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HOUSE AND BURIAL ORIENTATIONS OF THE HOKKAIDO AINU, INDIGENOUS HUNTER-GATHERERS OF NORTHERN JAPAN

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ABSTRACT

In the northern-most Island of the Japanese archipelago, Hokkaido, there live indigenous hunter-gathers known as the Ainu. Among the Hokkaido Ainu, each nuclear family lived in a house, called *chise*. Each *chise* contained a sacred window, *rorun-puyar* (or *kamuy puyara*) at the opposite side of the entrance and the skull of a ritually killed bear during the *Iomante* (sacred bear ritual) would be carried into the house through this window. Previous ethnographic research has suggested that the sacred window was facing east, but regional variation in the direction of the window has also been observed. Among 1,034 burials from the Pre-Modern Ainu Period (circa. 13 to 17 century), there is a strong tendency for burials to be oriented toward the east, but in this case too local variation exists. The orientations of houses and burials seem to have been decided based on several other factors, such as river orientation, land slope, and various others. Ainu villages were typically arranged along a river and the river's upstream movement towards a sacred mountain was just as important as the eastward orientation noted above. Thus, we need to develop a more integrated view of the ways Ainu understand nature and orientation in order to increase our comprehension of these questions.

KEYWORDS: Hokkaido Ainu, sacred window, burial orientation, bear ceremony.

1. INTRODUCTION

The Japanese archipelago consists of a long chain of islands that extend from nearing Russia in the far north to nearing Taiwan in the far south. Japan's northern most island is Hokkaido, a unique area where rice cultivation was impossible until modern times. Hokkaido is home to indigenous hunter-gatherers known as the Ainu (Figure 1). Historically, the Ainu have also lived in southern Sakhalin and the Kuril Islands. In a remote past, the Ainu people probably lived in northern Honshu as well.



Figure 1. Map of Hokkaido.

According to the web at Hokkaido Ainu Culture Center (now located in the Hokkaido Museum), the dialect of the Hokkaido Ainu is divided into Southwestern Groups and Northeastern Groups (Figure 2). The latter demonstrates some similarities with the groups of Sakhalin and the Kuril Islands. As will be shown below, this division well accords with the regional differences in housing orientation and burials.

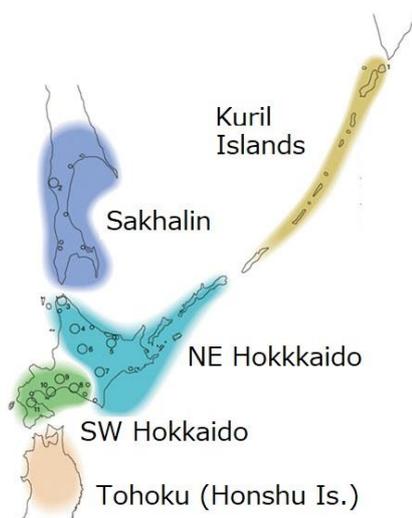


Figure 2. Map of Ainu Dialect.
(http://ainugo.hm.pref.hokkaido.lg.jp/html/01_01_02_01_00.html)

The Ainu had never been isolated people. On the contrary, they actively traded not only with the Japanese but also with groups on the Asian continent. Thus, their possessions consist of items both from Japan (e.g. samurai sword, kimono, etc.) and Asian continent (e.g. glass beads).

Today the Ainu people live just like the Japanese, using automobiles, mobile-phones, electricity and other modern technologies. But a cultural revival movement has recently begun. The accompanying picture shows a ceremony held in June 2017 in Shibetsu Town, the purpose of which was to console the souls of the Ainu fighters killed during the Kunashiri-Menashi war with the Japanese in 1789 (Figure 3).



Figure 3. A mourning ceremony, *icharupa*, held at Shibetsu Town (in June, 2017; photo taken by the author)

2. PREHISTORIC CHRONOLOGY

Japanese history can be divided into several distinct periods (Figure 4). The earliest of these are the Paleolithic Period (35,000 B.C. to 14,000 B.C.) and the Jomon Period (14,000 B.C.-1,000 B.C.). The Yayoi Period (1,000 B.C. to mid-2nd Century A.D.) followed these earlier periods and it was during this time when rice cultivation was introduced from China and the Korean Peninsula. After the succeeding Kofun (tumuli or burial mound) Period (mid-2nd century to 7th century A.D.), the Japanese islands moved towards political unification. In Hokkaido, however, where rice cultivation was then impossible, a distinct Post-Jomon culture succeeded the Jomon Period and a foraging economy persisted.

After the development of Post-Jomon culture (until 3rd century B.C.), the societies inland and in southwestern Hokkaido developed into what has come to be called Satsumon culture (3rd century B.C. to 7th century A.D.), which is considered the direct ancestor of the Hokkaido Ainu. In contrast, northeastern Hokkaido, especially the coastal zone of Okhotsk Sea, was settled by Okhotsk culture (3rd to 13th century A.D.), which originated in southern Sakhalin. The Okhotsk culture was a maritime culture characterized by sea-mammal hunting, fishing, and over-sea trading. The Okhotsk Culture contrib-

uted significantly to introducing civilization-derived valuables, such as glass beads and metal ornaments, to Hokkaido.

At some point, in northeastern Hokkaido, there developed a kind of creole culture, which blended elements from both Okhotsk and Satsumon cultures. This culture came to be referred to as the Tobinitai Culture (9th to 13th century A.D.). Thereafter, the Satsumon culture, absorbing Tobinitai culture, changed into what is now referred to as Ainu culture throughout Hokkaido. However, the regional differences before the emergence of Ainu culture is one factor that has led to regional variation of within the Hokkaido Ainu culture.

Year	Honshu (Main Japanese Is.)	SW Hokkaido	NE Hokkaido	NE Hokkaido (Coastal)
14,000 B.P.		Palaeolithic		
B.C. 5C		Jomon		
4C				
3C				
2C				
1C	Yayoi	Post-Jomon		
A.D. 1C				
2C				
3C				
4C				
5C				
6C	Kofun			Okhotsk
7C				
8C				
9C				
10C	Heian	Satsumon		
11C				Tobinitai
12C				
13C				
14C	Kamakura	Pre-Modern Ainu		
15C	Muromachi			
16C				
17C	Sengoku			
18C	Pre-Modern (Edo)	Ainu		
19C				
20C		Modern		

Figure 4. Prehistoric Chronology of Hokkaido and Honshu (Japan's Main Island)

3. LIFE AND SETTLEMENT OF HOKKAIDO AINU

The Hokkaido Ainu economy largely consisted of foraging, although they also practiced small scale farming of millet. Their most important staple food was salmon and the Ainu people traditionally caught several species of the fish between spring and fall. They preserved salmon meat by smoking it and also hunted deer, wild pig, rabbit, and bear, which all comprised important components of the Ainu diet (Watanabe, 1972).



Figure 5. Ainu House chise at Biratori Town. (in November, 2016; photo taken by the author)

Ainu society consists of a nuclear family and each family lived a house called chise (Ainu Culture Preservation Council, 1969). Chise are made of only one rectangular room and often an entrance chamber was attached to the side (Figure 5). In the middle of the room there was a hearth and at the end of the house's long axis, families created a sacred window known as *rorun-puyar* (or *kamuy puyara*=window of gods). Outside the sacred window, there was a sacred altar (Figure 6).

According to Ainu tradition, only gods were allowed to enter through the sacred window and the decorated bear skull during *Iomante* was brought in through this window. It was considered taboo to look into another family's house through this sacred window (Batchelor 1927, 171-172). Around each house there were typically bear pens, storehouses, and separate toilets for men and women (Ainu Culture Preservation Council, 1969).

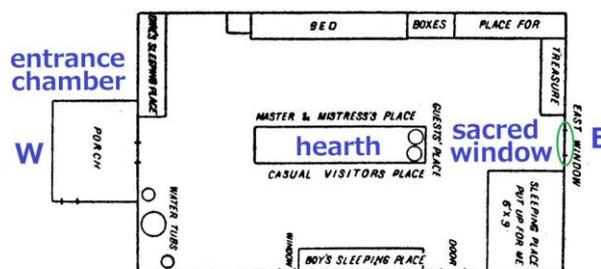


Figure 6. Inner structure of the Ainu house (modified from Batchelor 1927, 67)

The *Iomante*, or the bear ceremony, was the most important ceremony for the Ainu (Kadosashi 2016). *Iomante* is a ritual for sending back the souls of the hunted animals to the world of gods. This ritual was applied not only to bears, but also to other animals, such as foxes, raccoon dogs, and owls, amongst others. Bear *Iomante* were the most important to the Ainu and thus this term is often translated as "bear ceremony."

The Ainu hunted bears in hibernation during February and captured baby bears. The captured baby bears were traditionally brought back to villages and raised in pens. Ainu husband could watch the pen from inside of the house through sacred window.

When the bear turned two or three years old, around December solstice of that year, the bear was ritually killed in order to return it to the world of gods, *kamuy mosir*. The skull of killed bear must have been brought into the house through the sacred window. The skull was beautifully decorated and offered many foods for sending it back to *kamuy mosir*. The baby bear was thus treated with great hospitality and would tell gods in *kamuy mosir* that the human world was a good place to visit. That

means a good hunting season was promised in the next year, since the bear is a king of animal world.

4. INDIGENOUS ORIENTATION SYSTEM

The Ainu had an orientation system based on the movement of the Sun, *cup* (Sueoka 2009: 32). The east is recognized as the direction of "Sun-rise" and west as the direction of "Sun-set." In the east, they recognized three points corresponding to the rising point of the Sun, Summer solstice, Equinox and Winter solstice. In the same way, three points are recognized in the west, corresponding to the Sun setting point on solstices and Equinox. They were called as follows:

cupketok (*cupka+etok*: sunrise+head)
=Summer Solstice Sunrise Point
cuppoketok (*cuppok+etok*: sunset+head)
=Summer Solstice Sunset Point
cupkarantom (*cupka+rantom*: sunrise +middle)
=Equinox Sunrise point
cuppokramtom (*cuppok+rantom* : sunset+middle)
=Equinox Sunset Point
cupko (*cupka+o*: sunrise +hip)
= Winter Solstice Sunrise Point
cuppoko (*cuppok+o*: sunset+hip)
=Winter Solstice Sunset Point

There is evidence that the Ainu people observed the seasonal movement of the Sun from a certain spot in each village and that they constructed a wooden frame to measure the movement of the Sun (Sueoka, 2009, 33).

In addition to the east-west orientation, the Ainu had several types of local ways to index orientation. Among them, the most important was the contrast of upriver and downriver, since Ainu villages were usually situated along rivers. The upriver direction was especially important for the Ainu because that direction usually corresponded to the direction of sacred mountain where gods and ancestors live (Watanabe 1990).

5. ORIENTATION OF SACRED WINDOW

Existing ethnographic information suggests that the sacred window faces east. For instance, in the Chitose River Basin (southern part of Ishikari Plain), there is a strong tendency for the sacred window to be directed toward the east, although in this region the sacred mountain is located in the west. There is an Ainu oral history, which says that the people introduced the light of sun rise through this window and one informant says that "we should avoid facing the sacred window towards the sacred mountain (often lying upriver direction), since it is impolite to the gods (Matsui, 1999, 52; Uchiyama, 2007, 14-15)."



Figure 7. Sites mentioned in this paper
1: Karinba, 2: Suehiro, 3: Iruekashi, 4: Toyohata,
5: Motomonbetsu, 6: Moyoro.

Among excavated houses belonging to the Pre-Modern Ainu Period (Kobayashi 2010), 24 samples have an entrance chamber (Figure 8). If we assume that the sacred window is situated on the opposite side of the house along the long axis, all the 24 examples demonstrate an orientation belonging to the eastern half of the horizon (35° -- 130°).

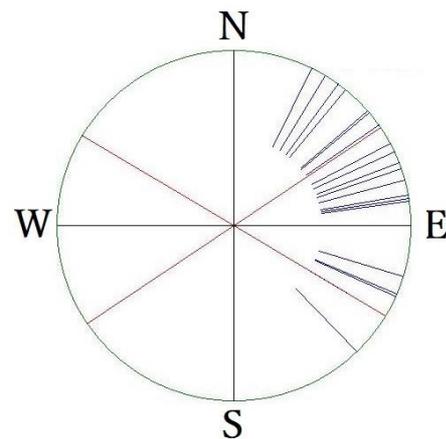


Figure 8. Estimated orientation of sacred window in house sites with entrance chamber (red lines indicate the sun rising and setting points at solstices).

At the Karinba 1 Site of Eniwa City (Figure 7:1), 10 houses were excavated (Eniwa City Education Board, 2005, Fig. 53). Among them, three houses have an entrance chamber on the western side, so the sacred windows must have been facing the eastern side (Figure 9). We can likely assume that the sacred windows of other houses without entrance chambers were also located on the eastern side of houses.

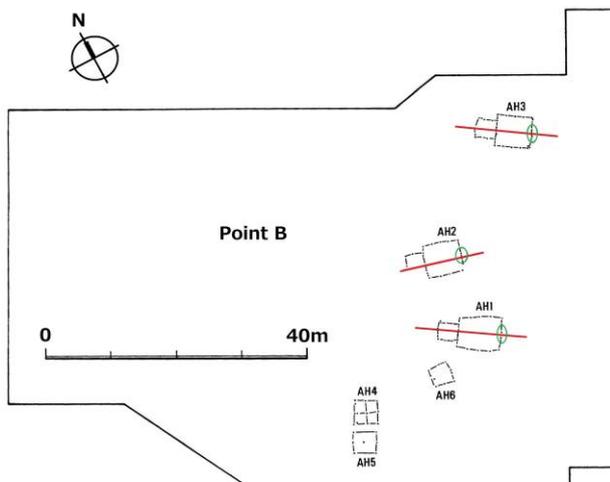


Figure 9. House sites with entrance chamber in Karinba 3 site (red lines indicate a long axis of each house and green circles indicate the estimated sacred window)(modified from Eniwa City Education Board 2005, Fig.53)

At the Iruekashi Site of Biratori Town (Figure 7:3), 10 houses were excavated. No entrance chamber is found in these houses. But if we assume that the sacred window is located along the long axis, then the sacred windows were facing either northeast or southwest. Even if sacred windows were facing the eastern side as ethnographic information in this town indicates (e.g Bachelor 1927: 171), this creates another problem, since the direction of northeast is also the direction of upriver (Uchiyama, 2007).

The eastern orientation of sacred window in southwestern Hokkaido, however, does not fit the ethnographic information collected in northeastern Hokkaido.

Ethnographic examples from Tokachi River Basin, situated in northeast Hokkaido, shows both northern and western orientation of the sacred window (Uchida, 1998). This clearly accords with the direction of the river (Figure 10), since all the examples show that windows were oriented to the upriver.

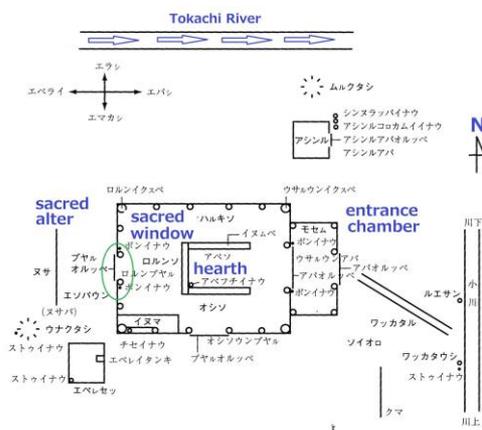


Figure 30. Ethnographic example of Tokachi Ainu (modified from Uchida 1998, Fig.1-1)

In Tokachi Basin, there is an oral history that states that the sacred window was situated towards either west or north, but that recently this tradition was fading and the window tends to be located on the eastern side (Yoshida, 1952, 117). Houses in northeastern Hokkaido often lack an entrance chamber and houses belonging to the previous period, the Satsumon Period, also lacked entrance chamber.

Therefore, we can tentatively conclude that the houses without an entrance chamber and with the sacred window facing to upriver were of the old type. According to Ainu lore (Yoshida, 1952), thereafter a new ideological wave originated in south-western Hokkaido, which distinguished the new type of houses with an entrance chamber and an eastern oriented sacred window.

6. BURIAL ORIENTATION OF THE PRE-MODERN AINU PERIOD

Similar differences in orientation can be seen in Ainu burials (Fujimoto, 1971). Ainu graves are usually oval or rectangular shaped. The deceased were typically buried in an extended dorsal position, but some were buried in crouched position (Hirakawa 1984). Since different accessories were buried with men and women, it is often possible to guess the gender of the buried person, even though no skeletal evidence remained. Furthermore, particular types of offerings are found around the head, which also makes it possible to estimate the head's orientation based on the distribution of burial accessories, even though no skeletal remains were found (Utagawa, 2007).

More than 1,000 burials belonging to the Pre-Ainu Period have been excavated so far, and they are compiled by Utagawa (2007). Among them, the orientations of some 400 burials have been precisely recorded. The histogram indicates the dominance of eastern orientation or southeastern orientation (Figure 11). Previous excavation reports were mostly based on magnetic north. The offset of magnetic north from true north is approximately 9 degrees west on the basis of present Hokkaido data. I have hypothetically calibrated the orientation data by using this offset value for this histogram and other figures in this paper.

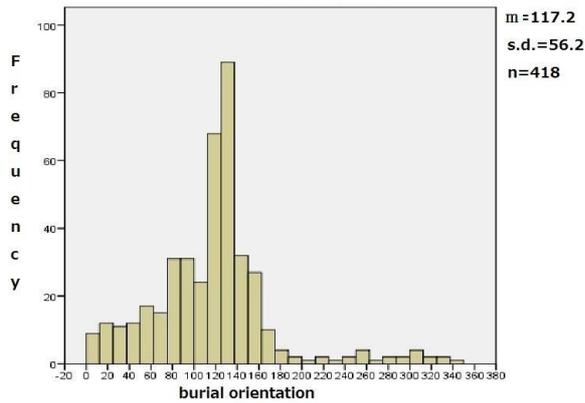


Figure 41. Histogram of burial orientations (the horizontal axis indicates the azimuth by degree)

At the Suehiro Burial of Chitose City (Figure 7:2), 30 burials have been excavated (Utagawa, 2007). Here, 80% of the burials are oriented from the northeast to south southeast zone, and only three examples oriented to north or west-northwest (Figure 12). There is an argument that these exceptional cases were for the people who died in a somewhat abnormal manner (Ohtsuka, 1964; Fujimoto, 1971).

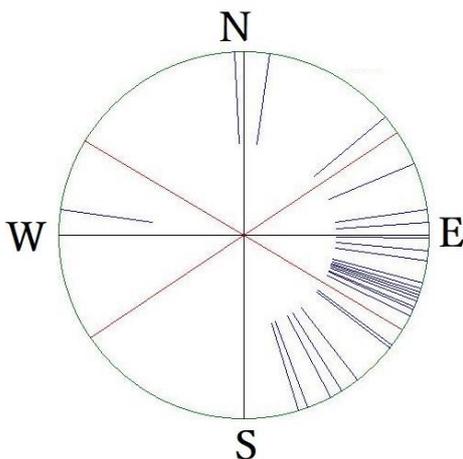


Figure 52. Burial orientation at Suehiro Site

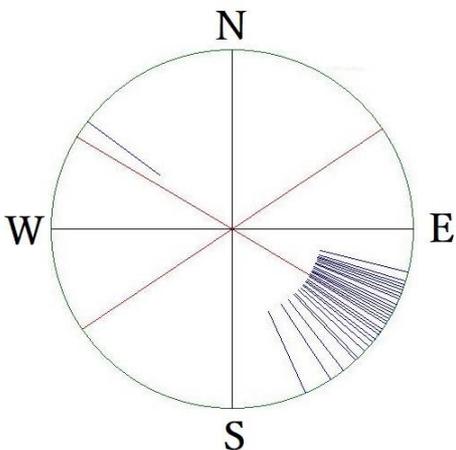


Figure 63. Burial orientation at Toyohata Site

At the Tohohata Burial in Shin-Hidaka Town (Figure 7:4), 75 burials have been excavated (Utagawa, 2007). Except for only one case, all burials demonstrated a southeast orientation around the Winter Solstice sun rise point (Figure 13).

Eastern orientation is by and large found in site of southwestern Hokkaido, such as Ohkawa Ukaichiten (16 burials), Yoichi Irifune (17 burials), Urakawa An-echabothi (22 burials), and so on, although there are usually a few exceptions (Utagawa, 2007).

On the other hand, among 51 burials in Motomonbetsu site (Figure 7:5), Monbetsu Town in north-east Hokkaido, east and southeast orientations are as numerous as north and northwest orientations (Utagawa 2007). Thus, similar to the house orientation, there is regional variation in burial orientation (Figure 14). The same regional tendency is also observed from other sites where only qualitative cardinal data (e.g. north, northwest, southeast, etc; not 0°, 325°, or 135° respectively) is available.

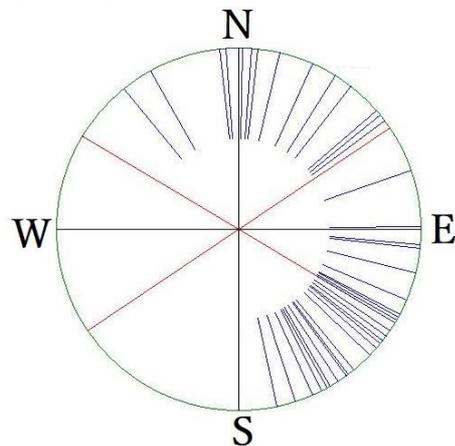


Figure 74. Burial orientation at Motomonbetsu Site

7. INTERPRETATION OF BURIAL ORIENTATION

Was the dominance of eastern orientation burials (at least in southwestern Hokkaido) related to the recognition of the east as an after-world or similar concept? But folklore indicates that if the deceased, whose heads were oriented to the east revive or wake up, he/she would be facing the west, where the dead was supposed to go immediately after dying. That is so the dead would never get lost on their journey. Therefore, the west was more important to the dead than the east in case of the eastern-oriented burials. Thus, eastern orientations of the sacred window and that of burials seem to have a very different meaning.

On the other hand, northern and western orientations of burials in northeastern Hokkaido seem to have affinities with those of the Sakhalin Ainu, although the evidence is not fully conclusive (Utagawa,

2001, 458-461; Uchiyama, 2006, 39-40). This burial orientation seems to have been derived from Okhotsk Culture (Fujimoto 1965). In Moyoro Shellmound Abashiri City on the Okhotsk Sea Coast (Figure 7:6), 80% of burials have northwestern orientations (Figure 15). One interpretation of this orientation is that it was the direction of the homeland of Okhotsk People, Sakhalin, or possibly sunset direction of June solstice.

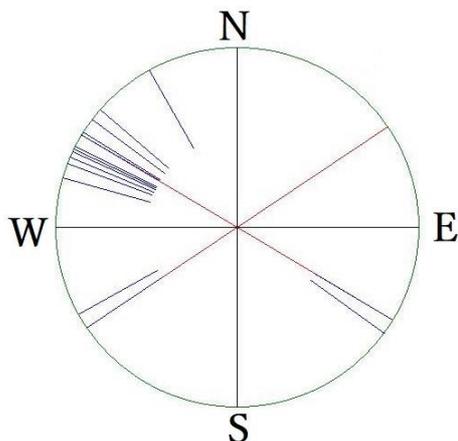


Figure 85. Burial orientation at Moyoro Shell Mound

There is an opinion that the Ainu bear ceremony was inherited from the Okhotsk Culture (e.g. Watanabe 1974; Amano 2003). Figure 16 shows the accumulation of bear skulls at the Okhotsk house site in Moyori Shellmound. It is possible to consider the northern and the western orientation of burials

in northeastern Hokkaido as a remnant of burial customs of the Okhotsk Culture.



Figure 96. An accumulation of bear skulls at Okhotsk house in Moyoro site (in June, 2017; photo taken by the author).

8. CONCLUSION

The regional variation of house and burial orientations seems to have come from several factors, such as, the influence of previous cultures and a time lag in the influence of a new wave of ideas. This resulted in the differential importance of cardinal directions based on the movement of the Sun and local indexes, such as upriver vs. downriver, and probably the direction of the sacred mountain as well (Ohbayashi, 1973; Watanabe, 1990; Uchiyama, 2007). This article discusses only these contrasts in orientation. I would like to make an integrated discussion on Ainu cosmology, including starlore (Sueoka, 2009), in the near future.

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