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**Science of Amami:
From an Island of “Nothing” to “Something”**

Edited by

TAKAMIYA Hiroto, SUZUKI Eizi and YAMAMOTO Sota

鹿児島大学国際島嶼教育研究センター

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INTERNATIONAL CENTER FOR ISLAND STUDIES

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Preface

“There is nothing on the Amami Islands.” The people of Amami often sigh and say these words. Is it true that “Amami are islands with nothing?” No, Amami has a wonderful history, culture, and even nature. One of the reasons why the people of the Amami Islands do not know such information is because of the researchers. This is also something that the locals often lament. “Even if we work with the researchers from the mainland, those people just take the data back home with them and never tell us about it.” As a solution, in April 2015, the Kagoshima University International Center for Island Studies (*Toshoken*) set up an Amami branch office in Amami city, where faculty and staff are stationed, provide education and conduct research more closely tied to the Amami Islands.

For example, the Ministry of Education, Culture, Sports, Science, and Technology’s special expense project “Development of Education and Research Infrastructure for Biodiversity and Its Conservation in the Satsunan Islands” (Kagoshima University, FY2016–2019) involved comprehensive research (joint research by science and humanities researchers). The research was conducted in the Amami Islands to investigate the detailed distribution of terrestrial and marine organisms, elucidate the mechanism for maintaining the diversity of ecosystems, and clarify the relationship between humans and nature.

In addition, study sessions have been held to return research results to the local people as much as possible. These sessions have included “Let’s talk in the Amami branch office”; symposia on the archaeological sites, island songs, industry, and biodiversity of the Amami Islands; observation sessions on land and marine life; and lectures on visiting the Amami Islands. However, while the return to the local community has increased since the opening of the Amami branch office, compared to that in the past, this was only a part of our research. Furthermore, the local people who participated have been limited to only a select number of people. Therefore, we carried series, “The Enchanting Amami Islands: Bringing Research Results to the Locals,” in the local newspaper “*Nankai Nichinichi Shinbun*” from January 2020 to March 2021 to present our discoveries and the latest studies to the people of the Amami Islands.

This series was written by full-time faculty members, adjunct faculty members, and visiting researchers at *Toshoken* (49 scholars and 66 publications), and comprised of

eight fields: (1) Island Civilization, (2) History and Culture, (3) Society and Economy, (4) Nature on Land, (5) Nature in the Sea and Rivers, (6) Utilization of Animals and Plants, (7) Various Problems over Nature, and (8) Island as a Place of Education.

Then, we picked up and recomposed publications related to History, Culture, Society, Economy, and Education and we translated them into English for this book. The book was partly supported by the Ministry of Education, Culture, Sports, Science, and Technology's special expense project "Formation of a Global and Local Education and Research Base in the Amami Islands, a Candidate Site for World Natural Heritage" (Kagoshima University, FY2020–2021).

"Is there *nothing* in the Amami Islands?" We hope that readers who feel that there is "nothing" would be able to answer "no" to this question after reading this book, and readers who think that there is "something" would be further charmed by the Amami Islands.

TAKAMIYA Hiroto

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International Center for Island Studies,
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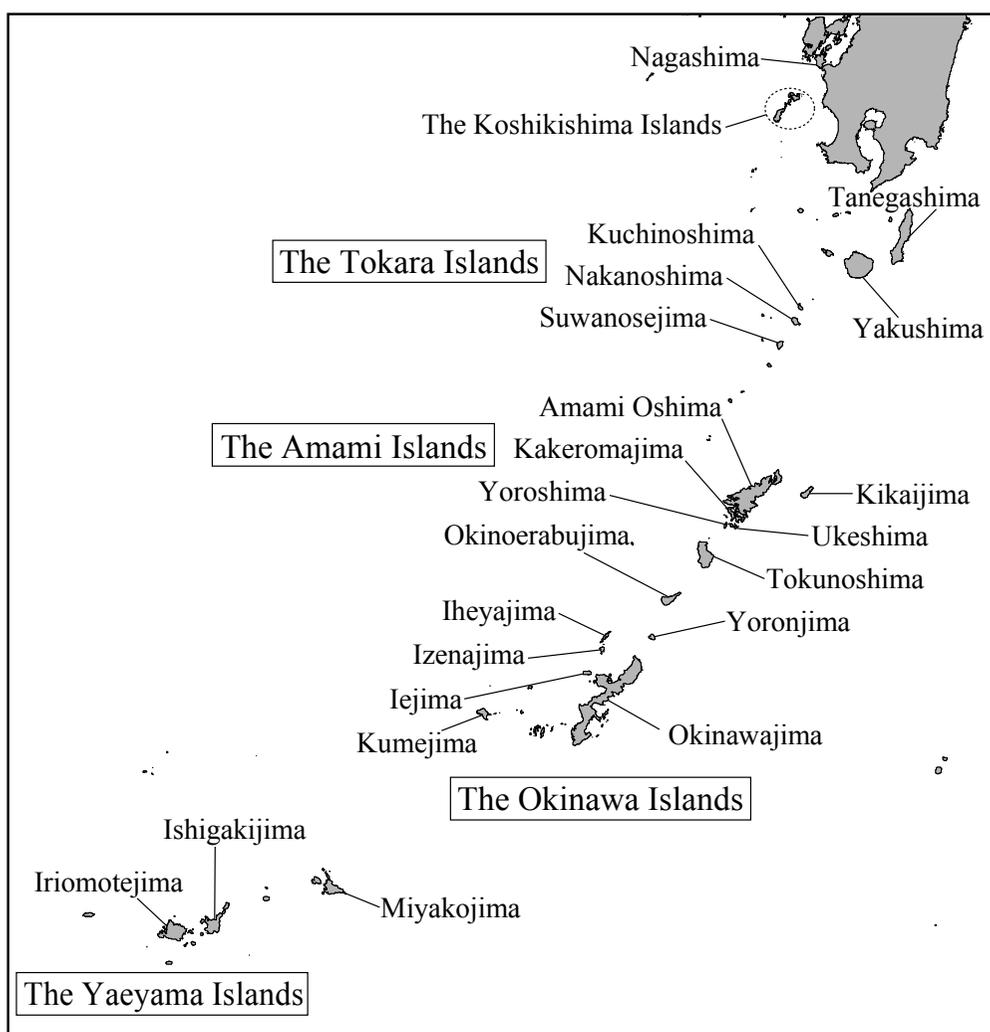
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Map of eight inhabited islands of the Amami Islands and islands mentioned in this book (Map source: National Land Numerical Information [Administrative Division] by Japanese Ministry of Land, Infrastructure, Transport and Tourism).

SECTION ONE:

History

Prehistoric period of the Amami and Okinawa Islands (1)

TAKAMIYA Hiroto

You might first imagine the pyramids of the ancient Egyptians and Mayans when you hear the words “ancient civilization.” There were no pyramids in the prehistoric period (the era without writing system, from approximately 30,000 years to several hundred years ago) of the Amami and Okinawa Islands. Then why do we describe the prehistoric Amami and Okinawa Islands as an “island civilization”? Here, if we assume that civilization is an “ultimate culture established by humankind,” then it is clear that there was an ultimate culture unparalleled in the world in the prehistoric Amami and Okinawa Islands. We would like to introduce those points below.

Our direct ancestors (*Homo sapiens*) were born in Africa about 200,000 years ago. By about 10,000 years ago, they had spread throughout the continents of Eurasia, Australia, North America, and South America, except for Antarctica. The most astonishing part of this spread was that it spanned from Alaska at its northernmost point to Chile at its southernmost point in several thousand years. This aspect clearly shows the high adaptability of human beings to various environments.

It should also be emphasized that they were hunter-gatherers. Thus, hunter-gatherers demonstrate their high adaptability to many different kinds of environments. While highly able to adapt to various environments, even hunter-gatherers had difficulty crossing the islands 10,000 years ago. In reality, there have only been 10–15 islands inhabited by humans 10,000 years ago or earlier worldwide (Paleolithic period). However, archaeological sites dated in the Paleolithic have been found on Amami Oshima, Tokunoshima, Okinawajima, Iejima, and Kumejima. Moreover, Paleolithic sites have been known to be in Tanegashima, Miyakojima, and Ishigakijima. Thus, Paleolithic sites (approximately 35,000 to 10,000 years ago) are known to be in a total of eight islands from the Ryukyu Islands—the Ryukyu Islands rival those worldwide.

One of the explanations for why there were only a handful of islands with human populations during the Paleolithic period was that island environments lacked sufficient natural resources including animal and plant foods, making the hunter-gatherer lifestyle difficult; human populations needed farming to survive on the islands. Farming began in the Neolithic period (from 10,000 years ago onwards), after which people inhabited most islands worldwide. However, the world is still a large place.

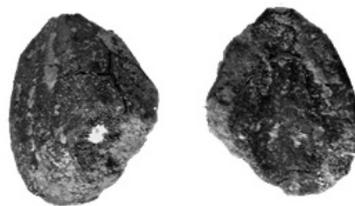
There have been some exceptional examples of islands where hunter-gatherers lived. Characteristics of these islands include (1) a large surface area, (2) proximity to continents and larger islands, (3) the ability to utilize marine animals such as seals, (4) edible animals and plants brought in from their motherland, and (5) combinations of some to all of these possible.

None of these characteristics apply to the islands of Amami and Okinawa. However, recent studies continue to indicate that hunter-gatherers-fishers were present in the Shellmidden period (approximately 7,000 to 1,000 years ago) of the Amami and Okinawa Islands for several thousand years (several tens of thousands of years when including the Paleolithic period). There are few other islands where this was the case. To use a slightly exaggerated expression, the information being obtained from the Amami and Okinawa Islands is thought to add a new page to human history as well as to world history.

As mentioned above, it seems that people on the Amami and Okinawa Islands made a living by using animals and plants obtained from the natural world for thousands of years (tens of thousands when including the Paleolithic period). The people of the Shellmidden period knew about the existence of rice cultivation through interactions with the Yayoi people and the culture of the mainland; however, they did not leap into rice farming. According to some researchers, they stubbornly refused to farm. This was not because the hunter-gatherers-fishers of the Shellmidden period were “backwards” or “barbaric” people, but rather because the nature of the Amami and Okinawa Islands was abundant. Therefore, there was no need to incorporate labor-intensive farming.

However, this period also ended approximately 1,000 years ago. It was clear that the Amami and Okinawa Islands introduced farming focusing on rice and wheat during this time. This farming began between the 8th and 12th centuries in the Amami Islands and the 10th and 12th centuries in the Okinawa Islands. In other words, farming was introduced first in the Amami Islands and then the Okinawa Islands. Therefore, during this time, the Amami and Okinawa Islands oversaw a transition from hunting, gathering, and fishing to farming. Still there are almost no other islands worldwide where there was a transition from hunting and gathering to farming.

As previously mentioned, most islands worldwide were colonized by farmers—there was no hunter-gatherer period on these islands. Meanwhile, exceptional examples of islands inhabited by a hunter-gatherer society continued to do so until “discovered” by Europeans and others. In other words, there was a rare cultural phenomenon in the prehistoric periods of the Amami and Okinawa Islands in this respect as well. The transition from hunting and gathering to farming is one of the most important, yet mysterious, research themes in archaeology and anthropology while the fact that the transition occurred on islands provides extremely important evidence of this theme to these fields.



Oldest edible acorns in the Amami Islands (from approximately 11,000 years ago, excavated from the Hango site, Tatsugo town). Hunter-gatherers-fishers of the Amami and Okinawa Islands ate nuts such as acorns for long periods of time.

Prehistoric period of the Amami and Okinawa Islands (2)

TAKAMIYA Hiroto

The environment of an island is very delicate. The environment of an island before people colonized it, had its own long history: several hundreds of thousands to millions of years ago, or perhaps even longer; plants and animals arrived on the islands, where they adapted and evolved. As a result, a balanced and extremely delicate environment was created. One can easily imagine that the ecosystem, evolved over millennia, would be influenced by the arrival of an external species. It is said that humans are the most troublesome among these external species.

For example, humans need forest resources for homes, boats, fuel, and so on. Even the arrival of the single species, the human, into an island environment would affect that ecosystem, but humans intentionally bring with them livestock, animals such as dogs, and cultivated plants, and may unintentionally bring in animals and plants such as rats and weeds. As a result, human colonization in many islands worldwide has been reported to cause environmental degradation or destruction, such as the extinction of species (it is said that approximately 2,000 species in the islands of Oceania have become either extinct or disappeared from the islands), deforestation, landslides, and resource depletion. Researchers have hypothesized that: human colonization of an island environment = environmental destruction / degradation.

Thinking that “there must have been a similar trend during the prehistoric period of the Amami and Okinawa Islands,” researchers have investigated this hypothesis for about 30 years. This research focused mainly on the Shellmidden period, where data were accumulated. First, no extinct animals were found according to TOIZUMI Takeji of Waseda University, who conducted analyses of vertebrates, unlike other islands worldwide. What was learned recently was that people had eaten *Amami no Kuro Usagi* (the Amami rabbit hereafter in this book, scientific name, *Pentalagus furnessi*) since the early part of the Shellmidden period.

It would be very likely that the Amami rabbits, consumed from a very early period, would have been extinct long ago if this were another island. However, they continued to survive, and it is now a symbol of the World Natural Heritage. According to TOIZUMI, it was believed that the utilization of vertebrates was stable throughout the Shellmidden period. Furthermore, research on the global utilization of shellfish on islands has indicated that the types of shellfish gathered changed from those that were easy to collect to those more difficult or dangerous to gather. Moreover, since the objective was to gather shellfish meat, the size of shells gathered were large at first, but excessive gathering resulted in a gradual decrease in the size of the shellfish.

These trends, however, were not recognized in the Amami and Okinawa Islands. KUROZUMI Taiji of the Chiba Prefectural Central Museum, who has been studying shellfish

excavated from sites dating to the Shellmidden period for many years, stated that “there was no human-based influence on shellfish.” Though not surviving as well as the animals, the plants of the Shellmidden period, understood from plant species and pollen, exhibited no major human-based influence on the environment. The analysis methods of the archaeological and related disciplines available today suggest, for now, that the impact of humans on the natural environment was not significant on the Amami and Okinawa Islands, during the Shellmidden period, unlike many islands worldwide. This was perhaps the case during the preceding Paleolithic period as well. Recent studies have shown that human populations began to affect the islands’ environment around the 11th century when farming began.

Comparing and verifying the prehistoric period of the Amami and Okinawa Islands with islands globally have made it clear from the results of research over the last 30 years that the Amami and Okinawa Islands had an extremely rare cultural phenomenon regarding the above-mentioned four aspects (the islands where *Homo sapiens* were settled in the Paleolithic period, the islands where hunter-gatherers-fishers lived, the islands that transitioned from hunting, gathering, and fishing to farming, and the islands in “harmony” with nature (?)). Globally, if even one of the four aspects is recognized in the “island” environment, then it seems to have been an anthropologically “rare” island. Not only one but four of these aspects may have existed in the Amami and Okinawa Islands.

There are six ancient civilizations in the world, but there may only be one island in the world with a prehistoric history like that of the Amami and Okinawa Islands. The ultimate human culture, so to speak, may have developed in the prehistoric period of the Amami and Okinawa Islands. There was no “urbanization” or “writing system,” the elements of civilization, in the prehistoric period of the Amami and Okinawa Islands, but if the facts introduced here are not rejected in the future, can they perhaps be added as one of the triumphant cultures of humans as well?



Oldest grain in the Amami Islands (rice excavated from the Gusuku site group, Kikai town). Cereal farming was first introduced in the area approximately a thousand years ago.

New technology for elucidating archaeological sites (land edition)

SHINZATO Akito

There has been dramatic progress in recent years on the investigation of the archaeological sites in the Amami Islands. This progress has been because each local government in the Amami Islands has a curator (or curators) specializing in archaeology. Furthermore, academic researches and excavations accompanying land development have dramatically increased. Not only have the number of excavations increased, but also the introduction of new technologies has enabled further investigation of the discovered sites than in the past. Let's introduce practical examples from the field and the results obtained from them.

Archaeological excavations primarily involve recordkeeping, using photographs and drawings. This is to broadly convey the situations at the sites by showing the locations and shapes of the remains (buildings, tombs, etc.) excavated from the sites in a drawing. The past events confirmed in the excavation area are represented in a drawing, and the history of the land is examined from its characteristics. In that sense, archaeological excavation can be rephrased as the one way to make a historical map.

On-site mapping work has mainly been conducted by handwriting until recent, but nowadays a range-finding device called a "total station" has been used, enabling the measurement of a wide area with a high level of accuracy. The use of digital cameras and GPS is quite commonplace. Drone-generated aerial photographs and ortho-images (photographs that correct distortion of shot image and have accurate positional information and scale data) are also being adopted.

These devices are used to create a plan view of large villages spanning tens of thousands of square meters at the Gusuku site group in Kikaijima. The devices have also been used to record, in detail, the internal shapes of cave sites and ancient tombs in steep cliffs on Okinoerabujima and Tokunoshima.

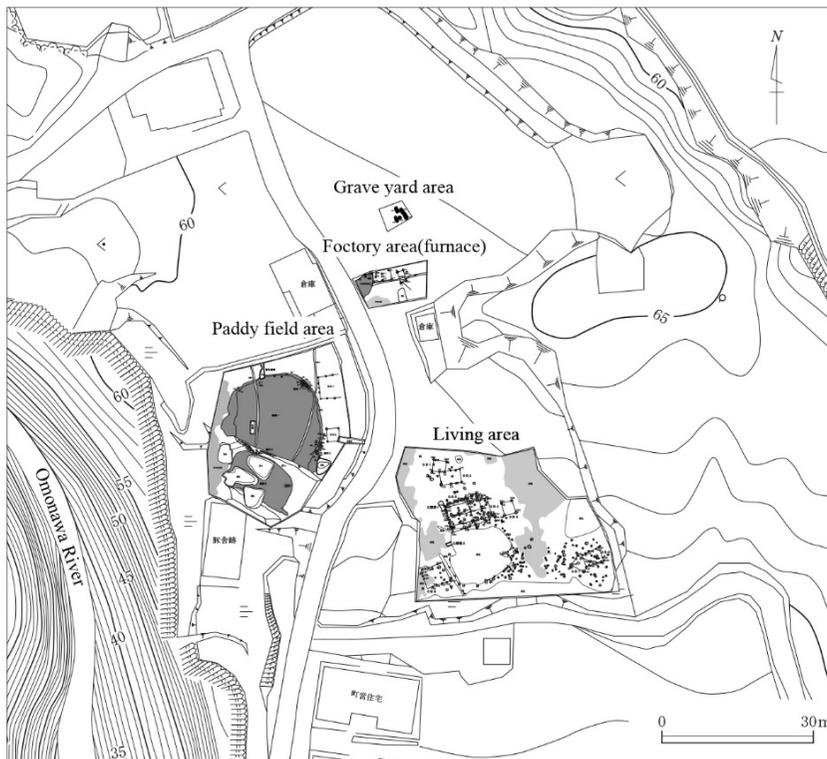
A village operated in the flatland area on a limestone plateau in the Maeatari site (Gusuku period: 11th to 12th centuries) in Omonawa, Isen town, which I have conducted an excavation, and paddy fields were confirmed in the adjacent valley. These new types of technological devices make it possible to reflect a floor plan of the survey area in the surrounding topographic map and represent the land use in the Gusuku period as a map. The coordinates of the world geodetic system are the standard, so the new technology also makes it possible to place information on archaeological sites on a world map.

Remot-sensing methods have also been developed that can investigate underground objects and structures without excavating sites. The Tokunoshima Kamuiyaki pottery kiln site

(11th to 14th centuries) comprised a group of kiln sites buried in a forest of over 100 hectares. A magnetic probe-based survey was conducted to identify the places where the kilns were buried. Soil contains a large amount of iron, so heating this to high temperatures using a fire, results in the material developing stronger magnetic properties than its surroundings. A magnetic probe can detect this magnetic anomaly.

Explorations of areas where many Kamuyaki pottery pieces were found in the forest revealed several magnetic anomalies, increasing the likelihood that many kilns were buried in the ground. Combining these results with high-precision topographic maps created at the same time as the exploration allowed for the mapping of the remaining kiln sites, making this a successful example of a survey that clarified the current state of the sites without excavation.

Archaeology is known as a discipline in the humanities, but it is indispensable to collaborate with various disciplines to unravel the history of an area from the traces that people in the past carved into the earth. How did the people of the past face nature; how did they use it? Further understanding the history of island civilizations and depicting them even more vividly requires the selection of the best methods according to the characteristics of the archaeological site while keeping an eye out for new technical development, and a challenging spirit to gain new knowledge. Curators should play a large role in this process.



Plan view of the excavated area of the Maeatari site in Omonawa, Isen town. Paddy fields were found in the valley on the west side facing the Omonawa River, and traces of buildings and tombs were found on the flat land at the foot of the hill on the east side.

New technology for elucidating archaeological sites (seabed edition)

SHINZATO Akito

Traces of the activities of people in the past can remain not only on land but also on seabeds, lakebeds, and riverbeds. Typical examples are harbor sites and ship moorings found on the beach and downstream of the river, and sunken ships on the seabed. The Kurakizaki underwater site (Uken village), where many Chinese ceramics dating from the 12th and 13th centuries were discovered, are famous on the Amami Islands. However, iron anchors and *Ikariishi* (weights for sinking wooden anchors) were also found in the sea at the ports in Omonawa and San ports. The three towns in Tokunoshima (Tokunoshima, Amagi, and Isen) that focused on these discoveries have engaged in efforts to investigate cultural properties that sank into the sea and have begun excavating the history of the area.

Underwater sites are often found because of information from divers and fishermen. Some examples of this are a bottom trawl net pulling up items on the seabed, or when part of the wrecked ship or an anchor when a diver finds an anchor accidentally during a recreational dive. The ocean is more expansive than the land, so random diving does nothing but consume time and energy to find archaeological sites. Therefore, it is important to narrow down the diving points by collecting historical information on the coastal waters by examining local historical materials and folklore with the cooperation of people who are involved with the sea every day. It is also important to walk along the beaches and reefs of the sea and collect materials that have washed ashore. Archaeologists sort out this information and select target areas where they should investigate.

Cultural properties found in the water are fragmentary materials of underwater sites, but let's examine how to reflect these places on a map. Tokunoshima is known as the location of the Tokunoshima Kamuiyaki pottery kiln site (11th to 14th centuries). The shipping port that was the starting point for transporting Kamuiyaki pottery to various areas has not yet been found. For these reasons, the three towns of Tokunoshima have decided to investigate the sea area around the island by cooperating beyond their respective towns and boldly taking on the challenge of elucidating the history of the sea in anticipation of the discovery of the Kamuiyaki shipping port.

What are the characteristics of the sea area that are likely to be related to the traffic of ships? To clarify this question, historical information obtained through interview surveys, coastal surveys, and a collection of local historical materials were recorded on a map, and seafloor topography surveys were conducted in areas where results were concentrated. The multi-beam sonar used for seabed surveying is a device that measures the distance (depth) to the seabed by calculating the time it takes for sound waves emitted from the ship to reflect off

the seabed and return, so that a seabed topographic map can be created under the navigation route of a GPS-equipped ship. Multiple iron anchors with four claws (Edo period) have been discovered around Omonawa port in Isen town. However, it became clear when the locations of those discoveries, recorded in the preliminary survey, were displayed on the completed topographic map of the seabed that the anchors used for the ships were distributed in the crevices of coral reefs. It is speculated that the sailors of that time were anchoring their ships in deep areas to avoid grounding on the rocks. We were surprised at their high level of knowledge about coastal topography in an era when it was difficult to grasp underwater conditions without diving equipment.

We do not know the location of the shipping port of Kamuiyaki, so these investigations will continue. However, it is certain that underwater exploration equipment will be effective in elucidating the history of island civilization. It may not be too long before the unknown sea area history is disclosed by combining traditional method (historical information gathering on land by interviewing people and visual inspection underwater) and new technology which enable us to explore the bottom of the water.



Iron anchor with four claws found at Omonawa port (photographed on November 16, 2015). Photograph shows the process of attaching floats to acquire GPS data on the water's surface.

Agricultural rituals held in inner caves of Okinoerabujima

SHINZATO Takayuki

There are over 300 caves in Okinoerabujima. The beautiful structures of nature, taking the form similar to an underground palace filled with abundant groundwater, have often been featured in the media, making it famous as an island with beautiful tourist caves. However, did you know that there are many caves that are very valuable as archaeological sites on Okinoerabujima?

One of these is the Nakafu cave ruins, known to have been used for approximately 6,000 years ago. Glass beads and cylindrical beads made of jasper worn on human bones have been discovered from Shoryudo cave, a famous tourist cave. Caves and rock shelters have been used since ancient times because they can help people avoid wind and rain and often have abundant spring water.

About a thousand years ago, the Southern Islands experienced major socioeconomic changes from the Amami Islands to the Yaeyama Islands. New tableware, cereal farming, livestock, ironware, and other items were introduced from Kyushu. The life of the hunter-gatherer society, which had been supported by rich reefs and forests as well as sporadic exchange, rapidly began to change into one of farming. These are some of the rituals that would have been held in the caves of Okinoerabujima during these turbulent times.

Hosudo cave is said to have a total length of over 2,179.7 meters and eight cave entrances. The Kansei Gakuin University expedition discovered a part of this in 1977, and the entire structure was revealed by the expedition of the fifth Okinoerabujima cave in 1998. A 2018 survey by TV Asahi discovered earthenware and human bones from the fourth cave, making it a “well-known archaeological site,” and the first archaeological excavation was conducted in 2011.

The opening of the fourth cave entrance is a vertical hole and can become as narrow as one meter. Descending this hole down a narrow sloping passage for 10 m leads to the bottom of a waterway. There is no large space inside, and many cave-in ceilings overlap. The lime in the caves sticks to the side walls, forming some narrow flat areas and slopes. There is no outside light, and it is a pitch-black darkness.

Earthenware and Kamuiyaki (Tokunoshima pottery) fragments have been discovered here without being buried at the bottom-most areas of the waterway, and surprisingly, bovine bones are also scattered here. One step above the waterway on the flat parts and slopes formed by the cave-in, there are many cracked earthenware remains almost without any burying, and traces of burned fire can be seen in places when the thin topsoil is taken off. The flat part can be ascended further in a spiral shape, and earthenware broken into quarters can be found even at that level. On the wall was a stone-enclosed hearth, above which was a charcoal layer 2 cm thick, where a quarter of the broken earthenware was placed.

The positions of the items were all recorded, and some of the earthenware, Kamuiyaki, bovine bones, human bones, and hearth soil were removed and taken back to the laboratory

for further analysis. The analysis results showed a surprising development. With the exception of some items, the bovine bones, charcoal from the heath, and the carbides attached to the earthenware were all dated to the 11th to 13th centuries. The results also showed that the charcoal in the heath contained only a large amount of barley that was dated to the 13th century.

The items and their production conditions were re-examined based on the results of this analysis, and the findings indicated that there was something unnatural about considering these to be living spaces, for these reasons. (1) There are other cave areas, but the items were concentrated only at the fourth cave entrance. (2) There are traces behind the pitch-black cave where light does not reach. (3) The flat part inside is very narrow, and without space where people can live day-to-day. (4) Despite the fact that the openings are barely over one meter at their narrow sections, bovine bones were found inside the cave (Were they cut up and brought in as pieces?). (5) Only half of the earthenware was brought inside the cave, intentionally broken, and placed separately. (6) Only carbonized barley was in the heath (usually detected as a group alongside rice, wheat, millet, etc.). (7) There are no marine shellfish or fish bones. (8) There are only a few pieces of earthenware and Kamuiyaki comprising tableware (usually, a large amount of talc stone pots, Chinese ceramics, ironware, etc. that are excavated as a set of utensils for daily life).

Integrating these eight aspects, the results indicate that this cave was not just a place of living or a shelter for disaster avoidance, but also that rituals and ceremonies related to farming were introduced and conducted in the caves at introduction and development stages of farming on the Southern Islands. Similar sites have not yet been confirmed on the Southern Islands. Using this excavation as an opportunity, we look forward to the day when locals will convey the value and charm of the cave on Okinoerabujima, which is not limited only to natural beauty.



Earthenware placed in front of an altar-like stone, with stalactites stuck into it, on a flat area at the top of the cave. Approximately a thousand years old but unburied (Hosudo cave's fourth cave entrance ruins).

Satsuma ware in the political context

WATANABE Yoshiro

Ceramics were not produced in the Amami Islands during the early-modern period (from the 17th century to the middle of 19th century), so they needed to be obtained from outside the island. Hizen ceramics came from the North Kyushu (currently Saga / Nagasaki Prefectures), Satsuma ware from Kagoshima, and Tsuboya ware from Okinawa. Chinese ceramics also were brought in through Okinawa. In other words, the Amami Islands formed a distribution area consisting of three layers: flows from the north (Hizen / Satsuma), flows from the south (China), and flows within the island area (Tsuboya). Among the flows from the north, I will deal with the products of the Tateno kiln, a Satsuma domain kiln.

A domain kiln is directly operated by a domain, and its primary purpose was to produce tea utensils and daily necessities used by senior samurai, including the feudal lord; furniture, and banquet equipment at the domain residence in Edo (currently Tokyo); and tributes and gifts to the shogunate and other daimyo. The most famous was the Nabeshima domain kiln in Saga, which fired the Nabeshima ware that was considered the finest ceramics for the shogunate. The Tateno kiln of the Satsuma domain produced *Shirosatsuma*, a transparent glaze on a white body; *Sunko Roku-utsushi*, imitating Thai pottery; and *Mishimade*, where clays of different colors were inlaid. These were not easily obtainable by common people during the early-modern period.

Products of this Tateno kiln have been stored in the old families of Amami Oshima. The Nishi family of Ikomo on Kakeromajima in Setouchi town has been a *Yohito* (highest island official) for generations beginning in the latter half of the 18th century. Three *Shirosatsuma* clove boilers and one *Mishimade* clove boiler with black soil inlaid on white body, have been handed down in this family (stored in the Setouchi Town Folk Museum). A clove boiler is a small boiler that is used for deodorizing and moisture-proofing by decocting cloves and generating a fragrance. It is commonly seen among Tateno kiln products. The items of the Nishi family all used a fine white clay with delicate decorations.

Clove boilers fired in the same Tateno kiln have also been handed down in the Morioka family of Yamato village (stored in the Amami City Amami Museum). However, this boiler is covered in a brown glaze. The wooden box in which the clove boiler was placed has the year of Kaei 7 (1854) as well as the name of the owner, “Maebuni.” The Morioka family was a family of influential people in the region who also served as *Yohito* in the early-modern era, and Maebuni also became a *Yohito* in 1846. One *Shirosatsuma* bowl from the Tateno kiln has been also handed down.

There are similar examples in Okinawa. Double-handled jars in the *Mishimade* style from the Tateno kiln (stored in Kumejima Museum) have also been passed down through families who turned out many *Kimihae* (*Chimbe*), the highest rank of *Noro* in Kumejima. The

Noro was a religious authority appointed by the Ryukyu Kingdom and was an influential figure in the region.

The Tateno kiln products in Amami Oshima are likely to have been bestowed by the domain since the owners were local influential persons. The items of Kumejima were probably given through the Ryukyu Kingdom. Though these domain kiln products were made with precision and beauty, they were more valuable as domain kiln products and gifts from the domain. For people of influence, gifts are not only an honor but also effective in increasing the authority of the owners themselves against the background of the authority of the domain. For the domains as well, gifting these to people such as *Yohito* may have had political significance to smooth their rule over the islands.

Many of the early-modern ceramics were products necessary for daily life, such as tableware including bowls, plates; jars for storing liquids such as water; and mortar for grinding miso or sesame. At the same time, some were produced and distributed as symbols of political power and authority. The Tateno kiln products handed down in the old families in Amami tell of how the domain ruled the island at that time.



***Shirosatsuma* clove boiler handed down by the Nishi family in Ikomo, Kakeromajima (stored in the Setouchi Town Folk Museum)**

War ruins that connect memories to the future

ISHIDA Tomoko

I saw war for the first time with my own eyes. The former Japanese Army ammunition arsenal in Tean; the observatory in Nishikomi; the Shinyo suicide motorboat storage trenches in Nominoura, Kakeromajima; the Kaneko-Tezaki defense station in Ankyaba. These are the feelings felt at the sites of many war-related ruins (war ruins) that remain in Setouchi town, located in the southern part of Amami Oshima. War is a memory of my grandparents. Since I was born after the war, it is a story I heard from those who experienced the war while I was on a school trip at the Nagasaki Atomic Bomb Museum. I also learned a difficult decision at the Chiran Peace Museum. A war that I thought was an extraordinary event, far removed from myself, it is still in front of me in Amami Oshima even after the war. I was overwhelmed by the power of the real thing.

As I look around with interest, I notice that many war ruins remained close to me. For example, traces of the war remain in current living areas where the houses are lined up, such as the remains of the Oshima Fortress Command Center and the Hoanden in the center Koniya, Setouchi town, and the three radio towers looming over Akaogi, Tatsugo town. The war ruins have remained there all this time, but they are “invisible” without any interest or knowledge. However, once recognized, they become storytellers of the history of the areas affected by war.

There are countless war ruins in the Amami Islands that are surprisingly well preserved. We have been exploring the war ruins of Amami Oshima with students from Kagoshima University since 2016. We have learned through this process that we can directly confront the real existence of these areas as a result of the efforts of many people, including cultural property managers and local historians, who continue their research to connect the memories of the war to the future; residents who voluntarily perform management work such as mowing so that people can safely visit; and guides who help visitors develop a deeper understanding. Meanwhile, there are many war ruins that decay without being of interest to anyone.

I was asked at Kakeromajima, “Why are archaeologists interested in war ruins?” The entire history of humankind, not just the prehistoric period where no written records exist, is the subject of archaeological research. There has been increased interest in recent years, in researching, preserving, and utilizing war ruins following the 1984 advocacy by a researcher in Okinawa Prefecture for war ruins archaeology in the Pacific War.

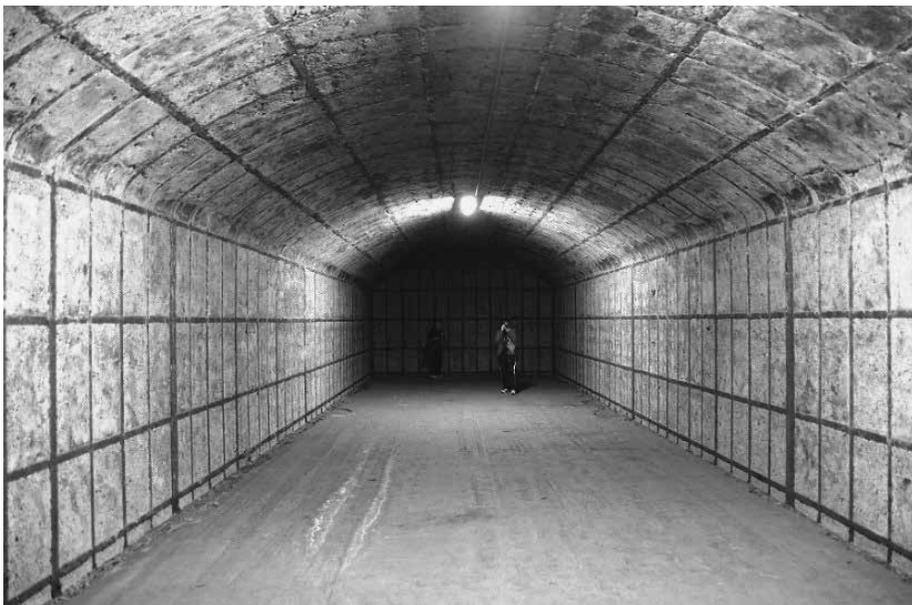
Many war-related documents were lost because they either disappeared during the war, were intentionally destroyed at the end of the war, or disposed of alongside postwar development. Nevertheless, materials such as concrete structures on the ground as well as military ammunition and tableware unearthed from archaeological excavations remain. We can infer from the large quantity of rocks and coral mixed into the concrete that conditions at the end of the way were difficult. The painful and abominable past of repeated failures is an important aspect of history, in addition to the bright aspects of favorable development.

It is the responsibility of modern people to record the “memories of loss” and convey to the future generations the folly of choosing war as a means of solving problems. There is a major role to be fulfilled by archaeology, a discipline that seeks ways to live in the future by knowing the process by which the present world is constructed from a long-term perspective.

During my surveys with students, I did not know the location of the destination that I had checked in advance, and I asked for directions in Sani village in Kasari town. I heard a detailed story of the “Banzai Rock,” which was the place where the locals last saw young boys being shipped off to war. It is an important place for the people of Sani; however, this would be an ordinary rock if this story were not known. There are memories of the war revolving around not only artificial structures such as military facilities but also natural landscapes and places, but these cannot be known without human language. Things alone are meaningless. If the knowledge or experience were not left behind as records now, they will be gone forever.

Is there something we can do? We first thought that it was important to know, and we began to be involved in the battlefields of Amami Oshima, centering on the archaeology seminars of the Faculty of Law, Economics, and Humanities in Kagoshima University. Recently, people have become more interested in the project. We are now collaborating with the anthropology and social science education seminars.

Now is the only opportunity to directly compare the testimony of war survivors (humans) and war records based on historical documents (events) with the war ruins (things / locations), and verify the mutual value and historical awareness. We hope that you will watch over us—who do not know war—as we find new value in war ruins as a cultural heritage of the region and seek to connect the memories and records related to the war to the future.



Survey scene at the former Japanese Army ammunition arsenal in Tean, Setouchi town

Listening to the *Shima* war stories

KANESHIRO Itoe

The island of Amami Oshima is known for its abundant nature. However, few people know the fact that this beautiful island once had military stations, and that many war-related constructions remain. It was a few years ago that I came to know the fact from a conversation with a colleague. Then, I began to walk around the island to see war ruins, and I found that many of them were located near the villages, which means that the war happened right in front of the residents.

So, how did the people in the village experience the war? Although the relationship between the war stations and the local community can be found in fragments in collections written by local people about their war experiences, it is difficult to grasp the whole picture of what was happening in the villages. This is because, access by the general public to the military installation areas was greatly restricted, so that even the local people did not know the details. However, did the military installations have any impact on the daily lives of the *Shima*, considering that they were adjacent to the villages? If that were the case, how did the people of the *Shima* survive the war? These questions come to me one after another when I visited the war ruins.

In 2018, faculty and students studying cultural anthropology and archaeology at Kagoshima University formed a team to conduct interview surveys on the war in the *Shima* on Amami Oshima. The first interviews were conducted with people in their 70s to 90s living in Tatsugo town in December 2018. We mainly asked for their stories of living through the war and their memories of the battles. We were able to learn many aspects of the war in the *Shima* including stories of making bombproof shelters, escaping from air raids with their lives, school life during the war and after.

We also heard some episodes where even though the war was raging, they as children at the time played, made jokes and fooled around. One student mentioned that it reminded them of the war drama ‘In this Corner of the World’ at the discussion after the survey. It seemed that they could understand how people in *Shima* continued to live their lives in wartime, and how easily their daily life was threatened by massive violence—this is war.

Now that more than 70 years have passed since the end of the war, the number of those who directly experienced it is decreasing, and their voices are about to be lost. Therefore, it can be said that this is the last chance to directly listen to these war experiences. It is undoubtedly necessary to collect, as much as possible, the voices of how people survived the war and transcribe them so that anyone in the future will be able to “hear” them. Compiling records of the war in the *Shima* in this way will be important information to convey the war to those generations who did not experience it.

In addition, it is meaningful to think once again about the war on the island. Islands are often far from the center of the nation geographically and marginalized politically and economically. In states of emergency such as war, islands often become places that are easily abandoned as frontlines of the battlefield.

Therefore, thinking about the “War of the *Shima*” is important issue when considering the relationship between war and society. We together with our students would like to continue the surveys in collaboration with the local people in order to be able to pass on the history of the region and the stories of the war.



Students listening to the stories of war in the *Shima* (photographed by ISHIDA Tomoko)

Memories of a hometown that connect to the future

SATO Hiroyuki

On December 14, 2019, I participated in the “Sacred Land of Japanese Sweets” study tour of Koniya High School. Given that Christmas was just around the corner, there were a total of 40 first- to third-year students dressed as Santa Claus and reindeer who took a tour around the site of the white sugar factory in Kuji, Koniya town. They shared quizzes and games with a total of 44 preschoolers, elementary school students, and their parents joining.

I took part in the quiz as practice on the bus from Koniya to Kuji. The participants were divided into four teams once at the factory, and with worksheets in hand, they toured four locations, such as the white sugar rocks and ruins of the white sugar factory that remain in the village, where they learned about the history of those areas while having fun with quizzes and games that the high school students prepared at each location. On the ride back, the participants had a great time playing a bingo game which reflected the content learned on the tour.

A rehearsal tour was held a month ago, in November, in which I also participated. Besides the tour, which involved only listening to the quizzes and explanations given by the high school students, there were games to search for photographs and keywords hidden in the surrounding area and experiences to measure the length of the chimney (36 m) of the white sugar factory with your own stride length, and there were a variety of efforts to make children enjoy learning.

I had thought that there was still room for improvement in the worksheet, but this is just the ramblings of a random man. The children were writing in the worksheets while passionately listening to the explanations of the high school students. There were scenes where the children would ask questions and the high school students would answer them. To what extent has the memory of the white sugar factory being here permeated into the children? This is not something for which the answers should immediately be sought and is a problem that should be considered over a long time.

During this time, the high school students went through numerous phases of trial and error, thinking about how to best communicate this information in an easy-to-understand manner. On the day of the tour, each high school student took responsibility for explaining the information. In fact, the high school students themselves have simulated the experience of connecting the memories of the white sugar factory to the future. It can be said that this memory was certainly inherited by the high school students.

The memory of the hometown created in relation to society is also evidence that people inhabited and lived there. The disappearance of this signifies the disappearance of the people there, and their history. However, today, local communities have become weakened with aging, population outflow, and industrial decline, making it difficult to pass on conventional

and practical wisdom and memory. Meanwhile, it is not always the case that the population flowing into a city would create something like that of a local community. I felt comfort and reliability in watching what seemed more like neighborhood lads and lasses doing their best to teach neighborhood children rather than high school students teaching elementary school students.

This kind of inheritance of the memories of a hometown cannot be completed by leaving them in the hands of experts. That being said, it is also not a solution to rely entirely on high school students. It is each resident who is interested in each position of society who connects the circle of inheritance of memory, and it is desirable that residents take the initiative in their own efforts. The communities in which we live every day contain a large amount of heterogeneity and diversity. Having a regular and constant relationship is important for each individual resident to understand each other's differences, find connections in them, and nurture those connections.

On top of this, there is no choice but to expand the "mutual" aspect as a collaborative arena that includes diversity in the process of learning or rediscovering the past and creating something new while inheriting that past. A new historical image should be opened by new relationships with people.

I was able to see this in the study tour.

The fact that, on December 14, 2019, there were high school students in Koniya who carried out activities to connect the memory of the Kuji white sugar factory, built by the Satsuma domain, from the Bakumatsu period to the future; and the fact that there were children who passionately participated in those activities.

This series will be reliable material that conveys this fact 100 years later, 1000 years later, and even beyond.



Children taking a quiz in front of the model of a white sugar factory

SECTION TWO:

Culture

Following the birth of the Tatsugo pattern

UCHIYAMA Hatsumi

Most people would answer “Tatsugo pattern” to the question, “What is the representative pattern of Oshima Tsumugi?” A part of the Tatsugo pattern has been symbolically used for T-shirts and wrapping paper in recent years, so it seems that it is becoming popular as one of the icons representing Amami.

How would people answer the question, “What kind of pattern is the Tatsugo pattern?” I could answer, “This is the Tasugo pattern” if actually shown it, but if asked to describe the pattern verbally, I would struggle to answer. Recently, there have been hypotheses that it is a design of Habu, cycads, or hibiscus.

About ten years ago, Mr. NAKATA Kazuo (1934–2019), a member of the Tatsugo Town Cultural Properties Protection Council, told me that the “origin of the Tatsugo pattern was a pinwheel pattern made from pandanus leaves,” which triggered my developing an interest in the Tatsugo pattern. I have been blessed with the position of a visiting researcher at the International Center for Island Studies, Kagoshima University, giving me the opportunity to consider this in depth.

Mr. NAKATA wrote about clothing in general, including Oshima Tsumugi, in publications such as “*Tatsugo Town Magazine: History*,” “*Cultural Properties of Tatsugo Town*,” and “*Tatsugo History Society Bulletin / Eternal*.” The section on Amami Oshima Tsumugi, particularly in *Tatsugo Town Magazine: History* (1988), described in detail the origin of the Tatsugo pattern. He considered 13 Tsumugi samples and two designs that were woven around 1900. The design was described as a *Gajimosha* (pinwheel), “The design at the center was a *Gajimosha* (pinwheel) made of pandanus leaves. Two of these were stacked on top of each other to produce a cycad leaf motif, which was then called a cycad pattern.”

The pinwheel made from pandanus leaves was a familiar toy for children in the past. Growing up in the middle of the Showa era, I did not have many toys around me, so I made this pinwheel on the beach and ran toward the wind. It is easy to imagine that a pinwheel was a more familiar toy to children of the Meiji era than those of my generation.

The Kasuri motif or pattern, named a pinwheel, is listed as a sample of old patterns in *Wadamari Town Magazine* and *Yoron Town Magazine*. In addition to the “*Oshima District Textile Summary*” made by SASAMORI Gisuke, the island official in 1895, which was written to promote the distribution of Tsumugi on the mainland. The name of the pattern originated in this old era and has nothing in common with the motif except this pinwheel pattern. It is the same as the name indicated by Mr. NAKATA.

At the time, the Kasuri motif with the pinwheel pattern was woven by hand-tied kasuri threads. Around 1907 a shimebata loom was invented that could weave patterns with even greater detail. Additionally, the cycad leaf motif was born to complement these patterns and

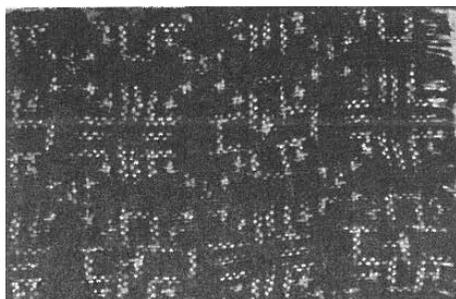
played an auxiliary role in filling that space. The cycad leaf motif differed from the space-filling patterns to date, and the new space-filling design was actively adopted in each *Shima* (village community) of Tatsugo. The name was different depending on each village and producer, but merchants and middlemen from the mainland unified the name as the “Tatsugo pattern.”

In the Taisho era, a Tatsugo pattern with four *Tama* (the four *Tama* involved two different patterns as a single set, with four sets arranged on the sides), called the “Sumi-chiyo pattern,” was developed. It was from this time onwards that the image of the current general Tatsugo pattern was established.

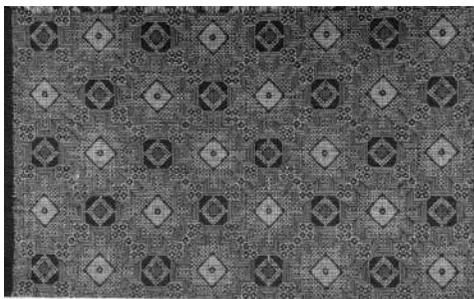
Large patterns, such as with one or two *Tama*, were born with the development of the shimebata loom, and the early Showa era was the heyday of the Tatsugo pattern. There were requests from wholesalers on the mainland after the war. Oshima Tsumugi in various patterns began, but the Tatsugo pattern had an enduring popularity regardless of the era and is now a representative classic pattern.

I have looked at various Tatsugo patterns and re-consider the question, “What is the Tatsugo pattern?” asked in the beginning of this story.

What these have in common are that (1) two different patterns are developed as a set, and (2) a cycad leaf motif is included. The shape of the motif is often the shape of a rhombus, and though relatively few, there are some combinations with circles. These patterns are combined with large and small variations. A cycad leaf motif is used to connect them, in turn generating the many Tatsugo patterns seen, which people from the late Meiji era have been untiringly loved by to the present. The Tatsugo pattern made of the pinwheel and the surrounding cycad leaf motif is truly a wonderful pattern born from the nature of Amami. As I think about the ancestors who created this design, I hope that the Tatsugo pattern will remain forever.



Gajimosha pattern, which is said to have been the origin of the Tatsugo pattern



Tatsugo pattern with four *Tama*

Oshima Tsumugi to be left in the future

UCHIYAMA Hatsumi

I was blessed with the opportunity to conduct research on the theme of the formation of the pattern of Oshima Tsumugi (Tatsugo pattern) and the transitions of the pattern in 2019 as a visiting researcher at the International Center for Island Studies, Kagoshima University.

I have re-read the materials I collected to date and searched for the name of Oshima Tsumugi and read books in places such as libraries on the island, libraries in Kagoshima University, and in used bookstores. I felt that there were very few books on the origin and history of the Oshima Tsumugi pattern.

For three years beginning in September 2007, I had the opportunity to publish essays on the dyeing and weaving culture of Oshima Tsumugi and Amami in the *Nankai Nichinichi Shinbun*. From that time onwards, I was occasionally consulted on the remodeling of old Tsumugi, and the Oshima Tsumugi including various stories, such as an “Oshima Tsumugi woven by their mother when she was young,” and “What their grandmother did when she was still alive.” As I looked at these, compared the patterns, and estimated the production period of each, I began to sense a joy in learning the living history of the Oshima Tsumugi; obtaining a knowledge and gathering information that could not be learned from written works. Furthermore, at every opportunity, I began to emphasize the importance of preserving the old Oshima Tsumugi in the local area.

I recently had the opportunity to meet two people who had old Oshima Tsumugi. The first person had a men’s haori with a pattern that I had never seen before. The pattern was very fine, the round shapes were very visible, and it was clearly different from the pattern of men’s items that I have usually seen. I became very excited over the pattern, quickly looking up the name. As I compared it with old scrap samples from the second volume of the *Naze City Magazine*, I found that this pattern was called the “Koyo Chirashi.” The second person had a kimono with a “Hakkina Tobi” pattern, where stars and round shapes were neatly scattered on a black background, then surrounded by small diamonds, circles, squares, and other shapes. It was a pattern that gave the impression of the shapes copied from the nature of Amami itself. I had seen this pattern in scraps and materials, but this was the first time I had seen a kimono with the Hakkina Tobi pattern itself.

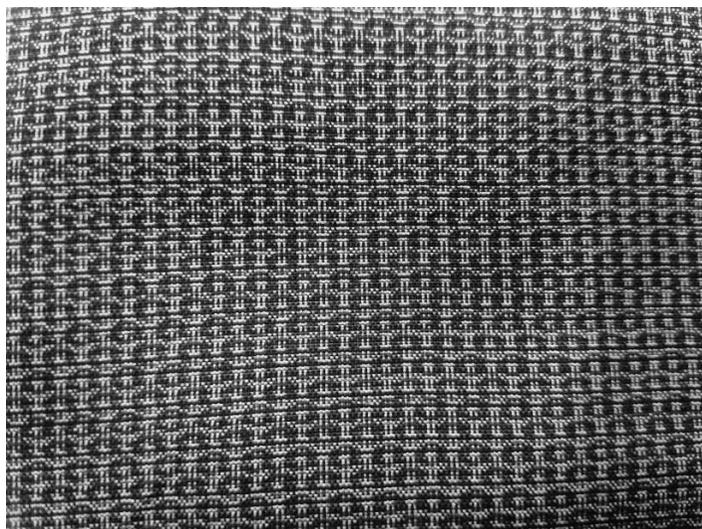
The haori and kimono I encountered this time were excellent, and once again I felt the appeal of the Oshima Tsumugi. The beauty of the motif represented by the fine kasuri is comparable to that of textiles worldwide. The ancestors of this technique utilized their knowledge, time, and effort; sought constant improvement, and poured their passion into creating an ever-superior Oshima Tsumugi until reaching the shape of today’s Oshima Tsumugi. These techniques were passed down verbally from the Meiji to the early Showa era. Therefore, there are very few fabrics that have been recorded in line with the occurrence of

patterns and technological reforms in dyeing and weaving compared to the heyday of that time.

There is no definitive evidence to date, but the previously mentioned “Koyo Chirashi” and “Hakkina Tobi” patterns are thought to have been from the Taisho era, considering the materials and the stories heard from their respective owners. Comparing and analyzing their respective stories, when Oshima Tsumugi with similar patterns emerge in the future, will allow for the identification of the production period and location, and we can be closer to a confirmation.

Precious clothing from the Meiji to Showa era is being secretly discarded today, but this is the last period of time for elucidating the history of Oshima Tsumugi. Oshima Tsumugi is a silk fabric, so it becomes more easily damaged with age. Fabrics that are so damaged that they become unwearable are thought to have no value and are often thrown away. However, no matter how damaged it is or even if it is scraps, there is no harm in seeing the pattern, and adhesive interlining from dressmaking can be placed in weak spots to preserve it carefully, like a document. We should shed light on precious old textiles and share information on these as island properties to explore our own roots.

It is necessary to trace the history of Oshima Tsumugi through the old cloths that we will encounter in the future in place of the ancestors who could not leave records of these fabrics at the time. It would be ideal to build a dyeing and weaving museum that houses the important materials collected in this way to pass this information on to the next generation. I believe that this will lead to honoring and being grateful for the efforts of the ancestors who created the Oshima Tsumugi with detailed kasuri patterns that emerged from nowhere, as well as the abundant nature of the area. This is truly learning from the past, and this will also be an opportunity for new things to emerge from these efforts.



Koyo Chirashi. There are 72 round patterns along the sides.

“Amami Folk Song Awards”: Challenges for the future

YANAGAWA Hidetoshi

For more than 10 years I have been attending the “Amami Folk Song Awards” sponsored by the *Nankai Nichinichi Shinbun* every year—I watch the entire show from start to finish. A long time ago, when it was hosted over two days, I watched both days from morning until evening. When I tell others this, they are usually impressed, saying that I must have a great deal of patience. Perhaps it might be better to say that they found it somewhat ridiculous. However, I love to listen to the *Shima-uta* (in my articles, *Shima-uta* designate Amami folk songs whereas Shima Uta indicates a particular song sung by THE BOOM), so even if I’m tired of sitting, I’ve almost never been tired of listening.

I’ve heard many opinions about the “Amami Folk Song Awards,” ranging from those saying, “we need them” or “we don’t need them,” or that “they’ll attend” or that “they won’t attend.” I think that they were all reasonable opinions in their own right. However, I personally have looked forward to it every year, so I hope that it will continue.

The “Amami Folk Song Awards” was formerly called the “Amami Folk Song Newcomers Tournament.” The objective was clear. It was to find a new singer. The folk song festivals held by the leading figures of the *Shima-uta* at the time have become too familiar and lost a sense of freshness. The first tournament was held in 1975. The winner was TSUKIJI Shunzo, still unknown at the time in 1979. As is now well known, Mr. TSUKIJI won the “Japanese Folk Song Awards” and became the best folk singer in Japan. This was a major incident in Amami at the time.

There were more and more voices who wanted to see the second and third incarnations of the best in Japan, and from the following year onwards, the “Amami Folk Song Newcomer Tournament” was then called the “Amami Folk Song Awards” as a prelude to the “Japanese Folk Song Awards.” The *Shima-uta* content in Amami then transitioned at once from the discovery of new talent to “the best folk song in Japan.” The “best in Amami” was just a passing point. The ultimate objective was to be the “best folk song in Japan.”

However, after Mr. TSUKIJI, the second incarnation of the best in Japan did not appear so readily. It was in 1989 that TOHARA Mitsuyo finally won the coveted crown. It had been 10 years since Mr. TSUKIJI won the award and the following year, NAKANO Rikki became the youngest in history to become the best in Japan. *Shima’chu* (Amamian people) finally found its moment to shine once again, but the all-important “Japanese Folk Song Awards” was abolished in 1992 due to the bursting of the bubble economy. The “Japanese Folk Song Awards” disappeared, but the “Amami Folk Song Awards” remained. However, its role as the prelude to the best folk song in Japan disappeared.

The prelude to the best folk song in Japan has now been handed over to the “Folk Song Folk Dance Amami Union Tournament.” So, what is the objective of the “Amami Folk Song

“Amami Folk Song Awards”: Challenges for the future
YANAGAWA Hidetoshi

Awards”? It feels that the “Amami Folk Songs Awards” have reached the present day without properly discussing this question. To begin with, it is very difficult to choose only one person for the grand prize among hundreds of people, including the qualifiers. I suspect that the people involved in the “Amami Folk Song Awards” are also quite miserable over the current situation.

In an era where the diversity of evaluations has become commonplace, why should we choose the best based on uniform evaluation criteria? Furthermore, a scoring standard can be shown for figure skating, but there is no equivalent in the “Amami Folk Song Awards.” The person coming in at second place does not properly understand what was wrong with them to put them in that position. This would leave those who choose, those who are chosen, and even those who were not chosen in a miserable state.

It is not that I am criticizing the system; it is because this is not a problem that can be resolved with a simple criticism. On the contrary, the problem of the “Amami Folk Song Awards” seems to be inseparably linked to the fundamental question of “What is the most important thing for *Shima-uta*?”—a question that is completely different from the one about enjoying the best folk song in Japan.

Is the reason why the “Amami Folk Song Awards” have been so controversial that *Shima’chu* has been released from the curse of being the best in Japan, and that the people have begun to seriously consider the question of “What is the most important thing for Amami?” It is unclear if this question has a conclusion. However, the exchanges discussed here will never be wasted for *Shima-uta* and for Amami’s future.



Stage of “Amami Folk Song Awards”

New song of *Shima-uta*!

YANAGAWA Hidetoshi

A song that always appears in student reports when talking about Amami *Shima-uta* in a lecture at Kagoshima University is the “Waido-Bushi.” Or rather, rarely have I seen any other songs in the student reports. Even students who don’t know about *Shima-uta* at all know “Waido-Bushi.”

“Waido-Bushi” is a song composed by TSUBOYAMA Yutaka based on the lyrics of NAKAMURA Tamiro and released in 1978. From the mid-1960s to the 1970s, the Amami tourism boom was at a tailwind, and there were many folk songs being actively produced. The lyricist NAKAMURA Tamiro also wrote the lyrics for new songs such as “Adan no Hana.” Therefore, “Waido-Bushi” is not exactly a *Shima-uta*, but rather a new *Shima-uta*. This song is now the representative *Shima-uta* for the today’s youth. The new *Shima-uta* has surpassed the original in terms of name recognition. I think that this is frankly a major issue.

Songs frequently sung in the new *Shima-uta* are not only the “Waido-Bushi.” Songs like “Oshima Tsumugi nu Urigyurasa” composed by ISHIHARA Hisako with lyrics by YAMADA Yonezo, and “Kikai ya Yoi Shima” composed and written by YASUDA Takahide are often sung as lively music at singing parties and banquets. Old *Shima-uta* are of course great, but new *Shima-uta* have a familiar melody and, above all, other people can easily sing along with the song.

It goes without saying that the term “*Shima-uta*” originated from Amami; however, most Japanese people think that the *Shima-uta* are folk songs from Okinawa. This may be due to the influence of “Shima Uta” by THE BOOM, but it is also because Okinawa has many new folk songs that are familiar. The folk singers in Okinawa are very talented in their songwriting and their advantage is that their scale is the Ryukyu scale, which is different from that of the mainland, so any song sounds like an Okinawan song. Furthermore, the listener just assumes that it is an old song.

The reason that there was not much resistance to Mr. TSUBOYAMA creating a new *Shima-uta* was because he was actively interacting with Okinawan singers and watching their activity up-close. There were many more opportunities for singers from Amami and Okinawa to do joint work than there are today. However, creating new *Shima-uta* in Amami does not work as well as it does in Okinawa because the music scale in Amami is the same as on the mainland. If not done properly, it would just sound like a folk song from the mainland. Whether to express the qualities of *Shima-uta* or Amami, is a difficult question.

Folk songs are activated by “putting new wine into old wineskins.” This is clear from the example of “Waido-Bushi” as well. Fortunately, *Shima-uta* has gained considerable popularity across the country, but rarely does one hear of new songs. Instead, there has been the arrival of *Shima-uta*-style pop music. There are some with the opinion that this kind of pop music

New song of *Shima-uta*!
YANAGAWA Hidetoshi

should be thought of as the *Shima-uta* of today. However, pop music is pop music, and *Shima-uta* is *Shima-uta*. To activate the *Shima-uta* world of Amami, new *Shima-uta* is desirable.

It may be difficult to suddenly create a masterpiece like “Waido-Bushi.” However, it seems that there are quite a few young singers active today and likely to make one or two *Shima-uta*. What may be somewhat problematic is the lyrics. If the younger generation sings about unpretentious everyday life in the natural island style, perhaps they will be able to write good songs. If they feel uncomfortable writing the songs individually, then they can work together. *Shima-uta* is originally a song that was unknown to the singer, so it may be more in line with tradition than expected. They should play the songs for their friends for the time being, and if popular, try it out on a broader audience.

I may be scolded, “Don’t say such things so lightly.” However, the extent to which “Waido-Bushi” has contributed to, and has continued to contribute to, increasing the recognition of Amami *Shima-uta* to the world is clear from the student reports discussed earlier. I just wrote something irresponsible with the expectation of a second and third “Waido-Bushi.” Young singers, please don’t hesitate to give it a try. I am sure that you will be able to write good songs.



TSUBOYAMA Yutaka singing “Waido-Bushi”

SECTION THREE:

Society

The making of urban Amami:

Past and present of the city of Amami, Naze

KIKATA Junne

Naze is the largest city in the Amami Islands. As of 2021 the population of the city area of Naze was approximately 35,500 people; more than one-third of the Amami Islands' total population. The city is one of the largest ten cities within the Kagoshima Prefecture now. The history of the town of Naze is surprisingly complex.

There is a theory that “Naze” is a corruption of the archaic word *Naji*, meaning vacant lot, and when looking at provincial maps of Japan, “Ryuku Kingdom, Oshima,” of the Genroku / Tempo-period (1696-1702, 1835-1838), the area where Naze is currently located is indeed blank. The origin of Naze's development as the center of the archipelago was due to the relocation of temporary residences and other facilities of the local magistrate to Kaneku village, in Naze Magiri in 1801, so it is not a particularly old development.

In 1875, the administrative division system came into effect, creating Oshima District within Kagoshima Prefecture, and the Oshima branch office was moved from its earlier site, and opened in what is now the center of Naze. The branch office subsequently changed its name and relocated several times, finally settling in 1907 at its current location as the prefectural Oshima branch office.

Under the Oshima Development Concept (1865) proposed jointly between the Satsuma Domain and the Glover Trading Company, Kaneku village developed as a domestic and international distribution base, becoming a port of call on the Kagoshima-Okinawa-Taiwan-Shanghai route. From the mid-1870s, merchants from Kagoshima, Nagasaki, Osaka and other cities contributed to the expansion of commercial and residential areas along the coast. Around 1891, a notation in a map compiled in the *Amami Chronicle (Shidan)* indicated that “there is an island office, court, police station, prison, school, and restaurants. There are rows of crowded shops ... it is a small metropolis.” In 1910, restaurants for visiting merchants “were relocated to the designated area in Western Yanigawa,” and Yanigawa was created as a planned entertainment district, under the supervision of the police.

Concurrently, the Oshima Tsumugi silk industry was developing, and the number of Tsumugi (silk) factories expanded, into the remaining fields of Itsubu village. During the Taisho era, the Tsumugi industry surpassed the traditional sugar cane industry, and the roots of Naze as an industrial city based on the commerce of Kaneku and the manufacturing of Itsubu were planted. The population increased with the development of industry, and a market was formed near Nagatabashi-bridge—a key point on both sea and land routes. The public Nagatabashi market was opened in 1931.

Roads were gradually built near Naze as the population increased, and were classed under prefectural management from the mid-1870s onwards. River repairs and estuary reclamation also progressed, and sewers were installed in the Taisho era. By 1932, a budget

request was made for projects such as port repair, roads, and land improvement. In 1940, the first legal city plan known as the Naze City Plan was drafted.

The Navy Oshima Base Corps and Koniya Air Base were established in Amami Oshima during World War II, subjecting it to intense attacks by the U.S. military at the end of the war. The attacks “moving as loudly as possible to give the impression of a large fleet approaching” (U.S. Army General HALSEY, 1944) extended to even the small villages. The largest city of Naze was devastated, and excellent buildings such as the former Naze Catholic Church (construction started in 1902, completed in 1928) were lost.

After the war ended in 1946, the U.S. military government occupied the former branch office, and island administration was separated from the mainland. Aid from Government Aid and Relief in Occupied Areas (GARIOA) did not lead to full-scale reconstruction, and the burnt remains of Naze were lined with huts built from split beechwood and corrugated cardboard released by the U.S. military. In December 1953 the island was returned to Japan, and just as promotion plans such as port renovations and public facility development were resumed under the Amami Islands Reconstruction Special Measures Act (1954), the city of Naze burnt down twice over, following the Great Sakaemachi Fire (October 1955) and the Great Irifunecho Fire (February 1955).

Although the War Damage Reconstruction City Plans had been in progress on the mainland since 1946, these were delayed in Naze where full-scale urban remodeling began from 1956 as part of the “Fire Reconstruction City Plan.” Having built up expertise through executing the War Damage Reconstruction City Plans on the mainland, Kagoshima Prefecture applied this knowledge to expedite the rehabilitation of businesses in anticipation of the expiration date of the Special Measures Act and the city of Naze entered a period of high growth with this momentum.

Even now, land readjustment projects are underway in the Suehiro / Minato districts in Naze, and progress has been seen in the development of a marine town. Since the mid-1950s, there has always been a city planning project occurring in Naze. It will not be long before the painting of the *Naji* will be complete. However, the city must mature in order to become a comfortable place to live. Perhaps it is time to set aside the paintbrush, walk around and examine the progress of the city, and switch to a small brush to finalize the work.



Naze City Plan – Naze Fire Reconstruction Land Readjustment Plan (1st Implementantation Area, Amami City Hall Collection)

***SHIMA* (island) and *Shima* (village community) on Kikaijima**

NAKATANI Sumie

The island of Kikaijima has just the right population and area for anthropologists to conduct surveys independently. In other words, it is at a scale where one person can grasp the entire island. However, there is no shortage of research subjects as each *Shima* (village community) on the island has inherited different dialects and events. It is a research site where something new can be discovered with every visit. One aspect of particular interest to me in my research is how traditional events and lifestyles are maintained, changed and passed on to the next generation.

Until the 1930s, there were over 20,000 people living on this island of only 57 square kilometers. One can imagine how people helped each other with sugarcane production and crafting Oshima Tsumugi textiles as sources of income. People made their livelihoods maximizing the limited resources from the land and sea. Currently, the population has decreased to one-third of its original size, since young people are moving off the island. Also it is aging rapidly.

The question of how to maintain lifestyles in rapidly depopulating areas and pass on traditions is not a problem unique to Kikaijima. However, what I found deeply interesting about Kikaijima was that people find it difficult to share what they consider as culture of the *SHIMA* (the island), because each *Shima* (village community) has developed different temperaments, spoken dialects, and customs. On this point, one person said, “There has been an initiative to teach dialects at school in order to keep them alive, but it always run into the roadblock of deciding which *Shima*’s dialect should be taught. There are opinions that it should be the dialect of the main village with the largest population, but then this can no longer be called a local tradition,” and “What should we be protecting and passing on to the next generation?”

Based on an academic argument, “traditions” are often not something passed down from ancient times but rather something “invented” in recent history. Famous examples include how the checkered tartan skirts and bagpipes, which are considered to be “old” Scottish traditions, were actually created by Scottish nationalism after the 19th century to emphasize differences from England. As a similar phenomenon, it would not be so strange to think that the dialect of the main village, Wan, would become the traditional dialect of the whole of Kikaijima. However, it is an accepted view that an enhancement of *SHIMA*ism is necessary, in which a sense of belonging to the *SHIMA* (island) becomes stronger than the sense of belonging to each individual *Shima* (village community).

Interestingly enough, what I have learned from surveys on Kikaijima over the past several years is that dialects and customs differ from one *Shima* to another; this does not necessarily prevent people from creating connections beyond their own *Shima*, or having a

sense of belonging to Kikaijima. Simply put, *SHIMA* and *Shima* need not be a zero-sum game where alignment with one means a weakened relationship with the other. In contrast, it can be said that varieties of *Shima* culture have formed Kikaijima.

I would like to introduce one episode which has helped me to realize this fact. I spoke to one woman over the age of 80 in a small mountain village called Shimanaka, which does not face the sea. Due to its geographic isolation, Shimanaka has faced a significantly declining population. However, there is a strong sense of unity, a high level of participation in the village activities, and also Chinese and Filipino women who were active as members of the local women's association. I imagined that it must be quite difficult for foreign women to live in such a small village, and I asked to the old Shimanaka woman how the village community accepts people with different languages and customs to which she casually responded, "Because we are used to accepting outsiders," as if there was nothing out of the ordinary.

According to her, "For a long time, Shimanaka was not able to survive without accepting outsiders (due to being a small village). This person, that person—they all came by marrying in from other *Shimas*. The same situation applied for the wife of the village head as well. In this way we have accepted people with different languages and customs for such a long time." My presumption that anybody other than so-called "Japanese" people were seen as outsiders, and lumping together all people born in Kikaijima as insiders had collapsed loudly in the face of such reality.

Whether it is possible to create a diverse and open society that includes a variety of differences such as language, culture, disabilities, and sexual orientation, will be an issue of survival and development for all communities in the age of globalization, where people, goods, and information from all over the world move across national borders. On Kikaijima, activities, such as children performing a classical Kyogen drama using the village dialects, and writing the dialect of each village on the sign boards at bus stops using crowdfunding measures, have already begun in order to preserve the different varieties of dialect.

Efforts to disseminate these *Shima* cultures have the effect of connecting people in villages as well as understanding the differences between the villages, sharing them, and growing from them. I cannot forget the shock of being told by that old lady who had never left her *Shima* with her pioneering way of thinking during the globalization era, when she said, "Because we have always accepted outsiders."



Photograph of village landscape from Hyakunodai



Participating in the activities of the August Dance Song Preservation Society

Supporting the revitalization of remote islands:

Diversity and community

NISHIMURA Satoru

The population is declining and aging on remote islands in Japan, and the number of villages whose survival is at a critical stage is increasing. Meanwhile, there are many islands that have achieved population growth and a youthful population due to the diversification of people's preferences for residential areas, narrowing of the disparity between rural and urban areas in the living and working environment mainly due to development and the spread of ICT, and the government's migration policy. A good example of this is Suwanosejima. The population of Suwanosejima went from 74 people in 2000 to 42 in 2010. However, due to the various initiatives of Toshima village and Suwanosejima, the population increased to 79 people by 2016. Many of these migrants are I-turners (people who relocated from other place than their home town). According to statistical data by Toshima Village Hall, there were 38 migrants from FY2009 to FY2016, of which 31 were I-turners and seven were U-turners (people who temporarily relocated and returned to their hometown). I-turners constituted 81.6% of all migrants. The elderly population percentage also decreased from 29.5% in 2010 to 17.5% in 2016. Population growth and a youthful population are developing at the same time. Let's take a look at the process by which this island attracted I-turners and began to take a step toward revitalization.

Suwanosejima became an uninhabited island following a large volcanic eruption in 1813, and was settled by FUJII Tomiden and others from Amami Oshima nearly 70 years later in the 1880s. In the late 1960s, the formation of communes (autonomously living villages) formed a new islander group. These people were called "Hippies" by outsiders. At the time, the island desperately wanted youth migration to maintain its distribution network by regularly scheduled ships. Upon a request from the island, SAKAKI Nanao, a member of a group called "The Tribe" in Tokyo, called out to his friends and created a commune with an American poet SNYDER Gary and others in 1967. Many youths visited this commune, and they lived an almost self-sufficient communal life without using currency until around 1977 or 1978. Marriages and child-raising among the members forced the development of households, and the commune collapsed. However, five households (as of 2016), including members of the commune, play a central role as an island elder group for Amami-originating festivals such as Arasetsu and Shibasashi held in shrines, as well as the management of local government events and school events. The descendants of the Amami settlers and the islanders of the commune overcame their differences to create communities, passing on the island culture while retaining the Amami culture, to the next generation. They have laid the foundation for the acceptance and retention of I-turners.

Furthermore, the spread of the internet has made it easier for people of various occupations to settle on remote islands. Some guesthouse owners are obtaining customers by using websites. A woman earns income from website creation. There are no shops on the island, but islanders can now obtain products through online shopping, in addition to the limited shops in Kagoshima city that they have used for many years. The number of islanders who obtain various products through the leading Kagoshima city supermarket “Taiyo” and Amazon is increasing. The online supermarket for Taiyo has the same delivery fees regardless of whether the destination is a remote island or Kagoshima city. The gap between cities and remote islands is steadily narrowing in terms of the procurement of supplies. With the narrowing of gaps in logistics and information as a tailwind, veteran I-turners have successfully accepted various migrants. The collaborative relationships of various actors in the area are also of note. The islanders are working hard to accept I-turners in cooperation with government offices and non-profit organizations (NPOs). The NPO Tokara Interface plans and manages island tours for those wishing to move. This NPO breaks away from traditional economic activities that depend on public works projects and searches for independence and self-reliance. They seek to recognize and reconstruct the regional mechanisms, the “connections” in which people and nature, and people and people co-exist and cooperate with each other, with a focus on the “richness” that is unique to this region.

Projects that revitalize the economy and society of remote islands with a declining and aging population are not easy to achieve. However, accepting diverse people and creating new communities while making use of the cultural resources cultivated in the history of remote islands is considered to be one way to revitalize remote islands.



A set of Jizos, or stone guardian deities of children, showing the diversity of Suwanosejima islanders

Ecotourism, and relationships with the community

SONG Da-Jeong

I came to Amami Oshima for the first time in August 2011. I visited various places from the north to the south of the island, and I experienced the nature, history, and culture of Amami. I fell completely in love with Amami during the course of my three-day trip, and I had a vague desire to learn more about Amami. Therefore, I chose Amami as my research subject in graduate school while at Kagoshima University, and I began going to the island on a regular basis. Here, I would like to introduce the kind of survey research I have been doing in Amami Oshima, with the keyword of “relationships with the community.”

I chose tourism and ecotourism in Amami as my research topic. Ecotourism is a form of sustainable tourism—a tourism concept that makes the appropriate use of the nature, history, and culture of a region while using of them. Its characteristics involve (1) the importance of having a guide (in order for tourists to further understand the region), and (2) conducting this tourism on a smaller scale (in order to reduce the burden on the natural environment and local community). Ocean activities such as diving, snorkeling, and whale watching; canoeing in mangrove forests in Sumiyo town; walks in the Kinsakubaru national forest; and observing wild animals and plants such as the Amami rabbit all come under the umbrella of ecotourism.

In 2013, when I began surveying the island, the Amami Islands Wide Area Office Association (administrative organization where 12 municipalities of the Amami Islands gathered) brought together guides under a single organization as part of efforts towards World Natural Heritage registration. They put in efforts for creating a system of cooperation and improving quality among guides. I interviewed registered guides of the Amami Oshima Eco-Tour Guide Liaison Council (established in 2008) on the reasons why they became a guide, their way of thinking about nature, what they recognized as valuable nature, and how they spoke to tourists. I also asked their thoughts on the importance of history and culture in these interviews.

I paid particular attention to the organizations and people on the island who have been conducting nature observation meetings and conservation activities since the late 1980s in association with these efforts. Among the people operating guide businesses in Amami Oshima, most ocean guides (including those for diving) were migrants; but most in the fields of nature, history, and culture of the land were from Amami. I learned that about half of these people were U-turners who re-affirmed the value of Amami after leaving the island to go on to school or employment and became involved in nature observation meetings and conservation activities after returning to the island.

At the beginning of my surveys, I focused on people who actively used the nature of given areas for tourism (government and guides), but in reality, there were few opportunities for directly interacting with local residents who continued to live in that natural area. From

October 2014 for half a year, when there was still a regional revitalization cooperation team in Amami Oshima, I became involved with the residents by working in the Sumiyo General Branch Industrial Construction Division in the Amami city long-term internship system, “Knowledge / regional revitalization cooperation project” for university students. With the cooperation of members of the NPO Sumiyo Yamura Land and the Sumiyo Town Union Youth Group, we created a walking course and map utilizing the familiar nature and culture of the Satochi / Satoyama, and implementing targeted monitoring tours for islanders outside of Sumiyo town.

What I learned from this experience is that these kinds of tourism cannot be maintained without the participation of residents. No amount of effort by strangers to come up with ideas and create new plans have meaning if nobody is there to continue them. There is a limit to how long such matters can be left to strangers. However, when personally calling upon the local people and becoming a tourist menu creator, I learned that “resident participation” and “cooperation” were easy words to say but difficult to put into practice.

After returning to the university, I visited Sumiyo town regularly and began to ask the residents about their relationship with nature, questions I had previously asked the government and guides. What does the nature of the area used for tourism mean to the residents? For example, in the case of mangrove forests, most of the residents recognized the forests as a natural landscape that they took for granted when they saw from the road, and only a small number of people used them in their daily lives. Furthermore, the mountain paths, which are now used for night tours, were only used by people involved in forestry. Since the mid-1990s, outsiders such as governments and guides evaluated these natural areas as valuable resources that could be developed for tourism and World Natural Heritage sites, and residents in recent years have begun to review these local resources once again. It was not the case that these regions have nothing, but rather, they were buried with treasure. Fortunately, the nature, history, and culture of the region have been reviewed from each standpoint and are beginning to be passed down because of the collaborative activities of outsiders and locals.

I would like to continue such investigations in the future, and most importantly, keep a record of the investigation results. Hopefully in the future I can use the records I have made with the local people when I researched Sumiyo town of this era.



Place for discussion for local issues among local people (April 1, 2017, Sumiyo inland sea Park Bungalow)

What are the opportunities for taking a second look at the obvious?

SONG Da-Jeong

I think that readers have experienced times when things they took for granted in their daily lives were not the case when seen externally. The same applies to nature; there are many things that we overlook while living in a place, only to see the tremendous value there when looking from different angles.

In early February of 2021, I took a tour to observe wildlife at night in Sumiyo town, Amami city. It was not a major event for me since I often observe wild animals in my research, but this time, I accompanied a colleague on her first night tour. She had never encountered an Amami rabbit, so I was able to experience my earlier days of feeling like a tourist. My colleague, Ms. SEI, who worked with me at the Amami station, International Center for Island Studies, Kagoshima University, brought me back to the feelings of excitement that I had forgotten. She was born and raised in Hirata town in former Naze city (part of Amami city today). She rarely had opportunities to go to Sumiyo town, one of the habitats of the Amami rabbits, at most just passing the town by when going to her grandmother's house in Kakeromajima or going there on a drive.

The reason why we were able to participate in a night tour, to begin with, was because in November 2020, we applied to the "Accommodation / Experience Program Usage Subsidy Program for Islanders" and were fortunate enough to win it. The five municipalities in Amami Oshima conducted the program. Since the number of tourists has decreased due to the influence of the novel coronavirus, the project aims to let islanders experience hotels and sightseeing on the island that they would usually not use. The tours we participated in are usually 7,500 yen, but almost half of the tour was subsidized, and we were able to participate for 3,800 yen.

While traveling from Naze to Santaro-no-Sato (tourist facility) in Sumiyo town, the location of the meeting, I was able to hear many stories from Ms. SEI, such as her expectations of the tour and her feelings about Amami Oshima, where she was born and raised. She lived in Osaka for about three years due to work, but that was far away from the oceans and mountains, and she told me that this was the first time since leaving the island that she felt "how close nature was in Amami." She played all the time in the nature of Amami as a child; however, after becoming an adult, nature was just a landscape to her, and she did not really have any opportunities to directly interact with nature.

We were able to see about seven Amami rabbits during the roughly two and a half hours of the tour. Ms. SEI had an honest impression that she was happy to be able to observe the real Amami rabbit for the first time in her life. She described this tour as having taught her,

through experience, the nature that until then she had just driven by and not properly observed, and that this was a precious experience for her. She had heard about how the Amami rabbit was a precious animal and was, therefore, aware of its value, but it was far removed from her daily life, and she had rarely given it much attention. However, after the tour, she told me that it left a big impression on her, saying that “the nature of Amami is amazing indeed.”

How do the residents of Sumiyo feel about the nature that is so close to them? I have recently conducted interview surveys relating to night tours. During these sessions, I was able to listen to the stories of some of the residents of Sumiyo town. The city road Santaro Line and its surrounding forests, where night tours are currently being conducted, were places of everyday life for the residents of Sumiyo. Sumiyo town is broadly divided between Tojo and Sumiyo, with Santaro Pass as the boundary. The road that crosses this pass is the current city road of the Santaro Line, which was opened as a prefectural road in 1917. This city road served a major role as a road that connected Naze and Setouchi town until the Santaro tunnel and bypass were created in 1989. It was particularly active in 1960s–1970s when the forestry business was in its heyday. The forestry business declined with the passage of time, and the city road Santaro Line was gradually used less often with the creation of the tunnel and bypass.

Two things have been revealed through the interview surveys. The first is that the city road Santaro Line and its surrounding nature has been recognized as a landscape that the residents of Sumiyo town take for granted. To them, the city road Santaro Line is just a path that they can visit at any time, and the Amami rabbit is an animal that lives in the nature near them and which they can go to see at any time. However, the second point is that this proximity is one of the factors that creates a distance between the relationship of the residents with their surroundings. Like that of air, there are no opportunities to recognize the “obvious.” It is known that the Amami rabbit is a precious animal that only exists on Amami Oshima and Tokunoshima, but people have taken their presence for granted so much that there seem to be few people who actively go to see them. Some of the people in Sumiyo town have visited the city road, Santaro Line, to show children and grandchildren who have returned to the island, as well as acquaintances who have come from outside the island to see the Amami rabbit. It seems that the knowledge that the precious treasures are buried there is too apparent and suppresses the act of seeing the real thing—despite there being a sense of awe in doing so.

I introduced my personal experience and examples of specific areas in this article. However, I think that the content shown here would apply to anybody in the world. Finally, I would like to focus on Amami and propose my thoughts. What is needed for the people of Amami to become aware of the obvious nature of their respective regions, and to take a second look at their relationship with nature?

Amami will steadily change in the coming years, including the World Natural Heritage Site status that they are aiming to register themselves for this year (as of 26th July 2021 Amami was registered as the World Natural Heritage Site). The people of Amami need to take a second look at themselves properly and continue to have a relationship with nature. It is

What are the opportunities for taking a second look at the obvious?
SONG Da-Jeong

only when the people of Amami become aware of the value of nature and continue to have a relationship with it that they can continue to leave behind to future generations a valuable form of nature, which is also the purposes of the World Natural Heritage. Phrases like “World Natural Heritage” and “Protection” are often heard in recent years, but there may be some who feel like these terms “don’t quite click,” or are “far removed from your lives.” However, I would hope that you would be more aware of the extraordinary nature of Amami by taking an interest in the nature around you, even the trivial elements, and reconsider how the obvious is actually of global value.



The Amami rabbit

Re-questioning the common sense of education from Amami

OGURI Yuko

My specializations are social education (adult and community education) and environmental education, but unlike in economics and biology, people don't quite understand these fields intuitively without an explanation. Therefore, I would like to introduce my specialization using the theme of Amami's "environmental culture," which I have worked on in Amami for the past several years.

The origin of the word "environmental culture" dates to 1994, when Yakushima was registered as a World Natural Heritage Site, a term used by the Kagoshima Prefecture and Yakushima. More recently, Amami National Park, born in 2017, once again shed light on this term. To be exact, this is an environmental cultural national park.

According to the Ministry of the Environment's explanation, "the natural environment of Amami, such as its forests, rivers, and beaches, have been deeply related to culture such as people's lives and activities. One of the attractions of the national park is the relationship between people and nature, such as ancient roads, coral stone walls, and rice cultivation, as well as the scenery with customs related to those practices and catching seafood on the reef." These should be protected and inherited, according to the Ministry of the Environment.

Meanwhile, the Kagoshima University Kagoshima Environmental Studies Research Group, where I have been active for the past ten years, has a different perspective. While the Ministry of the Environment says so, we may ask, "What meanings do these words have in terms of the experience and perspective of those who actually live in Amami?" The research activity that started from such a question has entered its third year, and we are currently preparing for the publication of the "Amami Environmental Culture Book." It is a compilation of interviews with 100 people of various generations from Kasari town in the north to Ukeshima and Yoroshima in the south. They talk about their relationship with nature. We have already listened to the stories of more than 80 people. We hope that you will see the content upon publication, but I would like to introduce some common items that we have come to understand by listening to these stories.

There are three points. First, we confirmed that childhood experiences were extremely important. The second was that everyone has a "guide" that serves to connect their relationship with nature, such as the sea and mountains. The third was that everybody had an opportunity to objectively review the meaning of their childhood experience.

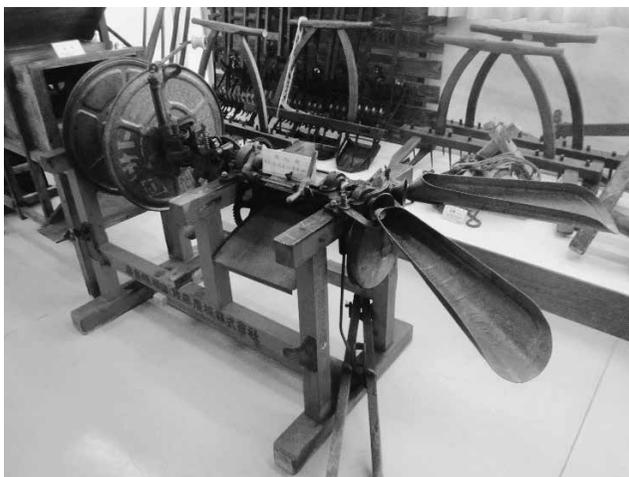
Each person had their own "guide" who invited them to this relationship: family members, relatives, the old men and women, the younger men and women in the village. What they had in common was that they all had some hint relating to nature, whether about

the habits of fish or how to catch them, how to make tools or how to use them. Even these relationships with nature are just experiences in childhood. However, this experience begins to develop a new meaning and value to the individual once they leave the island, were pointed out by others, or when reading a book.

There is no end to this list of realizations: the ocean that they took for granted was actually so beautiful and valuable, the *Shima-uta* that they sang without actually knowing had a deep meaning, the human interactions of the people in the village that they thought were so bothersome were actually done out of gratitude. The important aspect is that they have an “experience” to which they can give value with a new perspective. Let’s consider the *Habu* (a poisonous sneak, *Protobothrops flavoviridis*). There is a difference between people who have and those who have not seen, caught, or had a terrifying experience with *Habu* in their understanding of the scary aspects of the snake. Similarly, there is a big difference between understanding something on an intellectual and theoretical level, and understanding something through experience.

Such a point may seem obvious, and some may ask why this is so important. However, our value judgments and actions are based on these firm perceptions within us. That being said, has our society seriously considered what kinds of experiences should be given to children?

What we have found through our interviews is the importance of rich experiences that connect life and nature, and what has been recorded is proof of that situation. Humans do not develop in the narrow time and space that is school. They grow and develop with the surrounding environment and nature over a more extended period. Re-questioning the common sense of education from the Amami group of islands, and looking at future education are my specializations.



Rope knitting machine at the Folk Equipment Museum in Tawara village. The handmade museum was engraved with the footprints of the villagers.

Towards research for exploring together

OGURI Yuko

For all participants, “please take three minutes to discuss with those around you what you think is the difference between traditional events and ordinary events. ... Okay, three minutes have passed. What are some of your opinions?”

This statement is the introduction of a scene from a symposium that I am responsible for planning. I think that people have the image of just unilaterally listening to a speaker. From the perspective of my social education specialization, I am conscious of shifting the fixed relationship of the teacher and the taught.

The reason for this is because I believe that it is more important to have opportunities for dialogue that share and consider mutual knowledge and experience rather than obtaining new knowledge; and also, because many of the “problems” to be solved also require discovering rather than obtaining.

I have been working in a group called the Kagoshima University Kagoshima Environmental Studies Research Group (henceforth, “university”) on the themes of Amami’s feral cat problem and environmental culture. One characteristic is that it has involved thinking about the problem alongside those involved with the problem. I want to consider the meaning of this research style by taking the question asked in the introduction as an example.

This question was posed at the “Symposium: Thinking about Island Life (Environmental Culture),” held in Yamato village in January 2019. The university prepared this symposium with the support of the Ministry of the Environment, and together with discussions alongside the village leaders of Akina / Ikusato in Tatsugo town, Ichi in former Sumiyo town, and Kuninao in Yamato village. The true opinions of the village leaders towards the university, who were considering plans based on the theme of “environmental culture,” that “inheriting traditional events is a more pressing issue than environmental culture.”

As is well-known, the Island has many traditional events that the people of the island hold dear, such as the *Hachigatu-odori* (dance of the crop celebration in August), *Honensai* (harvest festival), and *Hamaore* (event to pray for a bountiful grain harvest). However, a common theme across all of them is that inheriting these traditions has become difficult due to a declining birthrate and aging population. Therefore, respecting the wishes of the village leaders, we took up the theme of the future of traditional events on the island and compared traditional and regular events, as introduced in the beginning of this article.

There were many interesting opinions. For example, traditional events were characterized as “having a deep connection with the gods,” “a fixed date on the lunar calendar,” “deeper bonds between youth and elders,” and “sad when it comes to end.” When the content of “traditional events” becomes specific in this way, it becomes easier to investigate not only what is inherited, such as whether involvement with the gods is still held in high regard or the lunar dates are followed, but also why these should be inherited.

Meanwhile, we also began to see the relationship between the lives of the island people and nature that are related to “environmental culture.” The relationship with god leads to a sense of awe towards nature and ancestors, and the date on the lunar calendar expresses living with the rhythm of nature, such as the waxing and waning of the moon, the ebb and flow of the tide, and the four seasons, as seen in the example of “the moon on the *Jugo-ya* (August 15 in the old lunar calendar) is a perfect circle.” We can see with regards to the bonds of the villages that the wisdom of the group was needed to face nature and live without advanced technology.

We were able to see action goals by respecting the opinions of the village leaders and others. What if we had placed “environmental culture” at the forefront, or had experts define and speak about “what are traditional events?” Our audience may have said that it was “interesting,” but this most likely would not have led to a force for changing reality. Even if the opinions of experts were valuable, these are not enough to solve problems.

As seen with the problem of inheriting traditional events, there are many phenomena around us where the relationship between cause and effect is complicated and diverse, making it difficult to identify the “problem.” For these kinds of problems, it is more effective not to come up with a universal and absolute correct answer, but to search for an “acceptable” correct answer that can be valid for specific current situations, without distinguishing between experts and non-experts. I would like to expand this kind of research style, which has the character of collaborative practice, from Amami.



Preparatory meetings, including on-site inspections and remote conferences, were held multiple times with officials from Akina / Ikusato village, Ichi village, Kuninao village, Ministry of the Environment, and Kagoshima University.

SECTION FOUR:

Economy

Reflections on island research

KAKINUMA Taro

NATSUME Soseki talks about people with various personalities in a lively manner in “Botchan.” “Botchan” is the nickname of the main character, meaning a good boy, sometimes a greenhorn. Early in the posting, the main character from Tokyo criticized the land and people in comparison with his own experience. Matsuyama in Shikoku was the countryside as seen from Tokyo. Incidentally, Tokyo was the countryside as seen from the Western nations. Islands far away from the mainland are referred to as remote islands. Japan in the Meiji period was a remote island. Can we say that modern Japan is not a remote island from the perspective of the international community? The policy of remote islands is a microcosm of the policy of the island that is Japan.

The results of the promotion of remote islands by the national and prefectural governments can be seen in tangible developments such as the improvement of water supply penetration rates, and securing medical facilities, although the number of midwives is still insufficient. However, it is not easy to distribute the promotion efforts to all remote islands evenly. If we try to close the gap, these efforts will run short because of factors unique to the remote island, such as their distance to the mainland. Promotion is reminiscent of the inferiority complex that begins with the recognition of being behind relative to others.

The perception of inferiority was established by bringing in certain norms. Such norms include population, economy, industrial power, and convenience, all of which are disadvantageous for remote islands. The reason is that these are norms for searching for weaknesses in remote islands. What happens if a completely different norm was introduced? Bring in a natural environment, which, once destroyed, requires a daunting amount of time to repair. Bring in unique cultures such as festivals.

Furthermore, remote islands are bases at the forefront when seeking resources in economic zones, such as oil, natural gas, methane hydrates, and submarine hydrothermal deposits. When these indicators are raised, the disparity between remote islands and the mainland transforms into a superiority complex. People go to remote islands to enjoy what would be extraordinary in the city. Regional disparities are widening not only in the negative direction but also in the positive direction. This means that the difference is not only an indicator of superiority or inferiority, but also an indicator of characteristics.

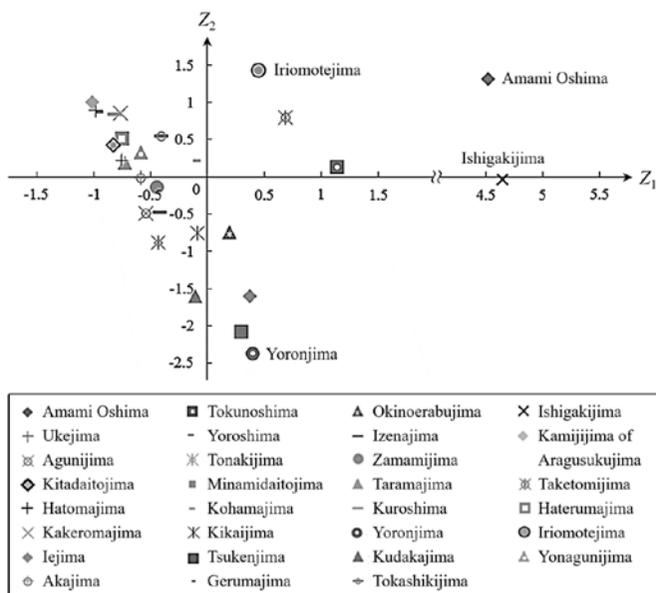
Promotion and development are necessary to ensure a comfortable and secure life while ensuring that the existing wonderful elements are maintained for both the remote island and the mainland. In our laboratory, we are analyzing a variety of data to extract the properties of the islands. For example, to consider the strength of the economic power of tourism, we conducted a principal component analysis that focused on population density, the population of workers in the tertiary industry, and the number of tourists.

The subjects are the remote islands designated in the Amami and Okinawa Promotion Special Measures Act. The data were announced from the Japan Remote Island Center,

Kagoshima Prefecture Planning Department Statistics Division, and Okinawa Prefecture Planning Department Statistics Division in 2013. In the figure, Ishigakijima and Amami Oshima have high scores on the Z_1 axis and exhibit strong tourism power. Moreover, Iriomotejima, which has a high score on the Z_2 axis, has a high number of tourists relative to its population density, and there is a possibility that tourism can be strengthened and profits may improve. Yoronjima, which has a Z_1 axis score similar to that of Iriomotejima, has a low Z_2 axis score and does not have as many tourists relative to its population density as Iriomotejima, so one of its best measures can be said to focus on public dissemination while combining with other industries.

Other examples include identifying similarities between Amami Oshima and Sadogashima, which are far removed from one another, in classifications of economics and medical care for all inhabited islands nationwide. Cooperation between islands is necessary for the exchange of such information. A nationwide integrated specialized agency, including resident representatives, should discuss and promote plans with local public organizations and corporations that are advisors and businesses. Local government belongs to the residents themselves. Local newspapers are effective in both listening to the opinions of residents and monitoring by residents for promotion. It is only by organically linking updatable and flexible tangible and intangible infrastructure and developing in close connection with the lives of the inhabitants that the islands can become comfortable living spaces for residents.

Promotion may create an environment in which the air that naturally exudes from life creates an island-specific culture. In this way, the island is freed from the two complexes mentioned above, as if the rebellious spirit of “Botchan” blew away the complexes along with his comrade, nicknamed “Mountain Strom.”



Principal component analysis results on the economy based on Amami and Okinawa promotion of tourism on the islands

Agriculture, characteristics, and challenges of the Amami Islands

SAKAI Norio

The percentage of agricultural workers, as a fraction of the number of employed individuals in the Amami Islands, is 13.5% (2015 census), considerably higher than the nationwide average of 3.4% and Kagoshima Prefecture average of 8.4%. Agriculture is an essential industry in the Amami Islands. I will provide an overview of Amami's agriculture, but since the Amami Islands consists of an "island," let's first look at the characteristics of island agriculture.

Generally speaking, islands are far from the mainland, surrounded by ocean, and small. The agriculture of such islands generally has these four characteristics.

(1) There is a disadvantage in terms of transportation. The island is small, so the market on the island is limited, and agricultural products will be shipped and sold to the mainland. Since the ocean surrounds the island, they need to transport items by boat or plane. This becomes expensive, the frequency of transportation is limited, and the delivery time becomes long.

(2) Production costs tend to become high. Lands are narrow on many islands, and it is difficult to conduct large-scale mechanized agriculture like that done on the plains of the mainland. Materials such as fertilizer tend to become relatively expensive when buying from vendors outside the island.

(3) There are few paddy fields. The island is small and without large rivers, so paddy farming, which requires a large amount of water, is often difficult to implement.

(4) There is a tendency to specialize in a few specific items. Items must be technically cultivated, bred, and sold for them to be viable for agriculture. Whether those items can be sold is partially determined by competition with other production areas, and given the above-mentioned disadvantageous characteristics, the items that can be sold are limited.

These are the characteristics of agriculture on islands. For farming in the Nansei Islands, including the Amami Islands, there are also weather conditions to consider.

(5) While more likely to encounter summer typhoons and severe drought, it is warmer than the mainland.

Based on these characteristics, let's take a concrete look at the item composition of Amami agriculture. The table shows the cultivated area and output of the main items in the Amami Islands. Sugarcane has the largest cultivated area, accounting for more than half of the total. Next are vegetables, which account for about 20% of the total. Nearly 80% of these vegetables are potatoes. This is followed by forage crops that feed cattle. This is also about 20% of the total. In other words, in terms of area, sugarcane, potatoes, and forage crops account for approximately 90% of the agriculture in the Amami Islands. Amami is no exception to the tendency of specializing in a small number of items, as in characteristic (4).

Incidentally, paddy fields, which occupy over half of the cultivated area of Japan, account for only 0.5% of the total in the Amami Islands, which is a characteristic (3) of island agriculture.

Meanwhile, different trends are seen when evaluating the amount of output. Beef cattle account for 33% of the total; sugarcane, 27%; vegetables, 23%; flowers, 10%; and fruit trees, 5%. Potatoes are the main vegetables; flowers include chrysanthemums and goldenrods; and fruits include mangoes and tankan. This means that flowers and fruit trees, which have a high proportion of output relative to area, have a high output per unit area.

Next, let's look at each item individually. Sugarcane is a rather special crop supported by national policy; it is also resistant to typhoons and droughts in the summer and will be addressed separately in the next article. Potatoes, beef cattle, flowers, and fruits are items that have become established by taking advantage of Amami's warm climate. Specifically, potatoes, flowers, and fruit trees are shipped when other production areas cannot ship their items (off-season) to avoid transportation disadvantages. Additionally, beef cattle have the advantage of fast production of feed, which is the food for cattle. Many flowers and fruits do not require additional heating. Therefore, these items are advantageous because they can be produced at a low cost.

In this way, the current agricultural items of Amami have established themselves by taking advantage of the (5) weather conditions of Amami to overcome the disadvantages of the (1) transportation aspects or (2) the high costs of island agriculture. These items are also the result of many years of hard work of farmers and stakeholders.

However, these are not unalterable. Market conditions are constantly changing, and the technology related to production, storage, and transportation is advancing every day. The competitive environment of agriculture will also change in the future. Under such circumstances, off-season shipments or cost competition alone may not respond well to change in the market and technology or may be depleted. Therefore, in addition to conventional efforts, measures to further increase the value of Amami's agricultural products must be promoted.

	Cultivated area		Output	
	ha	%	mil. yen	%
Sugar cane	8,448	55.3	8,556	26.7
Vegetables	2,935	19.2	7,324	22.9
Potatoes	2,295	15.0	5,334	16.7
Flowers	203	1.3	3,290	10.3
Chrysanthemums	73	0.5	1,117	3.5
Goldenrods	35	0.2	1,054	3.3
Gladiolus	53	0.3	421	1.3
Lilies	33	0.2	545	1.7
Fruits	587	3.8	1,441	4.5
Tankan	315	2.1	431	1.3
Mangoes	50	0.3	584	1.8
Passion fruit	19	0.1	204	0.6
Forage crops	2,888	18.9	—	—
Beef cattle	—	—	10,574	33.0
Others	210	1.4	829	2.6
Total	15,271	100.0	32,014	100.0

Overview of agriculture of the Amami Islands

Sugarcane and potatoes

SAKAI Norio

Sugarcane comprises over half of the area of agriculture in the Amami Islands, and approximately 30% of the output. However, its status has been declining. Over the past 30 years, the cultivated area of sugarcane has dropped by around 30%, and in its place, forage crops, which serve as food for cattle, and potatoes have increased. Even now, sugarcane is one of the main players in the agriculture of Amami, but it is not the only main player. Consider the role of sugarcane in Amami under such a situation.

As mentioned in “Agriculture, characteristics, and challenges of the Amami Islands” (pp. 53-54), because Amami is an island there are disadvantageous conditions in conducting agriculture compared to the mainland. Because of these conditions, sugarcane farmers and sugar factories on the island have received support from the government in the form of subsidies, which allow them to make a living in agriculture.

However, sugarcane is a crop with low profitability per land area. If the government provides more subsidies to sugarcane farmers, farmer’s incomes will increase, so why aren’t more subsidies being provided? There is, of course, the problem of financial resources, but the following reasons are also present.

If there is a competition among farmers to rent farmland when farming, then theoretically, farmland with better conditions will be borrowed from farmers who grow crops that can pay for lots of rent (high profitability). If the profitability of sugarcane is higher than that of other crops, then sugarcane farmers would drive out other crops and use their farmland. This is problematic if it occurs with crops that are receiving government support, so the subsidies to sugarcane farmers are limited, and the profitability per area is kept low.

Therefore, the cultivated area of sugarcane will increase or decrease depending on the condition of other crops. As an example, if the area of farmland on the island is set as constant, when the price of calves is high, as they currently are, then cattle farmers can pay large amounts to rent farmland, so the area of forage crops that feed cattle would increase, and the area of cultivated sugarcane, which cannot pay the high rent, decreases. In contrast, when items other than sugarcane are not doing well, the cultivated area of sugarcane increases. The fact that sugarcane is decreasing, relative to that in the past, can also be expressed as the promotion and expansion of other items.

Though decreasing, sugarcane still composes a large amount of farmland in Amami even today, signifying that no item can substitute for it. If sugarcane were to disappear, then people would struggle to maintain a large portion of the current farmland as farmland. Sugarcane also has a role in maintaining farmland.

Approximately 80% of the potatoes in Japan are produced in Hokkaido, but many are also grown in Okinoerabujima and Tokunoshima, in the Amami Islands. The potatoes in the Amami Islands are harvested from February to April, when the production areas of Hokkaido

and the mainland are too cold and cannot be cultivated, and these potatoes are shipped to the mainland as “new potatoes.” However, the Amami Islands are islands, so these potatoes cannot be cultivated over a vast space like those in Hokkaido. To meet the stable demand for potatoes, the small production areas cultivate and ship potatoes while alternating over a short period. This system is called relay shipping. When the potato harvest in the Amami Islands ends in April, production areas shift to Nagashima in the north of the prefecture until early May, after which shipping starts in the Shimabara Peninsula in Nagasaki Prefecture.

A common element of these potato-producing areas is that the soil to be cultivated is red. Red soil is generally difficult to cultivate. It is difficult to say that this is fertile soil, but potatoes grown in red soil look more beautiful than potatoes grown in black soil, and they are traded at a higher unit price. Potatoes are a crop suitable for Amami, where the soil and climatic characteristics of the Amami Islands outweigh the disadvantages of transportation.

However, there are challenges. Although not limited to potatoes, prices may decline as a result of reduced demand due to the declining birth rate and aging population, as well as competition with other production areas. Under such circumstances, efforts to increase the price of potatoes are required.

One of these efforts is PR methods. The solution here is not to conduct PR for each small island, but to market red-soil potatoes under one brand for the entirety of the Amami Islands, and possibly Nagashima and Nagasaki Prefectures. Furthermore, the skin of new potatoes more easily peels off, so it is difficult to utilize mechanical harvesting, therefore most of these are harvested manually. A major issue is securing a harvesting labor force, but on the other hand, promoting this “hand-dug” aspect and increasing its added value may also be possible.



Potatoes harvest at Imura Farm in Okinoerabujima

Applying the wisdom of the reservoir in Okinoerabujima to small-scale irrigation in the Philippines

NISHIMURA Satoru

In the Philippines, small-scale irrigation such as reservoirs has been attracting attention as a supplement to large-scale irrigation in expanding agricultural production and increasing farmers' income. The government has been working on a project called the Small Water Impounding Project (SWIP) since the 1980s under the Marcos administration with the help of national budgets and foreign / international organizations. This project has many advantages such as lower impacts on the local ecosystem, in addition to cost reduction, but there have been operational problems; it cannot be said to have developed smoothly.

Meanwhile, Japan has a long history of reservoir irrigation. There are many stories of Buddhist priests such as Gyoki in the Nara period (from AD 710 to 794) and Kukai in the Heian period (from AD 794 to 1185) building and repairing such reservoirs. Particularly in remote islands, the problem of water has been mitigated by the construction of underground dams, but these were once serious issues. The importance of reservoirs was particularly high with expanding agricultural production and the securing of water for domestic use. Okinoerabujima is one of these cases. The islanders have used the reservoir while coming up with innovations for agriculture and daily life. If the experience of using reservoirs on remote islands in Japan, such as Okinoerabujima, can be applied to SWIP operation in the Philippines and an effective operation system for reservoirs can be established, then a SWIP model would be created that enables the sustainability of ecosystems, people's lives, and village societies.

The author clarified the following points through long-standing comparative surveys on the use of reservoirs on Okinoerabujima and the Philippines. First, reservoirs were added in both cases as national policy. Due to this nature, the construction and management of reservoirs are the joint work of residents, local government, and government. The country needs to develop the project after fully understanding the characteristics of the region. In the case of Okinoerabujima, the operation of the reservoirs was more voluntary on the part of the villages. In the case of the Philippines, the government indirectly manages the residents and the area by organizing the irrigation association.

Second, the difference between the environment of Okinoerabujima and that of the Philippines in the present day became clear. In Okinoerabujima, the villages had established a strong sense of unity as a community. In the case of the Philippines, however, there were many cases where building a community was difficult due to the large differences between the union members. Factors that determined these differences were the land ownership system of the village, income source of the inhabitants, and so on. The strength of community between the water use association members varied depending on factors such as whether the

landowner owns the land of the reservoir and the degree of dependence of the residents on agricultural income. Site-appropriate support needs to be provided by the government. Third, in the use of the reservoir in Okinoerabujima, residents of the village established an effective water use management system. The wisdom of water intake and water distribution in the reservoir on Okinoerabujima of the past is considered to be applicable to the Philippines in the present day. For example, the method of distributing pumped water was devised in various ways to prevent conflict in the village. A small weir (distribution weir) called an *Oitama* was installed in each pond. Agricultural water was drawn into paddy fields through the water outlets (*Ibi*), but there were measures implemented to evenly adjust the amount of water. Distribution weirs (*Oitama*) were created according to the number of people using the paddy fields. A second and third *Oitama* were built when reservoir water had to flow to lands at the skirts of a mountain (*Chibida*) far from the reservoir. Rice fields through which the reservoir water passed were called ditch fields (*Nijumashi*). These ditch fields were required to secure water for the lands at the skirts of the mountain farther down from them. The owners of the ditch fields erected fine bamboo in the paddy field, made a water level (*Mindai*), and constantly monitored its level. A system was constructed in which scarce water resources were evenly distributed by the residents.

Small-scale irrigation such as a reservoir is a very effective method of increasing agricultural production and farmers' incomes while protecting the ecosystem in countries with limited national budgets, but the operational technology for applying this to various sites is still under development. Exchanging the wisdom and technology of small-scale irrigation operations over time and space will be important in order to form a new operation system. There should also be a major focus on the wisdom and technology cultivated by residents of remote islands.



Small-scale reservoir project in the Philippines

Fish is the “Treasure of the island”

TORII Takashi

Generally, there are abundant marine resources around an island, but the market size of islands is small. Given that all the marine products caught cannot be consumed on the island, many of them are shipped to the mainland of Kagoshima Prefecture or Okinawa Prefecture. Although there are some fee subsidies from Amami Promotion Projects, shipping off islands nevertheless requires considerable labor and cost. The market price of marine products carried over time often remains low because long periods have elapsed since they were caught. In other words, these products face the dual issue of decreased market unit price due to the long periods that have elapsed since they were caught, even when the products were shipped at a high cost. These are the characteristics of the fishing industry of remote island areas, including the Amami Islands.

However, advances in scientific technologies may alleviate some of the disadvantages faced by these remote island fishery industries. A representative example of this is quick freezing technology. There are several techniques such as liquid freezing and proton freezing, but a common element among these is freezing fresh seafood and thawing it appropriately to produce a “close to fresh” taste. The deterioration of freshness due to long-term transportation can be prevented, so this has been introduced on one after another remote island regions. Efforts to introduce rapid freezers and produce fish products have begun even in the Amami and Tokara Islands.

Is it possible to breathe new life into the island fishery industry through the introduction of the freezer? Unfortunately, the answer to this question is “no.”

The introduction of freezers has allowed the successful production of high-quality “produced goods,” but there are many efforts which have not found a final destination, such as where to sell these as “commercial products.” Fishermen have focused on direct sales using the internet and participated in various business meetings, but there are few cases where sufficient sales channels could be secured. Although one would like to place hope in the fishery cooperatives’ sales abilities, managing fishery cooperatives has been very difficult in recent years, and these cooperatives do not have time to spare for opening individual sales to restaurants and mass retailers outside the islands.

Without a destination, these “produced goods” simply accumulate in freezers as inventory. Simply introducing the freezer does not benefit fishermen.

What I want to investigate here is collaboration with private companies that have sales abilities. In other words, this is the building of relationships where the specialized skills of catching specialists (fishermen) and selling specialists (private businesses) are utilized to sell high-quality “produced goods” as excellent “commercial products” to consumers. In reality, the collaboration between producers and private companies is also advancing on remote

Fish is the “Treasure of the island”
TORII Takashi

islands in Kagoshima Prefecture. The relationship of rapidly freezing very fresh catch, after which companies in the prefecture take on the role of sales, has been implemented in Nakanoshima (Toshima village), and private businesses have been positioned as one of the important shipping destinations. This kind of relationship building is about to spread to Yoronjima and Koshikishima as well.

We would like to not only focus on shipping outside the island, but also the development of the island market. What kinds of seafood are handled as mass retailers, restaurants, accommodation facilities, and so on, on the island? Is there no room for marine products from the island? Imported salmon and mackerel are delicious, but there is even more delicious seafood in the Amami Islands. The demand of each individual store is limited, but this may be a substantial when put together. We hope for producers to actively provide this information.

The number of tourists entering the Amami Islands is increasing due to the launch of low-cost carriers and the arrival of cruise ships. There have also been full-scale efforts for World Heritage registration. What attracts these tourists are the nature, culture, people, and food of the Amami Islands.

Colorful fish are unloaded every day around the Amami Islands. We would like to promote the development of the off-island market while utilizing the sales abilities of private companies without dropping the freshness of the fish. We would like to provide abundant local fish to tourists visiting the Amami Islands in cooperation with the producers and restaurants. I would like to capture the stomach of a tourist with fish, and increase the number of fans of Amami because the fish of the Amami Islands are “treasures of the island” with much value and potential.



Local fish sashimi will no longer be available if the fishing industry disappears from the Amami Islands.

Society 5.0 @ Amami Islands

MASUYA Masato

From the hunter-gatherer society (Society 1.0), agricultural society (Society 2.0), industrial society (Society 3.0), and information society (Society 4.0), we are about to welcome the new society that comes next. Society 5.0 is a society where everyone can live comfortably by utilizing cutting-edge technologies such as artificial intelligence—a so-called super-smart society. Super-high-speed internet lines and broadband are indispensable for achieving this society. Among these, super-high-speed broadband provided by optical fiber networks has become indispensable as a lifeline of the future.

However, the development of the optical fiber network was mainly carried out in urban areas, and its development in areas with unfavorable geographic conditions such as remote islands and mountainous areas has been delayed.

Even in such situations, the development of optical fiber networks in the Amami Islands has progressed through the joint efforts of residents and local governments. With the exception of secondary and tertiary remote islands, many of these islands have been able to use super-high-speed broadband that is equivalent to urban areas, starting with Yoronjima and Okinoerabujima.

Meanwhile, there were some voices saying, “the internet speed is slow even when an optical fiber network was set up.” The reason for this is actually due to the mechanism of the internet. The mechanism used for exchanging data on the internet requires that the next set of data be sent after confirming that the previous data has arrived to ensure the reliability of communication. If there was no response, the data is retransmitted in order to ensure reliable data transmission. This mechanism results in less data being sent per second with greater distance to the communication partner. In other words, the data transmission becomes slow. In Japan, the servers that provide internet services are concentrated in Tokyo, so internet speeds become slower the farther you are from Tokyo. This problem manifested on Yoronjima, the longest distance from Tokyo in Kagoshima Prefecture.

When compared with a transportation network, the development of an optical fiber network is equivalent to the development of a multi-lane paved road. No matter how good the road may be, the amount of luggage that can be transported will not increase unless the car performance changes. The communication mechanism at the time when the optical fiber network was established in Yoronjima was, so to speak, luggage transportation by lightweight trucks. Despite all the effort that went into building a good road, it was not fully utilized.

In order to resolve this problem of slow internet, Kagoshima University developed a high-speed technology by dividing the communication intervals. This would be the equivalent of setting up relay warehouses in terms of transporting luggage. The notification of completing the delivery can be obtained by transporting the luggage to warehouses along the way, shorten the time for shipping the next package and increasing the number of packages that can be carried.

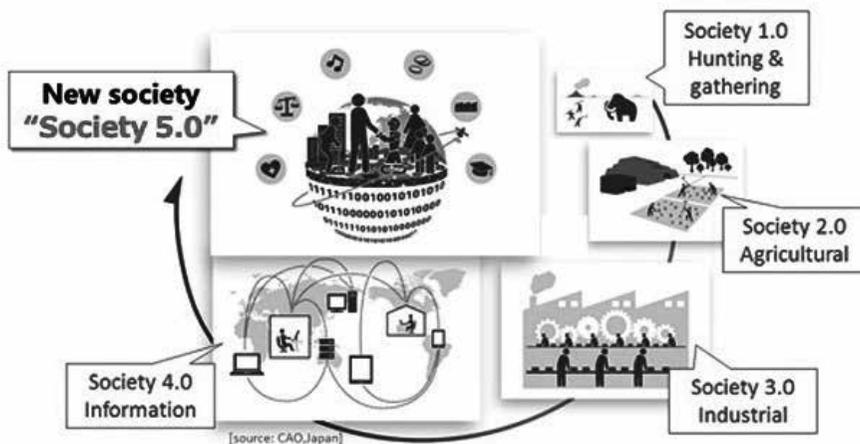
This was a practical technology, but it was unfortunately not adopted. All of a sudden, the internet speed in Yoronjima was no longer slowing down.

Communication performance was greatly improved in Windows Vista and later versions. This could be thought of as upgrading from lightweight to medium-weight trucks. The amount of data that could be transported at once greatly increased, and the performance of the optical fiber network could be utilized.

Technological advances have also improved the relay devices, which have shortened the communication path as well as the time to and from Tokyo. In terms of the transportation network, this was the equivalent of developing bypasses and motorways. These advances removed the perception of a slow internet.

Furthermore, new communication methods have also been developed, enabling higher-speed communication. Now, heavy-duty trucks have been coming and going. If the optical fiber network was not established, this communication method, the equivalent of these heavy-duty trucks, could not be utilized.

With the full utilization of the capabilities of the optical fiber network, it has become clear that the next development is the 5th-generation mobile communication system (5G). Although 5G is a super-high-speed wireless technology, communication with 5G is limited to communication between mobile phone base stations and terminals. The upstream from the base station is an optical fiber network, so 5G will not be installed in areas where the optical fiber network is not developed. Society 5.0 will not arrive unless the optical fiber network is in place. In that sense as well, it can be said that the people of the Amami Islands, who were among the first to work towards the development of an optical fiber network, had foresight. They will undoubtedly introduce 5G into their society without greatly falling behind urban areas. Only then will the true power of the optical fiber network be demonstrated and a super-smart society be realized in the Amami Islands.



Society 5.0 is a human-centric society that balances economic development and the resolving of social issues. (Source: The Cabinet Office)

SECTION FIVE:

Education

Young medical professionals studying on remote islands

TAKEZAKI Toshiro

The various restrictions on medical care on remote islands endure today as they did in the past. Therefore, a variety of supports and innovations have been implemented, and the current state of medical care has improved considerably compared to 30 years ago. Helicopters have become available as part of the emergency system, which was one of the major issues. In addition to the Self-Defense Forces and Japan Coast Guard, disaster prevention helicopters by local government were introduced in the prefecture in 1998, and an air ambulance system, “Doctor-Heli,” came into operation in 2011.

The advantage of an air ambulance is that doctors and nurses can quickly reach the requested location and transport the patient while starting treatment. Furthermore, a critical care center was set up at Kagoshima Prefectural Oshima Hospital as a base of operations for the remote islands, and a long-awaited air ambulance system was underway in 2017. At the country’s only center installed in remote islands, young doctors—mainly emergency specialists—form a team and work with hospital specialists to save lives on a 24-hour response system. Young doctors with emergent specialists are needed, especially for emergency situations. Even if a critical care center were to be established, insufficient manpower would exhaust medical staff, and the center would not function sufficiently.

Meanwhile, clinical doctors are treating and caring patients of various age groups suffering from various diseases based on a wide range of knowledge and experience because there are a limited number of specialists in remote islands and areas. Elderly people often have multiple illnesses stemming from a variety of backgrounds, and clinical doctors who are familiar with the community and their families are a reliable presence. It is also vital to accurately judge emergencies and specialized illnesses and transport and refer them; a truly comprehensive medical treatment.

To support medical care in a Japan with a rapidly aging population, comprehensive medical care is required, not only in remote islands but also in urban areas. The national government, therefore, is promoting training for these purposes, but this has not gone as well as they had hoped. Comprehensive medical care has long been present in remote islands; in a sense, the remote islands are a model for the future of Japanese medical care.

There are many young medical students who are interested in medicine on remote islands. When I was a student and visited Amami Oshima, I stayed in a two-story wooden doctor’s dormitory in Amami Oshima and spent entire days driving along bumpy and winding roads with my friends. I had the thought that I would love to be a doctor here if I had the chance.

While working as a pediatrician in Kagoshima, I had the chance to work at Kagoshima Prefectural Oshima Hospital. I thought that this was finally my chance, but there were many applicants, and I did not win the lottery. Afterward, I temporarily moved away from Kagoshima. By the time I was appointed a faculty member (education and research) at

Kagoshima University in 2003, practical training for some of the medical students had already begun at the remote islands. Later, I faced with the doctors and residents of the remote islands while continuing their training; I was convinced that the remote islands were a wonderful place for an education in medicine.

Medical practical training at the remote islands developed further, and by 2007, all medical students (approximately 120 students) were divided into groups of several people, and they all began a one-week practical training program at about 10 medical institutions in the remote islands. Furthermore, all students who enrolled under the regional recommendation framework, which began in 2006 to support regional medical care, began to conduct practical training in the remote islands during their first and second year summer vacation. In recognition of these achievements, the national government approved the establishment of the Education Center for Doctors in Remote Islands and Rural Areas at the university. The content of the practical training came into its own, and medical students from all over the country were called upon to experience their practical training at remote islands in the Amami Islands. Furthermore, we have begun a supporting project by the university to train medical personnel in the field of emergency medical care on remote islands.

The students are still burgeoning chicks, witnessing the actual circumstances of comprehensive medical care. As they feel its charms, difficulties, responsibilities, and various other aspects, they will gain experience as medical professionals who will be responsible for medical care in the future. Students' reports and presentations convey the thoughts of the doctors involved in medical care on remote islands, the gratitude of the residents, and the expectations the doctors and residents have for the students. They are glad that they conducted their practical training on the remote islands. When you see young medical professionals who will be responsible for future medical care in the remote islands and Japan, working hard to learn, train, and practice medicine while immersing themselves in the charm of the remote islands, I hope that you can watch over them warmly.



Medical students accompanying a traveling clinic in Ukeshima

Nursing and nursing staff at the *Shima*

KODAMA Shimpei

I was assigned to the Department of Nursing at Kagoshima University in the spring of 2003. After mid-April, when I finally adapted to my new life in Kagoshima, a senior professor said to me, “Will you go on a work trip for me?” The work trip destination was Yoroshima. I will never forget the impression of Yoroshima when I first visited there. It was a small island where all the residents, about 100 or so at the time, lived in a single community. There was a remote area clinic there, but there was only one resident nurse. It was a massive shock to me, who had only seen the Kanto region’s urban areas when speaking about local communities.

I still remember the story that the professor told me upon my return that the term *Shima* in Amami does not refer to the island, but rather the local communities such as the communities where the individuals live. Since then, I have visited the islands of Amami multiple times each year. The professor has already retired, but I have continued to engage in nursing education and research at Kagoshima University.

This question is somewhat out of the blue, but do you all know the term “community-based integrated care system”? It is a system that comprehensively ensures the provision of health care, nursing care, prevention, housing, and livelihood support. By this, the elderly could live the rest of their lives in their own ways in environments familiar to them. It was promoted throughout Japan by the Ministry of Health, Labor, and Welfare following the 2011 revision to the Long-term Care Insurance Act. It is also an essential keyword in community health nursing—my field of specialization. The community-based integrated care system emphasizes each region’s making good use of their respective strengths with their limited resources and creating a system that voluntarily and independently utilizes the region’s characteristics.

An additional characteristic of this system is that a small community such as a junior high school district, is considered a regional unit; and that it is conscious of the balance of self-help, mutual aid, and public aid, with a particular emphasis on the role of mutual aid that involves people in the community helping each other. You may have heard of community general support centers set up in municipalities to provide support for this system as a region. The construction of a community-based integrated care system involves considerable participation by nursing professions such as public health nurses, midwives, and nurses, so the importance of community health nursing in the nursing fields has increased in recent years, and there is a strong demand for enhanced education.

When I first heard about this community-based integrated care system, I felt like it was something I had heard about from before. Aren’t these the activities of the island nursing professions that I have always seen until now? What has always left an impression on me when visiting Amami was the appearance of the nurses and local people working there. Each person had their own approach, but the residents were supported with limited resources while utilizing the connections of the people of the *Shima* as strengths so that they could live in their

own ways. In other words, the nurses of Amami naturally built a community-based integrated care system in their respective regions. In fact, the activities of Yamato village and Tatsugo town were taken up by the Ministry of Health, Labor, and Welfare as a pioneering example of a comprehensive community care system, and Yamato village was selected as one of the 10 municipalities in the construction model example.

A comprehensive understanding of the patient is a very familiar concept to begin with in the world of nursing. The idea of caring for a patient instead of diagnosing an illness is important in medical care as a whole. However, taking an overall view of the individual, including their relationship with the surrounding environment (family and community), and helping them to live in their own way, has been a particular point of emphasis in the nursing profession. It is easier to say than to implement in practice, but for some reason, I feel that there are many people on the small islands who have naturally learned this.

This feeling may be largely due to the fact that much of the nursing activities in the areas where I was deeply involved, were based in the Amami Islands. However, I feel that one reason is the small size of the islands and their scarcity of resources, as seen in Yoroshima. It is a world that is small but in some sense complete. Within this world as well, there are the nurses who must deal with an overwhelming lack of resources. Each of these situations, by themselves, are a disadvantageous environment, but perhaps the reasonably-sized community of the *Shima*, which fits within a single person's consciousness, can cultivate the ability of nurses to comprehensively grasp the subject at hand.

My interpretation notwithstanding, there are indeed many nurses in Amami who are doing great work. However, it is unfortunate that there are many of these who take this for granted and do not realize the value of their efforts. I think that widely disseminating information about nursing in the *Shima* can contribute not only to the regions in which they are active but also to Amami as a whole, and even to nursing in Japan.

In November 2017, Professor HATANO Hiromichi, who had originally asked me to travel to Yoroshima, hosted an academic meeting of the Japan Society of Rural and Remote Area Nursing in Uken village. The theme was "Talking about *Shima*." Although it is common that academic meetings are generally held in places where transportation is as convenient as possible, we intentionally selected the small village as the venue, not only we had connections with the villagers, but also because we hoped to have attendees actually feel the *Shima* of Amami. As many participants from inside and outside the prefecture gathered, many activities by people active in Amami were also announced. It was an honor for me to be involved as a member of the planning committee as well. We would like to continue contributing to such opportunities and give back to the people of Amami who took care of us.



Opening remarks from the President of an academic meeting of the Japan Society of Rural and Remote Area Nursing held in Uken village

Charms of the island that nurture life

INOUE Naomi

The islands of Kagoshima Prefecture have maintained a high total fertility rate relative to the rest of the country. Based on the total fertility rate ranking of all municipalities from 2013 to 2017, four towns have ranked in the top ten: Isen town at 2nd place, Tokunoshima town at 3rd place, Amagi town at 7th place, and China town at 8th place. There may be some, after looking at these data, who think that the islands are places where childbirth and child-rearing are easily done.

There are 26 inhabited islands in Kagoshima Prefecture, but only five islands have obstetric medical facilities (hereinafter referred to as obstetric facilities) and where woman have access to healthcare during childbirth. Kikai town and Yoron town, ranked 15th and 37th in the previously-mentioned ranking, do not have obstetric facilities on their respective islands. Women go to facilities off the island using boats and planes for maternity health check-ups. When the expected date of delivery approaches, they leave the island and their family, waiting for childbirth while living on an island with the appropriate facilities. Women and their families go through these challenging experiences in order to have children.

I learned about the feelings women who live on islands without any obstetric facilities and how they felt as mothers when interviewing them. “It is sad to leave my older children and family, but I only think about having the baby safely. That is my responsibility as a mother.” Giving birth off the island was supported by the woman’s determination of becoming a mother. Of course, family support plays a large role as well. During the pregnancy, they are told that “they do not have to do the farm work. They should not hold heavy things.” After the pregnancy, they are told that “they should not work with needles or water.” In this way, they are treated well.

Women on the island also have a high ability for self-care. Women not only gathered information from the internet but also actively gathered information from the elderly and other mothers. This information included self-care that was unique to the islands, such as, “Do not eat goat meat,” “Children’s hair will grow well when you eat seaweed,” and “Fish soup is good.” Methods nurtured in the life and culture of the island were handed down through pregnancy.

What was more interesting was what was done when something goes wrong. “When bleeding, call the hospital or public health nurse after carefully observing the amount and color.” This is an observational skill rivaling that of a medical professional. There are more and more women today who feel that everything will be fine in pregnancy or childbirth if left to the devices of medical professionals. It is also a struggle for midwives to bring out the independence of women. However, women on the island felt a high level of awareness that they would be the ones responsible for protecting their own bodies and children.

I once conducted a survey on health guidance on islands. The impetus for this survey was that I had heard that mothers were less likely to attend maternity classes and would think that everything regarding pregnancy and childbirth would be fine. However, the circumstances that were revealed through the data told a different story. Women were skillfully collecting the necessary information. They would directly ask midwives and doctors at the time of maternity health check-ups about obtaining medical information according to their own conditions. They would ask experienced people close to them about matters relating to pregnancy, childbirth, and child-rearing. I felt that this easy-going attitude, thinking that everything will work out, was actually a flexibility based on some degree of information and evidence.

Student training is also conducted on the islands. There are many students from the prefecture who have visited the islands for the first time and many who do not know the islands frequently have negative impressions of them, such as the inconvenience of island life, or the difficulty of island medical care. However, the students' image of the island changes significantly once they go there and interact with the people and lives of the island, and see the actual circumstances of island medical care. They realize that not having medical facilities or resources is not restrictive or inconvenient. They also learn the strong feelings of "protecting the lives of the people on the island with our own ability" shared among the medical professionals on the islands, and this has a great impression on the students, who are seeking to become medical professionals themselves. The islands are a place that fosters a sense of responsibility in medical students, as well as a sense of duty.

In the present day, when we prioritize convenience and avoid troublesome relationships, we feel that it is the activities of the people on the island who make us aware of the important things we are on the verge of losing. Above all, the vitality of the women on the island is wonderful. I will continue to study the island as my field site and teach students. I am excited to see what kinds of wonderful things I will notice next time.



A woman who immerses her baby's feet in seawater and wishes for her healthy growth (April 7, 2019, Yakomo, China town; provided by *Nankai Nichinichi Shinbun*)

Ecosystem and environmental learning on Yoronjima

KITAMURA Yujin and UYENO Daisuke

Kagoshima University is one of the national universities in Japan which is located at the southernmost tip of the mainland. The beautiful natural environment around the university is diverse and abundant, making it a suitable university for research and education in environmental sciences. Kagoshima Prefecture has a great nature; beautiful natural forests, oceans, volcanoes, and more than 600 islands of various sizes—where this number is the second largest among the prefectures in Japan.

Imagine spending your student life here. On a sunny day, we have many options. Go to mountain trails to seek insects and plants in the Osumi Peninsula? Alternatively, you go snorkeling at the coasts of Makurazaki or Bonotsu and play with marine life? In either case, you will have to escape the classroom lectures. Even on days where you earnestly attend compulsory lecture subjects, it is entirely possible to go to Sakurajima volcano in the afternoon. Of course, for overnight stays on weekends. Why don't you go to Yakushima? The Tokara Islands seems appealing as well. It might feel like you spend your days just playing, but this is synonymous with attending lectures that are the ultimate in environmental education. Said another way, it also means that if we half-heartedly conduct lectures, then students will soon get bored of us. Practical courses conducted in the field need to be presented in a powerful and stimulating manner that can satisfy the students' immense desire for knowledge. In this article, we would like to introduce a Kagoshima University's style field learning program that makes full use of this blessed natural environment.

The Faculty of Science at Kagoshima University has a so-called “Yoron Jisshu” with a tradition dating back over three decades, the official name is “Field Studies in Regional Environment.” Students experience the entire natural environment of the area, deepen their specialized understanding, and learn the connections with the local culture. Yoronjima, the location for the program, is the southernmost tip in the prefecture. What awaits the students living in city-side Kagoshima is an extraordinary experience.

Students are picked up by the school bus at our university campus, commencing the great journey, and head to the ferry terminal. They stay overnight on board to reach the island—approximately 20 hours one-way. This ferry cruise is an important opportunity for learning about Kagoshima's great nature. Students experience the 600 km length of Kagoshima Prefecture, witnessing geological and topographical differences between the islands and the clear blue water as they move south while stopping at a series of islands. They cheer over flying fish and turtles, and they feel the activities of the islanders (*Shimanchu* in Amami dialect) as the people board and disembark the ferry with their large luggage every time they arrive at a port.

The ferry that left Kagoshima in the evening finally arrives at the port of Yoronjima the next day at noon. Awaiting us at the port is Mr. KAWAMOTO Harutoshi, the “master” of the BeachLand Lodge, Yoron which has served as the base for this program for over 30 years. Pioneer professors had groped the location for the field course at the beginning and tried a place on the mainland of the prefecture in the second year of the program which end up with unpopular rating by the students. Since then, the course has been held in Yoronjima. Professor SATO Masanori, who studies annelids and used to be a young faculty member when he was leading the course in its early stages, retired in 2021. The master and the Yoron training have not only overseen the growth of students but also of professors.

Let us focus on the content of “Yoron Jisshu.” As we mentioned, the course has already started on the ferry, but it is not until arriving at Yoronjima that we fully take on tasks. The content changes slightly depending on the weather and the types of instructors leading the program. It is mainly for studying “coastal vegetation and the environment,” “inland vegetation,” and “coral reefs and animals.” It also includes a “Day for free observation.” One of the best advantages of the program is that students can learn about flora and fauna that live in marine, coastal areas, and land while interacting with the actual organisms. It is customary to head out to the mountains and sea during the day, and to “identify the names” of the creatures at the lodge in the evening. Students not only acquire knowledge of the plants and animals that live on Yoronjima, but also think about questions such as “What are their notable characters?” and “Does this match the explanation in the illustrated books?” improves their ability to observe and think logically.

Don’t forget the fun while studying. When the students finish daytime tasks early, we head to the night beach to observe the activity of the nocturnal animals. This is an opportunity to find tropical species such as the large land crabs dwelling underground during the day and the coconut crab which is the world’s largest terrestrial hermit crab. Searching for those animals while illuminating the gaps between rocks with flashlights is as much fun as treasure hunting—even better when they are lucky enough to encounter the spawning of sea turtles. Based on the specimens collected by students during the program, two parasitic isopods, *Allocancrion yunnu* Uyeno and Boyko, 2020 and *Kepon grapsi* (Nobili, 1905) were described as a new species and a first recorded species in Japan from the intertidal crabs, respectively. The “Yoron Jisshu” can also produce discoveries of great academic value.

In the last quarter-century, our faculty, the Faculty of Science, has gone through re-organizations twice. From 1997 to the present, this practical training course “Yoron Jisshu” has been conducted under the name field science as part of the Department of Earth and Environmental Science and frequently been led by many geologists as well as biologists. As a result, the program has grown for learning more broadly and comprehensively about the “natural environment,” including topography and geology. In 2004, the former dean of our faculty presented a letter of appreciation to Mr. KAWAMOTO, the “master” who was instrumental in accepting the field program over the years. Looking at the students waiting for

Ecosystem and environmental learning on Yoronjima
KITAMURA Yujin and UYENO Daisuke

the ferry to return Kagoshima after learning about the nature of the southern island, we hope that they have broadened their horizons toward the outside world ever so slightly.



Let's take Yurigahama Beach sandbar! Field course program, where students learn from the great nature, is filled with a charm not found in any classroom lectures.

Intensive lecture on Yoronjima: An Island's System

YAMAMOTO Sota

Kagoshima University has lectures on practical training on remote islands in Kagoshima Prefecture. One of these is “An Island's System,” a common educational subject and intensive lecture. Faculty members of the International Center for Island Studies oversee the training on Yoronjima conducted over six days (though two nights are spent on board a ship). This is a so-called general liberal arts course, so most of the students are first- and second-year students, but third- and fourth-year students also participate.

There is always a guidance session held prior to departing for Yoronjima. I have noticed interesting trends when asking students at this time about why they decided to enroll in this course. Students from remote islands in Kagoshima Prefecture, such as the Amami Islands (or those who had experience living in remote islands), answered that it was because they were interested in “islands.” Students from outside of Kagoshima Prefecture answered that they wanted to go to the “islands” because they have come to Kagoshima.

What about the students from the mainland of Kagoshima Prefecture? The passive answers stood out: because a friend is going, or because a senior recommended the lecture. Additionally, they would say that they have had experience going to Yakushima or Tanegashima, but not to other remote islands in Kagoshima Prefecture. Coming from outside Kagoshima Prefecture, I can't help but think that there should be more educational programs on the mainland of Kagoshima Prefecture for elementary and junior high school students to learn at the Amami, Tokara, and/or Koshikishima Islands.

A ferry is used instead of a plane when going to Yoronjima for the “An Island's System” lecture because we want the students to feel the “distance” from Kagoshima city to the southernmost island of Kagoshima Prefecture. The experience of being on a boat for around 20 hours is an unknown one even for students who have been on a ferry before, let alone for students who have never ridden one. Even then, the students surprisingly have a good time on the ferry (though this is when the seas are calm).

After arriving at Amami Oshima in the early morning the day after boarding, we then head to Yoronjima after seeing Kakeromajima / Ukeshima / Yoroshima, Tokunoshima, and Okinoerabujima, in that order. This also gives the students a sense of the positional relationship, size, and topography of each island in the Amami Islands—another advantage of the ferry.

The Kagoshima University Yoron Revitalization Center (formerly Yoron Municipal Clinic) located on a hill in Chabana has been used as the training center and accommodation in Yoronjima (guesthouses have been used since it was closed in 2017). Incidentally, the new government building in Yoron town is currently at that location (opened in January 2020). The damage inflicted on the old government building in the 2013 typhoon is still fresh in people's memory. It is thought that the hill is a good location after considering natural disasters such as a tsunami.

During the intensive lectures, the students first attend classroom lectures by experienced practitioners of Yoronjima on the current circumstances, issues, and future of the administration, education, culture, tourism, agriculture, fisheries, and other facets of Yoron town. We would like to take this opportunity to thank the people who were involved in these lectures.

It would be a wasted opportunity to just attend classroom lectures after coming to Yoronjima. Therefore, we spend the entire day traveling around the island. The destinations vary every year, but examples include the Yoron Town Hall, fire station, compost center, fisheries cooperative, Nihon Maruko Co. Ltd. Yoron factory, Furusato water purification plant, Arimura sake brewery, Yoron Minzoku Mura (Yoron folk village), Southern Cross Center, and Kotohira Shrine / Tokonushi Shrine.

The entire island can be seen when going to the highest point in Yoronjima, and the students are not only moved by the beauty of the surrounding sea but also are surprised that they can see Okinoerabujima as well as Iheyajima, Izenajima, and even Okinawajima in Okinawa Prefecture. The fact that the national border was located here (Yoronjima and Okinawa Prefecture) until 1972 does not seem to register with the today's students.

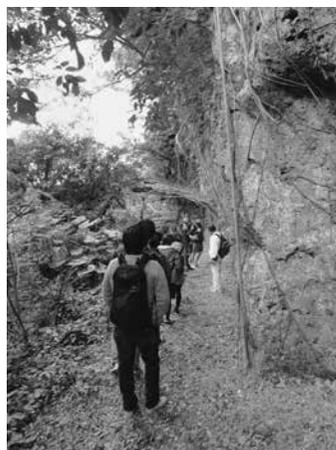
A perennial favorite among the students is Yurigahama (Oganeku Coast). If lucky, you can even go ashore onto Yurigahama as it floats onto the sea and look for star sand. Students become totally enamored of Yoronjima after the lecture.

The subject of the intensive lecture report is "What should we do to revitalize Yoronjima?" Despite the occasional dull essays scattered about among them, some of the students suggest very nice ideas from a youth perspective. I have made efforts to send these reports to the instructors of Yoronjima each year in the hope that they would be of some help to the island.

Due to the spread of the novel coronavirus pandemic in 2020, this lecture could not be held in 2020 and 2021. I hope that students will be able to fully enjoy Yoronjima in 2022.



View of Okinawajima from Yoron Castle



Walking around the ruins of Yoron Castle and looking up at the natural defensive walls

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