Relationships between Jōmon Culture and the Cultures of the Yangtze, South China, and Continental Southeast Asian Areas

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Jōmon is frequently connected with the continental cultures of Northeastern Asia, although there is considerable evidence showing its relationship to southern parts of the Asian continent (specifically, to the region around the Yangtze River, to what is today southern China, and to continental Southeast Asia), as well. The most striking evidence is the adoption of wet rice agriculture, which is absent in the northern part of the continent. Although Jōmon culture developed after the Japanese archipelago was separated by sea from the Asian continent, the contacts with continental cultures did not cease. In this research note, based on an analysis of archaeological data, I discuss the problem of the relationship of Jōmon with ancient cultures of the Yangtze basin, of Southeast China, and of Southeast Asia, and the problem of the ways and peculiarities of contacts of Jōmon people with the continent.

Keywords: Jōmon, Yangtze, Southeast Asia, Fujian, Rice, Neolithic, stone tools, pottery, jade, contacts

Introduction

The problem of the origin of Japanese culture is frequently discussed and much argued about. After many years of research there are still many things being questioned. There can be no doubt that Japanese Paleolithic (kyūsekki jidai 旧石器時代) derived its origins from the Asian continent. As regards the Jōmon 縄文 period, of course, to some degree its culture is a succession to that of Paleolithic inhabitants who already lived in the Japanese islands, as can be seen from archaeological artifacts (e.g., stone arrows),¹ but influence from the continent is also widely seen. Migrations of population never stopped during this period. This has been shown by the works of Hanihara Kazurō 埴原和郎 in the field of anthropology and Yasuda Yoshinori 安田喜憲 in environmental archaeology.² Artifacts from the very beginning of

Jōmon provide evidence of both inheritance from Paleolithic antecedents and a new intrusion from the Asian continent.

The objective of this research is to show the situation during this long period, which lasted for more than ten thousand years (Jōmon is dated 12,000 BP-1100 B.C.E., according to the new chronology).3 By the beginning of this era, the Japanese archipelago had already been separated from the continent by the sea.⁴ This physical fact determined the specific character of Jomon culture, and accounts for its contrasts with continental cultures. Jomon artifacts, especially pottery, show many features that do not exist on the continent. It is striking, however, that many common features with surrounding Asian cultures are also found. Even though their homeland was surrounded by the sea, Japanese islanders were not at all cut off from the Asia continent. Cultural migration waves sweeping the Eastern part of Asia⁵ reached Japan and stimulated changes in material culture there.⁶ On the continent itself (here and in the following pages, by "the continent" I mean continental East and Southeast Asia) in the period analyzed in this paper, the most technologically developed agricultural cultures existed in the Yangtze valley, especially in the area around the mouth of the river. At least after 5000 B.C.E., the Hemudu 河姆渡, Liangzhu 良渚, and other cultures already displayed a developed social structure, which is called civilization.⁷ Their main peculiarity was a rice farming society. It has been proven that rice was already domesticated here, and then spread from the Yangtze to Shandong, Japan, and what is now South Korea.8 Other proofs of the strong influence of Yangtze civilization can be seen, for instance the spread of some types of jade embellishments, found from Guangdong to Shandong, some types of dental (that is, tooth-form, or adze-shaped or plain rectangular) axes and later semilunar knives with two holes, which reached South Korea.9 Southwards, Yangtze cultures had strong relationships with the cultures of the Southern part of China, Indochina, and the Southeast Asian island world, forming a single cultural circle.

On the material evidence of crania and dentition, Hanihara Kazurō, Hanihara Tsunehiko, and others have shown the biological relatedness of the Jōmon people with Southeast Asians, including the inhabitants of the southern part of China. The main task of my research is to show how the migrations from the southern part of the continent were reflected in archaeological material. This will help to establish the relationship between the concrete archaeological cultures, and show the possible routes of migrations.

The main problems I will deal with are: the degree of correlation of material culture artifacts in Japan and South part of East Asia; the possible time and route of cultural migration waves; and the possible developmental impact of southern cultures on some spheres of material culture of Japanese Neolithic. This essay presents a brief review of some problems of material culture of Jōmon and the southern part of East Asia, but of course not all the problems can be raised here.

Research History

The majority of previous archaeological research has put the main accent on the Northeast Asian connections of Jomon. Relatively few problems relating to connections of the Jōmon people with the South have been studied.¹¹ One topic that has been broadly researched in both Japan and China is the spread of rice agriculture to Japan. 12 Though the data of anthropological research shows the relationship of the Jomon people to the ancient peoples of southern part of present-day China and further to the south, to Indochina, 13 research reporting on close analysis of archaeological artifacts themselves has been rare, 14 compared to the large volume of archaeological research that has been done to establish the northern connections of Jomon. 15 Among the few previously published investigations into the southern connections of the Jōmon, we should especially notice the works by Oda Shizuo 田静夫 and Mishima Itaru 三島格, who showed us the route Southeast Asian culture took in order to penetrate Japan: through Taiwan and Okinawa to the southern part of Kyushu.¹⁶ Unfortunately, however, a thorough analysis of Neolithic artifacts of both sides, especially an analysis designed to reveal more concretely the relationships between continental culture and Jōmon culture, has yet to be done. In this research note, based on observations of similarities between artifacts, starting from the Yangtze and proceeding southward (after first explaining the peculiarities of the main continental cultures), I attempt to show the relationship of Jōmon with southern cultures.

Were Lower Yangtze Neolithic Cultures Connected with the Birth of Pottery in Japan?

The Yangtze region gives us one of the earliest examples of pottery and agriculture in the world. The world's oldest pottery remains were found in the lower part of the Yangtze basin, and have been dated to 22535–20425 years B.C.E. (calibrated years, Xianrendong 仙人洞 and Diaotonghuan 吊桶環 sites, Jiangxi Province).¹¹ These finds are somewhat earlier than those in two other early regions—Southwest China (Liuzhou 柳州 in Guangxi-Zhuang Autonomous Region , from 21067–19152 B.C.E., calibrated years) and Japan (Shimomouchi 下茂内 in Nagano prefecture, 18159–16745 B.C.E., calibrated years).¹¹8 The same can be said about rice remains. Rice remains in the Xianrendong and Diaotonghuan sites can be traced to 15322–14392 calibrated years B.C.E., a little bit earlier than remains found in the Yunchanyan 玉蟾岩 site in Hunan Province in the Middle Yangtze basin (13364–11869 calibrated years B.C.E.).¹¹9 Although the dates from Jiangxi are only slightly older than some from Guangxi and Hunan, and the possibility is strong that new finds can correct these statistics, the current state of the field enables us to consider the Lower Yangtze region, together with the Middle Yangtze region and Southwest China, one of the cradles of pottery and agriculture in the world.

As for Japan, although the pottery remains are considered to be among the earliest in the world, rice farming came much later. The oldest rice remains discovered in Japan have been dated at only between 3000–2000 years B.C.E.²⁰ This leaves us with a very long span of around 14,000–15,000 years between pottery and rice. Such a long gap contradicts

the common archaeological theory that the Neolithic should be a period of both pottery and productive economy. The prehistory of the Japanese archipelago shows its own way of development here, different from common historical logic; as it happens, the path of the archipelago was distinctive many times. In view of this difference, the question arises, is it possible to speak of the influence of early Yangtze rice farming cultures on Jōmon? If it is, then to what degree? Contacts through seaborne traffic occasionally happened, and the infiltration of overseas cultures can be seen in Jōmon material culture, though the data that we have both for Incipient and Initial Jōmon (up to 4000 B.C.E., according to old chronology²¹ or up to 5300 B.C.E., according to partly revised chronology)²² in Japan, and for the period before Hemudu 河姆渡 culture in South China (before 5600 B.C.E.)²³ are very limited.

The fact of early spread of pottery in Japan cannot, in and of itself, be taken as proof of the influence from the Yangtze region. Pottery as well as other technical innovations (stone polishing, the wheel, copper and bronze casting) can be absolutely independent from external influences, as I have shown in previous publications.²⁴ And usually innovation proceeds independently of external influences, except perhaps in the case of neighboring peoples living in close proximity with a good deal of communication between them (such as the Levant or Mesopotamia).

In the case of the spread of agriculture, particularly, in this instance, of rice farming, innovation cannot be independent of external influences. Agriculture spreads together with plants, the species of which have one particular place of origin. According to Soviet scientist Nikolai Ivanovich Vavilov (1887–1943), all cultivated plants originated in the wild in one or another particular region of the world, and it is possible to to define the center of their origin by studying the spread of their different plant forms to specific regions. As becomes clear when we apply Vavilov's theory to rice, there can be almost no doubt that rice farming in Jōmon came to Japan from the Yangtze basin, probably by way of South Korea, although that is not the only possible way it could have come. But in Japan the introduction of rice cultivation occurred only in the period of the developed Yangtze Neolithic (Hemudu culture, seventh through fourth millenniums B.C.E.), much later then it spread in Yangtze Area.

Analysis based on Vavilov's theory proves that the contacts occurred at the time rice was introduced, though we cannot establish the archaeological data that evidence the contacts before this. Pottery appeared in Japan at almost the same time as in the Yangtze region, much earlier than in other regions of the world. This is as I have shown above, although as yet we have only this indirect evidence, and no direct evidence, that the pottery was introduced from the continent.

If we take a look at the pottery of the Incipient Jōmon (10,000–7500 B.C.E., according to Kenrick; 13680–9250 B.C.E., according to Taniguchi),²⁷ we see that there is virtually nothing in common with Xianrendong here. The types of pottery are more various—not only round, but also pointed and plain bottom vessels. Rims are widening, and are thick and plain. Jōmon ornaments are not only cord prints but also cut, and their variety is larger than we find at Xianrendong (Fig. 1). In artifacts from the same time, we can see the legs of tripods in Xianrendong, and this is very important: the tripod form that became typical for

the central part of the Asian continent starts its history here. In later times it would become one of the prevailing forms in the Yangtze region, the coastal area of China, Thailand (Ban Kao; see below), and many other areas of the continent. Notably, however, the tripod form is almost unknown in Jōmon.²⁸

At the same time, we should keep in mind that the data for Incipient Jōmon is fuller than that for Xianrendong, and the absence of some types of artifacts at Xianrendong cannot exclude the possibility that they once existed. But at the present stage of research we cannot connect the appearance of pottery in Japan with the continent. (The Lower Yangtze region is where the earliest continental examples of pottery have been excavated, and these are much earlier than pottery found in other regions. Thus if we relate the birth of pottery in Japan to what was occurring in the rest of the world, it is probably only in the Lower Yangtze that we can see developments that are at all similar.) The same phenomena are apparent when we examine the stone industry; the Jōmon and Lower Yangtze differ. In Initial Jōmon we have only chipped tools—triangular axes, widening to the edge, and arrows, mainly triangular in shape, related to the Upper Paleolithic (Fig. 2).

This data enables us to suppose that the development of the earliest Neolithic age in Japan may have been independent from the continent, at least from its southern part. And the fact that pottery appears much earlier than agriculture in Jōmon is one more item of evidence in favor of this supposition. I must concede here that the data from the northern part of the continent must also be analyzed, and for me, this remains a topic for future research.

The situation changes only slightly in the Initial Jōmon period (7500–4500 B.C.E. by Kenrick's dating; 9250–5300 B.C.E. by Taniguchi's). In this period, pottery with a sharply pointed base is prevalent. The ornamentation of Jōmon vessels (mainly horizontal lines, points, and zigzags) is still more complex then in Xianrendong, though the stone and bone tools are of the same types as in the Incipient Period (e.g., Jaōdō 蛇王洞 in Iwate prefecture and Kasubata 粕畠 in Aichi prefecture).²⁹

Developed Neolithic in the Yangtze Region and Its Relationship to Jōmon

The stage of developed Neolithic, preceding the birth of Yangtze civilization, can be undoubtedly attributed to Hemudu (or Majiabang 馬家浜) and Songze 崧沢 cultures in the Lower Yangtze. They are located close to the seacoast in the northern part of modern Zhejiang Province, in the southern part of Jiangsu Province, and around Shanghai Municipality. Hemudu or Majiabang (in the author's opinion, these are the variations of the same culture) may be dated from the end of the seventh through the fourth millenniums B.C.E. The largest and most prominent developed Neolithic relics belong to Hemudu site on the bank of Hangzhou Bay 杭州湾 (Zhejiang Province). Findings at this site in 1973 caused us to take the first step toward changing our notions of the development of civilization in China. A new early farming culture had been found not in the Yellow River basin, but in the south. Thus life was given to the theory of multicentered origins of civilization in China (and by extension, in East Asia).³⁰

In one Hemudu site a large settlement of houses built on pilings was found, similar to what has been usual in Southeast Asia (and remains so now). Good preservation of the site resulted in the survival of a large amount of wood—tools and parts of wooden constructions, together with stone, jade, bone tools, pottery, and rice grains. Along with the settlement a large necropolis was excavated. Calibrated dates for these Hemudu sites are from 5650–5030 B.C.E. to 4050–3445 B.C.E.³¹

Based on materials from several sites in Zhejiang Province, Hemudu culture has been divided into four periods, all of which have examples at the Hemudu site itself. The earlier layers mainly have round bottom vessels with a widening or triangular rim, in some cases very similar to Jōmon ritual vessels. These forms were preserved in the later layers, but their variety increased. From the beginning many vessels have a carination, or a raised band, in the middle (Fig. 3), and later some of the vessels have two carinations. The round bottom pottery of the upper layers becomes simpler (Fig. 4), but at the same time tripods with flattened legs and on high stand appear (Fig. 5). Some vessels have ear handles and spouts (Fig. 6). From the lower layers onward there are many flat bottomed vessels (Figs. 6, 7). All the pottery is of high quality, some of it even glazed. The ornamentation usually covers only a part of a vessel. It is combed, linear, or zigzag. Some ritual vessels have solar, floral, two-headed bird, or other designs (Figs. 7, 8).

The stone tools are axes and chisels only, in thick and thin dental (plain rectangular) forms (Fig. 9). The majority of them are rectangular in shape, and only some widen to the bottom. These types continue to appear until the fourth period, although from the third period, dental axes with a drilled hole and round spinning whorls with a hole in them can be seen (Fig. 10). Jade and stone rings and half rings are also found in Hemudu. These served as earrings, beads, and other adornments (Fig. 11).

Hemudu culture exemplifies a highly developed level of farming society with high technologies and social diversity. Jōmon culture, at a lower level of economic development, could not inherit many of Hemudu's features, but in some aspects Hemudu influenced Early Jōmon (4500–3000 B.C.E. by Kenrick's chronology; 5300–3360/3500 B.C.E. by Taniguchi's), especially in Western Japan. In the stone industry of Jōmon there are the same polished dental axes and chisels, both rectangular and widening to the edge, a type characteristic for Southeast Asia from the Yangtze to the Malay Peninsula. These appear in Early Jōmon in the Kansai (e.g., Shidaka 志高, Kyoto prefecture; Ōyodosakuragaoka 大淀桜ヶ丘, Nara prefecture; Torihama 鳥浜 shellmound, Fukui prefecture) and in the Kantō (Ōguruwa 大 曲輪, Aichi prefecture) (Figs. 12, 13). Stone tools with a drilled hole can sometimes be seen (e.g., Torihama) (Fig. 14).

In pottery there is similarity only to some degree. As in Hemudu, in the Early Jōmon three types of bottoms are found: round (which prevails, as in Hemudu), plain, and pedestaled. Rims are often decorated by carving. But individual forms of the carvings are different. In ornaments of Early Jōmon we have small zigzags and small circles (Figs. 15, 16, 17) as the main elements of ornament, similar to what has been found at Hemudu.

It is my contention that the correspondences between the artifacts of Hemedu and those of Jōmon support the hypothesis advanced by Hanihara that there were contacts (migrations from the continent to the islands, although we cannot exclude trade as a form of contact) between the people on the Japanese archipelago and Hemudu-type cultures. Such elements are not numerous, and this makes me think that the migrations were indirect, through other regions. The ways of migrations and possible trade could be through the more northern regions (Shandong) or through more southern regions (Fujian). In this research note, I concentrate on examining the possibility of the southern way.

Hemudu culture was continued by Songze (4000–3000 B.C.E.),³² named after the Songze burial site (Shanghai Municipality, radiocarbon date 5860±245 BP, calibrated).³³ From the Songze layer of this site, a large variety of pottery, stone and jade tools and adornments, and some bone tools have been unearthed. The stone inventory differs only slightly from Hemudu. Here also dental axes and chisels, sometimes polished, sometimes flaked, are prevalent. Other tools are spinning stones and plummets, and bone arrowheads. The variety of stone tools is not large. In this aspect the similarity of the culture of the area around the mouth of the Yangtze with Early Jōmon is preserved. In Songze, however, stone drilled axes increase, compared to Hemudu, while in Jōmon drilled tools are still very rare.

The similarity between pottery from around the mouth of the Yangtze and Jōmon pottery disappears in the Songze period. Songze pottery has much more variety than that of Hemudu. Round bottom vessels almost disappear. The most popular vessels of this period are bowls on perforated stands (Fig. 18), which are usually long. A stand can consist of one, two, or three steps, and have round, triangular, or plain perforations (Figs. 18, 19). While the Lower Yangtze people needed more and more complex forms, Jōmon society preferred more and more complex rim forms, but did not change the bottom. Adornments in Songze are made of jade and stone (sometimes of clay) and are of two main types, circular bracelets or rings and semi-circular adornments with drilled holes in both edges (Fig. 20). In Jōmon stone or jade adornments are seen very seldom, mainly in the late period. Unlike Lower Yangtze, the Jōmon people had little other than the simplest form of ring (of cut ring), in contrast to the large variety of adornments from stone or jade which existed in the area around the mouth of the Yangtze (Figs. 21, 22).³⁴

Generalizing the types of artifacts of the Lower Yangtze culture before the Liangzhu period (3000–2000 B.C.E.) we can identify the following main types. In pottery, the representative shapes are the flat-bottom vessel, which almost replaced the round-bottom one; the high stand bowl; and the tripod with long legs (flat or round). In stone industry, the plain rectangular (dental) is the only known type of axe, and sometimes a round drilled hole appears in its center. Jades also were used quite often, but the forms of jade artifacts are very simple, usually circular (with cut and without) or semi-circular.

Artifacts of the Middle Period of Jōmon might be summarily characterized as follows: In stone industry, polished tools increase and drill techniques are used, but at the same time chipped tools are still preserved. In pottery, pedestaled and plain bottom pots appear, but the round bottom is still present. At the same time the rim becomes more complex, and ritual pottery differs more and more from everyday pottery. Many regional types exist, giving us opportunity to differentiate big sub-regions such as Kyushu, Chūgoku, Kansai, and Northern Honshu, and also small ones. But at the same time, up to the end of the period examined here, Jōmon people are not yet engaged in agricultural society.

Liangzhu Civilization and the Problem of Its Impact on Jōmon

Songze culture evolved into Liangzhu, which is considered to be an "early state" according to the parameters used by Chinese scholars, or a "civilization" in the terms used by Japanese scholars.³⁵ And I think in this case civilization means, effectively, state formation. The center of Liangzhu was located to the south and east of Taihu 太湖 lake (northern part of Zhejiang Province, Shanghai Municipality, southern part of Jiangsu Province), though the region under its direct influence was much larger. It stretched as far as the southern Shandong in the North, to southern Anhui and eastern Jiangxi Provinces in the west, and it reached northern and eastern parts of modern Guangdong Province in the south. Even in the northern Guangdong, Liangzhu influence was very strong (Shixia 石峽 culture).³⁶ The dates for classical Liangzhu are 3000-2800 B.C.E. (Fanshan 反山 and Yaoshan 瑤山 necropolises, Zhejiang Province), and even after this, Liangzhu culture continued until the end of the third millennium B.C.E. From the beginning of the second millennium it is continued in Maqiao 馬橋 culture.³⁷ There is a great number of Liangzhu sites, especially around its center in the Taihu region. The most important artifacts come from Fanshan, Yaoshan (Zhejiang), and Fuquanshan 福泉山 (Shanghai Municipality) necropolises. The majority of findings was made in the 1980 and 1990s, and became famous all over the world. The highest quality jades, some with carvings depicting a deity with a human face, captured especially widespread attention. Liangzhu culture left high-quality glazed pottery, rich terraced tombs, channels, dams, and other objects in addition.³⁸

Jōmon in the Middle period (3000–2000 B.C.E. by Kenrick's dating; 3630/3550–2580/2510 B.C.E. by Taniguchi's) seems to develop in its own way, although it has some traits in common with the culture of the area around the mouth of the Yangtze. In stone tools we have the further spread of the polished dental axes, but chipped axes still exist (Kawamukai 川 向, Mie prefecture; Shimizunokami 清水 / 上 shellmound, Aichi prefecture) (Figs. 23, 24). Drilled dental axes are sometimes seen (Fig. 25), though many of these tools have a depression in the middle and their utilization can be doubted (possibly they are anvil stones) (Fig. 26). The same depression is found in similar tools in Southeast Asia, Fujian, and Okinawa. In these same regions (in Vietnam and Kyushu) spiral shells are found (Figs. 27, 28). Neither of these artifacts has a match in objects found on the continent to the north. In the Late Period (2000–1000 B.C.E., according to the old chronology; 2580/2510–1260/1230/1220 B.C.E., according to Taniguchi) in some regions such as the Tōhoku (Numazu 沼津 shellmound in Miyagi prefecture), subbottom forms become more and more popular (Fig. 29). Even a perforated subbottom appears, similar to what we can find in the Yangtze and sea coastal

regions of the Peoples Republic of China (Fig. 30). In ornament, as well, there are some similarities, such as a large scale wave ornament that appears fairly often in Middle Jōmon (Katsuzaka 勝坂 2 type, Tokyo metropolis) (Fig. 31) and is typical for Liangzhu too (Fig. 32).

Similarities of Jomon with Liangzhu culture are not numerous, despite the transfer of rice agriculture from the Yangtze basin to Japan at that time. This could be proof that the migrations at that time did not come directly from the area near the mouth of the Yangtze, but followed other, indirect routes. We shall see one of the possible routes below, as I discuss the example of the relations of Fujian Neolithic culture with Jōmon.

Fujian Neolithic and Jomon

From the region to the south of the Yangtze, the continental area closest to Japan is the Taiwan Strait coastal region of Fujian. Minjiang 閩江 and some other small river valleys are particularly worthy of study. They are divided from other regions of the continent to the north and south by high mountains, and geographically are more closely connected with other coastal and island cultures than with contiguous areas on the other side of those mountains.

In the Fujian Region we can see many common features with Jōmon, both in pottery and stone tools. The technical and social level of Fujian Neolithic cultures seems to be closer to those of the Jōmon people. This region has not been excavated so intensively as the region to the north, but the materials that have been found there show many similarities with materials unearthed on islands to the north and the south. In Fujian there are no archaeological cultures that spread over a large territory such as we have seen in the Yangtze region. In contrast, Fujian archaeological types are very different from one small river valley to another, as exemplified by Minjiang, Jiulongjiang 九龍江, and Hanjiang 韓江 artifacts.

The Neolithic remains in the region are found only from the period no earlier than 4000–3500 в.с.е. (Keqiutou 殼丘頭 culture) in Minjiang and 5000–4000 в.с.е. (Fukuotun 富国墩 culture)³⁹ in Jiulongjiang valley.⁴⁰ As in Jōmon, what typifies the stone industry of sites in the Fujian region is the coexistence of retouched and polished stone tools (Fig. 33); tripod forms are almost wholly absent from the pottery at these sites, and simple round bottomed forms of pottery appear to have remained in use for a long time (Fig. 34). Another suggestive similarity with Jōmon: shellmounds are usual for Fujian and other coastal regions (for example the coastal area of Guangdong), but they are not typical for the Yangtze mouth region to the north.

Fukuotun pottery remains have a mix of comb and cord ornaments (Fig. 35). Its similarity with Jōmon (Figs. 36, 37) as well as to Indochina, pointing at the probability of direct relations (probably migrations) between these regions, has been remarked by previous researchers.⁴¹

The most popular ornamental figure here is a combination of wave and cord print. The ornaments of Fukuotun shellmound show similarity to the lower layers of Kita-Shirakawa 北白川 (vessels from Osaka prefecture) and the lower layers of Entō 円筒 types (vessels from

Shimizu-Mukai 清水向, Shizuoka prefecture) (Fig. 37). The dates of the finds in Fujian and Japan are approximately the same. The Japanese finds are dated as Early Jōmon,⁴² between 4500 and 3000, or 5300 and 3600 B.C.E.). Shell and nail prints, along with cord ornament, decorate pottery excavated from the Kinkuishan 金亀山 shellmound (5700–3700 B.C.E., calibrated years),⁴³ another site identified with Fukuotun culture; the same ornamentation is known in Jōmon. Stone tools found at Kinkuishan all are retouched, as is characteristic also of Jomon tools (cf. Figs. 38a and 23). They are of two types: round scraper and dental axe (widening to the bottom, with either a straight or rounded edge).

Unfortunately we do not have pottery forms which can be reconstructed in the early period. Though in the later period of Fukuotun culture (P'upian 浦辺 shellmound, around 2500-1400 B.C.E., according to radiocarbon dates) there are found simple round bottomed bowl and a lid finishing with a bowl-shaped handle. The cord ornament is preserved as the most frequently occurring pattern here, though sometimes black pottery glazed with red can be seen (Fig. 38b). This might be, as archaeologist Ch'en Chung-yu 陳仲玉 has speculated, a primitive porcelain. 44

Unfortunately, the findings in Jiulongjiang valley are very few, but even they give examples of close relationships, evidencing cultural transmission towards Jōmon. More findings are left from Minjiang river basin cultures: Keqiutou (relative to Fukuotun culture) and Tanshishan 昙石山.

In Keqiutou (around 3500–4000 B.C.E.)⁴⁵ there are not only chipped stone tools, but also polished ones. The main form of stone axes is dental, though sometimes triangular and even rhombic axes are seen (Fig. 33). A few axes have a hole in the center, but this is rare; probably it is the influence of the Yangtze region. There are many bone tools—needles, fishing hooks, harpoons (Fig. 39). Pottery wheels and shell hoes are frequent here (Fig. 40).

The same types of stone and bone tools are preserved in Tanshishan culture (around 3000-2000 B.C.E.). 46 Though polished tools already prevail over unpolished, chipped axes are frequent (Fig. 41). Stone arrows and shell hoes and knives increased. Adornments are very simple, usually stone and jade round bracelets with openings as in Keqiutou (Fig. 42). The same type of adornments are characteristic for Jōmon (Fig. 21), and though in general the territory of spread of these bracelets is rather wide (the coastal region of East Asia),⁴⁷ so that we cannot connect their origin solely with the Fujian region, Fujian is one of the most probable ways of their spread to Japan. Tanshishan culture is the most probable way of transmission of Yangtze and continental South Chinese, Southeast Asian cultural influences to the Japanese archipelago. All types of stone tools found in Minjiang river basin are also typical for Early and Middle Jōmon (4500-2000 B.C.E. or 5300-ca. 2500 B.C.E.), especially for the Kansai region (which I examined closely in preparing this research note): simple plain rectangular axes, triangular axes, triangular dental axes, coexistence of chipped and polished axes (Fig. 43). Shell adornments with a hole are typical for the both cultures, though in Tanshishan they have more variations. In this case, it is possible to see close relationships between the two cultures, most probably indicating that there were direct cross-cultural contacts or migrations.

In pottery of Keqiutou and of Tanshishan tripods are almost absent. In Keqiutou there are two forms of vessels, one with a round bottom (Fig. 34), the other with a foot (Fig. 44). The rim in many cases is rough (Fig. 45). The subbottom is sometimes perforated. These two main types of vessels are preserved in Tanshishan (Fig. 46). But the variety of subbottom vessels increases greatly. There are bowls on huge perforated subbottoms, long cup-form vessels on a small stand, and open cups or jugs on narrow stands (Fig. 47). Sometimes the round bottom of vessels changes into an angle bottom (Fig. 48). Some vessels have handles, either a long stick-form (Fig. 49) or a round handle. The same types of vessels—round bottom and subottom with a strongly widening rim—can be seen in the Middle and Late Jōmon (3000–1000 B.C.E., or ca. 3600–1260 B.C.E.) (Figs. 30, 50). In Jōmon, unlike in Keqiutou and Tanshishan, side handles are almost unknown and sharp-pointed bottoms are no longer seen in this period.

The ornaments in Keqiutou are mainly cord and grain prints forming straight and zigzag lines. These types and styles are preserved in Tanshishan also. Here in addition to for straight and zigzag lines, circles and chains formed by circles can be seen (Fig. 51). The same ornaments existed in Jōmon, too (Fig. 52). Especially notable in Tanshishan is the ornamental figure of two circles incised on the rim, possibly symbolizing eyes (Fig. 53). A similar figure is seen in Jōmon, though sometimes the circles are cut as holes (Figs. 15, 54).

From a great many similarities such as I have presented here, it seems quite likely that the Fujian region influenced Jomon directly. In pottery, stone industry, and bone industry we can see many common features, much more than with the cultures of the mouth of the Yangtze, especially after Hemudu. This closeness of Jōmon culture to geographically more distant cultures of Fujian can be explained by two factors. First is that Jōmon was highly dependent on the sea, and the cultures of the mouth of the Yangtze were more oriented to the continental inland. Fujian cultures were separated by mountains from the rest of the continent, and were oriented to the sea, which yielded a large part of their economic product. Further, the distance between the continent and the island world was not great, and the relationship with P'enghu 澎湖列島, and further Taiwan was very strong from Paleolithic times. 48 From P'eng-hu and Taiwan the chain of big and small islands is stretching to the north—Okinawa, Kyushu, Honshu, Hokkaido etc., and to the south—Luzon, Mindanao, Sulawesi—and further to the east (Island Southeast Asia) and the west (the Pacific). Fujian was the main ring in the chain connecting Asian continent and the Island world (the southern part of the Korean peninsula had the same function). The second major factor was that there was a significant economic and social level difference between Yangtze cultures and Jomon culture. This difference (even for a long time in the type of economy—productive and appropriative) made it difficult for Jōmon people to adopt much of the cultural inheritance of the civilization of the mouth of the Yangtze, though some traits of Yangtze cultures, especially Hemudu, can plainly be seen. In the same era, inhabitants of ancient Fujian were dependent on sea and forest products, and had a style of life similar to that of the Jomon people.

Thus it appears probable that the main route of contacts and migrations from the southern part of the continent to Japan was through Fujian. This conclusion is reinforced

by the fact that it is difficult to find traits of Yangtze culture that were transmitted to Japan other than those that existed in the Minjiang area, with the possible exception of the rough rim style in pottery.

Indochinese Neolithic Traits in Jomon Culture

Despite the distance between Indochina and the Japanese islands (at least 3000 km), some typical traits of Indochinese artifacts have similarities in Jōmon. Let us look at just a few examples. Pointed and short cut ornaments in Laang Spean (Battambang Province, Cambodia, ca. 7000–2000 B.C.E.)⁴⁹ have parallels in Kasori 加曾利 E (Ubayama 姥山) type (Middle Jōmon, 3000–2000 B.C.E., or ca. 3600–2500 B.C.E., in Togariishi 尖石, Nagano prefecture and others), and Moroiso 諸磯 A type (Early Jōmon, 4500–3000 B.C.E. or ca. 5300–3500 B.C.E.) (Figs. 16, 17, 55, 56).

Colored large curving line ornaments can be found in Khok Phanom Di (Southern Thailand, ca. 2500 B.C.E.), Phung Nguyen (Phu Tho Province, Viet Nam, around 2500–1500 B.C.E.), Gua Cha (Kelantan, Malaysia, around 1500–1000 B.C.E.)⁵⁰ (Fig. 57). The same type of ornament is one of the most frequently occurring ornaments in the Middle and Late Jōmon Periods (3000–2000 and 2000–1000 B.C.E., or ca. 3600–2500 B.C.E. and ca. 2500–1200 B.C.E.), for example in Kasori B type (Late Jōmon, e.g., Shiizuka, Ibaragi prefecture), in the above-mentioned Numazu shellmound and the Ōguruwa site (Fig. 58).

The early Ban Chiang type (Ban Chiang site, Udon Thani Province, Thailand) of spiral ornament (around 3600–1000 B.C.E.)⁵¹ is often found in Jōmon, for instance in the Fukura 吹浦 type (Fukura, Yamagata prefecture, Early Jōmon), the Shōmyōji 称名寺 type (Shōmyōji, Kanagawa prefecture, Late Jōmon), and the Katsuzaka 勝坂 type (Middle Jōmon, e.g., Takikubo, Tokyo metropolis) (Figs. 16, 59).

Not only in the ornaments but in forms there are definite similarities. But here the similarity might be attributed to the spread of features common to cultures all along the South China Sea coast (e.g., in Fujian). These features are continued in Jōmon, as was shown above. In ornaments from the same era, the traits mentioned above are not vivid in Fujian, but can be clearly seen in Indochina, and they show up in Jōmon, as well.

Similarities in forms can be seen most clearly in the examples from Ban Kao (Kanchanaburi Province, Thailand, ca. 2300–2000 B.C.E.) (Fig. 60) and the Numazu shellmound (Fig. 61). Here we can see wide stand bowls, round bottom pots with a bulging line in the middle and rim. In Khok Phanom Di,⁵² a plain-bottomed pot with very high upper part can be seen, much like some pots from Middle Jōmon, 3000–1000 B.C.E., or ca. 3600–2500 B.C.E. (Figs. 57, 62).

In the stone industry of Jōmon, continental Southeast Asian traits are widespread. The most outstanding of these are shouldered stone axes, quite often found in Indochina and Island Southeast Asia, which can be seen in the Fujian region and Japan as well (in Fukurohara 袋原, Fukushima; Kanisawa 蟹沢, Iwate, Middle Jōmon or Late and Final Jōmon, 2000–300 B.C.E., or ca. 3600–410 B.C.E., or ca. 3600–1100 B.C.E.), but are very rare in the Yangtze area

(Figs. 63, 64, 65). The same can be said about the rectangular axes with triangular blades, which in Japan are largely found, for example in Kitano 北野 (Mie prefecture, Late Jōmon, 2000-1000 B.C.E., or ca. 2500-1260 B.C.E.), Hamazume 浜詰 (Kyoto prefecture, end of Middle Jōmon to beginning of Late Jōmon, around 2000 B.C.E. or 2500 B.C.E.), Mizonokuchi 溝 / 口, Wakayama prefecture (Late Jōmon, 2000–1000 B.C.E., or ca. 2500–1260 B.C.E.), Funadomari 船泊, Hokkaido (ca. 3500 B.C.E.) (Fig. 66). Except for Jōmon they are found in Indochina, Fujian, and the Southeast Asian Island world (Figs. 67, 68). Some other types of stone tools are: round stones with deepening in the middle (Kawamukai 川向, Mie prefecture; Shimizunokami 清水ノ上 shellmound, Aichi prefecture, Middle Jōmon; Kitano, Mie prefecture, Late Jōmon; Akutagawa 芥川, Osaka prefecture, Early phase of Late Jōmon (ca. 2000 or 2500 B.C.E.); Kamihirabuki 上平吹, Fukui prefecture, Late phase of Middle Jomon and very many others (Figs. 26, 69, 70); in Indochina, for example, at Quynh Van in Viet Nam, ca. 4000-2000 B.C.E.);53 long widening to the blade adzes (Ushimaki 牛牧, Aichi prefecture; Ōharabori 大原堀, Mie prefecture, Late Jōmon; Fukurohara and many others; Phung Nguyen etc. in Indochina) (Figs. 71–75). In addition, in both regions, a phallic form stone hoe is typical (e.g., Kawamukai site, looking like the one from Taiwan; other examples exist) (Figs. 76, 77).

What I have presented above is evidence for contacts between Jōmon and Indochina. I take these archaelogical materials as proof of Hanihara Tsunehiko's theory. Migrations from Indochina were important in the formation of Jōmon people and their cultures, I believe, especially from the Middle Period. The fact that the majority of cultural similarities are also present in the Fujian region can be evidence that Fujian was the main route for such contacts. However it was likely not the only route, as there are some elements not present in Fujian, but existing in Indochina and Jōmon, as I have shown).

Conclusion

From the analysis of material culture artifacts of the region around the mouth of the Yangtze River, Southeast Asia (including South China) of Neolithic-Early Bronze Period (Phung Nguyen and Ban Chiang are considerered Early Bronze period), and Jōmon the following conclusions can be drawn.

Jōmon culture from the Early Period (4500–3000 B.C.E., or ca. 5300–3600 B.C.E.) shows us a number of material culture similarities to Southeast Asian cultures from Fujian to Malaysia, such as mixture of shouldered and dental stone axes; ornaments decorated with large spiral patterns or a mixture of cord and shell prints or eye forms; pottery with widening stands and bulged middle line; and many others. Especially, the similarities are numerous between Jōmon and the Fujian region, showing that Fujian was probably one of the main bridges connecting Japan with Asian continent for migrations of human groups and possibly for trade. There were much more developed cultures in the area around the mouth of the Yangtze, including, even, an early civilization (Liangzhu), but their influence on Jōmon was limited.

The influence from the Yangtze basin can be shown by such types of artifacts as jade, stone perforated axes, perforated stand vessels, and some others. But most of those types can be found in some form in the Fujian area too. That is why we can suppose that the influence of Yangtze culture on Jomon was transmitted mainly through the Fujian region, a very convenient bridge for migrations from the south. Influence from the Yangtze can be seen in the Hemudu period, though towards the Liangzhu period it becomes more and more attenuated. In contrast with this, on the continent itself, in the Liangzhu period the influence from the mouth of Yangtze River reached its greatest strength, stretching far from the river basin, from Shandong to Guangdong. But it was very weak in its impact on Jōmon. This is an interesting phenomenon, which may be explained by the sea factor. Jōmon people, as well as Fujian people, were largely influenced by the sea, though the Yangtze people were more faced to the inner continent. The sea, which made the migrations limited to some convenient sea bridges, like Fujian-Taiwan. The sea factor also made Jomon (and later Japanese societies) specific, different from other cultures; yet at the same time it never stopped the migrations from the continent. Among the routes of Jomon, very important were the migrations from South China and Southeast Asia that Hanihara Kazurō and Yasuda Yoshinori have posited, based on their reading of the anthropological and paleoenvironmental material. The present research brings forward archaeological evidence for these processes.

Jōmon, which brought the independent birth of pottery, was the period which started this special development of the Japanese, different from other nations. It was, furthermore, a period of active migrations from the southern part of continental Asia, and these migrations determined the choice for rice agriculture, which had already emerged in the southern part of the Asian continent.

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NOTES

- ¹ See Lapteff 2003, pp. 51-54, ill. 6.
- ² See Hanihara 1994, p. 472; Yasuda 2000, pp. 315-316.
- ³ The new chronology is summarized by Uno Takao. See Uno 2005, pp. 16-18. Although Jōmon pottery is dated much earlier (see below, p. 255), the period before 12,000 B.C.E. can be called transitional from the Paleolithic, according to analysis of stone tools. See Habu 2004, p. 36.
- ⁴ See Lapteff 1998, pp. 50-52.
- ⁵ See for example Chang 1986, pp. 169-185.
- ⁶ See Lapteff 2003, pp. 49-86. For convenience, I frequently refer to the Japanese archipelago simply as "Japan" in this research note. Of course no political or social entity corresponding to the present nation of Japan existed in the Jōmon period.
- ⁷ See Yasuda 2000, pp. 275-280.
- ⁸ See Yasuda 2000, pp. 316-317; Sato 2002, pp.143-150; Yan 2002, pp.151-153.
- ⁹ See Kungnip Kimhae Pangmulgwan 1999, pp.12, 25.
- ¹⁰ See Hanihara K. 1991, p.194; Hanihara T. 1992, pp. 53-67; Horai et al. 1990, p.193.
- ¹¹ In her book, which is the standard survey of East Asian archaeology in a Western language, for example, Gina L. Barnes gives relatively little attention to the problems of migration and the transmission of rice to the Japanese islands in the Jōmon period, although she does mention some of the research by Japanese and Korean authors. See Barnes 1999, pp. 77, 170.
- ¹² See Yasuda 2002; Toyama 2002; Takamiya 2002; An 1990.
- ¹³ See Lapteff 2003, pp. 54-55, Sasaki 1991.
- 14 Oda 2000; Mishima 1989; An 1990; Hudson 1999.
- 15 Im 2000; Jung 2002.
- ¹⁶ For instance Mishima 1989 and Oda 2000; see also other works by these authors.

- ¹⁷ The calibrated dates in this section are those proposed by Y. Yasuda (Yasuda 2002, pp. 138-139), who summarised the data for early pottery and rice remains for China, Japan, and the Russian Far East. In other cases, the reference is attached.
- ¹⁸ Yasuda 2002, pp. 138-139.
- 19 Ibid., pp. 138-139.
- ²⁰ Toyama 2002, p. 269. This new data for the earliest rice finds was not used by Habu Junko in her recent book (Habu 2004; see esp. p. 258).
- ²¹ Habu 2004, p. 41.
- ²² Taniguchi 2001, pp. 17-21.
- ²³ Yasuda 2002, p. 130.
- ²⁴ See Lapteff 2003, p. 53; Lapteff 1998a, p. 37.
- ²⁵ Vavilov 1926, pp. 133-138.
- ²⁶ Lapteff 2003, pp. 56-58.
- ²⁷ Kenrick 1995, p. 23; Taniguchi 2001, pp. 17-21.
- ²⁸ It appears in Late and Final Period, e.g., in Numazu shellmound (see the text below).
- ²⁹ Kenrick 1995, pp. 95-96; Nagoya-shi Hakubutsukan 2004, pp. 72-73.
- ³⁰ Su 2004, pp. 65-78.
- ³¹ Yasuda 2002, p. 139.
- 32 Huang and Zhu 2004.
- ³³ Furukawa and Watanabe 1993, p. 255.
- ³⁴ See Umehara 1971; Tang 2003.
- 35 See Zhang 2000; Yasuda 2000.
- ³⁶ Li and Tang 2000; Lapteff 2005.
- ³⁷ Shanghai-shi Wenwu Baoguan Weiyuanhui 2002; Huang and Zhu 2003.
- ³⁸ Shanghai-shi Wenwu Baoguan Weiyuanhui 2000; Shanghai-shi Wenwu Baoguan Weiyuanhui 2002; Zhejiangsheng Wenwu Kaogu Yanjiuso 1988; Zhejiangsheng Wenwu Kaogu Yanjiuso 2001; Lapteff 2005.
- ³⁹ In this research note, I use Wade-Giles transliterations for the sites and cultures excavated by scholars working in the Republic of China, and pinyin for the sites and cultures excavated by scholars working in the People's Republic of China. These transliterations follow the examples of the field researchers.
- 40 Luo 1995, p. 438; Chang 1977, p. 180.
- 41 Lin 1969, pp. 36-38; Chang 1977, pp. 179-182.
- ⁴² Kenrick 1995, pp. 66, 79, 101.
- ⁴³ Ch'en 1999, pp. 52-61.
- 44 Ibid.
- ⁴⁵ Xiamen Bowuguan and Xiamen Daxue 1999, pp. 62-70.
- 46 Luo 1995, p. 438.
- ⁴⁷ Tang 2003, pp. 19-34.
- ⁴⁸ Tang 1999, pp. 19-27.
- ⁴⁹ Higham 1989, p. 64.
- ⁵⁰ Bellwood 1997, pp. 256, 262; Viện Khảo cổ học 1999.
- ⁵¹ Natapintu 1987, p. 29.
- ⁵² Bellwood 1997, p. 258.
- ⁵³ Nguyễn 1998, pp. 91-102.

FIGURES

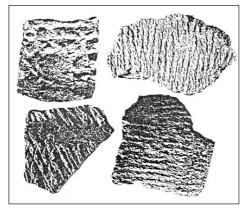


Fig. 1. Xianrendong. No scale. Source: Luo 1995, p. 386.

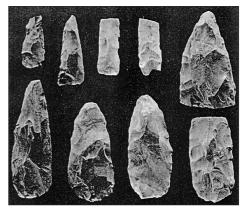


Fig. 2. Daitera site, Miyagi. Lower left tool 5.2 cm. Source: Tõhoku Daigaku Bungakubu, vol. 2, p. 84.



Fig. 3. Hemedu (Layer IV). No scale. Source: Furukawa 1993, p. 404.



Fig. 4. Hemedu (Layer IV). No scale. Source: Furukawa 1993, p. 398.



Fig. 5a. Hemedu (Layer II). No scale. Source: Furukawa 1993, p. 404.



Fig. 5b. Hemedu (Layer IV). No scale. Source: Furukawa 1993, p. 404.



Fig. 6. Hemedu (Layer III). No scale. Source: Furukawa 1993, p. 404.

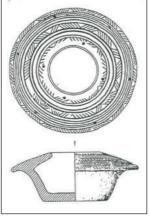


Fig. 7. Hemedu (Layer IV). No scale. Source: Furukawa 1993, p. 348.



Fig. 8. Hemedu (Layer IV). No scale. Source: Furukawa 1993, p. 404.

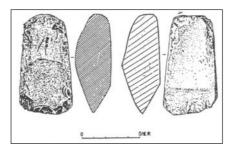


Fig. 9. Hemedu (Layer IV). No scale. Source: Furukawa 1993, p. 394.

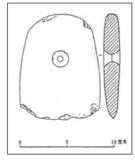


Fig. 10. Hemudu (Layer I). No scale. Source: Furukawa 1993, p. 402.

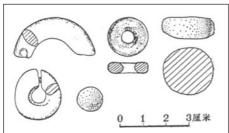


Fig. 11. Hemedu (Layer IV). No scale. Source: Furukawa 1993, p. 394.

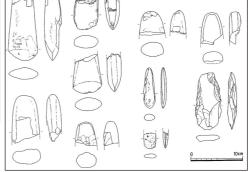


Fig. 12. Shidaka site, Kyoto (Early Jōmon). Source: Kansai Jōmon Bunka Kenkyūkai 2003, p. 183.



Fig. 13. Ōguruwa site, Aichi (Early Jōmon). No scale. Source: Nagoya-shi Hakubutsukan 2004, p. 54.

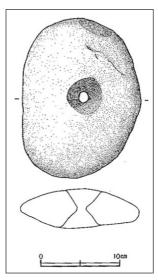


Fig. 14. Torihama shellmound, Fukui (Early Jōmon). Source: Kansai Jōmon Bunka Kenkyūkai 2003, p. 289.



Fig. 15. Moroiso A type (Early Jōmon). Height 12.6 cm. Source: Kenrick 1995, p. 99.



Fig. 16. Fukura site, Yamagata (Early Jōmon). No scale. Source: Kenrick 1995, p. 101.



Fig. 17. Ko site, Osaka (Early Jōmon). No scale. Source: Kenrick 1995, p. 101.

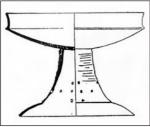


Fig. 18a. Songze. No scale. Source: Furukawa 1993, p. 359.

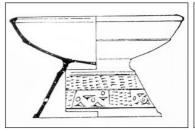


Fig. 18b. Songze. No scale. Source: Furukawa 1993, p. 359.

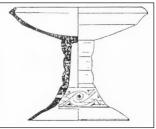


Fig. 19. Songze. No scale. Source: Furukawa 1993, p. 359.

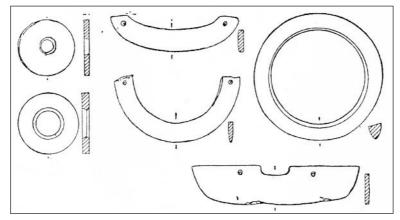


Fig. 20. Songze. No scale. Source: Furukawa 1993, p. 363.

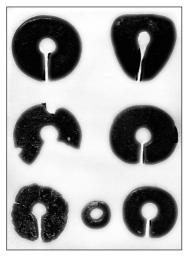
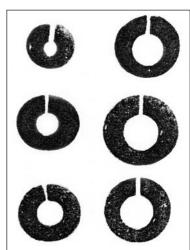


Fig. 21 (left). Middle Jōmon jades. No scale. Source: Tōkyō Kokuritsu Hakubutsukan 1953, p. 6.

Fig. 22 (right). Beiyinyangying site. No scale. Source: Furukawa 1993, p. 348.



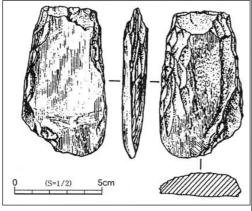


Fig. 23. Shimizunokami shellmound, Aichi (Middle Jōmon). Source: Kansai Jōmon Bunka Kenkyūkai 2003, p. 490.

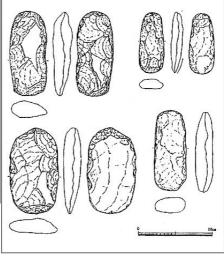


Fig. 24. Kawamukai site, Mie (Middle Jōmon). Source: Kansai Jōmon Bunka Kenkyūkai 2003, p. 328.

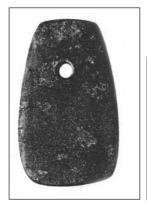


Fig. 25. Middle Jōmon jade. Source: Tōkyō Kokuritsu Hakubutsukan 1953, p. 15.

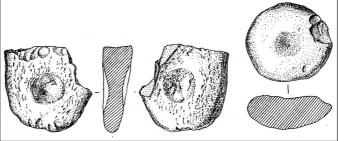


Fig. 26. Shimizunokami shellmound, Aichi (Middle Jōmon). No scale. Source: Kansai Jōmon Bunka Kenkyūkai 2003, p. 491.

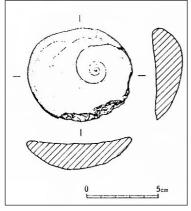


Fig. 27 (left). Vietnam or Taiwan. Source: Itō 2000, p. 128.

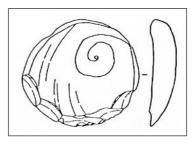


Fig. 28. Okinawa. No scale. Source: Itō 2000, p. 128.



Fig. 29. Numazu shellmound, Miyagi (Late Jōmon). 8.4 cm. Source: Tōhoku Daigaku Bungakubu 1982, vol. 1, p. 149.



Fig. 30. Numazu shellmound, Miyagi (Late Jōmon). 7.2 cm. Source: Tōhoku Daigaku Bungakubu 1982, vol. 1, p. 147.



Fig. 31. Katsuzaka 2 type, Ushimaki site, Tokyo (Middle Jōmon). 59.0 cm. Source: Kenrick 1995, p. 103.



Fig. 32. Fuquanshan site (Liangzhu). No scale. Source: Luo 1995, p. 207.

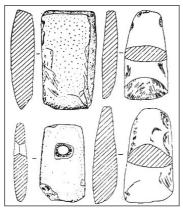
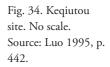
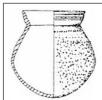


Fig. 33. Kequioutou site. No scale. Source: Luo 1995, p. 440.





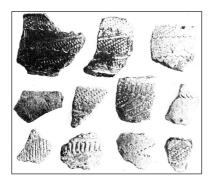


Fig. 35. Fukuotun site. No scale. Source: Chang 1977, pl. 1.

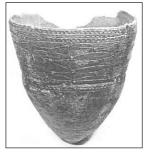


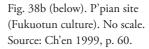
Fig. 36. Karumai site, Iwate (Late Jōmon). 34.0 cm. Source: Kenrick 1995, p. 116.

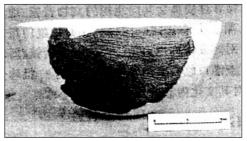


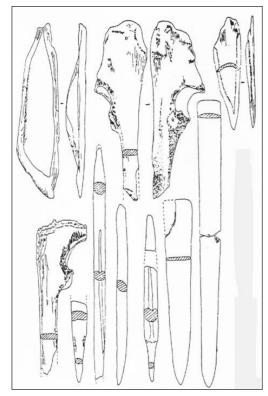
Fig. 37. Ento Lower type, Shimizu-mukai site, Shizuoka (Early Jōmon). 22.0 cm. Source: Kenrick 1995, p. 79.



Fig. 38a (left). Kinkuishan site (Fukuotun culture). No scale. Source: Ch'en 1999, p. 60.







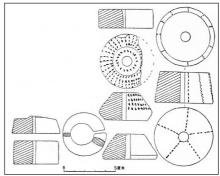
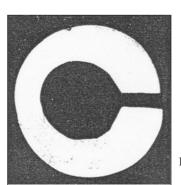


Fig. 40. Keqiutou site. Source: Luo 1995, p. 441.

Fig. 39. Keqiutou site. No scale. Source: Luo 1995, p. 441.



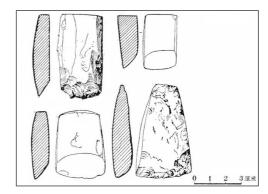


Fig. 41. Tanshishan site. Source: Luo 1995, p. 451.

Fig. 42. Keqiutou site. No scale. Source: Luo 1995, p. 443.

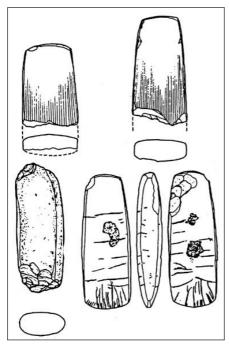


Fig. 43. Kaitō site, Gifu (Middle Jōmon). No scale. Source: Kansai Jōmon Bunka Kenkyūkai 2003, p. 390.

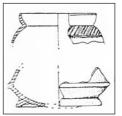


Fig. 44. Keqiutou site. No scale. Source: Luo 1995, p. 442.

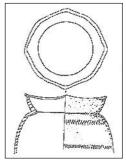


Fig. 45. Keqiutou site. No scale. Source: Luo 1995, p. 442.

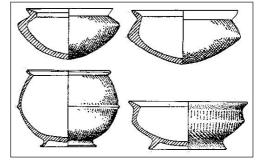


Fig. 46. Tanshishan site. No scale. Source: Luo 1995, p. 473.

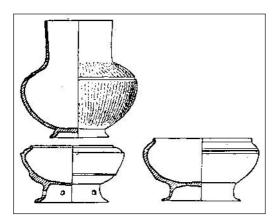


Fig. 47. Tanshishan site. No scale. Source: Luo 1995, p. 453.

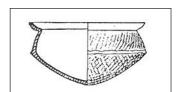


Fig. 48. Tanshishan site. No scale. Source: Luo 1995, p. 452.

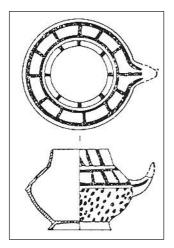


Fig. 49. Tanshishan site. 10 cm. Source: Luo 1995, p. 449.



Fig. 50. Middle Jōmon. No scale. Source: Tōkyō Kokuritsu Hakubutsukan 1953, p. 8.

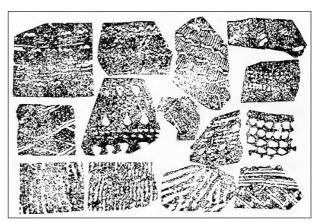


Fig. 51 (right). Keqiutou site. No scale. Source: Luo 1995, p. 439.

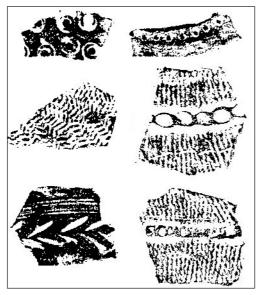


Fig. 52 (left). Tanshishan site. No scale. Source: Luo 1995, p. 451.

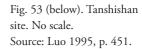






Fig. 54. Numazu shellmound, Miyagi (Late Jōmon). 10.5 cm. Source: Tōhoku Daigaku Bungakubu 1982, vol. 1, p. 147.

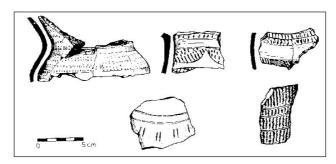


Fig. 55. Laang Spean site, Cambodia. Source: Higham 1989, p. 64.



Fig. 56. Kasori E (Ubayama type), Togariishi site, Nagano (Middle Jōmon). 21.8 cm. Source: Kenrick 1995, p. 113.

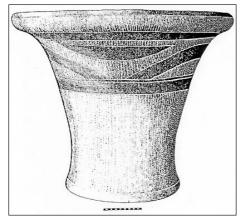




Fig. 58 (above). Ōguruwa site, Aichi (Final Jōmon). No scale. Source: Nagoya-shi Hakubutsukan 2004, p. 47.

Fig. 57 (left). Khok Phanom Di site, Thailand. Source: Higham 1989, p. 79.



Fig. 59. Katsuzaka type, Takikubo site, Tokyo (Middle Jōmon). 37.4 cm. Source: Kenrick 1995, p. 105.



Fig. 60 (above). Ban Kao site, Thailand. No scale. Source: Bellwood 1997, pl. 43.

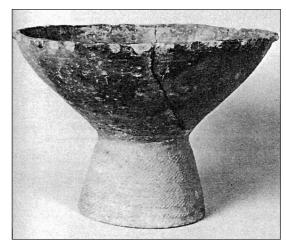
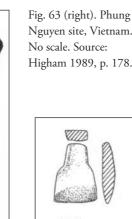
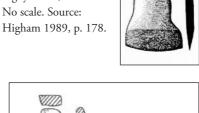


Fig. 61 (right). Numazu shellmound, Miyagi (Late Jōmon). Source: Tōhoku Daigaku Bungakubu 1982, vol. 1, p. 143.



Fig. 62 (above). Middle Jomon. No scale. Source: Tökyö Kokuritsu Hakubutsukan 1953, p. 6.





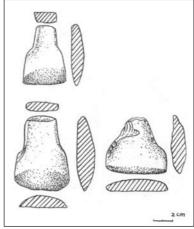


Fig. 64 (above). Quynh Van culture, Vietnam. Source: Nguyễn 1998, p. 252.



Fig. 65 (above). Kanisawa site, Iwate. 13.4 cm. Source: Tōhoku Daigaku Bungakubu 1982, vol. 2, p. 86.



Fig. 66 (immediate left). Funadomari site, Hokkaido. No scale. Source: Tõhoku Daigaku Bungakubu 1982, vol. 2, p. 87.

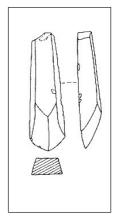


Fig. 67 (right). Malaya Peninsula. No scale. Source: Bellwood 1997, p. 232.

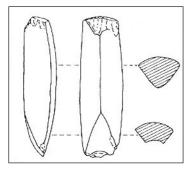


Fig. 68 (above). Luzon. No scale. Source: Bellwood 1997, p. 232.

Fig. 69 (right). Kitano site, Mie (Middle Jōmon). No scale. Source: Kansai Jōmon Bunka Kenkyūkai 2003, p. 331.



Fig. 71 (below left). Ushimaki site, Aichi (Late Jōmon). No scale. Source: Nagoya Kokuritsu Hakubutsukan 2004, p. 87.

Fig. 72 (below center). Ōharadori site, Mie (Late Jōmon). Source: Kansai Jōmon Bunka Kenkyūkai 2004, p. 127.





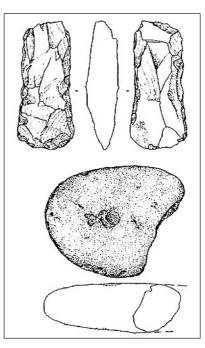
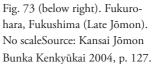
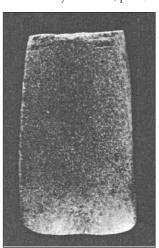


Fig. 70 (left). Akutagawa site, Osaka (Late Jōmon). No scale. Source: Kansai Jōmon Bunka Kenkyūkai 2004, p. 235.





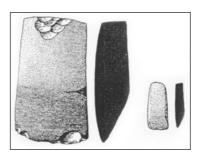


Fig. 74. Phung Nguyen site, Vietnam. No scale. Source: Higham 1989, p. 178.

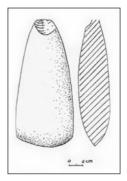


Fig. 75. Quynh Van culture, Vietnam. Source: Nguyễn 1998, p. 256.

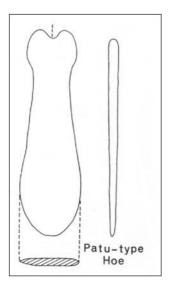


Fig. 76. Taiwan. No scale. Source: Bellwood 1997, p. 232.

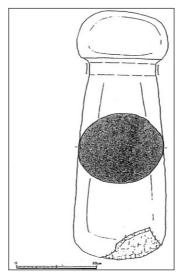


Fig. 77. Kawamukai site, Mie (Middle Jōmon). Source: Kansai Jōmon Bunka Kenkyūkai 2003, p. 329.

要旨

縄文文化と長江、華南、東南アジア大陸部との関連性

セルゲイ・ラプチェフ

縄文文化は大低アジア大陸の東北部諸文化と関連付けられているが、アジア大陸の南東部との関係を証明している事実も少なからずある。その内の一つはアジア北部にない稲作の採用である。日本列島は大陸と隔てられたから最初の時代になった縄文にも大陸との交流は途絶えなかった。この論文は考古学資料を分析の上、縄文文化の長江流域とそれ以南(中国東南、東南アジア)との関連性、古代縄文人と大陸南部との交流の道と特徴などの問題を取り上げる。