

# Makimuku, Himiko and Yamatai: Solving the Puzzle

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The age-old question that has captivated the interest of Japanese historians and others, to the point of obsession, is never without new and informative data derived from archeological discoveries. This is the question of the identity of the female ruler, Himiko, of people called Wa, and the location of her chiefdom, Yamatai. The section dealing with the country of Wa in the *Wei zhi* (Chronicles of Wei) as included in the third century AD *Sanguo zhi* (Records of the Three Kingdoms) failed to provide accurate directions or distances to Yamatai, thereby creating the dilemma that has been called Japan's greatest historical puzzle.

The proponents of Yamatai-equals-Yamato point to recent archaeological work at Makimuku sites in the northern part of Sakurai city in Nara prefecture. The occupants of Makimuku's first hamlets arrived in the late Yayoi period. They were followed by a dramatic population increase in the second and third centuries AD, by which time the Kofun period had begun. Decline set in soon after. Accepting that Yamatai is in that area, as I have in the past, my intention here is to describe and interpret these recent discoveries in order to refine arguments relating to its time period and religious and cultural prominence.<sup>1)</sup> The archaeology has revealed architectural features that may indicate the presence of a "royal" personage. Moreover, the discoveries have bolstered the argument that ritual played a major role in local activities, and has raised interesting questions about Makimuku's metropolitan position in the environment with the recovery of the remains of animals, birds, fish, nuts, fruit and other plants. Throughout, I make one assumption: the Chinese regarded the Japanese islands as lying parallel to the China coast, as their maps show even as late as the nineteenth century.<sup>2)</sup> Sections in the text comparing the material assets of Wa with Dan-erh and Zhu-yai (apparently places in Fujian and Zhejiang provinces in south China) could not have been occasioned for any other reason.<sup>3)</sup>

Himiko, the reclusive shaman ruler of Yamatai for several decades, died in AD 247 or 248 according to the Chinese account. The Chinese took a special interest in her because she dispatched two missions to their court (in the years 238 and 243), and near end of her life solicited aid against the fractious tribal chieftain of Kona (or Kuna). It should be noted here that among the gifts the Chinese sent Himiko in return for this aid was a special set that included 100 bronze mirrors. These probably arrived in 240.

One must assume that Kona was within the sphere of direct Chinese influence or Himiko would not have thought that a mission could have been of assistance, but its location, like Yamatai, is still in dispute since it is not one of the stops on the way to Yamatai. The comprehensive and systematic study of the Yamatai question by Hasanuma Keisuke suggests that Kona can be identified with the large and well-publicized Yayoi site of Yoshinogari in Saga prefecture that reached its zenith in the middle and late Yayoi period, or the first century BC to the second century AD.<sup>4)</sup>

Yoshinogari was losing its social position rapidly as the Kofun period opened and the elite of its population were consolidating their status with territorial gains toward the east. The Chinese placed Himiko within the context of Kofun culture. Items mentioned in the *Wei zhi* known to be distinctive of Kofun culture included: (1) Himiko was buried in a large mounded tomb. (2) Diviners used tortoise carapaces (Yayoi diviners usually used deer and boar shoulder blades; carapaces are found only in Kofun sites). (3) A short bow (like the kind invented by the north Asian horse riders; the Kofun period type) was in the gifts to the Chinese court in 243 (the text says Wa people use bows that are short below and long above (i.e. a long hunter's bow). (4) The existence of a single type of burial system (the Yayoi had several regional types). (5) Bronze mirrors dated to Himiko's time; 10 dated between 235 and 244 (2 more unprovenanced) have been found only in Kofun tombs, none in Yayoi graves. Other items may be less convincing, such as various textiles, the materials or techniques believed to be unknown to Yayoi craftsmen, included in the imperial gift to the Chinese in 243, and more arguably, a reasonably elaborate administrative structure (four officials are listed on the ladder), more advanced than a Yayoi tribal unit. Regarding the last, it is not the intent here to enter the discussion of social and political evolution, the features of which are endlessly debated on both sides of the Pacific, but only to claim some value in recent finds toward connecting Himiko with the area that came to be called Yamato.

The contention of Kyushu proponents that Makimuku area archaeology not only lacks the evidence of a substantial settlement (the Chinese historian said Yamatai may had more than 70,000 households) but also the farming tools necessary to sustain a large population, can be countered with conditions elsewhere in both the Osaka Plain and the Nara Basin. There are two aspects to this problem. The first is the natural elevation of these areas and their water drainage systems. The former's lack of Jōmon sites and shortage of middle Yayoi sites is attributed to its very low land and frequent inundation; in fact it may have been submerged at the time, of the Chinese visit.<sup>5)</sup> The average elevation today of the former is not much more than 15m above sea level. The latter, across the hills, is substantially higher, for instance, at Makimuku about 80 m.

Somewhat opened-ended in the north until reaching Kyoto, said to be about 300 sq km by academic geographers, the Nara Basin is notably fertile agricultural land. The plain and the basin share some common features such as low-lying alluvial expanses, with mixed gravel, sand, silt and clay.<sup>6)</sup> Numerous small rivers cross the ba-

sin. These are not conditions that foster the building of pit-dwellings, without which the archaeology will say very little concerning settlements. Even surface dwellings were frequently flooded. Historic-period notations on poorly sited Asuka-period palaces (by diviners and geomancers) and flooding mourn this fact. Emperor Jomei moved his palace to higher ground.<sup>7)</sup> When Aston speaks of a “lofty building,” he is referring to a raised-floor structure (an extra palace building for Empress Saimei called Futatsuki).<sup>8)</sup> The best known archaeological site, Karako, in recent decades enlarged as Karako-kagi, is a huge marshy area, its conditions particularly conducive to the preservation of wooden objects.<sup>9)</sup> Despite the conditions, in fairness to this argument, the initial excavators of Karako were able to identify the floors of 107 houses ranging from Early to Late Yayoi, when it was more habitable.

Further indication of the problem is seen in the vicinity of the huge Osaka mounded tombs. For instance, no large settlements are known archaeologically nearby the tombs attributed to Ōjin, Nintoku and Richū, which obviously required years of work by thousands of off-season laborers who had no choice but to live near the project during working months. The floors of the dwellings were on ground surface, not requiring the sunken posts and therefore the post-holes (which show up as different textured and colored soil). It is not too far-fetched to compare these with the construction of the pyramids at Gizeh where accommodations for the workers, a basic logistic for the operation, have been uncovered.

The second point is faced by archaeologists in all urban areas. Modern housing occupies much of the space and permits excavations in only limited areas, and even those areas may have been farmed for years or otherwise disturbed, leaving considerable damage to upper layers in an otherwise productive site. This is particularly troublesome for the most significant Makimuku discovery, discussed later: post-holes of a complex of buildings, at least two of which are very large for the time period and are described as “palace” size (using the word “palace” simply to mean the residence of the highest authority of the area), and fenced boundaries.

As for farming tools, Makimuku is not a Yayoi site where stone implements tell the agricultural story of the area. Conversion had been made to iron tools, and Makimuku is now known to have been an affluent metropolis where the finest of materials were in style. The grave-goods of the Makimuku-ishizuka tomb—probably one of a lesser chieftain—yielded 27 iron hoes of the long-handled type known as *nagaekuwa*.<sup>10)</sup> Agricultural tools did exist, were retooled if broken, and were carefully passed on to the next generation. Carelessly lost iron tools disintegrated in the damp soil.

To date sufficient archaeology has been done in the Makimuku area to narrow down the likelihood of finding clusters of house remains. Makimuku is generally said to occupy an area about 1.5 km north-south and 2 km east-west, with the present Makimuku train station of the JR Sakurai-sen located close to the middle of the area. Archaeologists sometimes use the word *chiku* for different ill-defined places,

sections or districts within it.

The mounded tombs were the initial attraction of study. Excavations by local archaeologists started in 1971. The 160<sup>th</sup> excavation was completed in 2009. The significance of these excavations has been recognized only later, but notable reports have slowly revealed the characteristics of the area. Those highlighted here have been important in the evolving scene.<sup>11)</sup>

**1971:** large ditches suggested an extensive drainage system, with the recovery of some ritual objects; a cypress board in a peat layer beside the Makimuku-ishizuka tomb was dendrochronologically dated to AD 177+18.

**1972:** in the Tsuji *chiku*, slightly northwest of the station, a stream bed yielded fragments of a Yayoi-period bronze bell (*dōtaku*) and of a large *haniwa* stand.

**1975:** a roundish wooden plaque carved with a geometric pattern of intersecting curved lines was found in the moat of the Makimuku-ishizuka tomb; also a fairly large piece of wood carved in the shape of a bird and painted red.

**1978:** in Ota *chiku*, half a km west of the station, post-holes of a structure big enough to be called a “ritual building” and another were exposed.

**1987:** in Ietsura *chiku*, northeast of the station, more of the water supply system, a broken section of a wooden carved openwork plaque of a ritual nature, and the remains of a collapsed lean-to apparently once attached to the Minami-tobizuka tomb were all found.

**1996:** in Ozakibana *chiku*, slightly farther out than Ietsura, a 2 m deep ditch and accompanying remains of wooden fences suggested the existence of a typical Yayoi defended village.

**1997:** the Imperial Household Agency’s archaeologists ascertained that Hashihaka had been covered with stones and eventually determined that it had four rather than three terraces and had been surrounded by a double moat.

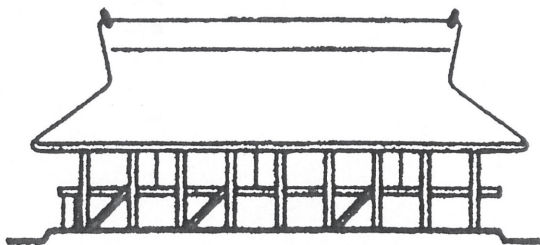
**1999–2000:** report made of the excavation of the Hokenoyama tomb in 1995 describing the remnants of a wooden coffin and the recovery of a Han-type Chinese mirror; 2001: remains of wooden construction materials were discovered in the moat of the Katsuyama tomb.

**2007:** in Mekuri *chiku*, due west of the station, a red painted wooden mask was recovered from the edge of a disposal pit. Pollen from a ditch was found to include *benibana*, used for red dye.

**2009:** more post-holes in the vicinity of the 1978 excavation (referred to above) indicate the presence of another very large building, the three aligned, and sections of an enclosing fence, now imply a complex of related third century buildings.

**2011:** a pit yielded a great variety of fish and animal bones and plant seeds. Most notable is the number of fish bones and peach seeds.

The 2013 publication *Makimuku iseki hakkutsu chōsa gaiyō hōkoku sho: Torinomae chiku ni okeru hakkutsu chōsa* describes nine excavations in the Torinomae *chiku* numbered between 20 and 176.<sup>12)</sup> This area is to the northwest of Makimuku station. In other words, few places could have been dug any more intensively, given the available space to excavate and willingness of landowners to permit it.



**Top:** Hashihaka, Sakurai city, from the southeast. Probably the tomb of Himiko. L: 280m.

**Middle left:** Reconstruction of Building D, Toriinomae, Makimuku. East side: 19.2m (*BHSJ* 2010.1, 7).

**Middle right:** Wooden mask, Mekuri, Makimuku. L: 26cm (*BHSJ* 2008.5, np).

**Bottom:** Decorated clayslate stone, Higaida, Makimuku. Carved face: 4.7 x 2.8cm (*Makimuku e ikō*, 7)

Recent AMS advances in carbon-14 dating have refined the results to brackets of twenty years. While there are still doubters that such precision is justified, this has been used by members of the National Museum of Ethnology and History to date the Hashihaka mound a little earlier, the huge tomb that under imperial auspices has always been associated with a princess named Yamato-totohi-momoso-hime from the *Nihon shoki* story, to the years between 240 and 260.<sup>13)</sup> The earlier decade of this bracket overlaps with Himiko's time, pointing to the obvious: this princess and Himiko are likely to be one and the same individual. This has also resulted in a modest redating of the pottery chronology of the area.<sup>14)</sup> Pottery chronology is still uppermost in many archaeologist's ordering of the cultural developments, but it has problems here that are yet to be resolved.

Pottery types used in this region of the basin are known as Shōnai 1, 2 and 3, and Furu 0, 1 and 2. Local archaeologists sometimes prefer the use of Makimuku numbers. Charred material on 89 fragments was tested. These samples were from sherds of cooking vessels believed to have been thrown into the moat when the construction of Hashihaka was finished and from local sites and tombs around Hashihaka.<sup>15)</sup> The results were matched against a large database of known dendrochronological dates. The types are Shōnai 3 and Furu 1, which fall in the early and later halves of the third century. This puts Furu 0 between, or about 240 to 260. In this way, once suspected by some to be the tomb of Iyo, Himiko's successor, Hashihaka can now be placed in Himiko's time. But the archaeology can go only so far; putting Himiko in the tomb will never be accepted by all.

It is the diversity in ceramics that allow Makimuku to be regarded as an important center of a trading network. While other sites may have a variety of pottery types, it is usually never more than 10 percent from elsewhere. But Makimuku's non-Yamato *haji* (the domestic low fired pottery of the Kofun-period centuries) constitutes about 15 percent of its excavated pottery, identified as coming from production areas in the western side of Japan, in the Kantō and east coast, and from Island Sea regions.<sup>16)</sup>

The discovery of the post-holes of buildings in 1978 was the initial revelation of a complex of structures that has been referred to as palace/ritual/administrative in nature. The Toriinomae *chiku* site sits on slightly raised ground between two rivers, gently graded toward the southeast, the dirt pushed in the northerly direction to level it. Apparently the spot had been carefully selected and prepared for the placement of a group of buildings, in a working space of about 150 m east to west and 100 m north to south. The post-holes found then were of the building now called Building A, which was calculated as rectangular, 5 m in width with five or seven bays on the long side, occupying 23 sq meters.

Excavations in 2008 and later revealed the post-holes of a 3 by 2 bay, but almost square, building (Building B), some 10.5 m to the east of Building A, its long sides facing east and west. A closely-spaced fence ran around it on three sides and ex-



tended north and south on the same axis as the east wall of the building.<sup>17)</sup> The fence enclosed the smaller building with little more than a meter between the two. About 4.7 m to the east was a third building (Building C), a rectangular 3 by 2 bay structure about 8 m in its north-south dimension.<sup>18)</sup> The reason for the existence of the fence became obvious in the 2009 excavation. The post-holes of a much larger building to the east (Building D), with a long side of 19.2 m, indicated the presence of a whole complex of structures and their security and/or sanctity required an enclosure.

The western part of Building D runs into a badly disturbed ditched area that had been used in the fifth and sixth centuries, but its east-west dimension is projected to be about 12.4 m by the buildings' spacing and familiarity with the proportions of normal ground plans. It was therefore a rectangular 4 by 4 bay building, longer bays running east to west. Where disturbance had not damaged the evidence beyond recognition, larger and smaller supporting pillars alternated in the north-south rows. The thirteen exposed larger post-holes have a diameter ranging between 34 and 38 cm (black in the ground plan) and the smaller ones 23–25 cm. Beams for north-south bays averaged 4.8 m in length, for east-west bays 3.1 m.

The size of this building far exceeds the two known largest buildings from Yayoi centuries, one at the Ise site in Moriyama city, Shiga prefecture, and the other at the Yoshitake-takagi site in Fukuoka city in Kyushu.<sup>19)</sup> Both have been referred to as *miya*, (palaces). The former measures 11.3 by 7.8 m, the latter 12.6 by 9.6 m, so the calculations for Building D (19.2 x 12.4 m) put it into a larger class. In view of the fact that the communities along the way to Yamatai all had two officials and Yamatai with “maybe more than 70,000 households” had four, larger facilities would be expected.

The entrance to the complex would have been on the east side—now occupied by train tracks and banks—and the buildings were progressively smaller as they were encountered. Comparison may be made with the Ise shrines, where alignment is perfect and each enclosure is set back farther and so reduces the space between each proportionally.<sup>20)</sup> The remarkable alignment of these buildings, which could hardly be coincidental, can be compared with the scattering of buildings as late as the early seventh century when Prince Shōtoku built his palaces—no earlier palaces have been definitely identified archaeologically. One wonders if one of Himiko's ambassadorial missions did not bring back the form without the Chinese southern orientation philosophical principle supporting it. And in view of the fact that the grouping of palace buildings retained a degree of informality which religious buildings did not have, the religious element would seem to be the dominant one here, in keeping with the nature of Himiko's rule.

Not only does the fencing imply the presence of a protected area, religious or secular, but the paucity of recovered pottery sherds is so unusual it suggests that the building had been specially cleaned, evoking the Buddhist ritual of sweeping out a

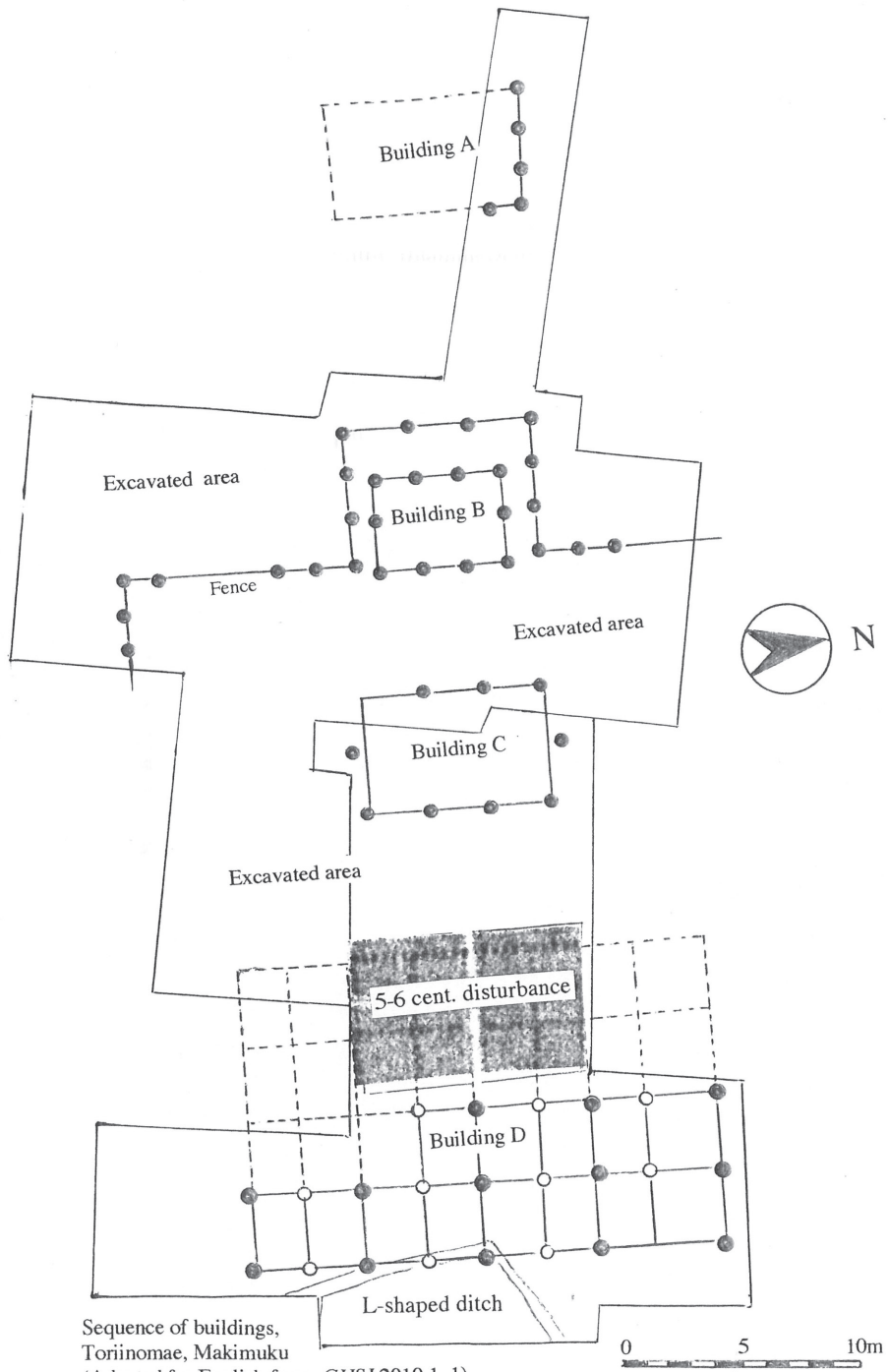
temple to cleanse it of any malignancies.<sup>21)</sup> Sherds were found in several nearby ditches and elsewhere. The buildings were constructed in the earlier half of the third century, but had been abandoned by the latter half of the century, for a longevity that conforms with known facts about later palace and shrine construction. After Empress Suiko moved to Asuka about 593, palaces for the next century were single generational and often more than one to a reign, until the bureaucracy became too large and entrenched to make such a tradition impractical.<sup>22)</sup> In fact, in the Asuka century, some nine rulers used sixteen named palaces for an average of just over six years each.<sup>23)</sup> As for the Ise shrines and their reconstruction every 20 years, the practice was ritualized out of necessity.

A disposal pit had been dug on the south side of Building D, its edge cutting into the projected fence line. This should have been done after the fence had served its purpose. Noted for its large quantity of bones and plant remains, the pit also had discarded building pieces which, it is believed, were once used, if not reused, in one of these buildings described above, probably as parts of rafters and/or thresholds, the longest being a board of *hinoki* (cypress) 70 cm long and 20 cm wide.<sup>24)</sup> A cut out section on a side at one end was curved to fit around a pillar 30 cm in diameter and holes in it were from nails used to affix it to a door frame. A point of interest: *hinoki* is not known to have grown in the low areas of the Nara Basin, hence it would appear that for some of the buildings at least, or parts of them, special wood was secured.

To return briefly to the era prior to the Japanese adoption of the continental system of southern orientation, as the cluster of buildings is not a unique example, the stage is particularly demonstrable in the construction of the early mounded tombs. Many of them, especially very large ones, are known as the *zenpō-kōen* (square front round back) type, popularly known in English as “keyhole-shaped.” Saitō Tadashi looked at 394 tombs of the Early and Middle Kofun periods (3<sup>rd</sup> to 5<sup>th</sup> centuries), including excavated smaller round mounds in which the direction of the burial chamber had been determined, separating these as built on hilly and level terrain.<sup>25)</sup> The perplexing question has always been the extreme randomness of their orientation. Was there a system, such as facing the sun at certain times of the year, facing the residence of the deceased, facing a tomb of a revered ancestor, and so on? Were there regional differences and/or time differences in the first half of the Kofun period? Early ones, occasionally formed by cutting off the tail of a hill, naturally followed its direction. The orientation was then uncontrollable, and some scholars think this may have fixed an attitude that direction was not significant, but only size.

The study includes 135 tombs on hilly terrain and 259 on level ground as indicated on the chart. In the entire group only WSW has no tomb facing it, but several other directions have only one. The point here is that, although the cardinal directions are generally preferred and south is obviously used more for level ground, even south has only 88 tombs (22%). South has the highest percentage, but it is rivaled by west with 76 (19%). Japanese folklore contains many stories of protecting houses,





Sequence of buildings,  
 Toriinomae, Makimuku  
 (Adapted for English from *GHSJ* 2010.1, 1)

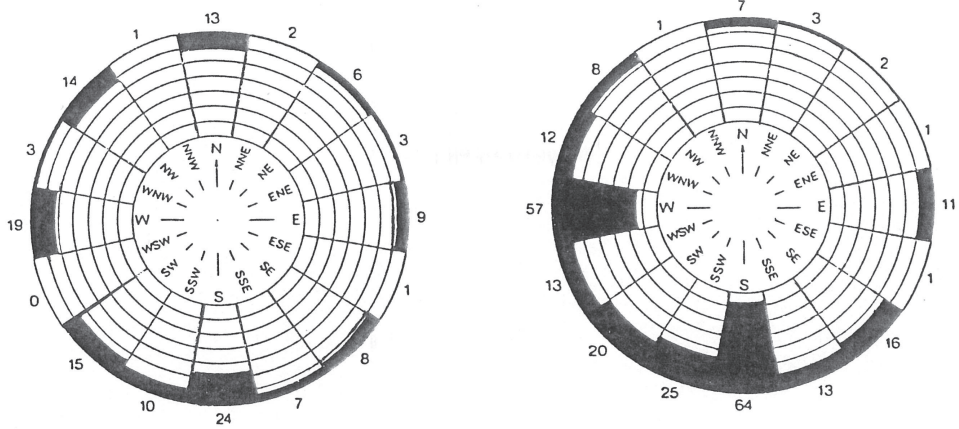
palaces, temples, castles and even cities from the hostile spirits that attack from the north, the classic example being the Enryaku-ji for the city of Kyoto. Twenty tombs face north. Saitō says there can be only one explanation: the Chinese principle of southern orientation had not yet been introduced. My view on the randomness is that it was actually a calculated concept at this stage. It was in keeping with the prevailing practices in a world intimidated by malignant spirits which had to be beseeched and placated. I have interpreted Himiko's form of magic called *kidō* as controlling the spirits of the dead. Spirits were known to be robotic routine followers (hence not retracing one's steps at a funeral), moving in straight lines (hence spirit screens), unable to cope with inconsistencies and sudden changes. In other words, randomness confused them and neutralized their inimical intentions.

No object of a ritual nature has received more attention than the wooden mask found in late 2007 in an old water drainage pit (sometimes called a well) in Mekuri *chiku* just west of the train station.<sup>26)</sup> Artifacts in an old well can be either disposed of or intentionally dropped in as offerings. In this case, it was below many other artifacts, lying face up. Pottery fragments were numerous, and all date to the first half of the third century. Among the pile of wood *débris*, many pieces charred, one could be identified as the handle of a sickle and another a small part of a shield.

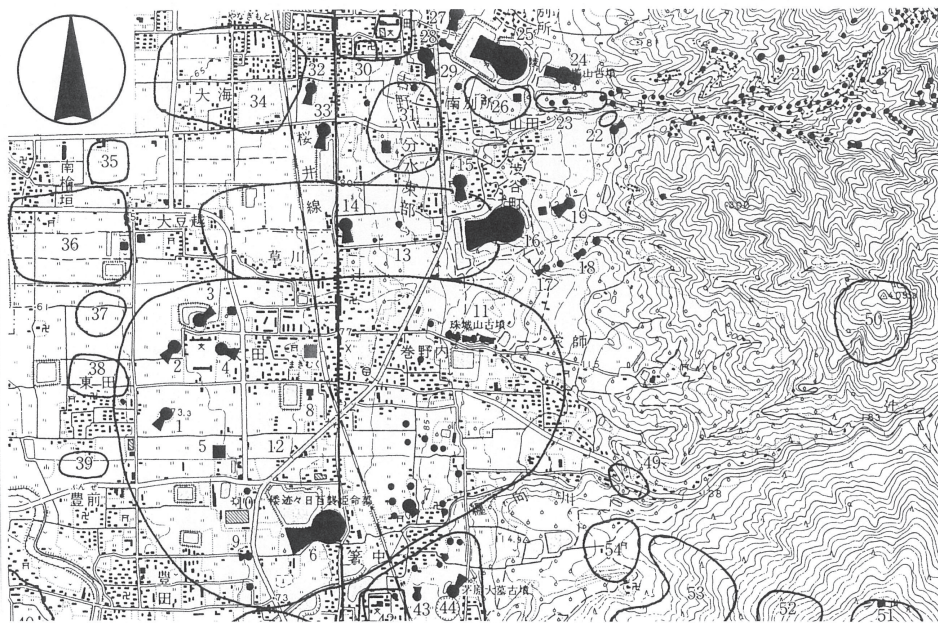
The mask is of *akagashi* wood (*Quercus acuta*, an oak that grew in most parts of the country) shaped like a hoe, although there is no evidence it was used as such. Red paint still shows on it. Nevertheless, the shape was converted by using the humped middle as a nose, with eyes and mouth then cut out. It measures 26 cm in length, 21.5 cm in maximum width, averages 0.6 cm thick and, after fitting its breaks, is intact except for small edges missing along the left cheek and chin. Its size is therefore about one-third larger than the average human face. Red paint ascribed to it magical powers.

Without side holes there is no way to affix it to a face. In any event, it is too heavy for that purpose, so it had to have been hand held or used in another way. But simply wielding a mask has often been enough to symbolize whatever other individual, creature, spirit, or form of existence is desired, and they are known to be hung on a wall to indicate the building or room is a shrine/holy zone or is occupied by a person believed to have special psychic powers. As to its ritual use, its position near the bottom of the water hole face up, most probably means it was at that point an offering, once floating, later sinking waterlogged under the weight of other objects. Less likely, its usefulness was spent and its services were no longer required so it was discarded. Most of the *débris* in the hole was waste materials, many wooden pieces badly fire damaged. Such a condition has always led to the suggestion of fire rituals, and rice ceremonies/fertility cults come to mind.

Clay masks have been recovered from late northern Jōmon period sites, and there is a middle Yayoi period mask of clay from the site of Unko in Yoshano-machi, Kyoto prefecture.<sup>27)</sup> It has been suggested that a scratched picture on a sherd of a mid-



Orientation of keyhole-shaped tombs and burial chambers of excavated round mounds. Left: hilly terrain; right: level terrain



Examples of randomly oriented tombs: Makimuku group: 1) Higaida-ōtsuka; 2) Yazuka; 3) Katsuyama; 4) Makimuku-ishizuka; 6) Hashihaka; 7) Hokenoyama. Yanagimoto group: 14) Yanagimoto-ōtsuka; 15) Uenoyama; 16) Shibutani-mukōyama (Emp Keikō); 24) Kushiyama; 25) Andōyama (Emp Sujin); 29) Tenjinyama; 32) Nobera; 33) Ishinazuka. Others: 43) Bishamonzuka; 44) Chihara-ōhaka. (*Makimuku iseki hakkutsu chōsa gaiyō hōkoku sho*, 40, p.3)

dle Yayoi pot found at the Shimizukaze site in Tawaramoto-machi, Nara prefecture, shows a man wearing double-peaked head gear that comes down over the upper part of his face somewhat like a mask.<sup>28)</sup> He holds a rectangular shield in the left hand and ahead of him is a very stylized raised-floor building on something like ten posts, but the work is so primitive one only guesses its meaning. It is probably a shaman before his residence. Otherwise, preserved wooden masks are not known for another four hundred years.

Mud samples found in one of three ditches that cut into the eastern edge of the fenced precinct described above were found to contain an unexpected amount of pollen of *benibana* (safflower, *Carthamus tinctoria* L.), material used for red dye. The tree pollen was dominated by pine (*matsu*), oak (*konara*), cryptomeria (*sugi*), and hazel (*hashibami*), and the nonarboreal pollen by rice (gramineae and oryza: *ine*) and artemisia (*yomogi*: mugwort).<sup>29)</sup> None of these are unusual, but *benibana* was not thought to be in Japan at the time, as the safflower plant was introduced from the Asian continent. To be so close to Building D and not be a garden area, it may be that water used for dyeing textiles in a workshop nearby was poured into the ditch, according to Kanehara Masaaki.<sup>30)</sup>

Kanehara goes on to associate the use of this dye with Himiko since these recovered items date to the early third century, and describe tribute sent by Himiko to the Chinese court in 239 that included silk (*kōseiken*; the word *kō* meaning red). Taking this in wider perspective, the first tribute went in 238 and the record does not mention silk, but the tribute of 243 includes what I called “red and blue silk.”<sup>31)</sup> If the quality of local silk was worthy of international gifts, nothing but the best dyes had been used for it. Kanehara presses the point of the importance of this discovery by saying that the use of *benibana* is recorded in the *Nihon shoki* in the time of Empress Suiko.

Although there is no specific reference to *benibana*, but Suiko was the first to order embroideries for Buddhist halls, as she did for the Asuka-dera in 605, and she had had cap ranks installed early in her reign, the fifth and sixth ranks of red color.<sup>32)</sup> We can thus assume that *benibana* was in use, and the quality of it can still be recognized today. To memorialize Prince Shōtoku, probably shortly after his death in 622, Suiko commissioned the making of the Tenjukoku Shūchōzanketsu (known in English as the Mandala of Heavenly Longevity). Although only in pieces and much of it repaired, the original seventh century colors are more brilliant today than the thirteenth century colors of the repairs.<sup>33)</sup> The Aya and Hata names at the end of the long inscription as designers and director of the project are known to have had close Korean and continental connections.

However, the implications are for much earlier use. According to the *Nihon shoki*, during Emperor Suinin’s reign when a man from Kaya was stranded in Japan for some five years and requested to return home, he was given “red silk stuffs” to present to his ruler.<sup>34)</sup> Suinin follows Sujin, whose adviser had been Princess Yamato—

totohi-momoso who is said to have been buried in the Hashihaka tomb. Chronologically, Hashihaka can now be associated with Himiko. Thus, if the chronology has any merit, a good red dye is already recorded as in use one reign after Himiko's time.

Due south of Building D, cutting through the surrounding fence, the pit mentioned above, of substantial proportions (4.3 m north to south and 2.2 m east to west) yielded a great variety of animal and fish bones and plant seeds.<sup>35)</sup> While most of the bones are of fish, there were also bones of duck and deer, and deer horns and a molar tooth of a wild boar. Both fresh and saltwater fish bones were present, the latter including sardine (*iwashi*), porgy (*madai*), sea bream (*hedai*), horse mackerel (*aji*), and mackerel (*saba*).

According to the report, none showed evidence of cooking; the fish showed evidence of having been chopped up and placed in an orderly fashion, species by species, on top of each other. As the find was described, it was recognized as unusual and for the fish bones, at least, appeared to be an intentional arrangement. The description gave the impression of a sort of offering site, the fish types selected, as though the spirit world was being solicited for good catches of each.

The diverse flora deserves attention, as some 9,760 seeds and nuts were recovered, constituting 73 different species, 25 of these edible. Peach (*momo*) seeds far outnumbered all others with 2,765. Pollen of peach blossoms has led to the suggestion of an orchard nearby and harvesting of peaches. Following peach in number, but well down, were melon (*uri*), hemp (*asa*) and paper mulberry (*kōzo*). The great variety is astonishing as it is unlikely that Himiko's or Iyo's table was normally spread with such a sumptuous selection of food. In fact, it is unlikely that all of these were grown in the Nara Basin at that time. In the same way that the higher percentage of non-Yamato pottery types makes Makimuku appear to have been a metropolitan center, the floral remains indicate similar wide connections, although somewhat less tangibly.<sup>36)</sup> Ishino Hironobu says it would appear that representatives from various parts of the country gathered for an offering/feast, perhaps a ritual in connection with the rebuilding of one of the sacred structures.<sup>37)</sup>

A more plausible reason for the variety and quantity is suggested by Koyama Shūzō.<sup>38)</sup> While documentary evidence of herb gathering for medicinal purposes is not available before the time of Empress Suiko, the establishment of the Bureau of Medicine (Tenyaku-ryō) within the Imperial Household Department (Kunaishō) was necessarily part of the Taika Reforms as described in the *Nihon shoki* in 646 and 649 when the Eight Departments and 100 Bureaus were constituted.<sup>39)</sup> To be formally titled required an established tradition of a group of medicine men collecting and experimenting with the pharmaceutical value of plants. Much had been learned from the Chinese, and the content of the Chinese manual of drug use *Shennong bencao jing* (J: *Jinnō honzō kyō*, usually translated as Pharmacopoeia of the Divine Farmer), compiled in Han dynasty times, was undoubtedly known to the Japanese at an early



date. References to drugs abound on wooden tallies dug up at the Fujiwara capital (694–710), in the eighth century gazetteers *Fudoki*, in the temple inventory *Hōryū-ji Shizai-chō* of 747, and in the tenth century texts of rituals known as *Engishiki*. Peach seeds were used as medicine, the reason that some are included in the eighth century Shōsō-in collection.

The record on Suiko is informative. She went herb gathering every other year (610, 612, 614) always on the fifth day of the fifth month, and Tenji did on the same day in 668. The importance of this is emphasized when the search was led by the empress or emperor, and it was done on an auspicious day when the plants were in bloom and in their most recognizable state.<sup>40)</sup>

The report described the peach seeds are abnormally large, possibly due to cultivation practices. The peach had magical properties in Japanese lore from earliest times, or at least the *Nihon shoki* writers claimed it had. Granted written later to complete the story, in one of the many versions of the death of Izanami, when Izanagi was trying to escape from her clutches in Yomi no kuni where he had gone to retrieve her, Izanami threw down peaches in front of the thunder deities who were chasing him and so dispersed them. Peaches, it was believed, were able to ward off evil spirits.<sup>41)</sup>

Comments on two older discoveries have a bearing on the rituals that may have been practiced at Makimuku. An intricate form of decoration circulated for mortuary magic, perhaps begun in the early third century and reaching its most popular point in the decoration of tombs. Called *chokkomon* in its evolved form, it may be described simply as intersecting straight and curved lines, done in relief sculptures and wall paintings. Tombs in Kyushu and the Inland Sea region exhibit this style of decoration. Two good examples have been found at Makimuku, one carved in relief on a stone and the other carved as openwork on a wooden panel. The stone is broken and how it looked when it was complete and what purpose it served is difficult to say, and the wooden panel has lost one side. Straight lines are not included in the decoration, perhaps indicating an early stage in the development of the pattern.

The clayslate (*nenbangan*) stone came from an upper layer in a ditch in Higaida *chiku* with pottery that can be dated to around the middle of the third century.<sup>42)</sup> The decorated face is 4.7 x 2.8 cm, but the stone is broken off at what appears to be the top, and the decorator may have left unfinished, as only sketch lines appear at the bottom. Perhaps breakage was the reason for stopping the work. Interwoven bands form such a sophisticated design that one assumes it is solidly within a tradition, yet despite much scholarship on the subject the origins of the *chokkomon*, its meaning and use are still debated.

In conclusion, since I wrote *Himiko and Japan's Elusive Chieftdom of Yamatai*, the archaeologists in Sakurai have made astonishing discoveries, far more significant than any finds of previous decades. They are unusually persuasive, but since archaeolog-



ical data is often subject to different interpretations, arguments on how to solve the puzzle will persist. Nevertheless, two discoveries stand out as of particular importance: a cluster of buildings, imposing enough to be designated a “palace” complex, and the assigning of a new date for the Hashihaka tomb that now fits Himiko’s time. The presence of a fenced-in precinct of buildings, lined up in the formal manner known in historic times, marks the central and commanding focus of a community. The diverse and therefore metropolitan nature of the pottery and the same diverse nature of nuts, seeds and pollen testify to a wide range of connections. The unique wooden mask and prior discoveries of ritual artifacts signifies a social dependence on magical practices, fitting the Chinese description of Himiko’s activities. Bracketing the Hashihaka tomb with Himiko’s death date, probably the first large mounded tomb built on level ground, not more than 400 m away from the “palace” complex, and certainly the only tomb which the *Nihon shoki* writers honored with the recording of a traditional story, leaves little choice as to its occupant. The Sakurai archaeologists now have matchless evidence that Makimuku was the “capital” of Yamatai, Himiko’s domain.

As a final comment, in April 2014, some 20 representatives of 15 “amateur” Yamatai research groups met in Tokyo to form a new national organization for the purpose of exchanging information. Titled Zenkoku Yamatai-koku Renraku Kyōgi-kai (All Japan Yamatai-koku Information and Discussion Council), the group selected officers, set a series of specific topics certain “chapters” should investigate, and a schedule of meetings.<sup>43)</sup> While the use of the term *ama-chua* implies the elimination of academics, several have been invited as advisers and even as officers. The article goes on to say that there are 30 different opinions on the location of Yamatai, so it is unlikely that a consensus will be reached. Territorial integrity is at stake.

#### Notes

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- 3) Yasumoto Biten. *Yoshinogari to Yamatai-koku: Iseki bunpu kara toku jōkoku no nazo*. (Tokyo: Daiwa Shobō, 1989), 54; and Kidder, *Himiko*, 15, notes 52, 292.
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- 6) Minato Masao, ed. *Japan and its Nature*. (Tokyo: Heibonsha, 1977), 135.
- 7) William G. Aston. *Nihongi*. (Rutland, Vt: C. E. Tuttle Co., 1972), Vol. II, 125, 165.
- 8) Aston. *Nihongi* II, 250.
- 9) Masao Suenaga, Kobayashi Yukio, and Fujioka Kenjirō. *Yamato Karako yayoi-shiki iseki no kenkyū: Shōwa 16-nen, Shōwa 17-nen*. (Kyoto: Kuwana Bunseidō, 1943).
- 10) Japan Tsūshin sha. *Gekkan bunkazai hakkutsu shutsudo jōhō (GBHSJ)* (Monthly Culture Properties Excavation Information). (February, 1997), 89–90; Sakurai-shiritsu Maizō Bunkazai Sentā, ed. *Makimuki iseki 100-kai chōsa kinēn: Makimuki iseki wa doko made de wakatta ka?* (Nara: Sakurai-shi kyōiku iinkai), 1998, 8.
- 11) *GBHSJ* (March, 2009), 54.
- 12) Sakurai-shi Makimuku Kenkyū Sentā ed., *Makimuki iseki hakkutsu chōsa gaiyō hōkoku sho: Toriino-*

- mae chiku ni okeru hakkutsu chōsa*, 40.5, (Nara: Sakurai-shi kyōiku iinkai, 2013). Available online: <http://www.makimukugaku.jp/pdf/gaihou.pdf>.
- 13) *GBHSJ* (July, 2009), 11, 42, 43.
  - 14) *GBHSJ* (August, 2009), 8–9.
  - 15) Sakurai-shiritsu Maizō Bunkazai Sentā, *Miwa-san shūhen no kōkogaku*. (Nara: Meishinsha, 2000), 18–19.
  - 16) Sakurai-shiritsu Maizō Bunkazai Sentā, *Miwa-san shūhen no kōkogaku*, 18–19.
  - 17) *GBHSJ* (May, 2009), 54–55.
  - 18) *GBHSJ* (January, 2010), 1.
  - 19) *GBHSJ* (January, 1993), 142–146.
  - 20) Sakurai-shi Makimuku Kenkyū Sentā ed. *Makimuku iseki hakkutsu chōsa gaiyō hōkoku sho*, 6–7, for the archaeological plan in its environment.
  - 21) Aston. *Nihongi* II, 376–377.
  - 22) Aston. *Nihongi* II, 121ff.
  - 23) J. Edward Kidder. *The Lucky Seventh: Early Hōryū-ji and its Time*. (Tokyo: ICU Hachiro Yuasa Memorial Museum, 1999), 143.
  - 24) *GBHSJ* (March, 2011), 49, 52.
  - 25) Saitō Tadashi. “Kofun hōi kō.” *Kōkogaku zasshi*, 39 (1953) 110–116; Saitō Tadashi, *Nihon kofun no kenkyū*. (Tokyo: Yoshikawa Kōbunkan, 1961), 265–272.
  - 26) *GBHSJ* (November, 2007), 69; *GBHSJ* (February, 2008), 16, 20; *GBHSJ* (May, 2008), unpaginated, at front; Sakurai-shi-ritsu Maizō Bunkazai Sentā, *Makimuku e ikō: Shoki Yamato seiken hasshō no chi o aruku*, (Sakurai, Nara: 2003 or 2006), 8.
  - 27) *GBHSJ* (February, 2010), 1.
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  - 29) Kanehara Masaaki, Makimuku iseki. “Ota-sumomoda chiku mizo 2 shutsudo no benibana kafun ni tsuite,” *Makimuku iseki dai 61 ji chōsa*, Sakurai-shi-ritsu Maizō Bunkazai Sentā, (2007); *Makimuku e ikō*, 9.
  - 30) *GBHSJ* (December, 2007), 80.
  - 31) Kidder. *Himiko*, 17.
  - 32) Aston. *Nihongi* II, 127–128, 133.
  - 33) Kidder. *The Lucky Seventh*, 262–263.
  - 34) Aston. *Nihongi* II, 167.
  - 35) *GBHSJ* (March, 2011), 49–50.
  - 36) Shimizu Shin’ichi, “Kodai o yomu: Saishin no hakkutsu deta kara.” *Makimuku* (*Sakurai-shi, n.d.*).
  - 37) *GBHSJ* (March, 2011), 49.
  - 38) Personal correspondence.
  - 39) Aston. *Nihongi* II, 225, 232.
  - 40) Aston. *Nihongi* II, 141, 143, 145, 288.
  - 41) Aston. *Nihongi* I, 30.
  - 42) *GBHSJ* (March, 1984), 62; *Makimuku e ikō*, 7.
  - 43) *GBHSJ* (June, 2014), 9–10.