHARA, ed., 148-53. 1988 Jomon, Yayoi jidai no shojinkotsu

[Burnt human bones of the JOmon and Yayoi periods]. *Sundai shigaku* 74: 84-110.

ITO Toshiyuki DEFS

1988 Tokyo wan seigan ryuiki ni okeru hOkeishilkObo no kenkyu II \*TrAVAWN,IA1(::161,t6iPMXIoDli/M II [A study on the square moated burial precincts of the western drainage of Tokyo Bay II]. *TOkya-to maizO bunkazai senta kenkyil ronshil* 6: 1­69. (English summary)

IWASAKI Jiro tkt=1P13

1987 Shisekibo xi [Dolmen burials]. In *Yayoi bunka no kenkyft 8: Matsuri to haka to yosooi,* KANASEKI & SAHARA, eds., 91-97.

KANASEKI Hiroshi NI

1986 Jujutsu to matsuri IR\* A [Magic and ritual]. In *Iwanami kOza Nihon kokogaku 4: Shgraku to saishi* tR-Mk H\*-t!-7-' 4: \*X AC [The Iwanami Archaeology of Japan 4: Settlements and

rituals], KonclO Yoshiro et al., eds., 269-306. Tokyo: Iwanami Shoten.

KANASEKI Hiroshi and SAHARA Makoto, eds.

1987 *Yayoi bunka no kenkya 8: Matsuri to haka to yosooi* t4A,fLo)49M 8:ALELXI.,, [Research on Yayoi culture 8: Ritual, graves and ornaments]. Tokyo: Yuzankaku.

KANEKO Erika

1968 Areview of Yayoi burial practices. *Asian Perspectives* 9 (1966): 1-26.

KANZAWA YUichi BRA

1990 Jujutsu no sekai: Kotsuboku no matsuri :

[A world of sorcery: Oracle bone rituals]. In *Yayoijin to matsuri* tt.AL [Rituals and the Yayoi people], Ishikawa Hideshi, ed., 67-107. Tokyo: Rokko.

KASHIWAKURA Ryokichi MAAiti

1961 Misakiyama shutsudo no seidOtO Hiliklilli:H±.0)\*OU [A bronze knife excavated at Misakiyama]. *Tohoku kokogaku* 1: 1-12.

KATAO KA Koji #I4

1991 Kyushu chihO no Yayoi-bo [Yayoi graves in

Kyushu]. In *Genshi, kodai Nihon no bosei* 1A7-, tit 1=1\*0-)I$11 [The burial systems of prehistoric and ancient Japan], Yama­gishi Ryoji, ed., 188-204. Tokyo: Dosei.

KIDDER, J. Edward, Jr.

1991 Ritual in the late JOmon period. Paper presented at the 12th Congress of the International Union of Prehistoric and Proto­historic Sciences, Bratislava, Czechoslovakia, September.

KOBAYASHI Hirokazu and SATOMURA KOichi ffl.f4A‑

1987 Mura no rekishi—Kodai tstoplif— tft [The history of the vil­lage: Ancient period]. In *Mukawa sonshi* [A history of Mukawa village], 235-65.

KOBAYASHI Tatsuo %MAIO

1991 Jamon bunka to Yayoi bunka 1450Z1L UOmon cul‑

ture and Yayoi culture]. In *Yayoi bunka: Nihon bunka no genryfi o saguru,* Museum of Yayoi Culture, eds., 212-17.

1992 Regional organization in Jomon Japan. Translated with Intro­duction by Mark Hudson and Mariko Yamagata. *Arctic Anthro­pology* 29/1.

KOBAYASHI Yukio 1.1\\*FT/4E

1959 *Kofun no hanashi* tMoD,71 [Talking about *kofun].* Tokyo: Iwanami.

[Middle Yayoi square moated burial precincts]. In *Saikachido iseki* [The Saikachido site], Sakaue Katsuhiro and Sakamoto Akira, eds., 159-84. Yokohama: Yokohama-shi Maizo Bunkazai ChOsa Iinkai.

1988 Kanagawa-ken tobu no hOkeishukObo\*7)11AWIT50)RXE [Square moated burial precincts of east Kanagawa]. In *Higashi Nihon no Yayoi bosei* FIAKopt.E$11 [The Burial Systems of Yayoi East Japan], Kita Musashi Kodai Bunka Kenkyukai, eds., 140-70. Gunma: Gunma-ken Kokogaku Kenkyujo, Chikuma­gawa Suikei Kodai Bunka Kenkyujo, and Kita Musashi Kodai Bunka Kenkyukai.

RONDO Takaichi An‑

1987a Seidosei saigu wa naze umeraretaka WirdligAi/4c-05

tt,t: b4 [Why were bronze ritual implements buried?]. Round table discussion with Ishino Hironobu in *Kofun hassei zengo no kodai Nihon* --MAtilfaapt-ft 19\* [Ancient Japan at the time of the appearance of tomb mounds], Ishino Hironobu, ed., 107-132. Tokyo: Owa Shobo.

1987b SeidOki to tekki: JuyO to tenkai Wflqigg NRO[Bronze

and iron implements: Acceptance and development]. In *Asahi hyakka Nihon no rekishi* [The Asahi encyclopedia of Japanese his­tory] 39: 172-78.

1987c SeidOki o megutte -C [An overview of bronze

implements]. In *Kofun hassei zengo no kodai Nihon,* Ishino Hiro­nobu, ed., 90-106..

KoNDO Yoshiro Affia.R13

1959 Kyodotai to tan'i shudan #14f\*L WAtIal [Corporate groups and the community]. *Kokogaku kenkyri* 6/1: 13-20.

1986 The keyhole tumulus and its relationship to earlier forms of burial. In *Windows on the Japanese Past: Studies in Archaeology and Prehistory,* R. Pearson, G. Barnes, and K. Hutterer, eds., 335­48. Ann Arbor: University of Michigan Center for Japanese Studies.

KoNDO Yoshiro and HARUNARI Hideji

1967 Haniwa no kigen tailkoMfg [The origins of *haniwa]. Kokogaku kenkyit* 13/3:13-35.

KURAKU Yoshiyuki .TA,43.&

1990 Dotaku no matsuri *ap* t 19 *[Dotaku* rituals]. In *Yayoifin to*

*matsuri* [Rituals and the Yayoi people], Ishikawa Hideshi, ed., 29-65. Tokyo: Rokko.

MISHINA Shoei EirPE4\*

1968 Dotaku shOko 1140/1\ [Some thoughts on *dotaku]. Chosen gakuho* 49: 361-73.

MIYASHITA Kenji '-g-FltiA

1983 Jomon dogu no shOen iit5c±NaDR-A [The end ofJomon clay figurines]. *Shinano* 35/8: 78-101.

MIYAZAKI Shigeo 704116, TOYAMA Kazuo M-LLIT-1 , and IIJIMA Yoshio 1985 Nihon senshi jidai ni okeru hito no hone oyobi ha no senko ni tsuite H \*3t5e.[141-t itL t61,3- t 1- op 'it$31

[Perforated human bones and teeth in prehistoric Japan]. *Gunma-ken ritsu rekishi hakubutsukan kiyo* 6: 77-108.

MIZUNO Masayoshi 71(FfIlff

1990 Bunmei no dojo -Shimaguni no genzo ZEIA0)±.-4K10)1ge. [The foundation of civilization-The original state of an island nation]. Tokyo: Kadokawa.

MIZUNO Yu 71st

1952 *ZOtei Nihon kodai OchO shiron josetsu i of* H\*tfuoi-gm4v [Revised introduction to theories of the ancient Japanese dy­nasties]. Tokyo: Komiyama Shoten.

MORRIS, Ian

1991 The archaeology of ancestors: The Saxe/Goldstein hypothesis  
revisited. *Cambridge Archaeological Journal* 1/2: 147-69.

NAKAHASHI Takahiro 1:11114\*4 and NAGAI Masafumi \*)-HaU

1987 Fukuoka-ken Shima-chO Shinmachi iseki shutsudo no JOmon, Yayoi ikoki no jinkotsu AN-;p:„\*ffil-fatritg3M+o)43 • t;t

fitioDA\* [Transitional JOmon-Yayoi human skeletal re­mains from the Shinmachi site, Shima-chO, Fukuoka Prefec­ture]. In *Shinmachi iseki* [The Shinmachi site], Hashiguchi Tatsuya, ed., 87-105. Shima, Fukuoka: Shima Municipal Board of Education.

NAKAMURA Tomohiro rPtIA-1\*

1987 Buki-gata saiki AtRiM [Weapon-shaped ritual implements].

In *Yayoi bunka no kenkyu 8: Matsuri to haka to yosooi,* KANASEKI et

al., eds., 25-31.

NAKAMURA Yoshiyuki LIA4A\*

1989 Nemuro-shi Hattaushi 20 iseki shutsudo no dogu 413MVJEEI. 20 31VAM±O±A [Clay figurines excavated from the Hattaushi 20 site, Nemuro]. In *Hattaushi 20 iseki hakkutsu chasa hOkokusho* VJEISI,t- 20 ingeNVIA0.156 [Excavation report of the Hattaushi 20 site], Kawakami Jun JILL 4 and Toyohara Shoji CARTA , eds., 43-55. Nemuro, Hokkaido: Nemuro Board of Education.

NAKAYAMA Seiji lira=

1988 Yayoi jidai shumatsu ni okeru Uenodaira iseki no shuraku kOzO

.[14ft rf 0-6 \_E. txma [The settlement structure of the final Yayoi Uenodaira site]. Yamanashi Kenritsu Koko Hakubutsukan and Yamanashi-ken Maizobunkazai Senta *Kenkyii kiyO* 4: 31-51.

1989 Chubu, Kanto chiho no Yayoi shadanbo no kosei ni tsuite *rtafig ,* RMitopi-§tfliolflili/L--)L,-C [The structure of Yayoi community graves in the Chau and Kanto regions]. In *Yamanashi kokogaku ronshfi* LLIA4---4.--At [Papers on Yamanashi archaeology], Volume II, 265-83.

NIITSU Takeshi 14\* f\*

1986 Yamanashi ni okeru Jomon bunka no dento to shOmetsu LEAK\_

64i13 L,6Dtk ifig [Jomon culture in Yamanashi: Tra­dition and decline]. In *Yamanashi kokogaku ronshf t,* Volume I, 179-204.

NIITSU Takeshi and YAMAKI Yoshio AA gfiLi• , eds.

1989 *Kinsei iseki II* 5t5114[The Kinsei site II]. Kofu: Yamanashi-ken Kyoiku Iinkai.

NISHIMOTO Toyohiro MK34

1989 ShimogOri-kuwanae iseki shutsudo no dabutsu ital-FliSAratU W±apatlf\* [Faunal remains excavated from the Shimogori­kuwanae site]. In *Shimogari-kuwanae iseki* [The Shimogori­kuwanae site], Takahashi Nobutake, ed., 48-61. Oita, Kyushu: Oita Prefectural Board of Education.

1991a Jomon jidai no shika, inoshishi shury6 iffiZi4ftv).:%t , AcIlit [Deer and wild boar hunting in the Jomon period]. *Kodai* 91: 114-32.

1991b Yayoi jidai no buta ni tsuite Ant.1#41-top 3t -D L 't [Pigs in the Yayoi period]. *Bulletin of the National Museum of Japanese History* 35: 1-65.

NOMURA Takashi filf

1985 *Hokkaido Jomon Jidai shilmakki no kenkyu* t ACo\*ftgltii 0)43f [A Study of the terminal Jomon Period in Hokkaido]. Sapporo: Miyama ShobO.

OBAYASHI TaryO t\*t

1977 *Yamataikoku .* Tokyo: Chao KOronsha.

1987 Jomon to Yayoi no haka: Minzokugaku teki kaishaku RA0DE- l 7 fg [Jomon and Yayoi graves: An ethno‑  
graphic explanation]. In *Yayoi bunka no kenkyu 8: Matsuri to haka to yosooi,* KANASEKI & SAHARA., eds., 165-73.

ODA Fujio iJNEEra±\*

1990 Yayoi jidai no hokubu Kyushu-J-,.1E141t0D1LII,3)1,)+1 [North

Kyushu in the Yayoi period]. In *Wakoku tairan to Yoshinogari*

[Yoshinogari and the Wa Unrest], 71-115.

Tokyo: Yamakawa.

OKITA Masaaki 'MAWR

in press Dotaku no hakken o motomete *1770)376N,t L255-C* [On the trail of bronze bell finds]. *Toni Daigaku oyasato kenkyujo kaihO Xg.\*\* 1-* LOMPA-A-\* 6.

OsmmA Naoyuki

1990 Kita no bunkatapiE [The culture of the north]. In *Ningen no bijutsu 2: Me to kernyoku* ArHia)4. 2: ICJ [Human art 2: Rice and power], Umehara Takeshi, general editor, 80-87. Tokyo: GakushO Kenkyusha.

PHILIPPI, Donald L.

1968 *Kojiki.* Tokyo: University of Tokyo Press.

PIGGOTT, Joan R.

1989 Sacral kingship and confederacy in early Izumo. *Monumenta Nipponica* 44/1: 45-74.

SAGA BOARD OF EDUCATION fkliMtfc\*VA-A-, eds.

1990 *Yoshinogari iseki gaihO* \* [The Yoshinogari site:

Preliminary report]. Tokyo: Yoshikawa Kobunkan.

SAHARA Makoto a

1960 Dotaku no chOzi5 minoom [The casting of bronze bells]. In *Sekai kokogaku taikei* [World archaeology series] Vol. 2, pp. 92-104. Tokyo: Heibonsha.

1980 Yayoi doki no kaiga 1.±.0DicatA- [Pictures on Yayoi pottery]. *Kokogaku zasshi* 66/1: 102-17.

1987a The Yayoi culture. In *Recent Archaeological Discoveries in Japan,* Tsuboi Kiyotari, ed., 37-54. Paris and Tokyo: UNESCO and The Centre for East Asian Cultural Studies.

1987b *Nihonjin no tanjo* [The birth of the Japanese]. Tokyo: ShOgakkan.

1990 Round-table discussion in *Wakoku tairan to Yoshinogari* [Yoshinogari and the Wa Unrest], Otsuka Hatsushige et al., 117-247. Tokyo: Yamakawa.

in press Rice growing and the Japanese. *Acta Asiatica* 63.

SAHLINS, Marshall

1972 *Stone Age Economics.* Chicago: Aldine.

SAKIMA KOei

1982 *Nyonin seiji kO: Jinrui genshi kihon no kenkyli A-AereA-* : ANJAMA\*0)FR [A consideration of female government:

Basic research on primitive people]. Shisensha (reprint: 1st edi­tion 1926).

SAXE, A. A.

1970 Social dimensions of mortuary practices. Ph.D. thesis, Univer­sity of Michigan. Published by University Microfilms, Ann Arbor, 1973.

SHIRAISHI TaichirO --1313

1991 Yamataikoku jidai no Kinai, Tokai, Kanto ffmtariv-tioNm ,

, N1V [The Kinai, Tokai and Kant() in the age of Yamatai]. In *Yamataikoku jidai no higashi Nihon* ffiLlgt, MI4f-toDA Fl\* [East Japan in the age of Yamatai], National Museum of Japanese History, ed., 45-71. Tokyo: Rokko.

SHIRAISHI Taichiro, HARUNARI Hideji fi!Z\*M , SUGIYAMA Shinsaku 1111M, and OKUDA Hisashi AIEB

1984 Hashihaka kofun no saikentO WItilapNittf [Rethinking the Hashihaka tomb]. *Bulletin of the National Museum of Japanese History* 3: 41-80 (English summary pp. 276-77).

SHITARA Hiromi •=a14E,

1988 SaisObo kenkya no genjO to kadaiMOEFVDNA Mfg [Prob­lems on the study of secondary burials]. *Kokogaku zasshi* 74/2: 108-109.

1991a Yayoi jidai no noko girei /Ft.1\*{-toD1 1 t [Agricultural rit‑

uals of the Yayoi period]. *Kikan kokogaku* 37: 59-64.

1991b Kant() chilli-co no Yayoi bunka Dtl\*itopt.3ZIL [The Yayoi culture of the KantO]. In *Yayoi bunka: Nihon bunka no gen7y27 o saguru,* Museum of Yayoi Culture, eds., 196-202.

SUGIHARA Sosuke

1968 Fukushima-ken Narita ni okeru shotateana to shutsudo doki 161 M *irt* M±±,U [Smalls pits and their ex­cavated pottery from Narita, Fukushima Prefecture]. *KOkogaku shithan* 4/2: 19-28.

1981 Tochigi-ken Izuruhara ni okeru Yayoi jidai no saisobogun It7KR-IMIg .1A1341-taDN4tRIT [The Yayoi period sec­ondary burial cemetery at Izuruhara, Tochigi]. Meiji Univer­sity, Faculty of Arts Research Report, Archaeology 8. Tokyo: Meiji University.

SUGIHARA SOsuke and OTSUKA Hatsushige 1\*/93&

1974 Chiba-ken Tenjinmae ni okeru Yayoi jidai chuki no boshi 1-Vw- VT 0- $151041-trilIgoatE[Cemeteries of Middle Yayoi age at Tenjinmae, Chiba Prefecture]. Meiji University, Faculty of Arts Research Report, Archaeology 4. Tokyo: Meiji University.

SUZUKI Hisashi

1983 Hone kara mita Nihonjin no rinsu Fl\*A0Dil— 7

[The roots of the Japanese as seen from bones]. Tokyo: Iwanami Shinsho.

TAKAKURA Hiroaki AA-gt

1973 Funbo kara mita Yayoi jidai shakai no hatten katei tAl-ta-A-0)561456.1q [The development process of Yayoi so‑

ciety as seen from graves]. *Kokogaku kenkyil* 20/2:7-24.

1990 Haka ni arawareta Yayoi shakai no tokushitsu wa nani ka iL,45

i-Di-Li-,:j5t.a-A-oplqWitf1b, [What distinguishing character­istics of Yayoi society are visible in graves?]. In *Sdten: Nihon no rekishi* : 1=1 \*(7O LIE 5e. [Points of debate: The history of Japan] Vol. 1, Suzuki Kimio, ed., 255-70. Tokyo: Shinjinbutsu Juraisha.

TAKAMURE Itsue rwi

1954 *Josei no rekishi* kitoDIM [A history of women]. Tokyo: KOdansha.

TAKASHIMAAZT‑

1990 Comment in Shinpojumu: Wakoku Tairan to Yamataikoku [Round table discussion: The Wa Unrest and Yamatai]. In *Wakoku tairan to Yoshinogari* [Yoshinogari and the Wa Unrest], 117-247.

TANAKA Migaku FE111:1

1970 "Matsuri" kara "matsurigoto" e rt'Oi) *b,6 r t-D*

[From ritual to ritual government]. In *Kodai no Nihon 5: Kinki* [Ancient Japan 5: the Kinki district], Tsuboi Kiyotari and Kishi Toshio, eds., 44-59. Tokyo: Kadokawa Shoten.

1991 *Wajin sOran l* AL [The Wa Unrest]. Tokyo: Shueisha.

TASHIRO Katsumi SAE

1987 Hokeishaobo 1 3ii)'MPE [Square moated burial precincts]. In *Yayoi bunka no kenkyit 8: Matsuri to haka to yosooi,* KANASEKI & SA­HARA, eds., 148-53.

TERASAWA Kaoru X

1988 Makimuku-gata zenpo-kOenfun no chikuzo

OC.S. [The construction of Makimuku-type keyhole-shaped  
tombs]. In *Kokogaku to gijutsu* 4394 [Archaeology and tech‑  
nology], Mori Koichi, ed., 99-111. Kyoto: Doshisha University.

1989 Seidoki mainO no igi WM54 ,r.opfta [The significance of bronze hoards]. *Kikan kakogaku* 27: 66-74.

1991a Yayoi jidai no seidoki to sono matsuri ttlietoDWO415

0).7 'Y 9 [Yayoi-period bronzes and ritual]. In *Kokogaku: Sono mikata to kaishaku :* XV [Archaeology: Ap­proaches and interpretations]. Vol. 1, Mori Koichi, ed., 139-84. Tokyo: Chikuma ShobO.

1991b Yayoi jidai kara Kofun jidai e [From

the Yayoi to the Kofun period]. Round table discussion with Owa Iwao. *Higashi Ajia no kodai bunka* 69: 116-46.

TILLOTSON, Dianne

1989 Mortuary patterning and the evolution of the rice ancestors. *Indo-Pacific Prehistory Association Bulletin* 9: 1-14.

TOYAMA Kazuo, MIYAZAKI Shigeo, and IrjimA Yoshio

1989 Saisobo ni okeru senko jinshikotsu no imi

V-LASytorAA [The significance of perforated human teeth and bones in secondary burials]. *Gunma-ken ritsu rekishi hakubutsukan kiya* 10: 1-30.

TSUDE Hiroshi affiit

1984 MAO shakai no keisei A#ZE-A-0DRA [The formation of agri­cultural society]. In *KO- za Nihon rekishi Genshi, kodai 1* [The his­tory of Japan I: Prehistory and ancient history 1], Rekishigaku Kenkyukai and Nihonshi Kenkyakai, eds., 117-58. Tokyo: University of Tokyo Press.

in press The Kofun period and state formation. *Acta Asiatica* 63.

TSUDE Hiroshi and YAMAMOTO Saburo LuAK.E--As , eds.

1990 *Yamataikoku no jidai* g,g-t-,111appit [The age of Yamatai]. Tokyo: Mokujisha.

TSUNODA, R. and L. C. GOODRICH

1951 *Japan in the Chinese Dynastic Histories.* South Pasadena, Ca.: PD and Ione Perkins.

UEDA Masaaki \_LIBEOR

1976 ***Wakoku*** *no sekai* 0o-g- [The world of the Wa]. Tokyo:

**KOdansha.**

1986 A fresh look at ancient history. *japan Quarterly* 23/4: 403-409.

UMEHARA Takeshi JP:

1992 *Nihonjin no tamashii* 1=1\*A0D4 [The soul of the Japanese]. Tokyo: KObunsha.

WATANABE Makoto /1m

1991 Kunkok-ri kaizuka shutsudo no bokkotsu no kenkyfigV6MAQ *Wor) F* \*0FR [A study of the oracle bones excavated from the Kunkok-ri shell midden]. *Nagoya Daigaku Bungakubu kenkyft ronshit (shigaku)* 37: 127-59.

WATSUJI TetsurO frtiltAIS

1977 Nihon kodai bunka 19\*-NitZL [Ancient Japanese culture]. In *Watsuji Tetsuro zenshft* la11l3 [Collected works of Watsuji TetsurO], vol. 3. Tokyo: Iwanami Shoten.

YAMAGISHI Ryoji 1111—

1989 Senko dokiron sobyo VTL±Rgi-k\*Ig [An outline of theories on perforated ceramics]. *Shikan* 21:109-22.

1991 Saisobo NXI [Secondary burials]. In *Genshi, kodai Nihon no bosei JAM •* t-ft H \*0D$11 [The burial systems of prehistoric and ancient Japan], Yamagishi RyOji, ed., 105-19. Tokyo: Dosei.

YAMAMOTO Takeo I11\*.A

1980 Ni, san seiki no kik() 2 • 3 -ftfEopfiR [The climate of the 2nd and 3rd centuries]. In *Sanseiki no kOkogaku* [The archaeology of the third century]. Tokyo: Gakuseisha.

YAMAO Yukihisa 111%\*X

1990 Sanseiki no Nihon EitkoD El\* [Japan in the third century].

In *Yamataikoku no jidai,* TSUDE *&* YAMAMOTO, eds., 119-39.

YAMAUCHI Noritsugu LIJME

1987 Yosumi tosshutsubo INI3FMX [Four-cornered burial mounds].

In *Yayoi bunka no kenkyu 8: Matsuri to haka to yosooi,* KANASEKI & SAHARA, eds., 142-47.

YOSHIDA ShoiChiro itiEE1\*—P13

1979 Kofun jidai t [The Kofun Period]. Entry in *Sekai*

*kokogaku jiten*-ftXt-4-4\*411, [An encyclopedia of world archae­ology]. Tokyo: Heibonsha.