

Jomon Culture in Kagoshima and Uenohara Site

Koichi Shinto

Archaeological Center of Kagoshima Prefecture, Kokubu, Kirishima, 899-4461 Japan

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Recent excavation results suggest that a unique and advanced form of Jomon culture such as the one found at the Uenohara site might have appeared earlier in south Kyushu, the southernmost tip of the Japanese mainland, than in the rest of Japan. The gradual climatic warming that had begun at the end of Paleolithic period (about 15,000 years ago) caused changes in different cultures on different parts of the Japanese Islands, giving rise to regional differences in culture. Thanks to its geographic location, southern Kyushu was the first to be exposed to the climatic warming and influences of the Black Current. Recent excavation and research results have revealed that the beginning stage (from initial to early) of Jomon culture flourished significantly earlier in south Kyushu than in other parts of Japanese Islands. It seems that south Kyushu was home to a form of Jomon culture that is inexplicable through traditional understanding. What factors made the southernmost tip of Japan the birthplace of the Jomon culture? Its existence there may require a total rethinking of our understanding of Jomon culture. However, the question is challenging and interesting in that it may lead to a deeper insight into the origin of Jomon culture.

Keywords: Uenohara site, another Jomon culture, Jomon revolution, Osumi provincial temple built in the Mecca of Hayato tribe

EXPLANATION OF KEYWORDS

Uenohara site: The Uenohara site facing Kinko Bay is from the first half of the early Jomon period. At this site, a village composed of 52 pit-dwellings, along two paths, have been excavated from under a pumice layer that fell nearly 9,500 years ago. Besides the pit-dwellings, 39 stone clusters for cooking and 16 fire-pit shaped tunnels expand within the site, and are organized to compose this village. This large site, which features the first sedentary village in southern Kyushu, plays an important part in understanding the beginnings of the Jomon era in the Japanese Islands. This Jomon culture in southern Japan fuels a debate that almost changed the understanding of the Jomon culture of the Japanese Island. It is said that the Jomon culture from the northeast Japan is superior to that in the southwest based on preceding archaeological excavations and studies of many of the famous sites in the Kanto and Tohoku regions. But recent excavations in southern Kyushu revealed that the advanced Jomon culture in southern Kyushu leads culture in the Japanese Islands in the first stage of the Jomon era. And it is said that Jomon culture in the southwest is superior to that of the northeast during the early Jomon initial period.

Another Jomon Culture: The era noted by Jomon pottery made with rolling cord is generally called the Jomon era in Japan. However, the people of Jomon in the southern tip of

the Japanese Islands liked to use seashells for marking pottery and didn't use ropes. During the shell-marking period, southern Kyushu was most vibrant.

Jomon Revolution: Shell-marked, cylinder-shaped pottery originated in south Kyushu during the first half of the early Jomon period and extended from southern Kyushu to all over Kyushu during the middle stage of the early Jomon period. People using this type of pottery then traveled northward to the Chugoku Mountains and the Hyogo area. The Jomon revolution was the advance into conservative mainstreams of Jomon culture. However, this Jomon revolution ended in failure due to the large volcanic explosions of the Kikai caldera around Iou Island. The energetic age prior to the Meiji revolution in Kagoshima is called the Jomomon revolution of the early Jomon period.

Osumi provincial temple built in the Mecca of Hayato tribe: Emperor Shomu began to build provincial temples throughout Japan under the imperial edict of Tenpyou 13 (741 A.D.), wishing, "peace and a good harvest of staple grains for the people". The Osumi provincial temple was newly built, divided from the Hyuga provincial temple in Konin 11 (820 A.D.). Why was it built in Kokubu, which was the mecca of the Hayato tribe in a piedmont of Kirishima? The reason is that the building of the provincial temple was the policy toward of the Hayato tribe and the greater national achievement.

1. INTRODUCTION

For the last 10 years, between 1995-2005, the affluent Jomon culture in the north of Japan has been revealed as another Sannaimaruyama site (Approx. 5,000 years ago) of Aomori prefecture Tohoku, Nakano B site (Approx. 7,000 years ago) of Hokkaido, and the Sakuramachi site (Approx. 4,000 years ago) of Toyama prefecture, etc. On the other hand, the real image of the culture during the beginning of the Jomon era in the south of Japan has been revealed as Sojiyama site (Approx. 12,000 years ago) of Kagoshima city, Kakoinohara site (Approx. 12,000 years ago) of Kaseda city, and Uenohara site (Approx. 9,500 years ago) of Kokubu city, etc. The real image of Jomon culture in Japan has been shown to be remarkable at both ends of the Japanese Islands. The sites in south Kyushu from the beginning of the Jomon era provide a debate that almost changes the understanding of the Jomon culture of the Japanese Island, which has been drawing a keen interest.

In the Okunonita and Onigano sites of Nishinoomote city in the Kumage Islands, various kinds of structural remains and a large amount of relics have been excavated, which appeared earlier than other parts of Japan. These sites show an advanced example of the Jomon culture in its initial period out of other Jomon cultures in Japan, and therefore it has drawn very keen interest (Shinto 1999).

Besides, the Mizusako site of Ibusuki City, which was

discovered in 2000, there are passes, pit dwellings, and hearths from the latter Paleolithic period, approximately 15000 years ago (Shimoyama et al., 1999). It can be said that a kernel of the Jomon culture was already formed in southern Kyushu before the incipient Jomon period.

Considering the actual status of these Jomon relics from the early Jomon era in southern Kyushu, it can be said that the Jomon culture appeared in the South Kyushu before the mainland Japan.

2. NATURAL ENVIRONMENT AND ENVIRONMENTAL ADAPTATION IN THE BEGINNING OF THE JOMON ERA

As the Japanese archipelago spreads from north to south and is surrounded by the ocean, there is a great difference in the natural environment between north and south. Diverse cultures developed in different parts of Japan especially during the Jomon era when people lived in harmony with nature.

According to recent analysis in natural science, the natural environment, unique to the Jomon period, was formed in southern Kyushu due to the drastic warming caused by climatic warming and the Black Current during the end of the glacial period that started approximately 15,000 years ago. It has been noted that the Jomon culture began in southern Kyushu (Okamura 1997).

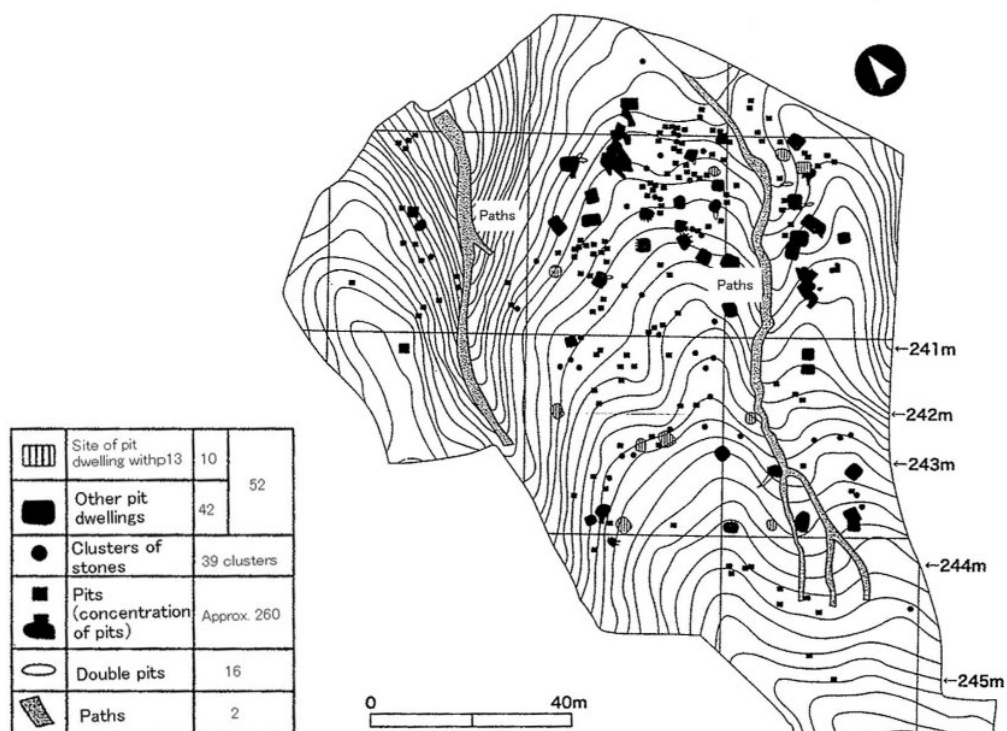


Fig. 1. Overall view of the Uenohara site.

In the late glacial stage or sub-arctic coniferous forest phase, which was previously predominant in the Kyushu area, was replaced by broad-leaf deciduous trees such as *Betula*, *Corylus*, *Fagus*, *Quercus*, and *Ulms*. Broad-leaf deciduous trees of warm and temperate zone such as *quercus serrata* and chestnuts grew, and indicated people of the importance of using acorns, chestnuts and horse chestnuts as food. It is considered that this stimulated the creation of Jomon earthenware. It is also estimated that the expansion of broad-leaf deciduous trees and the decrease of meadows accompanied by climate warming exterminated large mammals of the glacial age. As a result, the acquisition of vegetables became more important (Yasuda 1980).

According to the analysis of flora during the incipient Jomon period in Kagoshima prefecture, *Quercus*(*Lepidobalanus*) nuts were found from Higashikurotsuchida site in Shibushi town. Pollen and carbon analysis in Kakoinohara site have revealed the existence of *Quercus*, *Lauraceae*, *Miscanthus*, *Sasa*. *Lauraceae* broad-leaf forest was already confirmed in Kakoinohara site during the middle incipient Jomon period. The evergreen forests evolved into a broad-leaf deciduous tree belt during the developing stage of the incipient Jomon incipient period in southern Kyushu, thus creating It is likely that the incipient Jomon culture in southern Kyushu flourished

under such circumstances.

Two volcanic ash layers, the Satsuma volcanic ash, from Sakurajima, and the Akahoya volcanic ash layer, from the Kikai Caldera, are very unique to southern Kyushu. Below the Satsuma volcanic ash layer from Sakurajima, which dates back to approximately 11500 years ago, cultural relics from Jomon incipient period and micro-blade relics from the end of the Paleolithic period are found. On top of the Satsuma layer, cultural relics from the early Jomon period are found, on top of which the volcanic ash layer, from the Kikai caldera, (approximately 6,400 years ago) sealing the initial Jomon period of southern Kyushu (Shinto 1997).

Thus, because of the volcanic strata, South Kyushu provides a favorable field where transitions from the micro-blade culture to the incipient Jomon culture, and then to the initial Jomon culture can be observed.

3. THE INNOVATIVE NATURE OF THE INCIPENT JOMON CULTURE

It is estimated that affluent forests were already developed in southern Kyushu by the end of the Paleolithic period, preceding the rest of Japan. After the intermediate temperate-forest phase was formed through the evolution of broad-leaf forests. Under this environment, stone arrowheads and

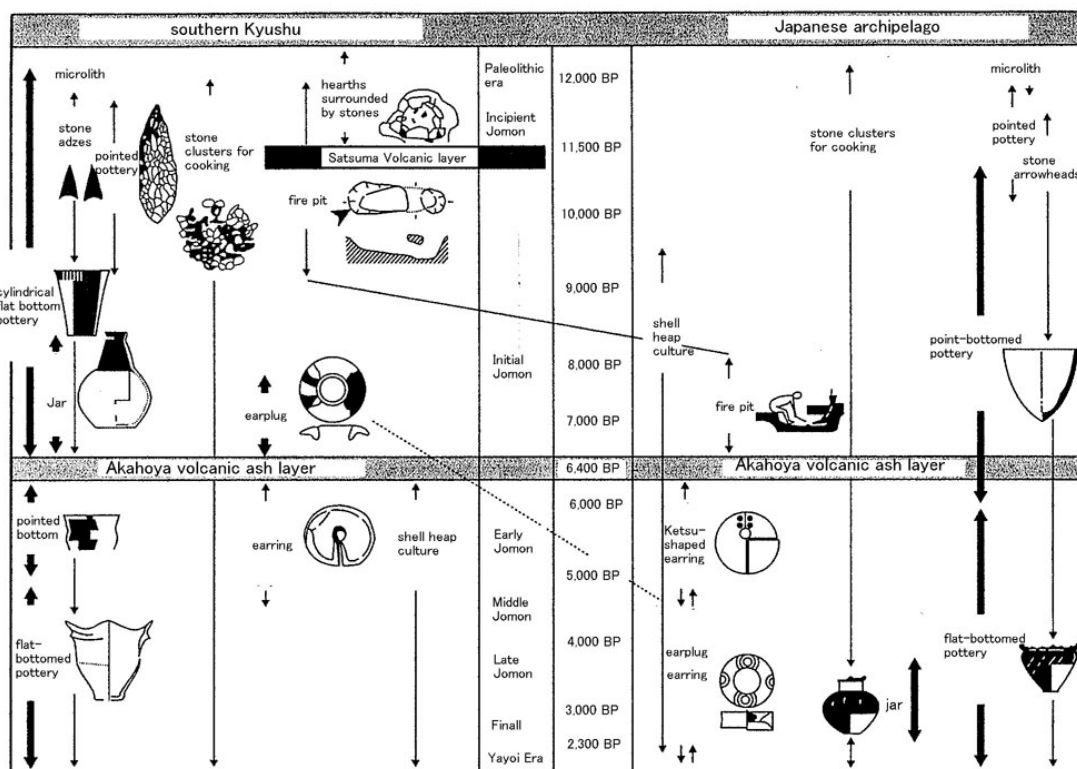


Fig. 2. Comparison between the Jomon culture of southern Kyushu Japanese archipelago.

potteries appeared, and Jomon society was created earlier than other parts. In the stage of incipient Jomon period, micro-blades were replaced by potteries called Ryutaimon potteries specific to southern Kyushu. Together with large amount of potteries, Jomon stone-tools such as stone axes and arrowheads became dominant. Especially, in southern Kyushu, cooking tools for vegetable such as grinding tools and querns were used more than hunting tools like arrowheads. This implies that, blessed with forest that was formed after warming, the authentic, vegetable-dependent Jomon culture originated in southern Kyushu first (Shinto 1995).

During the middle stage of incipient Jomon period in southern Kyushu, pit dwellings were already built at the Sojiyama and Kakoinohara sites. There are also various remains including hearths surrounded by stones, stone clusters for cooking, and fire-pits for smoking, which indicate that people had been settled there for a relatively long period of time.

In southern Kyushu, the first appearance of pit dwellings is in Uwaba site of Izumi city, which is accompanied by micro-blades of the end of the Paleolithic period (Ikemizu 1974). Later, clusters of small pits arranged in a circle were found at the Enokizaki B site in Kanoya city (Kagoshima archaeological center 1993). Additionally, pit-dwellings and hearths were discovered at the Mizusako site in Ibusuki City. They have revealed the appearance of groups of people in southern Kyushu who established dwellings at the end of the Paleolithic period.

From the Sojiyama site of the middle stage of incipient Jomon period, two pit dwellings and Ryutaimon pottery era were found. A large amount of cooking facilities including hearths surrounded by stones, stone clusters for cooking, and fire-pits for smoking are found, which show that the minimum conditions necessary for a community were satisfied. Thus these relics in the middle stage of the incipient Jomon period imply the features of a settlement.

The formation of Jomon communities in southern Kyushu is also attributed to the interchange and spread of different cultures between the north and south of Japan, which were caused by warming in the southern part of the Japanese archipelago.

Mikoshiha-type stone adzes, which originated from the northern culture are known as representative relics unique to the era from the end of the Paleolithic period to the incipient Jomon period. It was estimated that their cultural sphere spread as far south as northern Kyushu. Recently, however, they have also been found in the Hitoyoshi basin and the Chouchi site in Kiire town, southern part of Satsuma peninsula.

Moreover, a deposit of eight stone spear heads from a storing facility were found at the Sonoda site of Nakatane town, Tanegashima island, the southern tip of Japan. Therefore, it can be said that the influence of Mikoshiha culture was expanded throughout Kyushu.

On the other hand, cylindrical round-edged chisel-shaped adzes existed from southern Kyushu to the Ryukyu Islands after the incipient Jomon period (Oda 1988). Round-edged chisel-shaped adzes have been excavated with Ryutaimon pottery from the incipient Jomon period at Sojiyama site and others in Kagoshima Prefecture. The wide distribution of the same type round-edged chisel-shaped adzes was found over the Ryukyu Islands ranging from the Okinawan Islands through Amami Islands to Kumage Island, the coastal area of southern Kyushu, as well as the Amakusa Islands and the Goto Islands in Nagasaki prefecture. Round-edged chisel-shaped adzes are also considered to be used as woodworking tools to make canoes. The oldest canoe in Kyushu was considered to be the one excavated in Ikiriki site of Nagasaki Prefecture. However, considering the spreading route of micro-blades culture and pottery from the incipient Jomon period, it is also possible that canoes were used in southern Kyushu as well (Shinto 1997).

Thinking of remarkable development and maturity level of cultures during the incipient and initial Jomon periods in southern Kyushu, it is quite likely that both cultures of southern and northern Japan played a major role in forming the Jomon culture in southern Kyushu.

The beginning of the incipient Jomon period can be dated back to approximately 13000 years ago from excavations and carbon-dating analysis if the time of appearance of pottery with micro-blades originated in the end of the Paleolithic period and appearance of stone-tools characteristic of Jomon is regarded as the beginning of incipient Jomon period. And the culture of incipient Jomon period ended when the Satsuma volcanic ash layer was accumulated in southern Kyushu.

4. PRECOCIOUS CULTURE IN INITIAL JOMON PERIOD

During the initial Jomon period of southern Kyushu, many local shell-marked cylindrical pottery and cornered cylindrical pottery was developed, and are quite unique to this area. In the initial Jomon period of southern Kyushu large sized settlements represented by the Uenohara 4 site appeared, and they are composed of various structural remains like pit-dwellings, fire pits, stone clusters for cooking and paths succeeding from the culture of the incipient Jomon period.

And, in the latter half of the initial Jomon period of southern

Kyushu, in addition to pots, jar-shaped pottery, which are considered to have a completely different use, appeared. Clay figures and earrings representing a spiritual culture have also been excavated. This shows a highly matured and creative culture which cannot be seen elsewhere in Japan during the initial Jomon period.

At the Uenohara 4 site, from the layer just above the Satsuma volcanic ash stratum, which divides the initial Jomon period from incipient Jomon period, a large settlement was excavated. This typically shows the early phases of the settlement in southern Kyushu, and is an important to understand the beginnings of the Jomon era in the Japanese archipelago. Fifty two pit-dwellings, 39 stone clusters for cooking, 19 fire pits for smoking, 2 passes, and many pits were discovered. The soil found within 10 out of 52 pit-dwellings was packed by the volcanic ejecta from Sakurajima ejected approximately 9,500 years ago. From this evidence it is clear that 10 pit-dwellings existed in the same period of the first half of the initial Jomon period at Uenohara. Uenohara is classified as the oldest settlement in Japan (Kagoshima archaeological center 1997).

Prior to the discovery of the Uenohara 4 site, a settlement site with 17 dwellings, many stone clusters and fire pits had already been excavated in Kakuriyama site in Kagoshima City in 1975. Numerous village sites have been excavated at the Maehara site of Matsumoto town in Nagasakohira site in Ijuin town, revealing that core settlements like Uenohara site existed all over southern Kyushu during the first half of the initial Jomon period.

In the latter stage of the initial Jomon period (about 7500 years ago) the most gorgeous pot-shaped local pottery, also known as Hiragakoi-type pottery, was developed. There were also some remarkable phenomena during this period. First, sets of pots and jars appeared and were often buried and stored in pits at places like the Uenohara 3 site of Kokubu City. Secondly, many ritual and ornamental tools like clay figures, shaped stone tools, and earrings were excavated. It was believed that the jars and earrings were at their best during the periods from late to final Jomon periods in Japan. However, in southern Kyushu, they were already found during the latter half of the initial Jomon period, when the Jomon culture reached its maturity. Thus in southern Kyushu, it can be said that the stable lifestyle of the Jomon community with a high level of spiritual culture was already formed during the initial Jomon period.

Afterwards, the large Kikai Caldera eruption, which is estimated to be the largest one during the Holocene, occurred at the sea bottom north of Yakushima. The pyroclastic flows

and volcanic ash traveled over sea and covered southern Kyushu. The thick layer of volcanic ash deposited in southern Japan at this time is called the Akahoya volcanic ash layer. It was due to this volcanic eruption that the matured Jomon culture of southern Kyushu perished. This can be assumed from the different cultures found above and below the Akahoya layer.

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