THE DUALITY OF JOMON GROUP STRUCTURE

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ABSTRACT

Dwelling remains in Jomon settlement sites often occur in two clusters. In such settlements, it has also been observed that burials occur in two different forms (extended vs flexed, or two different modes of body orientation) and that ceramic vessels are manufactured using two different techniques. It is therefore argued that Jomon communities were probably composed of two constituent parts.

DWELLINGS AND MIDDENS AS INDICATORS OF DUALITY

The structural organization of a Jomon village was first recognized at the Togariishi site in Nagano Prefecture (Miyasaka 1946). This Middle Jomon village had a northern and a southern grouping of dwellings encircling a central open space. In this central public area, or plaza, were alignments of stones and other features. This discovery was to become an important base for understanding the structure of Jomon villages.

Wajima (1948) expounded the view that the central plaza and its function reflected the basic organization of a Jomon village. He placed importance on the circular or U-form of the Togariishi village with its central common plaza surrounded by dwellings, explaining this form as the result of strict rules of social relationship. Wajima, however, seems to have missed the significance of the north-south division in the groups of dwellings.

Following Wajima's early work, it was Mizuno (1969) who really began the discussion of Jomon village structure with his analysis of the layout of the dwellings in the Yosukeone site, located near Togariishi. Mizuno paid particular attention to the division of the Yosukeone dwellings into eastern and western groups. He gave no indication, though, that he was aware of Miyasaka's earlier work, for he did not cite it. Miyasaka was clearly the first to present the idea, but Mizuno must be given credit for his

interpretation that Yosukeone can most likely be divided into two parts, thought to represent two groups of residents and probably to reflect their social structure.

Mizuno's analysis of Yosukeone stops with analysis and description of the village and he does not use this information to discuss the whole structure of the settlement. Perhaps this stems from his failure to refer to the north-south division of Togariishi. If we assume that the division of the village into two parts, as seen at the Togariishi and Yosukeone sites, is not accidental, we can also recognize this pattern in many other sites all over the country and from Initial to Final Jomon.

The terminal Initial Jomon site at Hitachi Fushimi in Ibaraki Prefecture (Ono 1979) has northern and southern groups of dwellings enclosing a central plaza. This site is small, but it is an early example of a "model" Jomon village (Kobayashi 1980). The roughly contemporary Kaguriyama site in Kagoshima Prefecture (Kagoshima-ken Kyoiku Iinkai 1979) shows this same pattern equally early at the southern end of the main Japanese islands. At the Hoshikusatoge site in Shizuoka Prefecture (Suzuki1983), this pattern continued through two or more consecutive phases of occupation from Initial to Early Jomon. And at the Tsukagoshi Kita A location in the Shakado site in Yamanashi Prefecture (Ono 1989), this pattern was seen in sequential occupations from the end of the Initial to the middle of the Early Jomon.

Clearly recognizable examples of the dual pattern increase radically in the Middle Jomon. The materials from the symposium on "The Evolution of Jomon villages", held at the autumn meeting of the Japanese Archaeological Association at Yamanashi University in 1984 (JAA and Yamanashi Taikai 1984), illustrate many such sites. For example, the Tonai I pottery phase at the Minamihara site in Nagano Prefecture had three dwellings each in the northern and southern groups; the Oishi and Higuchijonai sites in the same prefecture are other examples. Similar patterns can be seen at the Sugikubo site in Kanagawa Prefecture, the

Miharada site in Gumma Prefecture, and the Kamiyahara and Namezaka sites in Tokyo (Figure 1).

Late Jomon examples are not common due to the small number of excavations of sites of this period, but Nasunahara in Tokyo and Tokuri in Nagano Prefecture fit this category. In the Final Jomon, there are the Arai Minami and Nakao sites in Nagano Prefecture, and the Kinsei site in Yamanashi Prefecture. The Takai Higashi site in Saitama Prefecture has the pattern from the Late Jomon, or earlier, through the Final Jomon.

In addition to these sites, there are many others that clearly have two groups of dwellings. There are also many sites that show no apparent division into two parts, but it might be incorrect to assume that these sites do not have the division. Many sites were occupied continuously for long periods, or the occupations were intermittent over several separate occupations. This results in younger dwellings overlapping older ones, or in changes in the locations of activities, thereby blurring the division of the settlement.

On the other hand, sites with shell middens often exhibit the dual pattern more clearly than the sites which only have dwellings. Some sites have two distinct shell middens. For example, the Early Jomon shellmound at Fujioka in Tochigi Prefecture had two mounds, one on the north and one on the south, enclosing a level open space in the middle. The abundant Middle and Late Jomon shellmidden sites on the eastern side of Tokyo Bay are composed of two half circles, or the circle is broken at one point, That is, the circular mounds were not originally circular, but rather they were horse-shoe shaped or else two half moons facing each other. Good examples of this can be seen at Ubayama Shellmound (Middle Jomon) and Horinouchi Shellmound (Late Jomon) in Chiba Prefecture, and at the Nakazume Shellmound (Late to Final Jomon) in Ibaraki Prefecture.

Sites without shell middens have other features that show the two-part division. One such feature is areas where large quantities of pottery were discarded. Sites with two such discard spots are the Mikuchi Kamidaira location (Middle Jomon) at the Shakado site in Yamanashi Prefecture, the Ohata site (Middle Jomon) in Akita Prefecture and the Iwanohata site in Niigata Prefecture.

In other words, in addition to two groupings of dwellings showing a division of the settlement, shell midden accumulations and pottery discard areas can be used as evidence for the two-part division. The social origin of all three divisions is the same or similar.

BURIALS AS INDICATORS OF DUALITY

Jomon rituals for the dead certainly varied with time and region, but since burials were not simply a way of disposing

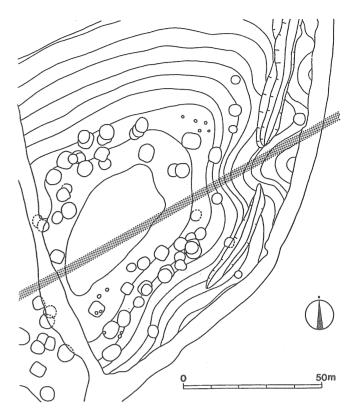


Figure 1: The division of the Namerizawa dwellings into two groups.

of dead bodies they should reflect the Jomon worldview. In fact, burials, also show the duality of Jomon society.

Otsuka (1967) was one of the first to deal with this question, pointing out that the flexed and stretched burials at the Late Jomon Ubayama Shellmound in Chiba Prefecture were relatively equal in number. If this was not the result of differences in time, age, sex or cause of death, then it must indicate the burial practices of two different social groups. Otsuka deserves credit as the first to attempt to understand Jomon social structure specifically in terms of this concept of duality.

Cemeteries (burial areas) in which the bones have not been preserved have only the grave pits, stone structures and clusters of stones remaining. However, these also offer several lines of evidence for postulating a division of the society. Rectangular, stone-lined burial pits at several sites form two groups with the long axes roughly perpendicular. Examples include the Miyanaka site (Late Jomon) in Nagano Prefecture and the Oshide site (Final Jomon) in Gumma Prefecture. At the Yudeno site (Final Jomon) in Akita Prefecture, the long axes appeared to be aligned randomly, but in fact they tend to form two groups aligned north-south and east-west. The use of the rising sun to determine the east-west axis accounts easily for the variation in the

alignments of the east-west axes of the burials which vary roughly between the summer and winter solstices. The northsouth axes of the burials then followed this variation. Thus, if the cause of apparent random alignments is considered, we can see that they are not random after all (Figure 2).

The Late Jomon cemetery at the Kitashirakawa site on the Kyoto University campus had an area of jar burials on the side of a shallow depression, and burials with stone structures on the other side (Izumi and Uno 1980). When no skeletons remain, we cannot determine the body positions or the direction the head and face pointed. We also cannot determine the position of things left directly on the body. But we can still see the long axes of burial pits and other features that indicate a two-part division in the cemetery.

There are also the unique stone circles that are related to burials and burial practices. For example, there are two large stone circles at the Manza and Nonakado locations at the Oyu site in Akita Prefecture (Figure 3). Each stone circle consists of two rings of stone-lined or stone-marked burial pits arranged around the same center point. Otsuka (1967) postulated that these mean that stretched and flexed interments were in the same cemetery and that two social groups coexisted in the associated settlement – one group that must be buried in the outer ring and another that must be buried in the inner ring.

Stone circles that differ from those at Oyu are found widely in Aomori, Akita, Iwate, Yamagata and Niigata Prefectures, but these show variations in the sizes of the stones within each circle and in the size and form of the

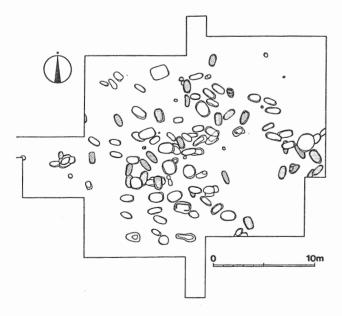


Figure 2: Two different groups in a communal cemetery: (white) east-west oriented; (black) north-south oriented: Yudeno, Akita; Final Jomon (Ono 1978).

circles. This suggests that, even when two groups existed in the same settlement, they did not always manifest this in the forms of burials, or that the groups were not so distinct that their division would show up in burial practices. This may be the reason for the variation seen in stone circles and other kinds of stone structures.

The ring mounds which date from the end of Late Jomon through the Final Jomon in Hokkaido must also be considered in this discussion. They can be seen as the earthmound equivalents of the stone circles. Five such ring mounds were found at the Kashiwagi B site in Eniwa City (Kimura 1981). The burial pits in Ring No. 1 were marked either with large angular stones placed at one or both ends of the pits (Type A), or were marked with rounded cobbles (Type B). The differentiation of Types A and B was not so clear in Ring No. 2, but this ring might have followed the Oyu pattern of burials in outer and inner circles.

The placement of these ring mounds is also informative. Rings No. 1 and 2 and Rings No. 4 and 5 formed two pairs. Possibly there is a sixth ring mound that was not discovered. That is, two ring mounds form one set. This same pattern can be seen in sites along the Misawa River in the construction zone of the New Chitose Airport. There, four pairs of ring mounds were placed along the top of a small ridge jutting out from the hills into the lowlands. The small size of each ring mound suggests that as one pair filled with burials a new pair was set up nearby. Each pair comprises the burials for two distinct social groups. Each pair had considerable differences in the numbers of actual burials. but this probably reflects differences in the numbers of people in each group, or variations in the death rates, leading to one ring filling more quickly than the other. In such cases, even though the other ring was not yet full, a new pair of ring mounds was established and the old pair abandoned. In this context the proximity of the pairs also needs to be considered. For example, at Oyu Stone Circle the pairs were only 58 m apart. This could reflect not only the distinctions of outer and inner circles, but also opposing groups of a different dimension.

EXTRA-LARGE BUILDINGS AS INDICATORS OF DUALITY

Jomon sites sometimes have extra-large pits for structures that were probably functionally different from pit-dwellings. Watanabe (1980) looked at these from the standpoint of subsistence and proposed that they were common work areas for preparing foods for storage during the winters in regions of heavy snowfall. However, I prefer to consider Ogawa's (1985) hypothesis that these buildings were communal eating and meeting places. This would mean that they functioned as places for conducting public business and rituals, like civic halls (Kobayashi 1986).

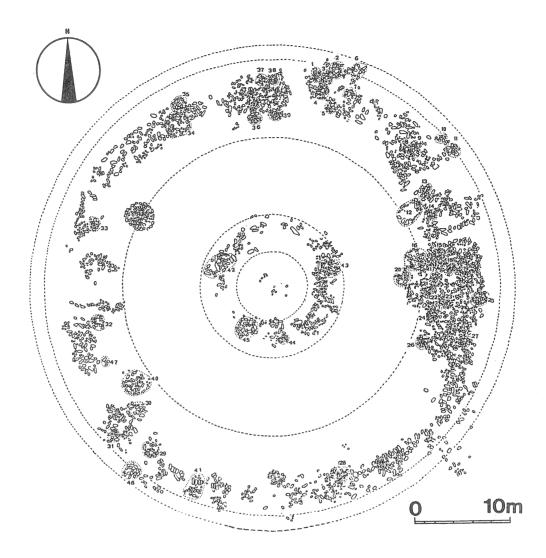


Figure 3: Double circles of stones: Oyu, Akita; Late Jomon.

The first discovery of one of these extra-large buildings was made at the Fudodo site in Toyama Prefecture (Figure 4) (Kojima 1973). It was about 17 m long, 8 m wide, and oval in shape. The long axis was roughly east-west. Four stone-encircled hearths were found in a line down the middle of the floor: the two on the east were rectangular, the two on the west oval. Furthermore, there were pots buried in the floor just south of the two central hearths; these were filled with burnt earth. There were also three extra postholes across the center of the building between the middle two hearths, as if a wall had been there to divide the building in half. Alternatively, these may have been supports for a screen-like separator. Whichever was the case, it is clear that this large structure was not simply divided into eastern and western sections, but that these were in opposition, as seen by the different forms of hearth.

The Fudodo site was occupied in the early part of Middle Jomon. It had 18 or more dwellings, in addition to the one

large building. Only five of the dwellings have been fully excavated, but three of these had rectangular hearths and two had oval hearths. Again, there is the division of styles. These do not reflect differences in time, nor are the dwellings located separately in the site. The two styles were contemporary and show the traditions of two social groups coexisting in the same village. When using the communal building, these two groups separated themselves with a dividing screen in the middle.

Extra-large buildings have also been found at the Hatookazaki site (Middle Jomon) in Iwate Prefecture, the Suginosawa site (Early Jomon) in Akita Prefecture and the Okinohara site in Niigata. These buildings are both rectangular and oval, and all have a line of hearths down the middle of the floor. However, none of the hearths was outlined with stones, so their shapes cannot be determined. Perhaps there was no differentiation of shape, but in these latter sites there were two buildings each and, at the

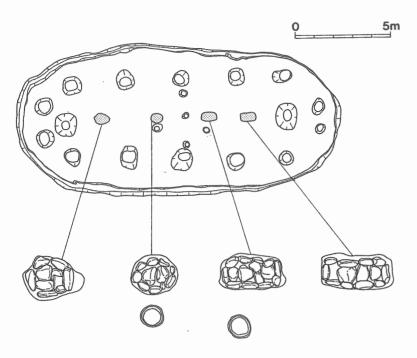


Figure 4: Two different groups in an extra-large building: round stone-outlined fireplaces on left; square stone-outlined fireplaces on right. The hearths in the centre are accompanied by burial jars. Fudodo, Toyama; Middle Jomon (Kojima 1973).

Hatookazaki and Suginosawa sites, one was larger and the other smaller. All the buildings were on the same axis and set side by side. Whereas the building at the Fudodo site was divided to make two parts, the division at these other three sites was established by using two separate buildings. This could have had some effect on how the buildings were used communally.

DITCHED SITES AS INDICATORS OF DUALITY

A ditched terminal Middle Jomon site was excavated at Shizukawa on the eastern side of Tomakomai City in Hokkaido (Tomakomai 1987). This site occupied the more or less level top of a small hill. The ditch was 1-1.8 m deep, 2-3 m wide at the top and 20-50 cm wide at the bottom, and U-shaped in cross-section. It ran along the upper slope on the shoulder of the hill and across the ridge on the southern side, leaving a wide opening on the northern side where the steep slope formed the boundary. The total length of the ditch was 135.5 m and it enclosed an area of about 1600 m². In the enclosure were two pit-dwellings, one about 6 m across and the other about 8 m across. No other features were found (Figure 5). This moated site closely resembles Yayoi moated sites, leaving some doubt that it really dates to the Middle Jomon. Whatever the case, only two dwellings seem to be too few for a village site. Perhaps it was not a village, but rather served some other purpose.

Digging a large ditch such as that found at Shizukawa with only digging sticks would have required a large input of labour. If we consider that the upper walls of the ditch have probably collapsed to some extent, partially filling in the bottom, the original depth can be estimated as 2 m or more. This would have required even more labour to dig, and removing loosened soil from the ditch would have become progressively harder as the depth increased. Such a deep ditch, 135.5 m long, would have required relatively large amounts of labour for a foraging society. It could not have been dug in winter when snow covered the ground, and the people would probably have been too busy in spring and autumn gathering food to spare the labour for such a major project. Only the hot part of the summer would have been free enough for people to work on the ditch. Thus, this ditch at Shizukawa was probably dug over several summers. For this reason, Shizukawa probably had some unusual social function that made it necessary to invest huge amounts of time and labour just to surround

two simple buildings with a large enclosing ditch. This function could have been something similar to that proposed for the large buildings at Fudodo and other sites further south. Shizukawa would not have been the residence of a high ranking family, but more likely was a place with spiritual or religious functions. If this site is not seen as a living and sleeping space, but as a place for communal and social rituals, the investment of time and labour in its construction are easier to explain.

There are examples all over the world, from all times, of people investing inordinant amounts of labour and time on memorials, cathedrals and the like. Shizukawa's ditched site, then, probably belonged to this category of special function sites. Furthermore, it is highly probable that two groups from one settlement came together here to conduct activities such as communal business, festivals, rituals and other activities not part of daily life.

Mizuno (1975) argued that sites with encircling ditches were a characteristic of the Yayoi period, and that this clearly separated Yayoi from Jomon culture. This absolute separation, however, can no longer be maintained. Jomon sites with true enclosing ditches – or features with the same function – have now been confirmed beyond question. And this is not just the single find at Shizukawa: a similar enclosure was excavated at the Komaruyama site (terminal Middle Jomon) not far away in Chitose City, and ditches

have been reported at the Yoyama Shellmound site (Late Jomon) in Chiba Prefecture and at the Yakijima site (terminal Final Jomon) in Iwate Prefecture.

POTTERY STYLES AS INDICATORS OF DUALITY

Other aspects of Jomon culture also show evidence of two different social groups living in the same settlement or in a specific defined locality. One such cultural aspect that warrants considerable attention is pottery. Throughout the Jomon period, the culture divided into eastern and western traditions roughly along the line of the Japan Alps. Sometimes, though, pottery styles of one tradition showed up in sites in the other area. This can be seen clearly in the pottery assemblage found at the Early Jomon Murayama site in Gifu Prefecture (Ono and Shioya 1960). Of the 1118 identifiable pots from this site, 887 belonged to the Kinki Lower Kitashirakawa style and 231 to the Kanto-Chubu Moroiso style. However, less than 1% of the total site area was excavated. This means that the site could contain 100 times as many pots as have been studied so far, which in turn would mean that pots of the Moroiso style, although overwhelmingly the minority type, could number as many as 23,100. This is too many to believe that they were carried in from the Chubu region; they were almost certainly manufactured at the site, together with the estimated 88,700 pots of the Lower Kitashirakawa style.

Moroiso and Lower Kitashirakawa pots differ from each other in every possible way - shape, motifs, colour, texture, thickness, and tools used for making the decorations. In other words, the two styles present entirely unique impressions, so much so that they almost certainly represent two different traditions. Although these two traditions were being produced side-by-side, they maintained their complete distinctiveness. The two styles were also found in separate areas of the site, in separate parts of the large communal building and in different groups of burials. It seems reasonable to assume that these two pottery styles represent two different social groups. This one case, however, does not mean that the two groups living in the same village always maintained strict separation of their own pottery styles. The Murayama site just happened to be in the border area between two major cultural regions, making it much easier in this case for the two groups to maintain their individual identities. Thus at this site the distinct Lower Kitashirakawa and Moroiso peoples lived separately but in the same village.

Also in the Early Jomon phase, the Moroiso and Ukishima pottery styles are found together, especially on the eastern side of Tokyo Bay. Moroiso was the style of the Chubu Mountains and reached its maximum expansion in the vicinity of Tokyo Bay. Ukishima was the style centered on the Tone River and Lake Kasumigaura. Both styles are often

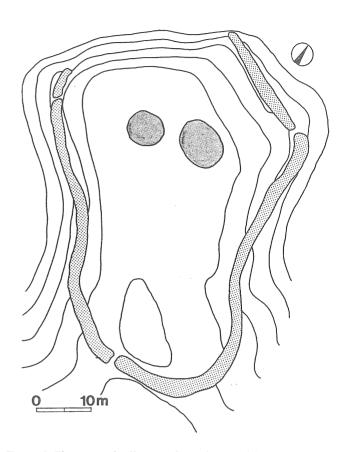


Figure 5: The two pit dwellings in the enclosure of the ring moat at Shizukawa, Hokkaido; Middle Jomon (Tomakomai-shi Kyoiku Iinkai 1987).

found together, particularly in sites around Chiba City. Shishikura (1974) pointed out that in the Kurumasaka site in Kaizuka Town, Moroiso and Ukishima style pots were found in different parts of the site and were rarely found together. Specifically, the Moroiso pottery was found with the shell midden deposits, but the Ukishima pottery was not. The same situation was seen at the Hodoji Shellmound and the Kowada site, both also in Chiba Prefecture. These two pottery styles differ considerably in form, and decoration. The differences are more than sufficient to assume that these pottery styles represent two distinct social groups living together in the same village.

TOOTH ABLATION AS AN INDICATOR OF DUALITY

Tooth ablation is one way of displaying individual identity. In the Tokai region in the Final Jomon, some skeletons have all four canines removed (2C type) while others have both the upper canines and all four lower incisors removed (4I type) (Harunari 1979) (Figure 6). Harunari (1979) argues that the 2C type skeletons belonged to people who married in from another village. He assumed that on marriage both the

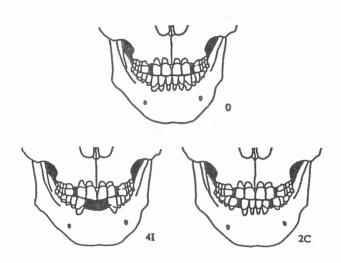


Figure 6: Two types of tooth-extraction: (left) 41 type; (right) 2C type (Harunari 1979).

males and the females might move to the other's village. It is difficult to accept this as a fully satisfactory interpretation. The possibility that the 2C and 4I types represent two groups living in the same village cannot be completely excluded.

CONCLUSIONS

In some regions of the Japanese archipelago during the Jomon period, the two social groups residing together in the same village maintained their distinctiveness by making different styles of pottery, in other regions by using different styles of tooth extraction. Alternatively, they might have used means of differentiation that have left no trace in the archaeological record – painting the forehead or cheeks, tattooing or various hair styles - to show their distinction from one another. In any event, it is important to note that the main structure of Jomon society was two distinct groups living together. Obayashi's (1971) idea of a rule or principle of duality in Jomon society is highly probable. We should note that the Andaman Islanders, who were used by Obayashi as a comparative example, and the tribes of the North American Northwest Coast, both have the same basic duality in their social structures. The latter also had the same kinds of tools as the Jomon, acquired food in much the same way, and had no cultivation; they maintained a very rich foraging type of subsistence. Just like the Jomon people, they lived along the Pacific coast, developing the rich resources of the sea and the large variety of plant foods that were available close at hand. Thus, it is fully possible to hypothesize that the Jomon people also had a rule or principle of duality within their social structure.

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