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Relationship between the Susuya Culture and the Aniwa Culture

1. Analysis of the Yuzhnaya II Site

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Introduction

The definition of Susuya culture began with the Susuya type pottery defined by Dr. Nobuo Ito (Ito 1942). In the 1930's, he investigated archaeological collections in Sakhalin commissioned by the Office of the Sakhalin Museum (Ito 1935). In addition, he explored many sites, and excavated some, including the Susuya site in southern Sakhalin (Fig.1). On these occasions, he noticed the potteries having lateral cord-mark impressions, which were common in southern Sakhalin. In addition, he frequently found another kind of pottery with comb-stamps mingled with the potteries above at the same site and in the same layer (Fig.2).

Moreover, both patterns sometimes appeared on the same pottery. He treated these two potteries as of the same culture (Susuya), although their main distribution shifted both north and south. This discordance in distribution he explained as regional. Nevertheless, he stated at the same time that since their origins were supposed to be different and their chronological positions estimated to be somewhat different, they should be divided into two different types in the future.

Although Ohyi criticized his typological

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method based on Dr. Yamanouchi (Ohyi 1982), we do not have a proper setting for the “Susuya type” even today, because we lack seriational data of those potteries found in Sakhalin. The arguments on Susuya pottery have always had this restriction, but we should try to approach the proper potteries of the so-called “Susuya type” through even a secondary way, since cultural identification depends primarily on the type of potteries discovered at the sites.

Susuya type pottery as defined by Ito contains two domains in controversy; the first is concerned with genealogy, and the second with cultural identification. The first domain covers relationships with comb-stamp potteries adjacent to Sakhalin, the Epi-Jomon potteries, and the so-called “Towada type” of the “Okhotsk culture.” As for the origin of comb-stamp potteries in Sakhalin, two regions have been assigned: one in Siberia (Ito id.:42, Okada 1967:41, Kanamori 1969:4), and the other in the lower Amur basin or in the Maritime Province of Siberia (Chubarova 1960:181, Kozyreva 1964:67, id. 1967:64, Kikuchi 1971:36). Although many archaeological researches have since been done in these regions, the arguments on the descent of comb-stamp potteries remain stagnant. As to the relationship with the “Towada type,” arguments have rather been concentrated on elements other than potteries, because a decision on cultural identity needed a general examination of the substructure (Maeda 1976, id. 2002, Amano 1977, Taneichi 1979, Ohyi 1981, Yamaura 1985). Contrastively, the relationship with the “Epi-Jomon type” has focused mainly on potteries, because the data on substructure of the “Epi-Jomon type” have been insufficient (Ito id., Kanamori id., Okada id., Ishiduki 1976, Nioka 1970, Kikuchi 1981, Ushiro 1991, Yamaura id.).

The second domain consists of two parts: one, the interpretation of a relationship between potteries with comb-stamps and those with lateral cord impressions (hereafter LCI), and the other, the interpretation of different aspects of LCI potteries among the sites in Sakhalin and in northern Hokkaido (Kumaki 1995, id. 1996). As for the problem of a formative process in Susuya culture, the second domain is more important, although genealogy problems (above all in the Epi-Jomon) naturally relate to it.

Today, the fusion theory seems dominant as a fundamental framework for the formative process in Susuya type pottery. It maintains that Susuya type pottery is a complex of comb-stamp potteries in northern Sakhalin and Epi-Jomon potteries in Hokkaido. Its main advantage is the possibility that these potteries differed in origin and that the main distributions belong to the same culture. However, “fusion” is not a conclusion for the formative process in Susuya pottery, but only a starting point to illuminate how Susuya has been formed. As is widely known, comb-stamp potteries are almost nonexistent in Hokkaido. If Susuya pottery is a fusion of comb-stamp and Epi-Jomon, therefore, then the process of fusion must be concretely elucidated.

Research on the formative process of Susuya type pottery is still in the beginning stages, and we only get a basic framework in “fusion.” The problems relating to this matter are reduced to three main points:

1) What kind of Epi-Jomon pottery was directly concerned in the formation of Susuya pottery?

2) Are the chronological positions of several comb-stamp groups (Kadylan'ya 1, Sabo, Ust'-Ainskoe 1, Estoru, and Susuya) on the same stage or not, and what are their cultural complexes?

3) Which body received acculturation—the comb-stamp group or the Epi-Jomon group? Where and how did this occur?

In this paper, I will begin with materials concerned with the first assignment. The Epi-Jomon potteries thought to be related to the formation of Susuya pottery are divided
into two groups: 1) the “Tobuchi type” and the “Aniwa type” in Sakhalin, and 2) the “Ustunai II group” and the “Koeto-Omagari III group” in northern Hokkaido. Nevertheless, these potteries are different in chronological position; it is very difficult to believe that all are related to the formation of Susuya pottery. The “Ustunai II group” and the “Koeto-Omagari III group” are similar in typological features, and their chronological positions are newer than the “Tobuchi type” and a part of the “Aniwa type.” Accordingly, the analysis of potteries will start with those in Sakhalin, especially the “Aniwa type.”

I. Definition of “Aniwa type” potteries

The “Aniwa culture” as defined by Vasilevski has become known by a series of excavations in 1985-89 in the southeast region of Sakhalin (Vasilevski & Zhushchikhovskaya 1988). Pottery of the “Aniwa culture,” namely the “Aniwa type,” consist mainly of three groups; recently however, he presented a new classification (Vasilevski 2002). Thus, types of potteries are classified, based on the shape of vessels and on elements of the patterns as follows (Fig.3):

“Aniwa A”: The vessel is in-curving toward its mouth with flat rim and bottom, diagonal cord-mark impressions on its outer surface, and pierced holes just under the rim.

“Aniwa B”: The vessel is similar to that of “Aniwa A,” and lateral cord impressions add to the pattern of “Aniwa A” just below the rows of pierced holes.

“Aniwa C”: The shape of the vessel is unidentified, because the example presented is a mere fragment of mouth, though its rim seems to be flat. It has rolled cord impressions on its outer surface and on the rows of bulges just under the rim.

“Aniwa D”: The vessel has a distinct neck and short mouth slightly flared. Its pattern is similar to “Aniwa C,” but it has no cord-mark rolled impression on its outer surface.

Vasilevski mentioned that “Aniwa type” potteries were uniquely different from Epi-Jomon potteries found in the southwest and middle-south regions of Sakhalin. However, as for the “Aniwa C type,” though its features are not clear, it would seem to be very similar to a part of the “B-a type” of the “Koeto-Omagari III” group in northern Hokkaido, which were found at least in the southwest regions of Sakhalin. On the other hand, among other assemblages without potteries were found a fireplace surrounded by stones with white clay pasted on their bottom, and a high utilization of obsidian among stone tools. The location of sites, and the pattern of distribution for house pits are common to those in the second
Until this day, since no settlement of the "Koetoi-Omagari III" has been found in Hokkaido, it is difficult to examine whether or not the similarity recognized in these potteries extends to other elements of the cultural complex as well. Cultural identity of "Aniwa C" potteries should be suspended until the appearance of comparable data.

Since a separate paper is in preparation for the "Aniwa D" potteries, therefore, an examination of "Aniwa type" potteries is limited to the two types above, which were first uncovered from the Yuzhnaya II site in the southeast region of Sakhalin.

II. Examination of the "Aniwa A & B type" potteries from the Yuzhnaya II site

The Yuzhnaya II site is located about 27 km to the north of Cape Aniwa in southeastern Sakhalin (Fig. 4). It is on the left side of the river terrace, 10–12 m in altitude, separated from Aniwa Bay by about 300 m. Fourteen house pits (depressions) were found here in 1985 (Fig. 5), and two among them were excavated in 1986 (No.1) and 1987 (No.2) (Vasilevsky 1987, 1988).

The cultural layers of these houses are similar, and potteries (except for a Naiji discovered among them) are thought to have belonged to the same complex in the form of vessels and ornaments (Zhshchkhovskaya 1988:49). The cultural layers are separated into three, and potteries from the third layer are related to these house pits (Figs. 6, 7).

According to Zhshchkhovskaya, who examined these potteries, their characteristics are summed up as follows (Zhshchkhovskaya id.: 49-51):

Mixture: Sieved fine sands of 2 mm or less are mixed no more than 50%, which derived from sands of the riverbed beside the site, as judged from their round shape. Organic mixtures seeming to be thin pieces of stems are also observed.

Manufacture: Wall of the vessel is formed by a stack of clay bands of 2-3 cm. Bottom is separately made, and tacked to the body reinforced by clay band from outside. Thickness of wall is 4-6 mm on average, and uniform, which reflects the technical perfection of its makers.

Trimming: For finishing and waterproofing, slip is applied to the surface of both wall sides. Polishing by stone or pebble was not performed, but gloss is found on the surface of wall as as a result of rubbing by soft hide or pasting grease.

Firing: Vessels seem to have been irregularly fired at less than 600°C in oxidized atmosphere.

Shape: Kinds are monotonous, the main type
having a spindle-shaped body with flat bottom, its mouth wide and flat. Height of vessel to diameter is equal or greater.

Pattern: Two types are evident, the first is bearing diagonal cord-mark impressions on its outer surface, sometimes extending to the bottom, with rows of pierced holes just under the rim. The second has lateral cord impressions added to the first, just below the rows of pierced holes. The former outnumber to the latter.

Undoubtedly, her analysis is very useful to us, especially in understanding the total technique of pottery manufacture from Yuzhnaya II. It is necessary, however, to examine ornamentation made by cords, because they are discriminative characteristics relating to the Epi-Jomon potteries in northern Hokkaido.

In 2000, I had a chance to investigate the
collection of Yuzhnaya II as a member of the Scientific Research in Sakhalin.1) These materials are a collection by the Laboratory of Archaeological Research at the State University in Sakhalin.2) All artifacts were separated into eight boxes about as large as a shoe box. Within two years, 315 fragments of pottery were discovered, and eight vessels with flat bottom were reconstructed, though imperfectly (Vasilevski 2002: 1). Fifty-two percent have rolled cord-mark impressions on their outer surface, and the rest have no ornamentation at all (Vasilevski ibid.). However, judging from our short investigation, it seems that those 315 fragments do not directly mean the number of individual potteries; they embrace three kinds of fragments: mouths, bodies, and bottoms. Identification of individual potteries, therefore, remains. On the other hand, the rate of plain potteries is notable, since rolled cord-mark impressions extend the whole body, frequently to the bottom. If it were not necessary to suppose a bias to the taphonomical process between plain potteries and cord-marked potteries, it might then be thought that plain fragments surely belong to the plain potteries, because rolled cord-mark impressions extend the whole body, frequently even to the bottom. Differences in the size of both potteries have little reference to this problem, because the sizes of cord-marked potteries range from small to large in comparison with reconstructed potteries (Figs.6, 7), while plain potteries are rather small in size.

From the third layers of both houses, as the coexistence of plain potteries and cord-marked potteries becomes obvious, the high rate of undecorated fragments is supposed to reflect the existence of a considerable preponderance during those periods. In other words, it can be estimated that a composition of the potteries in Yuzhnaya II consists of an equal number of cord-marked potteries and plain.

The cord-marked potteries found at Yuzhnaya II are separated into two types (Zhushchkhovskaya 1988: ibid.), which have been named by Vasilevski as the “Aniwa A” and “Aniwa B” types mentioned above. He thought these to be local groups of the Epi-Jomon potteries in Sakhalin (Vasilevski 2002: 15).

Fig.8 shows representative samples discovered from Yuzhnaya II. From No.1 to 5 are classified the “Aniwa A” type, and from No.6 to 8 the “Aniwa B.” Both groups have rolled cord-mark impressions on their outer surfaces. Cord-mark tools used for rolled impressions are mostly strands of RL except in a few instances of L (Fig.8-2). Nevertheless, the directions of strands are at least of two types. The first is made when a strand is placed vertically on the surface of the pottery and rolled horizontally, in which case the rolled impressions are relatively short and run diagonally. The second is that a strand is placed diagonally on the surface and rolled vertically; the rolled impressions are then long and run vertically or somewhat diagonally. All of the rolled impressions incline in the same direction from top left to bottom right; therefore, the artisan seems to have deftly arranged one’s method of cord winding and the direction of rolling cord-wrapped stick of L.

Cord marks are also observed on the surface of the rim (Figs.8-1, 2, 4, 6-8).

The result of my examination indicates that these cord marks are rolled impressions, and that the same cord-mark tool was used on the body. A cord-mark tool is placed on the surface of the rim vertically and rolled horizontally; consequently, the rolled cord-mark impressions incline similarly with those observed on the body.

On the outer surface of the bottoms we frequently find cord marks of RL and sometimes twisted marks of L (Figs.8-15,16). The direction of these marks is rather irregular, but the intention of decoration is distinct. As we know, this is one of the characteristic elements of potteries from the Final Jomon to the Epi-Jomon in northern Hokkaido.

“Aniwa B” type reveals lateral cord impressions
Fig. 8 The Impressions made from pottery fragments taken at Yuzhnaya II in 1986 & 1987 (Coll. No. 67 & 74)
overlapped with rolled (Fig. 8-6, 7, 8). All these impressions are made by strands of RL, which is the same tool used for rolled impressions on the body and on the rim.

Moreover, a row of pierced holes about 2–3mm enhances the features of these two types. Rolled cord-mark impressions cover almost all surfaces of the pottery, and a row of pierced holes and lateral cord impressions overlap with them. These characteristics are similar to those of the Epi-Jomon potteries found in northern Hokkaido.

Supplements to the report of Zhshchkhovskaya (1988) about the shape of vessels follow. A few cord-marked fragments of mouths indicate another shape of vessel with a rather straight mouth. As to the plain potteries, although information concerning this problem is insufficient, their spindle-shaped body rather keeps uniformity in comparison with those from other sites in Sakhalin. It is worthwhile noting that there are strong similarities between the shape of plain potteries and those of cord-marked potteries, except for the instances mentioned above. These spindle-shaped potteries with no ornamentation seem to be indigenous to Sakhalin, because no sure signs of their existence have been found in northern Hokkaido until this day, but we do find a few examples of this pottery in Sakhalin (Fig. 9). Although these sites are positioned before or after Yuzhnaya II based on the typological features (Vasilevski 1992: 128), an important point to be noted is that spindle-shaped potteries certainly did exist north and south in Sakhalin during these periods.

As has been pointed out, plain potteries are an important group dividing the composition of Yuzhnaya II. The fact that similarity in shape between plain potteries and cord-marked potteries, together with the high appearance rate of the former, the composition, and their indigenousness, strongly suggests that the people of Yuzhnaya II were a fundamentally indigenous group closely related to the plain potteries.

I have already mentioned that the potteries most resembling the ones found at Yuzhnaya II in Hokkaido are those of the Uedomari group on Rebun Island (Ono 2002: 109). The common composition consisting of plain potteries and cord-marked potteries, however, is not found among potteries from the Uedomari sites. I will show examples from these sites and try to reexamine them hereafter.

III. Examination of potteries from the Uedomari sites

The Uedomari sites are located on the Horodomari marine terrace along the east coast of Rebun Island (Taneichi 1985) (Fig. 10). They are separated into three adjunctively, (north to south): Uedomari 4, Uedomari 3, and East Uedomari. Based on typological features, the Epi-Jomon potteries are classified into three groups: "II-A," "II-B," and "II-C." With few exceptions, almost all potteries from the Uedomari sites have rolled cord impressions on their outer surfaces. Cord-marked potteries relatively similar to potteries of Yuzhnaya II are those of the "II-A group." Potteries with lateral cord impressions, however, seem to be somewhat few (Fig. 11).

The shapes of vessels are more diverse. Spindle-shaped bodies are considerably fewer than bucket-shaped ones; in addition, other type vessels are to be found with a shoulder resulting from smoothing by fingers, with several projections at the rim.

Cord-marking tools are mostly RL, and the directions of rolled impressions are similar to those at seen Yuzhnaya II.

The point of most differentiation is that the "II-A group" include a kind of "Nimaibashi type," and some have a row of pierced holes just beneath the rim (Fig. 11), which is one of the clues to knowing the chronological position of the "II-A group." On the other hand, the "II-B group" with a row of bulges, and the "II-C group" affected by the "Esan type" potteries, are found at the Uedomari sites.
However, at the Koetoi-Omagari site, the potteries consist mostly of those with a row of bulges; moreover, similarity between these potteries and the "Esan type" is evident (Fig12).

These facts show the "II-A group" to be somewhat earlier than the other groups at Uedomari, and Uedomari sites as a whole precedent to the Koetoi-Omagari site.

Although pierced holes and bulges are both decorative elements of Epi-Jomon potteries, there are some differences in their prevalence and distribution (Ono id.). From data available at present, the chronological position of potteries with pierced holes are as mentioned above, and the distribution of sites where these potteries have been found are nearly all restricted to the northernmost area in Hokkaido. Consequently, it may be supposed that similarities in cord-marked potteries of the "II-A group" at both Uedomari and at Yuzhnaya II demonstrate a strong relationship.

IV. Estimation of Yuzhnaya II and its relationship with Susuya pottery

Resemblances between the "II-A group" from Uedomari and Yuzhnaya II have been concretely confirmed. Since transformations of cord-marked potteries into the spindle-shaped obviously progress over those of Uedomari, however, a new composition of plain and cord-marked potteries is formed. Accordingly, it should be thought that the assemblage of Yuzhnaya II is not one of the Epi-Jomon potteries itself, but a complex of Epi-Jomon represented by the Uedomari group, and of indigenous pottery represented by the plain type.

Vasilevski defined "Aniwa Culture" so as to include Yuzhnaya II as an "Aniwa = Sakhalin" variation of the early Epi-Jomon culture (Vasilevski 2002: 6), and stated that Yuzhnaya II was the first stage of advance in the Epi-Jomon category (Vasilevski 1992:126). I also have expressed that the "Aniwa Culture" was a kind of Epi-Jomon acculturated by an indigenous group in southern Sakhalin (Ono 2002.: 111). However, this needs updating. My previous opinion stated that the indigenous group in southern Sakhalin was still a kind of hypothesis to explain
transformation of the Epi-Jomon group advancing into Sakhalin.

However, taking the composition of Yuzhnaya II into account, another aspect is revealed. As previously mentioned, the difference in size between plain and cord-marked potteries is not remarkable; they are common in shape, and the use of both potteries seems to have been equal because of burned remnants attached to the walls of vessels.
Therefore, it is supposed that the composition of Yuzhnaya II was based not on functional but on identical ground. In addition, for cord-marked potteries, although their original composition was still sustained, their shape became increasingly similar to that of plain potteries. As to the latter, on the contrary, it cannot be recognized that distinct characteristics were affected by the Epi-Jomon potteries. Accordingly, it is estimated that the inhabitants of Yuzhnaya II consisted mainly of indigenous people and others with a genealogy in common with the Epi-Jomon group in northern Hokkaido. This is a kind of cultural contact involving coexistence of potteries with different genealogies. As we have seen, for example, the coexistence period of the “Yuus IIb type” potteries and the “Itazuke I type” in the same settlement, the former are native to the Final Jomon period, and the latter are immigrants from the Korean Peninsula (Yamazaki 1980, Fujio 1999).

Concerning indigenous potteries in southern Sakhalin corresponding to the first half of the Epi-Jomon period, it has hardly been referred to by archaeologists either in Sakhalin or in Japan. However, the advance of Epi-Jomon potteries into Sakhalin and the transformation of these potteries cannot be explained without reference to specific indigenous examples. At present, the data on these “Aniwa type” potteries are insufficient; therefore, the hypothesis that I advanced originally should be examined in more detail hereafter.

As to the relationship between the “Aniwa A & B” types and Susuya type potteries, particularly the LCI group, the “Aniwa B type” is comparatively similar in the features of pierced holes and lateral cord impressions. However, differences in the shape of vessel, the adoption of rolled impressions on outer surfaces, and in composition, make it hard to trace a direct sequence to the LCI potteries. Whether or not these differences are dissolved when the comb-stamp group made contact with them, or with the indigenous group in southern Sakhalin, promoting transformation to the Susuya potteries precedent to contact with the comb stamp group, these are issues to be resolved in the future. Nevertheless, composition of the “Aniwa A & B” types seems to give direction to our search. The next step should be in the direction of starting to grasp the composition of Susuya potteries and their typological characteristics.

As to the formation of Susuya type pottery mentioned above, the “fusion theory” is prevalent today. It might be stated, however, that the arguments for “Epi-Jomon” potteries that made
contact with comb-stamp potteries in Sakhalin are too simple. The formative process of Susuya potteries should be examined from a wider point of view. Consequently, cultural positioning of the "Aniwa type potteries" is indispensible for elucidating the formative process in Susuya culture.

Notes
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