June 3 - September 18, 2023

We will consider the lives of ancient people as revealed by the excavation of archaeological sites in Morioka City from the perspective of the SDGs.

Introduction

The SDGs are the Sustainable Development Goals established by the United Nations. It is a plan to be implemented by countries around the world by 2030 to solve various problems on the earth. The goals of this plan are not limited to environmental problems, but also include poverty, discrimination, and conflict, so that no one will be left behind, and people will be able to continue to develop and live well into the future.

Since ancient times, people have continued to develop and change their lives in order to live better.

Through this exhibition, we will introduce the ingenuity and hardships of people's lives in ancient times from the perspective of SDGs. We hope that you will be inspired to think about the future by seeing the relics of people of the past excavated in Morioka City.

1. living comfortably

People have always wanted to stay warm in winter, stay cool in summer, eat delicious food, and live long and healthy lives. We can learn from the excavation results of archaeological sites that people have devised various ways to achieve this.

1-1 "Mottainai"

We use the Japanese word "mottainai" to mean "it is regrettable to spend things unnecessarily." Wangari Maathai (1940-2011) from Kenya, who won the Nobel Peace Prize in 2004, believed that this word "mottainai" was necessary for a life that does not waste resources. She learned of the word when she visited Japan. She was so impressed by the meaning of the word that she spread it around the world. Words like "mottainai," which expresses a feeling of regret for spending things unnecessarily, do not seem to exist in English or many other foreign languages.

The word "mottainai" is found as far back as the Muromachi period (1336-1573) in the Japanese language dictionary "Kagakushu" (established in 1444). In the "Kagakushu" it is written that "mottainai" means "to lose sight of the original form of gods and Buddha, the correct reason, or the guidelines for action. This meaning is different from it used by many people today, but it is certainly a word that has been used in Japan since ancient times. Excavations have revealed that the ancient people in Morioka also had the habit of taking good care of things, such as repairing broken pottery and using whetstones until they became small.

1-2. Eat

In Japan today, we buy food. However, people in ancient times got

foods by catching animals (hunting), taking plants and nuts from the fields and mountains (gathering), taking fish and shellfish, seaweed from the sea and rivers (fishing), growing crops in fields and rice paddies (cultivation), and exchanging them. The location of the site gives us an idea of how people lived in the past. During the Jomon period, when people obtained food from nature, villages were built on the plateau, and after the Nara period when rice was grown, villages were built on the plains.

People from the Jomon period onward dug entrapment holes near rivers to trap animals (deer and other animals).

"Fish weirs" dating back to the Jomon period (about 4000 years ago) have been found at the Shidanai site excavated during the construction of the Gosho Dam in Morioka City.

Shell mounds have also been found at Jomon period sites near the coast. Fish bones of sardines, tuna, and sea bream, shells of clams and scallops, and bones of deer antlers and wild boars have been found in



"Fish weirs" at the Shidanai site (岩手県立博物館 1993 第 37 回企画展図録『じょうもん発 信』より)

the shell mounds. People of the Jomon period were creative and hardworking in the wild to obtain food.

Kofun period (about 1500 years ago) after that, iron tools became popular. This increased agricultural efficiency and made it possible to obtain food from the fields in a stable manner. The pit dwellings in which people lived from the Kofun period onward became square, and a Kamado (kitchen range) were built into the walls. Kamados are more thermally efficient than furnaces and are suitable for cooking hard rice. The number of pit dwellings at different times of the period gives us an idea of the state of society. A period with many pit dwellings sites can be said to have had a large population, and it is thought that there was also a large amount of food. This is assumed to have had something to do with the climatic changes discussed below.



The number of pit dwellings discovered during excavations in ancient Shiwa County (around Morioka) from the 7th to the 10th century. (北東北 古代集落遺跡研究会 2014^{[9} ~ 11 世紀の土器編年構築と集落遺跡の特質から見た、 北東北世界の実態的研究」集成データから作成)

1-3 Pray

Before the development of science, people believed that good harvests and health were due to "invisible forces". Therefore, they did Majinai(casting a spell), Inori (prayer), Uranai (divination), and Matsuri (festivals). Kofun period (about 1500



pottery with a bear's face on it (Excavated from the Teshiromori site, Morioka)

years ago) after that, religious teachings such as Buddhism and Shinto spread along with local beliefs. Traces of Buddhist rituals spread by those in power, as well as of the spells performed by the common people, can be found at archaeological sites.

For example, during the Heian period, when people left the pit dwellings they lived in, some people knocked over the Kamado and placed pottery face down, or set stones upright. It seems that there was a belief that there was a god in the Kamado where people cooked their meals. This may have been a custom to settle the deity of the Kamado.



The Kamado in a pit dwelling at the Futamata site (Shimoiioka, Morioka) late 9th-10th centuries

2. living better

A social environment in which people can share knowledge and wisdom and have good relationships is also important for people to live. A world where various people can live comfortably is a world where everyone can live better.

2-1. Writing

The invention of letters has enabled people to share and pass on their knowledge and experiences widely. The change from landmarks and symbols to letters that convey meaning is said to have occurred around 6000 to 7000 years ago (Jomon period in Japan). The hieroglyphs of ancient Egypt, the cuneiform script of the Mesopotamian civilization (Iraq), and the Yin dynasty script of China are said to be the oldest examples.

It is said that Kanji (Chinese characters) was introduced to Japan from mainland China around the late Yayoi period (2000 years ago) to the Kofun period (1500 years ago). One of the oldest





Gold Seal (National Treasure) (Excavated from Shikanoshima Island, Fukuoka City ©Fukuoka City Museum)



Pottery inkstone (Excavated from Shiwa-jo Castle)

known examples of the use of Kanji in Japan is "the king of Na gold seal" found on Shikanoshima Island in Fukuoka City in 1784. This gold seal was given to the King by Emperor Guangwu of the late Han Dynasty in 57 AD. The Gold Seal was designated as a National Treasure of Japan. The seal is a well-known item from the fact that even Japanese textbooks refer to it as a cultural asset to ascertain how the Japanese nation came into being.

Later, Kanji developed in its own unique way in Japan. During the Nara period (710-794), Man-yo-gana, a Japanese phonetic alphabet, was used to represent the sounds of the Japanese language through the reading of Chinese characters. During the Heian period (794-1185), Man-yo-gana developed into the Kana script.

In the Morioka area, potteries with Kanji characters written on it has been excavated from sites dating from the Nara to Heian periods. However, most of them are single Kanji characters or were written as magical symbols, and it is unclear to what extent people at that time knew the meaning of Kanji characters. On the other hand, there were officials at the national capital "Shiwa-jo Castle" (southwest of Morioka City; established in 803) who were in charge of writing letters on wooden letters and paper with ink and brush.

2-2. Differences between men and women

Sometimes we are discriminated against because we are male or female. However, it is this biological difference that gives birth to a new life. Before the development of medicine, a child could die at the moment of birth. Today and in the past, the wish for children to be born and grow seems to be the same.

This "Deep bowl with a face on the handle" (designated cultural property by Yamanashi Prefecture, excavated from the Tsuganegoshomae site in Hokuto city, Yamanashi prefecture, mid-Jomon period, about 4,500 years ago) is thought to represent a mother's face on the handle of the mouth rim and the body decoration, and a baby's face in the center of the body, which is thought to represent the birth of a child. The face in the center of the body is thought to represent a baby being born.

The "Clay tablet with footprint" (designated cultural property by Takizawa City, excavated from the Yubunazawa site, in Takizawa city, late Jomon period, about 4,000 years ago), the footprint is thought to be a foot of a boy around 10 to 12 months old. It is not known whether it was made to wish for growth or to mourn a deceased child, but there is no doubt that it was made with this child in mind.





Deep bowl with a face on the handle (© Hokuto City Board of Education)

Clay tablet with footprint (© Takizawa City Board of Education)

2-3 Using Fire

One of the major differences between humans and animals is the use of fire. Humans have developed through the use of fire for cooking, warming, lighting fires, and baking clay to make pottery.

2-4 Clean water

Clean water is essential for human life. In the past, people drew water from rivers or dug wells to draw clean groundwater. Traces of wells have been found at sites in Morioka since the Middle Ages. An excrement disposal pits was discovered at the site of Yanagino-gosho (Hiraizumi Town), which was the residence of the Oshu-Fujiwara clan in the late Heian period. Wooden spatulas that served as toilet paper were also unearthed, indicating that human excrement and urine were properly disposed.

2-5 Technological Innovation

People use tools. They have devised the materials, shapes, and methods of making tools. Some ancient tools do not differ greatly in form from those of today. For example, like today's fishhooks, the fishhooks made of bone and antler vessels in Jomon period had a barb to prevent fish from escaping.



The fishhooks Jomon period

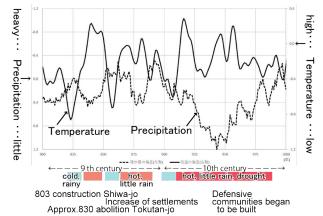
3. cooperate with each other

People are not strong creatures in their natural environment. However, they have lived by using their hands with dexterity, exercising their wits, uttering words, writing letters, and helping each other in groups.

3-1 Depending on the weather

Humankind has lived a flexible and resilient life in the natural environment. If we consider human history in conjunction with global-scale climate change, which repeats cycles of warming and cooling, we can better understand how people have lived.

Global climate change cycles occur in cycles of 50000 to 70000 years, thousands of years, hundreds of years, and years to decades. Small-scale climate changes are caused by solar activity on an approximately 11-year cycle and volcanic ash from volcanic



Temperature and precipitation in the 9-10th centuries Solid line is the temperature deviation from the present time on the right axis. 10-year moving average. Dashed line is the precipitation deviation from the present day on the left axis. 11-year moving average. The smaller numerical value, the more precipitation.

伊藤俊一 2022「気候変動と日本史」IEEI Web サイト(https://ieei.or.jp/2022/03/expl220310/)2022.03.10(2023.05.25.参照)

eruptions that reduce solar radiation. These small-scale climate changes have had an impact on people's lives. This is known from archaeological artifacts, diaries, and other historical documents. Rainfall also affected agriculture, and in the latter half of the 10th century, high temperatures and little rainfall caused drought, which is thought to have resulted in low crop yields. During this period, the number of pit dwellings in the Morioka area decreased.

3-2 Settlement, Towns, and Cities

As the population grew, people needed lots of food. Families, relatives, and even more people came together and developed into villages, towns, and cities. People began to share the workload.

The Odate-cho site (designated as a historic site by Iwate Prefecture), dating from the Middle Jomon Period (around 4,500 years ago), was a settlement located on a south-facing hill, with a pit dwelling area ranging from 250 to 200 meters, a ritual area including a tomb in the center, and storage pits and garbage dumps in the surrounding area that were used in a systematic manner. The settlement was operated for approximately 1,000 years.

The Daitaro Site (Mukainakano, Morioka City) was a settlement in the Nara and Heian periods (around 1300-1100 years ago). It was located 800m east to west and 500m north to south, facing the river. In the beginning, there were many pit dwellings along the river, and eventually pit dwellings were distributed over a wide area. This location was suitable for agriculture and logistics.

The site of Shiwa-jo (Kamikazuma, Shimo-ota, Naka-ota, and Motomiya in Morioka City, designated as a national historic site) are the site of a fortified government office called Jo-saku. The site was built by SAKANOUE Tamuramaro at the order of Emperor Kanmu in the early Heian period (A.D.803). 930m square with a large ditch and 840m square with a mud wall, the vast castle was surrounded by a government office slightly south of the center, a group of practical buildings on the outside and barracks pit dwellings along the mud wall, where several thousand soldiers and officials were stationed and lived in the site.

At the Daitaro site from the Kamakura to Muromachi periods, there was a lord's residence surrounded by a moat along the road. Around the residence, settlements of common people, religious facilities, and tombs were located. The road and religious facilities continued to exist in almost the same location thereafter.

About 400 years ago, during the Edo period, the Nanbu-clan built Morioka Castle, roads and cityscapes. The residences of the chief vassals were placed around the castle. The outer part of the castle was surrounded by earthen mounds and moats (Sotokuruwa) to house warriors and merchants. The outer part of the castle was also surrounded by earthen mounds and a moat (Tokuruwa), and temples and shrines were placed around it. It was developed as a city, and traces of it can still be seen today.

3-3 Fighting and Conflict

Now and in the past when people get together, there are all kinds of conflicts. Examination of the bones reveals that even in the Jomon period, there were killings. The purpose and scale of these conflicts grew, from village to village fighting over food, to warriors fighting over territory, to nations fighting over rights and interests.

Even today, many people in some countries are still living in the midst of war. People live side by side with conflict, but each time they discuss it, they have developed to live better.



The settlement on the top of the hill

In the late Heian Period (late 10th - 11th centuries), many settlements were established on the inconvenient mountains from north of Morioka to south of the Oshima Peninsula in Hokkaido. At the Takebayashi-date site (Kamiyonai, Morioka), the remains of more than 10 pit dwellings and the ditches surrounding them remain in a depression on a hill. There are also settlements surrounded by large moats and earthen mounds from the same period in northern Iwate Prefecture to northward. It is not clear what kind of people lived in these settlements. There are various theories as to whether they were settlements of woodworkers who lived in the mountains, or whether they were settlements where people protected themselves from the chaos of food shortages caused by climate irregularities.

During the Warring States Period, lords built castle buildings as bases for governance and defense. The Abe-date site (Abedatecho, Kamido, Morioka City) is the remain of a 15th to 16th century castle, as well as the site of Kuriyagawa Castle built along the road on the cliff of the Kitakami River. It was maintained in preparation for warfare by the Kudo-clan, landowners since the Kamakura period who were based in the Satate site (Tensyoji-cho, Morioka City). You can see along the prefectural road the remains of a large moat remaining from those days.

3-4 Interaction & Exchange

Since ancient times, people have interacted with people farther away than you can imagine. People cooperated with each other, exchanging necessary items. Artifacts that are evidence of exchange have been unearthed from Jomon-era sites. Amber, which comes from Kuji



Stone arrowhead with asphalt on it in Jomon period, excavated from the sites in Morioka.

City, seems to have been used more as an igniter than as jewelry. Natural asphalt contained in crude oil from Akita Prefecture and other areas on the Sea of Japan coast was used to attach stoneware to handles and to repair pottery and other objects. Beautiful light green jade, of which Itoigawa in Niigata Prefecture is a famous source, was widely distributed as an important jewel. During the Nara and Heian periods, it is also thought that products from the northern Tohoku region were transported to the capital of Kyoto, and valuable iron was brought to the northern Tohoku region from the southern Tohoku and other regions.

Conclusion

Since ancient times, people have been devising, developing, and living vigorously for a better and richer life. This has not always been "sustainable development," but it has also led to environmental destruction and conflicts.

However, people have been able to sustain their lives and survive on the earth.

Knowing this, we can now live with consideration so that future generations can also live better.

I am sure that we have also realized that Morioka, where we are now, is rich in historical and cultural heritage, including sites that are evidence of the existence of people since ancient times. I also believe that we have realized that we can learn a lot and feel something from this historical and cultural heritage.

Making the most of the historical and cultural heritage that remains today and passing it on to the future, so that future generations will be able to do the same, is also connected to "SDGs 11: Creating Cities Where People Can Continue to Live".

We hope that this thematic exhibition will help people to think about the lives of people in ancient times, when times were not always easy and affluent, and about the future.

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