Northern Jomon culture seen from the world
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Jomon culture is a prehistoric culture that lasted for more than 10,000 years on the Japanese archipelago. The range of the culture is thought to have extended throughout almost all of the archipelago, from northern Hokkaido to southern Kagoshima, and then further, into Okinawa.

However, the culture was not necessarily uniform, and distinctive regional characteristics have encouraged moves to understand Jomon as a regional cultural sphere.

Among these regions, a unique cultural area was formed by the southern part of Hokkaido and the northern part of Tokhoku, the north-eastern part of Japan, which are separated by the Tsugaru Strait. Currently, efforts are underway to secure UNESCO World Heritage Site designation for the Jomon culture of this region, as “Jomon Archaeological Sites in Hokkaido and Northern Tohoku.”

The Goshono Jomon Park continues to hold lectures to encourage learning about Jomon culture in the north, and many researchers into archaeology, history, and cultural anthropology have given interesting lectures. This article contains one of those lectures, on how Jomon is seen from outside the Japanese archipelago.

I would like to remove the frame of the Japanese archipelago, and to think with everyone, from a broader perspective, about the strong regional ties and longevity of the culture of “Jomon Archaeological Sites in Hokkaido and Northern Tohoku.”
The beginning of pottery and changes in the natural environment

Fifteen thousand years ago, rapid warming reduced the number of large animals, and pottery began to appear for the first time, from Primorsky Krai in East Asia (Russian Far East) to various parts of China and the Japanese archipelago. At present, the oldest such pottery in the world is a combination of stone tools that have strong Palaeolithic characteristics and Neolithic tools such as polished stone pots and arrowheads that were excavated together. These are seen as evidence of a time of immense change in the history of humankind, driven by environmental change.

Originally, for a long time, humans were hunter-gatherers who roamed in search of food, but with the emergence of a rich natural environment, this was the time of the transition from free movement to settlement.

From 13,000 years ago, a cold period continued, but by about 10,000 years ago a warmer climate had stabilized, and with it a more abundant natural environment. Remains from this time have been confirmed in various places, confirming that the move of hunter-gatherers into settlements was proceeding at pace.

I think the changes in the four seasons, spring, summer, autumn and winter, were also important in settling hunter-gatherers. Regions with four seasons have many kinds of animals and plants, and it is possible to secure different foods in each season. However, because each period is limited, a large amount of food stuff must be obtained all at once. Doing that and securing the food efficiently, requires resources in respect of labour, technology and facilities.

Having said that, securing food is difficult in some seasons, so know-how in storage is also important. The increase in the number of ruins seems to indicate advances in such technology.

### Comparative chronology of the Jomon period and world history

<table>
<thead>
<tr>
<th>Age</th>
<th>Time division</th>
<th>Major developments</th>
<th>World developments</th>
<th>Jomon sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC</td>
<td>Palaeolithic period</td>
<td>- Microlithic culture spreads throughout the Japanese archipelago.</td>
<td>- Homo erectus pekinensis prospers. - Lascaux cave paintings are drawn.</td>
<td>- Oda-mamemoto Site</td>
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<tr>
<td>Approx. 13,000</td>
<td>Incipient</td>
<td>- Pottery and stone arrowheads begin to be used. Permanent settlements spread, and settlements are formed.</td>
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<tr>
<td>Approx. 9,000</td>
<td>Initial</td>
<td>- Climate warming increases and the sea level rises (Jomon transgression). - Shell middens are formed.</td>
<td>- Rice cultivation begins in the downstream basin of the Yangtze River.</td>
<td>- Kakinohama Site - Late period</td>
</tr>
<tr>
<td>Approx. 5,000</td>
<td>Early</td>
<td>- Cylindrical pottery culture is formed. - As the number of settlements increases, some of them begin to play a more important role in the region. - The technique involved in lacquer processing develops.</td>
<td>- The Chinese civilization begins. - The Mesopotamian civilization begins.</td>
<td>- Okagohama Shell Midden - Saiin-Maruyama Site - Early period</td>
</tr>
<tr>
<td>Approx. 3,000</td>
<td>Middle</td>
<td>- Large-scale hub settlements develop. - Trading of jade, obsidian, etc. thrives.</td>
<td>- The Pyramid of Khufu is constructed. - The Indus Valley civilization begins.</td>
<td>- Oorne Site - Goshono Site</td>
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<tr>
<td>Approx. 2,000</td>
<td>Late</td>
<td>- The number of large-scale hub settlements seen in the Middle period decreases and settlements become decentralized. - Stone circles emerge.</td>
<td>- The Code of Hammurabi is established. - The Yin Dynasty is established. - Tutankhamen assumes the throne.</td>
<td>- Kitasae-muromachi Site - Early period - Quy Stone Circles - South Site</td>
</tr>
<tr>
<td>Approx. 1,000</td>
<td>Final</td>
<td>- Kamagakura culture flourishes. - Goggle-eyed clay figurines, clay masks and many other tools for rituals are made along with a variety of accessories. - Rice cultivation is introduced in northern Kyushu.</td>
<td>- Spring and Autumn period</td>
<td>- Omori-Katsuyama Site - Kamagakura Site</td>
</tr>
<tr>
<td>Approx. 300</td>
<td>Yayoi period</td>
<td>- Yoshinogari Site flourishes.</td>
<td>- China is unified by the Qin Dynasty. - The Colossus is constructed.</td>
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</table>
With the emergence of large-scale settlements, mainly for hunting and gathering, farming started in West Asia, with pastoralism following later. It is interesting to note that farming started in the diverse flora lying between arid and forested areas. It then spread, mainly to temperate regions such as Europe, slightly behind Western Asia; but this culture was by no means uniform, and varied widely from region to region.

In West Asia farming centred on crops suited to grasslands: wheat, barley, lentils, peas, chickpeas, etc., and pastoral farming followed about 1000 years later.

However, in contrast to the grassland culture of West Asia, East Asia was a wet forested region, sometimes referred to as a forested Neolithic culture.

Within it, different cultures continued to exist in the same forested environment Forest clearances to grow crops like millet had begun in the northern part of China, but in the Far East and Japan’s Tohoku, deer and boar were hunted in the forest, and quercus, a nut, and mizuna, a leafy vegetable, were gathered.

In addition to hunting and gathering nuts, the people of the north-eastern forest culture, centred on the Sea of Japan and extending from the south of the Russian Far East through the Korean Peninsula to the Japanese Archipelago (collectively known as the Japan Sea Rim Cultural Zone), characteristically fished the rivers and oceans for fish like salmon and trout, lived in pit houses, and built shell mounds. The Jomon culture of the Japanese archipelago is also considered one of the cultures of the Japan Sea Rim Cultural Zone.

Jomon culture is not a culture cut off by the sea that is unique to the Japanese archipelago, rather it can be seen as one of the established hunter-gatherer cultures of the Northeast and Far East regions of East Asia.
In the hunter-gatherer society of this region, along the Sea of Japan, there are major variations in the native vegetation. In the northern part it is deciduous broad-leaved forest, while the southern part is home to evergreen broad-leaved forest (glossy-leaved forest). The former is mainly made up of Quercus Serrata (pin oak) and Quercus Mongolica (water oak) with elm and maple, and the latter mainly evergreen oak such as Pasania (Japanese stone oak) and Matebashii (also Japanese stone oak), so the nuts used are different. The distribution of northern deciduous broad-leaved forests extends from north-eastern China to the northern part of the Korean Peninsula, and to eastern Japan, while the distribution of evergreen broad-leaved forests extends from the southern part of the Korean peninsula to western Japan and to south of the Yangtze River in China.

In this region, the Japanese archipelago, surrounded by the sea and with an oceanic climate, was home to exceptional and abundant forests. In addition to Quercus serrata and Quercus mongolica, they were home to many species of tree that were scarce on the continent, such as beech, horse chestnut, chestnut, painted maple and katsura (Japanese Judas tree).

The beech forest and steep mountain streams enriched the sea, realizing the formation of an extraordinary marine resource. Eastern Japan was also where the salmon and trout thought to have supported the lives of hunter-gatherers in the Pacific coast region migrated upstream.

Jomon culture grew up in this natural environment on the Japanese archipelago, centering on the deciduous broad-leaved forests of eastern Japan. Most importantly, in the northern part of the Japanese archipelago, with its cool climate, the beech forest extends to the plains, and is hence termed the Northern Beech Zone. It contains many nuts that were the main food of the Jomon people, such as chestnuts and horse chestnuts. Studies have shown that such nuts were consciously cultivated by the Jomon people.
To date, the oldest pottery found in the Japanese archipelago Japan dates from 15,000 years ago. It was excavated from the Ohira Sangen Remains in Sotogahama Town, Aomori Prefecture.

Eleven thousand years ago, cold temperate, deciduous broad-leaved forests expanded their range into southern Hokkaido and northern Tohoku, and rich forests sprung up from mountainous areas into the plains. Along with this change in the natural environment, settlements began to appear, and between 9,000 and 7,000 years ago tombs and large pit houses, the central facilities of the settlements, appeared. The Kakinoshima remains, located on the west coast of Funka bay in Hakodate, Hokkaido, have long survived from this period, and in the surrounding remains, lacquer-decorated products that are considered the oldest in the world have been excavated from graves.

As the warm period reached its peak 7,000 years ago, sea levels rose and coves and inlets formed. This change, the Jomon Transgression, saw the creation of settlements in coastal areas, lakes and marshes, and also in the highlands of rivers. As the precipitation levels rose, forests were enriched by the humid climate, as were the rivers, lakes and marshes, and the oceans, resulting in dramatic increases in fish and shellfish species and populations.

Changes attributable to this warm period are most noticeable at Jomon Archaeological Sites in Hokkaido and Northern Tohoku, which are located in diverse environments, making the uniqueness of the ruins more pronounced. The shell mounds at the Kitakogane site in Date City, Hokkaido attest to the abundant marine resources offered by the Funka coast.

A huge eruption of Mount Towada 6,200 years ago triggered abrupt environmental changes that extended from the northern part of the Tohoku region to the southern part of Hokkaido. Although it is thought to have caused devastating damage in numerous places, a strong cultural sphere subsequently formed in the most affected area. This is symbolized by the region’s cylindrical pottery. The Tagoyano shell mounds in Tsugaru city, Aomori Prefecture on the Sea of Japan are typical of this culture, and at the Sannai Maruyama remains in Aomori City, which face Mutsu Bay, villages began to appear from this time on.
As represented by the Tsugaru Strait and Funka Bay, being surrounded by a rich ocean is one of the features of this region but at the same time, there were an increasing number of unique settlements that relied on the diverse ecosystems of lakes, marshes and river areas. Base settlements of this type are found in each area.

Examples include the Ofuna remains in Hakodate city and the Sannai Maruyama remains in Aomori city on the coast, the Futatsumori shell mounds on the shores of Lake Ogawara in Aomori Prefecture, and the Goshono remains in Ichinohe Town, Iwate Prefecture, located on the river terrace of the Mabechi River. All of these base settlements involved large-scale utilization of the land, and they became even bigger as they incorporated nearby tombs, storage facilities, processing facilities, etc. Networks formed around these base settlements, and exchanges and trade with more distant places become more active. These networks contributed to the establishment of the strong cultural sphere in southern Hokkaido and northern Tohoku.

4,200 years ago temporal cooling caused a major shift in the form of the dwellings at the center of the base settlements. These settlements became smaller in size and, for the first time, people dispersed into hilly and mountainous areas. The appearance of large stone circles coincide with the dispersion of these settlements.

Although major changes in social structures during this period extended to the whole of East Japan, the construction of large stone circles has been confirmed only in the northern part of the Tohoku region and on the Oshima Peninsula in Hokkaido. All serve as burial areas for multiple settlements, independent of them, and were also places for communal rituals that connected the dispersed villages. It is thought that large-scale monuments helped to intensify rituals and ceremonies.

The Oyu stone circles in Kazuno City, Akita Prefecture, and the Isedotai remains in Kita-Akita City, Akita Prefecture, are base settlements in the upper and lower reaches of the Yoneshiro River basin in the northern part of the prefecture, while the Komakino remains in Aomori City seem to have been established against the background of the Sannai Maruyama remains on the coast of Mutsu Bay. Similar changes have been confirmed on Hokkaido's Oshima peninsula. As these stone circles are located on the peripheries of what had been base settlements up to that time, their establishment can be thought of as accompanying the breakup of those settlements.

Large stone circles in Northern Tohoku, and the 2,500-year-old Omori Katsuyama remains in Hirosaki City, Aomori Prefecture have survived as they were, but in the Ishikari lowlands in Hokkaido large embankment tombs were built in the marshy area. These are the Kiusu Shuteibogun Tombs.
The lowland remains established along rivers and shell mounds found on the coast are integral to any understanding for the culture of everyday life at that time. The many artefacts excavated from these remains provide detailed information about the Jomon culture and tell us about the mature hunting and gathering society at that time, and the high levels of craftsmanship, and complex rituals and ceremonies.

The Irie shell mounds of Toyako Town in Hokkaido, a coastal settlement, allow us to understand the diets of people who lived by the sea, and their reliance on fish and shellfish; the same is true of the adjacent Takasago shell mounds. In Aomori Prefecture the Kamegaoka remains in Tsugaru City and Korekawa remains in Hachinohe City are precious lowland remains, and artefacts such as lacquer ware and the magical colors of organic remains convey aspects of the mature "Kamegaoka culture."

The "Kamegaoka culture," which emerged in northern Tohoku, influenced other areas with its cultural peculiarities, but eventually, with advances in irrigation and rice farming, the hunter-gatherer society gradually declined and became subject to cultural transformation.

However, despite the early arrival of rice farming in northern Tohoku, the Yayoi culture stagnated due to the cold climate, and changed to form a new post-Jomon culture. In Hokkaido and north Tohoku, the influence of the Jomon culture lingered until later, as rice farming did not take root. This makes it an unusual area, where the investigative methods of ethnography make it possible to confirm techniques that continued to be passed on from the Jomon.
The "Jomon Archaeological Sites in Hokkaido and Northern Tohoku" are a group of sites which, in a humid climate in the northern part of the Japanese archipelago, were established on the back of abundant food resources such as shellfish and fish, including salmon, as well as abundant nuts and deer, wild boar, etc. The southern part of Hokkaido and the northern part of the Tohoku region nurtured a culture unique to the region, linked by the Tsugaru Strait, that continued for more than 10,000 years.

Jomon culture is a prehistoric culture established in a diverse geographical environment unique to the Japanese archipelago surrounded by the sea, and it can be said that the Jomon Archaeological Sites in Hokkaido and Northern Tohoku stands most peculiar for the best examples of the culture's characteristics.

Kazunori Takada
President, Goshono Site
He became the president in 2002 and has been promoting the site to the world. The site is a large-scale settlement site from the latter half of the Middle Jomon period (approx. 2,500 – 2,000 BC) in northern Iwate Prefecture. He says that the site is important for understanding the layout of settlements and the structure of pit dwellings during the Jomon period.

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