

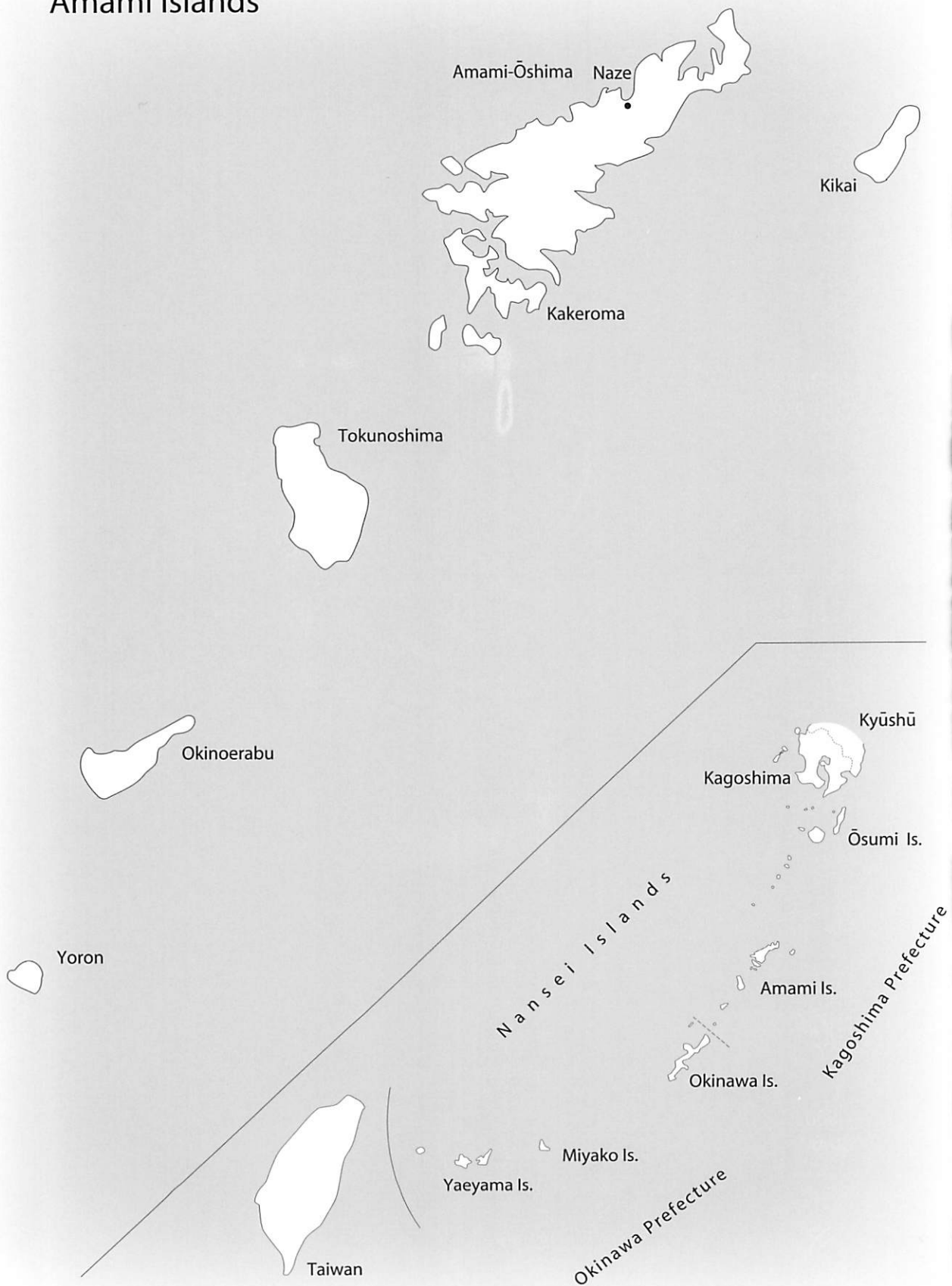
The Amami Islands

Their people, culture and development

Amami Access Centre Committee
Kagoshima University



Amami Islands



The Amami Islands

Their people, culture and development

Amami Access Centre Committee
Kagoshima University

Contributors*

Panel Discussion Participants

Hirata Takayoshi	Mayor of Naze
Inamura Kōbō	Adjunct Professor, Chūō University
Kawada Machiko	Island photojournalist
Kiyonari Tadao	Strategic Planning Officer, Hōsei University
Yamada Makoto	Professor of Economics

Panel Discussion Coordinator

Yano Toshiaki	Vice Chancellor, Kagoshima University
---------------	---------------------------------------

Symposium Presenters

Hanai Kōzō	Director, Broader Area Administration of Amami Islands
Jitōsono Takashi	Associate Professor in Agriculture
Kitazaki Kōji	Professor in Economics, Kagoshima University
Maetoshi Kiyoshi	Employee, China Town Hall
Nishi Ryuichirō	Associate Professor in Engineering
Ōhashi Ayuhito	Chief editor, Marōdosha (publishing company)
Tsuda Katsuo	Associate Professor in Agriculture
Yamamoto Kazuya	Associate Professor in Economics

Newsletter Contributors

Doi Masanori	Professor in Law
Hagino Makoto	Professor in Economics
Nitta Eiji	Professor in Archaeology
Nishimoto Hisaaki	PhD student
Sakida Mitsunobu	Curator, Wadamari History and Folklore Museum
Shinzato Takayuki	Research Assistant in Archaeology
Takarabe Megumi	MA student
Uneme Hirofumi	Professor in Law

Translator

Steve Cother	Associate Professor in English
--------------	--------------------------------

***all contributors members are of Kagoshima University unless otherwise stated**

The Amami Islands – Their people, culture and development

1st March 2007 1st edition

Editor: Amami Access Centre Committee, Kagoshima University

Translator: Steve Cother

Publisher: Faculty of Law, Economics & Humanities Kagoshima University

© 2007 Printed in Japan

No unauthorised copying



The Amami Islands broke away from the mainland one million years ago. This has led to a unique fauna of endemic species as well as those that have become extinct on the main islands of Japan. This is one reason why an application has been made to register the islands as a World Natural Heritage Site.



The Amami black rabbit is a small-eared rabbit found only on Amami-Ōshima.



The most beautiful frog in Japan, Ishikawa's frog, is found only on Amami-Ōshima and Okinawa Island.



The striking Lidth's Jay is endemic to Amami-Ōshima and Tokunoshima.



The venomous *habu* pit viper is found throughout the Amami and Okinawa Islands. Due to its presence, the forests of Amami have remained untouched by man.



Mangrove forest covers the river mouths of the Sumiyō and Yakugachi Rivers on Amami-Ōshima.



The pristine coral beaches of Amami are a favourite getaway destination.



The *hirasemankai* is an ancient Amami ritual where prayers for a good harvest are offered to gods beyond the sea.



Raised granaries are a traditional way of keeping grain fresh and preventing damage from mice.



The *hachigatsu-odori* (August dance) gives thanks for a plentiful harvest and asks the gods for a peaceful year to come.



Bullfighting is a popular traditional activity on Tokunoshima.



Okinoerabu is a leading producer of cut flowers and bulbs.



Agricultural fairs with people buying and selling vegetables, fruit and flowers.



The daily catch is sold to fishmongers directly at the port.



Highly favoured by Japanese ladies, Ōshima Tsumugi is the most famous silk cloth in Japan. It is coloured using dyes made from tree bark and iron-rich mud and then intricately woven by hand.



Brown sugar shōchū is a speciality of the Amami Islands.

Contents

Preface	14
Panel Discussion	16
Symposium Presenters	
Tourism and the return to Japanese sovereignty..... <i>Hanai Kōzō</i>	29
Rainfall Erosion on Yakushima..... <i>Jitōsono Takashi</i>	32
Sesame production on Kikai	<i>Kitazaki Kōji</i> 35
Amami Authors.....	<i>Maetoshi Kiyoshi</i> 39
Coral Reefs and Marine Leisure Safety.....	<i>Nishi Ryūichirō</i> 43
The Amami Diaspora	<i>Ōhashi Ayuhito</i> 46
Sweet potato weevils.....	<i>Tsuda Katsuo</i> 50
An Amami industry: brown sugar shōchū	<i>Yamamoto Kazuya</i> 52
Newsletter Contributors	
Abandoned Cars	<i>Doi Masanori</i> 58

Local resources and the business world in Amami.....	<i>Hagino Makoto</i>	60
Island Rulers and the High Seas	<i>Nitta Eiji</i>	68
The refinement of <i>shimauta</i>	<i>Nishimoto Hisaaki</i>	71
Impressions on Okinoerabu research	<i>Sakida Mitsunobu</i>	74
Recent studies in the trade of shells in Amami	<i>Shinzato Takayuki</i>	78
Attending classes in the Amami Access Centre	<i>Takarabe Megumi</i>	82
Environmental protection and	<i>Uneme Hirofumi</i>	86
the role of local government		

Preface

Yamada Makoto

Amami Access Centre Committee Representative

With this book we hope to show some of the results of the education and research on the Amami Islands that the Faculty of Law, Economics and Humanities (LEH) and in particular the Division of Humanities and Social Sciences has achieved.

The Nansei Islands are a chain of islands between Japan and Taiwan. Some of these islands are already known to the wider audience: Okinawa is home to large US military bases and Yakushima with its ancient cedar forests was the first place in Japan to be registered as a World Natural Heritage Site. The Amami Islands can be found between these two. They are surrounded by coral reefs and cobalt blue seas, while the forests have a wide variety of endangered and endemic species. The 120,000 people who live on the islands have managed to maintain their traditional culture and religion.

After the Amami Islands were returned to Japanese sovereignty from US administration in 1953, the Japanese government poured funds into the area to improve the infrastructure. However, they have been able to stay free of any huge tourism developments and so the balance between man and the natural environment is still prevalent. And once you experience the rustic beauty of Amami, you will be discovering something new. In search of these experiences, over the past few years cruise liners have been calling at Amami to share these treasures with overseas visitors.

Kagoshima University, and especially LEH and the Division of Humanities and Social Sciences, has been conducting intensive research on the Amami Islands over the last few years and has promoted several projects that will contribute to the growth of the islands. Part of this saw LEH professors call on their colleagues in other faculties to participate in their Amami project, the Island Development Grand Design Project. However, it was also necessary to come up with new ideas and the people to implement them if lasting development was to be achieved. With the aim of fostering these local leaders, we opened our master course distance learning facility, the Amami

Access Centre. In addition, we also started publishing the Amami Newsletter to publicise our activities and circulate information throughout the islands. The newsletter is already on its 29th edition.

This book is a synopsis of our activities and research on the Amami Islands. It covers both the symposium organised by Kagoshima University in December 2005 and a selection of abridged articles that have appeared in the newsletter. The first section on the symposium gives the transcript of the panel discussion as well as four presentations from the special interest groups. The panel discussion saw five specialists on Amami and Okinawa discuss the attraction of the islands and how to disseminate that attraction to a greater audience as well as the prerequisites to encourage growth in the region. On the other hand, the four special interest groups gave researchers the opportunity to present their findings from the last 3 years' activities.

The second section contains eight summarised articles from the Amami Newsletter. We have mainly selected articles on Amami's environmental policies and its traditional culture to give the reader a taste of the region's unique characteristics. Takarabe Megumi's article on the impact of lectures at the access centre has given us proof that we are providing an invaluable service to the island community.

Our policy is to help sustain Amami's important natural environment while aiding in its economic growth. Without this the island people would be forced to lead inconvenient lives not fitting our modern world. And if that were to happen many would surely give up their island homes despite the beauty of its nature and the rich cultural traditions. Our mission is to work gradually towards improving life on the islands using the latest technology and research whilst protecting the environment. Of course, this mission cannot be carried out by university researchers alone. We need the cooperation of the islanders and the exchange of information, which is why the Amami Newsletter will continue to be a vital tool in this undertaking.

I hope that after having looked at this book you will feel the desire to visit the islands and support the efforts of the Division of Humanities and Social Sciences within the Faculty of Law, Economics and Humanities in its contribution to the development of the Amami Islands.

Panel Discussion

Panel Discussion Participants

Hirata Takayoshi was born in Naze in 1937, and became a councilor there in 1984. During the next ten years he worked at a variety of posts, until he was elected mayor in 1994. He is currently in his third term and also a councillor on the Japan Association of City Mayors and chairman or deputy of various other associations.

Inamura Kōbō was born on Tokunoshima. He became director of postal administration in Okinawa and was involved with the promotion of the prefecture. Currently he is both administrative director of the Telecommunications Advancement Foundation and a lecturer at the Research Institute of Japan.

Kawada Machiko is a photo-journalist specialising in islands, who was born in Tōkyō in 1953. She is president of Gurūppu Airandā which publishes the magazine, Airandā. She has visited more than 300 islands worldwide. She also enjoys travelling with her disabled daughter. She has written several books on island life.

Kiyonari Tadao was born in Tokyo in 1933. He was president of Hōsei University from 1996 to 2005, during which time he also served as chairman of the Okinawa Promotion Council and as chairman or deputy of various other associations. He is currently the strategic planning officer at Hōsei University.

Yamada Makoto was born in Kagawa Prefecture in 1946. He was dean of the Faculty of Law, Economics and Humanities of Kagoshima University from 2004 to 2006. Recently he has become interested in care insurance, the care of the elderly and research on islands. He is one of the founders of the Kagoshima University Island Grand Design Project.

Panel Discussion Coordinator

Yano Toshiaki was born in Ehime in 1942. He graduated with a degree in engineering from Hokkaidō University. He became dean of the Faculty of Engineering in Kagoshima University in 2000 and has been vice-president since 2003.

Coordinator When I learned that I was going to be coordinator of today's symposium, I decided I had to cram a little on the Amami Islands. One particular trait that I found interesting was the welcoming nature of the people, which I initially heard about during the first symposium in Naze. Professor Domae of Kurume University touched upon merchants from other prefectures who lived in Amami temporarily from the late 19th century to World War II. He mentioned how much they contributed to the community development of the islands and also how the islanders accepted them into their society.

First Professor Yamada will explain the background to this symposium and the goal of Kagoshima University's interfaculty project to enhance environmental sustainability in the Nansei Islands.

Yamada In the last 3 years, the Faculty of Law, Economics and Humanities (LEH) and its graduate school have put a concentrated effort into education and research about the Amami Islands. One of our efforts was to establish a graduate school access centre in Naze and this will be followed by another in Tokunoshima next year. Undergraduate students in LEH also have the opportunity to learn about Amami in our mass media theory class, which focuses on the Amami Islands. Finally we are in the last year of our three-year project, Island Development.

The original aim of this project was firstly to look at the civil engineering that is carried out in the islands and to see whether they are being utilised well. Also we wanted to learn more about how the people living there could be able to develop economically while maintaining their rich natural environment.

We already have some visible results from our activities, such as the beer brewed from raw sugar, which is in its experimental stages now. We have made many small impacts but there are still many more challenges ahead.

We publish the Amami Newsletter quarterly, which is in itself a remarkable achievement for one project group within the university, yet we are still not sure whether the newsletter has been accepted widely by the island people.

More specifically, the key to regional promotion has shifted to culture and tourism. This is of course a national trend. The name of Amami has become more popular among Japanese people, yet internationally speaking, only Okinawa is known. Amami is still not easily recognisable from the outside world. We need to clarify the differences between Amami and Okinawa. I think that more emphasis should be placed on the cultural aspects of the islands, which forms the background to this symposium.

Coordinator Professor Yamada has proposed that the focus of regional development in Amami should be moved from civil engineering to culture and tourism. I would like to ask each panelist now what they think the main attraction of the Amami Islands is.



Kawada The charm of the Amami Islands lies in the warmth of their people. I went to Okinoerabu for the first time when I was in my first year of college. I found the

people there very welcoming. I stayed on a farm and the farmer's family came to see me off when I left. When I went back a second and a third time, everyone was surprised but equally welcoming. Since then I have visited Okinoerabu 21 times and Amami-Ōshima 24 times. During my career I have been to over 300 different islands but I have never come across an island where people welcomed me so warmly.

Kiyonari I think the most important thing is how we disseminate culture, or as Joseph Nye calls it, "soft power". The more soft power a community has, the more people will begin to like it. And this soft power will attract more people to the region.

My research concentrates on the Okinawa Islands, which due to their location and culture are similar to the Amami Islands. I spent six years working on research exchange meetings for local community development in the Miyako Islands and the Yaeyama Islands. The research was conducted fully under the initiative of the private sector with the aim of intrinsically creating new culture or products from their local resources. It took us three years to be accepted by the community because Okinawa has a multi-layered social structure with vertical discrimination. This is very different to Amami, which is truly open to outsiders.

Inamura I am from Tokunoshima, which forms the basis of my identity and therefore I am very proud of the island. When I first left the island as a child, it was by ship. Today, you can fly between Ōsaka and Amami-Ōshima. Of course there is no point in making simple comparisons between the past and present due to vastly different volume of cargo and energy consumption. But I wonder whether the situation today is indeed sufficient.

There is a global trend of market fundamentalism and the economy seems to be controlling everything. The differences that we can see between the rich and poor in countries that are currently experiencing economic success such as China, India and Brazil, can also be seen to a certain extent in Amami. This is a common problem that is shared nationwide: regional areas are being sacrificed. Japan has the power to manufacture and export world-class products, which forms the core of the country's wealth. However in this type of economy, where efficiency becomes the highest priority, small discrepancies can be neglected. In other words, nobody is hurt if a small place like Amami is lost.

When I travel overseas, it is very easy to see Tokunoshima and the other Amami Islands as small dots in the Pacific Ocean. Yet however small these islands may be, they are still wonderful places that need to be preserved. This will lead us to more stable values of capitalism and democracy.

It will also lead to environmental sustainability. Under communism, Eastern Europe continued to promote industrialisation regardless of the high level of pollution. In the past Japan experienced a similar situation, the result of which was water-poisoning in Minamata. Fortunately, Amami still maintains an unpolluted environment.

Hirata I have been mayor of Naze for 11 years, and before that I served on the city council for 10 years. During that time many things have changed including the environment.

Historically speaking control of Amami has changed hands many times. Firstly it was under the rule of the Yamato court before being governed by the Ryūkyū Kingdom. Later it was controlled by the Shimadzu family in Kagoshima. When the prefectural system was introduced after the Meiji Restoration, the islands became part of Kagoshima Prefecture. After World War II, from 1948 they were administered by the US, to be returned to Kagoshima Prefecture in 1953.

After the return to Japanese sovereignty, the Amami Islands' Development Promotion Law was enacted to implement public works to enable the region to catch up economically with the rest of Japan in the post-war years. This led to better harbours and roads, improved air services, a secure water supply and upgraded educational facilities, such as renovated school buildings. As a result, life in the islands has become quite favourable and convenient. In many regards Naze has become a miniature of Kagoshima. So now, our issue is to take care of the culture on each of the islands.

The law has been reviewed every 5 years but the question has arisen whether it is still needed. Another law has been introduced aiming to revitalise the islands by using their local resources and maintaining the flora and fauna and lifestyle.

Now comes the issue of the islands identity. Many visitors to the islands are unaware that they actually form part of Kagoshima Prefecture and not Okinawa Prefecture. They also do not realise that there is a mixture of cultures in the islands which are one reason they are unique. I think how to harness this uniqueness is one of the challenges

we face.

Yamada I agree with Ms. Kawada about the attraction of Amami being its people. The islanders welcome anyone on equal terms, which is not found in other places in Japan. It would make a very interesting study to see how this society was created and how it has survived until today.

Coordinator Today's topic is the dissemination to the world of cultural information about Amami. What are the selling points for Amami to be recognised internationally and what specific measures need to be taken?

Kawada Every year I visit Okinoerabu High School to give a talk to the students. I always tell them about my feelings for the island, what I have learnt from it as a traveller. I don't teach anything, rather I try to emphasise to them that they need to love their island. I do this because I believe, in the long run, passing on my ideas will be beneficial especially since so many young islanders leave for the mainland after they finish high school.

The young islanders today are living in a very different world from that of my childhood. Then, the islands were known for their difficulties: typhoons, water shortages, poor transport services. Today many of those problems have been alleviated and instead of hating island life, they love their islands very much. It would be wonderful if those young people could be the message bearers of how wonderful it is to live there.

From a technological point of view, I think that the internet could be used to disseminate information more easily. Free access in local post offices such as we can find in airports and hotels, would be good.

Coordinator As has been pointed out, the Amami people are not only extremely friendly but also have a great pride in the islands. This rich lifestyle and culture can be one of the selling points of the islands. For that, it is important to have good education.

Yamada We are currently involved in two projects that relate to the education of the

local people. The first one is our graduate school access centre. At present it only covers humanities courses, but we hope it will expand to other fields in the future. Unfortunately, we are finding it difficult to recruit students.

Recently high schools have requested us to provide classes there. Instead of sending professors to talk, we have been sending undergraduate students to talk about their studies and the university in general. We started this programme because we realised that young people in Amami hardly have any opportunity to talk to college students.

As for the rich lifestyle and culture, I think Amami people are not always aware of this. Despite the fact that Amami and Okinawan culture have the same roots they are clearly different today. Okinawan culture was influenced by the Ryūkyū Kingdom and its court. On the other hand, in Amami, every aspect of their culture was related to their day to day lifestyle. An example of this is *shimauta*, the local Amami songs. Traditionally people would sing the songs when they were working. They would sing when there were get-togethers. Many of the songs would be improvised, based on the feeling of the moment. This produced a huge emotional bond between people in the communities, and I think this could be one of the reasons why Amami is so receptive to outside people. However I am concerned that Amami people have not really recognised these attractive points about the islands or understand the importance of preserving them.

Coordinator In the Amami Newsletter there was a report about the administration during the US occupation. An American anthropologist went to Okinawa for research. There he felt that Okinawa was not part of Japan, but a foreign country. But when he went to Amami by ship from Okinawa, he thought Amami still felt like Japan. This impression can easily explain the difference between the two regions.

In 1975 the numbers of tourists visiting Amami and Okinawa were almost equal. Yet there have been big differences in their tourism standards and trends since then. Is there any explanation for this?

Kiyonari Having served as President of the Okinawa Promotion Council and as a member of the National Land Development Council, I have to admit that I do not really agree with the way tourism is conducted in Okinawa.

Okinawa and Amami are both similar in that they are vulnerable to secondary

industries, which have little added value. Thus Okinawa cannot sell much outside of the prefecture, yet Okinawans have to rely on the rest of Japan to supply cars, electrical appliances etc. All of this puts the prefectural financial status into deficit, which can be supplemented by money from tourism. Likewise, the money for public works comes from inside the prefecture, but the cement and steel used in the construction must all be bought from outside. This is Okinawa's economic style.

After Okinawa returned to Japanese rule, part of the promotion plan to revive the economy was to encourage manufacturing plants to the region. However, not a single company decided to do so.

Tourism is something however that took hold readily. It also brought with it environmental destruction particularly to the outlying islands such as Ishigaki. The local people soon began to realise that they had to stop what was happening and revitalise the islands using local resources.



People from outside can often see how local resources can or could be used better than the local people, so we invited a group of people to the Yaeyama Islands from Tokachi in Hokkaidō, an area that is famous for wine. The Tokachi group were able to give ideas to the islanders, because they had been able to turn around the tourism

income in their area. This was especially relevant to islands such as Iriomote, where tourists would visit on daytrips from the larger Ishigaki, but not stay over night. This kind of exchange on community development has been beneficial throughout Japan. Sociologist Tsurumi Kazuko refers to this difference between the wanderers and the settled community. It is the wanderers who stay temporarily in one place, noticing things and making proposals. And it is the settled population who will get the stimulation out of what they are told.

When I was involved in island community development in the late 1970s, most of the discussion was based on the correction of the disparity between Okinawa and the mainland. I disagreed with this idea. Okinawa did not have to follow the others, but instead should have been able to use its own resources to promote industries. The results have been slow, but there are now many small industries all over the prefecture, even if they still do not make enough to fill the prefectural deficit gap yet. When we think of our nation, Okinawa and Amami are remote areas. Yet if we think in terms of the outside world, they are on the frontier. This is a big difference, and for areas such as the islands to serve more like frontiers, it is necessary for them to have a core function. I feel that today we are on the verge of the end of globalisation, so we need to rethink the concept of the nation state once more. From this point of view, our perspective of local areas, such as Okinawa, may change.

Coordinator Amami has many rich local resources such as its culture. What do the islands need to do to circulate this information? What is lacking and what can be used to fill the gaps?

Inamura Amami and Okinawa are very similar to post-war Japan. Despite being far from the world's most important markets, Japan was able to rebuild and undergo tremendous economic development. On a national scale, this is what Amami needs to do.

Amami people feel a sense of crisis in trying to overcome this difficulty. And this is a start. For example there is the issue of Kagoshima Prefecture's administration of the islands. At present there is a branch office of the local government in Amami-Ōshima, but the question is, whether this type of administration is suitable in this day and age. I think the answer to this can and should only be made by the islanders themselves.

The fact that this symposium is held in Kagoshima highlights that Amami is viewed as an administrative unit of Kagoshima Prefecture. Speaking from my own experience, Kagoshima is just one option for Amami people: many of them have closer ties with Tōkyō, Ōsaka and Okinawa.

We also need to reassess whether we got the maximum possible results from the projects that have been directed towards Amami since the restoration of Japanese power, so that we can visualise how to proceed in inviting new industries to the islands, such as the call centres that have sprung up on Okinawa.

Another point of argument is capital. The tourism industry can introduce capital into Amami from outside, but we have to seriously consider where the benefits go. If we are to avoid making Amami into a colony, we need to establish whether we should depend on a large capital market in establishing companies, or whether we should develop enterprises under strict environmental regulation. An example of this is that Okinawa has its own airline, albeit not 100% locally owned. Amami does not have one, probably because Kagoshima Prefectural Government does not provide any capital.

Hirata We are now in a very different era and this has completely changed the way information about the islands can be spread. For example, when older people are asked where they are from, they will answer “Kyūshū”, when pressed they may add “Kagoshima Prefecture” and finally “Amami”. The younger generation are different: they say proudly that they are from Amami. Amami people used to refrain from singing or dancing to shimauta in the past. Today you can find islanders who will sing and dance in the middle of Tōkyō with the greatest of pride. This is a very clear difference between the past and present.

Questions from the plenum

Question I am from Tokunoshima and I believe that airfares to the islands have to be lowered by asking for national or prefectural subsidies. At present the airfare to Okinawa is actually cheaper than the Amami Islands, which are closer. Until this kind of transportation facility has been implemented in a proper way, it will be very difficult for tourism to have any great potential.

Kiyonari The issue of airfare is directly related to the number of package tourists. The more tourists, the lower the airfare can be. However the difficult point is the initial driving force, which comes from the package tours organised by Tōkyō travel agents, not those based in Okinawa, who find it difficult to promote tours. So in this way, it would be up to outside tour operators to help bring about the change. And for that to happen, we need to look at ways to improve the tourism resources of the islands, such as green tourism or island-hopping by boat.

Kawada As a travel journalist, I can say that there are not that many travel writers and photographers specialising in islands, because the fares are so prohibitive. This can be compounded by the fact that writers of books on small islands always have to work on a tight budget.

When I was in the UK, I learnt about their highland-island policy. This aims to provide the same transportation service be it on land or sea. In other words, when the sea is too rough for a ferry to operate to a small island, a plane or helicopter service can be used in its place for the same fare. The difference in cost is supplemented by the EU.

Yamada I think that too much attention is paid to airlines. We need to consider the sea routes as well. In this regard all sea transport to Okinawa is controlled by Amami, so we should not underestimate this. Amami can profit from having Okinawa as its hinterland.

Eco-tourism and educational tourism are another potential that has yet to be exploited. In the 1990s, fifty to sixty thousand high school students would visit Tanegashima and Yakushima every year. Due to the lack of accommodation facilities they were forced to sleep on board ship. At that time Kagoshima Prefecture was competing fiercely with Okinawa Prefecture. Today we hear nothing about school trips to Tanegashima or Amami, but some six or seven hundred thousand high school students are visiting Okinawa, primarily due to the island's history and its role in peace studies.

Question I would like to ask about Amami promotion measures. These have not been used for promoting tourism or soft power. They seem to be implemented under the initiative of the central government and are overwhelmingly concentrated on public

works. One example would be the small, rural island of Kakeroma. It has roads, a port and tunnels that are ill-proportioned to the size of the island. These were built under the directive of the local government office and the municipalities, but I wonder if they are really needed or wanted by the local people. Sometimes I feel that public construction work goes beyond the needs of the community. What are the panelists' views on the measures?

Inamura I agree totally. There is no room for concrete if we want to put soft power into effect. Many people will talk of how we have to develop the fishing industry or improve tourism, but they seemed to be lacking a sense of crisis to make any progress. At first gradual steps to change the direction of the measures need to be made from all manner of perspectives. This will enable us to overcome this issue.

Hirata I am afraid that you have somewhat misunderstood the measures. In the basic framework of the project there is a budget allowance for non-public works, which can be used by the Land, Infrastructure and Transportation Ministry. Let me give you one example of how the budget is used. In Naze we have invested in thalassotherapy to be used by athletes when they visit the island for their winter training camps. The new Amami Park is another example that counts as a non-public work. So too is the Amami Museum Concept which aims to revitalise the islands by making the most of their unique nature and lifestyle. This concept is run not just by Naze, but all of the islands have to consider what objects will be included.

If we want to talk about attracting more tourists to the islands, then I think we will conclude by saying what is good and what is bad. I attended a symposium in Tōkyō recently about promoting tourism to Amami. There I found that the travel agents talked about the topic in general, but had not actually come up with any solutions. If there is going to be increased tourism to the islands, then a multi-faceted arrangement becomes necessary. This will make it difficult for islanders to carry it out alone.

Final Comments

Kiyonari The Amami Museum Concept is a fantastic idea, one which is very common in small towns and villages in Germany, where they have museums related to their life and culture. For example, in the state of Baden Württemberg they have

published an enormous amount of maps and books about the museums. This kind of collaboration at the municipal level is wonderful.

Another example is the town of Tateshina in Nagano Prefecture. Within the municipality there is an altitudinal difference of 2300m, which means that the climate differences of the whole of Japan can be found in vertical representation in just one place. This prompted us to make the Forest Cultural Village, where children can learn about the importance of water resources and preserving the forest and its culture. In Amami we have the mangrove forests, which can be incorporated into the tourism there. If we emphasise tourism first, different industries will be able to prosper later.

Yamada I would like to comment on Mayor Hirata's answer about public works. I think the reality is that excessive construction can be seen in different places in the islands. Is soft power fully utilised? I don't think so. We have to face this reality. Otherwise we cannot make any effective counterargument when mainlanders criticise that their taxes aren't being used efficiently.

To return to the topic of the dissemination of information, I think that whether we can invite people from outside Amami to the islands depends on what those people think of the islands. As has been mentioned, the era of mass production and mass consumption has ended. There is now a big and growing movement within Japan and other advanced nations to seek "healing". But if you ask me whether Amami will succeed in this, I will have to say no. Life and culture will embrace the difficult problem of finding a place where tourists and local people can interact. But will the islanders have to sacrifice their own lives to entertain the tourists? This is an important point. A typical example is shimauta and the shimauta contests that have started. Some more senior shimauta singers do not like this trend, but they do provide an opportunity for visitors to enjoy shimauta. This has also led to singers, such as Hajime Chitose, becoming famous outside of Amami. There are also younger singers who want to produce shimauta-accented music that is easily accessible to outside audiences for instance by using western musical instruments or singing in standard Japanese. This may not be authentic from the perspective of the traditional singers, but it is helping to spread the idea of Amami to many people, who know very little about it already.

Tourism and the return to Japanese sovereignty

Hanai Kōzō

Hanai Kōzō is currently the division head of planning in Amami City Hall. He is also chairman of the Amami Islands Broader Administrative Union, the Amami Islands Tourist Board and the Amami Islands Welfare Service Centre.

The Amami Islands were returned to Japan from US military occupation on December 25th 1953 and in commemoration of the 50th anniversary three years ago, ceremonies and other events were held nationwide. Since its return, Amami has established a unique position among other small islands in Japan. It has gone through several periods of prosperity, firstly when it was the southern most border of Japan before Okinawa's return and then also when Japanese became interested in remote islands and finally when direct flights were established from Tōkyō and Ōsaka. Other reasons for both tourism and migration to the islands have been the traditional island folk songs, *shimauta*, and their sugar cane spirit, *kokutō shōchū*.

Throughout these periods there are two distinct characteristics to be noted. The first is that the ecosystem and the islands' unique culture have been preserved; this is mainly because the visiting population has increased very little during the last 50 years. As a result, there are plans to try and have Amami listed as a World Heritage Site. Secondly, the exchange population is more stable throughout the year without being concentrated in the summer.

Several years ago we visited islands in France and Germany as part of an overseas study tour organized by the National Remote Islands Study Council. We learned that historically Europeans have chosen remote islands as their destination for recreation and recuperation, which led us to believe that this could happen to islands in Japan if national measures were put in place. On returning to Amami, the concept of a sports island was developed with the cooperation of Professor Fukuoka Takazumi of Tōkyō University of Culture. With the backing of Japan Air Systems airline and local councils winter training camps were promoted for mainland Japanese to come to the warmer southern islands. Their popularity has turned the ratio of summer visitors to winter visitors to 64 to 36. Big name sports personalities who have used the facilities

on the island include Olympic gold medalist Takahashi Naoko.

Local people involved in either administration or the service industry have also been very welcoming to the sportsmen and women. Consequently, by way of word of mouth, more and more sports and other organisations are looking to use the island for training facilities. The sports island concept has all in all turned out to be one of the best examples of collaboration between rural islands and the mainland.



A beach-side health resort offering thalassotherapy and local cuisine.

The good reputation that Amami has gained for this concept has led to the creation of two new models that will be piloted on the islands. Firstly, there is the new idea of "island therapy", going to islands for relaxation. This has been promoted in the Japan Remote Island Centre's national development plan and has made it easier for islands to venture into different areas other than sports. Some examples include island campuses for higher education as well as educational tourism for school trips and trying to attract cruise liners to the islands. Secondly, in regard to population of the islands, they are hoping to compensate for the decline in permanent residence by those visiting and semi-resident there. Semi-permanent residence refers to people who are not registered as resident but stay for the medium or long term, or those who go

back and forth between other places. The increase in corporate home offices will hopefully make this possible.

Another key factor in the promotion of tourism in the islands has been the Amami Islands Promotion Development Scheme. Over the last 50 years, this scheme has been instrumental in maintaining a balance between development and preservation. However it is debatable whether this balance can be kept for the next half century. The first tipping point came in the 1990s when Japan's economic bubble burst. During the bubble economy, much of the land on Okinawa was bought up. It was expected that this would happen in Amami, too, but the bubble burst before inroads were made. In actual fact, this saved Amami and means that development today is still within the realms of control.



Large cruise ships carrying tourists often call at Naze.

Tourism is an inevitable part of the Amami economy, but sustainable tourism is necessary rather than that based on the fads of the moment. Listing the islands as World Natural Heritage Sites could be fundamental in this as UNESCO requires development and utilisation of the preservation system as well as promotion of eco-tourism.

Rainfall Erosion on Yakushima

Jitōsono Takashi

Jitōsono Takashi is a professor in the Faculty of Agriculture, Kagoshima University. He specialises in hydrology, erosion and hydrogeomorphology. He has conducted research on many of the islands in Kagoshima Prefecture.

Since Yakushima was registered as a UNESCO World Natural Heritage site, it has become famous in the media as a tourist mecca. However it is also an extremely interesting place from the point of view hydrology, the study of the water cycle and its relationship with man.

The island of Yakushima is 60km south of the Kagoshima mainland and is almost circular in shape, being 24km north to south and 28km east to west. In the centre of the island are some of the highest mountains in southern Japan, Miyanoura-dake and Nagata-dake. These mountains were formed 14 million years ago when magma solidified pushing granite up through the middle of the island at a rate of 1 metre every 1000 years. Yakushima itself was not a volcano, but rather on the lip of a large volcano 40 km to the north, which erupted 6300 years ago, scorching the island with its pyroclastic flows. If you visit Yakushima, you can find yellow strata which are pyroclastic sediment and beneath them the weathered granite layer.



Yakushima is a mountainous island, whose ancient cedar forests are a World Heritage Site.

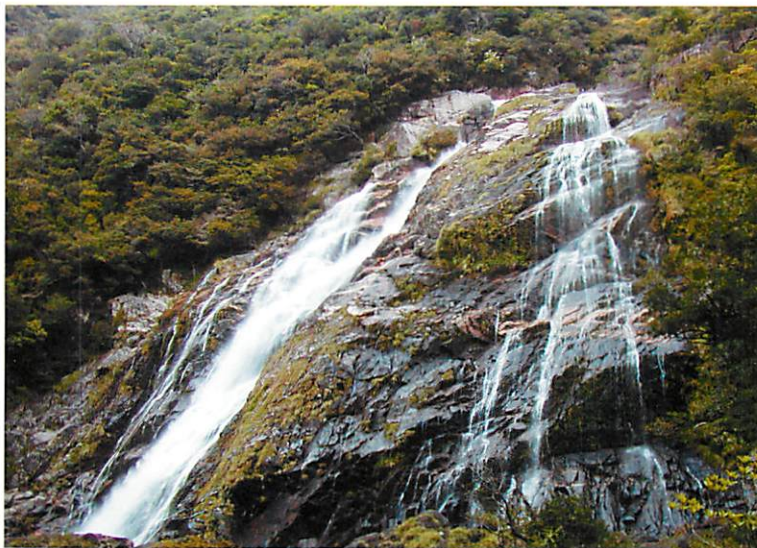
The pyroclastic flows also made the land very infertile and the loss of vegetation led to extensive landslide damage. In fact the boulders and rocks that can be found in the rivers of Yakushima are a result of this eruption.

The granite rocks have given Yakushima a unique water system. Rainwater permeates the joints in the rocks. This has created a drainage system which criss-crosses at almost 90 degrees. Another characteristic of the rivers on Yakushima is their steepness. Five to 10km from the river mouth they rise to 1500m about sea level. Miyanoura-gawa is an example of this.

Yakushima is also famous for its rainfall. In the inner mountainous areas 5000-7000mm fall annually. At the coast they receive between 2400mm and 5000mm. Comparing this to the Japanese national average of 1700mm and even the Kagoshima average of 2300mm, we can see how much rain Yakushima gets.

However the precipitation differs on the island according to the place. South-facing slopes get 4900mm, east-facing 4400mm yet west-facing slopes only receive 2400mm.

Why does Yakushima get so much rain? The answer to this lies in the island's mountains. The almost 2000m high peaks are located very close to the coastal area, so when warm currents come in, they are forced straight up into the alpine areas. Fifteen years ago we started monitoring the Nagata area for water level, pressure and



Yakushima was formed from igneous rock with many steep cliff faces and powerful waterfalls.

precipitation at 430m and 950m. When flooding occurs we also have sensor cameras to photograph the conditions to aid us in our analysis. Our objective for the research was to see how global warming and other factors influence the hydrology of the region.

From our data we have shown that water levels rise rapidly when it starts to rain, and drop quickly once the rain stops. This can give rise to the kind of flash flooding that killed 3 hikers in May 2004. Therefore knowledge of the island's hydrology is essential in promoting Yakushima as a tourism destination.

Daily rainfall is also very high. Between 1991 and 2003 there were many days when more than 500mm of rain fell. It is extremely unusual to have such large amounts of precipitation. In any other area this would cause considerable damage, but in Yakushima the daily run-off is so high, that no damage is sustained.

Sesame production on Kikai

Kitazaki Kōji

Kitazaki Kōji, a professor in the Faculty of Law, Economics and Humanities, specialises in regional planning and agricultural policy. He is editor of the Amami Newsletter published by Kagoshima University – his articles: agricultural production in Amami.

Sugar cane production forms the basis of agriculture for the island of Kikai. It is cultivated on nearly 85% of the arable land. Okinoerabu and Tokunoshima have both branched out into growing flowers and raising beef cattle respectively. Kikai has also been searching for other crops which will not affect their sugar cane yields, and recently sesame seems to be the answer.

Kikai islanders have planted sesame in their gardens for many years. But in the beginning of 1996, while Japan was experiencing a boom in organic food, Kagoshima University started a special study into the organic production of sesame. The boom led to an increase in demand for domestic sesame, which resulted in a demand for sesame produced on Kikai. This coincided with a new interest among local farmers because when there is a drought sugar cane production is low and they need to have additional income.



Kikaijima is a coral island 48.6km in circumference.

The four major sesame-producing countries are China, India, Myanmar and Sudan, who produce one third of the global total of 2.8 million tonnes. About 600,000 tonnes are traded every year with 30% being imported into Japan, making it the largest importer of sesame in the world. Despite this huge market for the product, only 150 tonnes are produced domestically, which means the self-sufficiency rate is as low as 0.1%. Kikai now produces 50 tonnes, which shows a drastic increase over the past few years. In fact Kikai accounts for 30% of the total domestic production, which is remarkable for such a small island. One reason for this large capacity for sesame production is the low rainfall and alkaline soils.

Since about 1996 people have started producing it as a consumer item, which is when the local council started keeping records. The unit price per kilogram was ¥1700-¥1800 per kilo. Farmers have repeatedly stated that they will continue farming sesame as long as the price remains above ¥1500/kg. Currently it is ¥2500/kg, a price which is greatly motivating the island's farmers. Likewise the cultivated area has increased from under 10 hectares to 85 hectares in 2005.

The islanders tried other cash crops such as mangoes, melons and tomatoes before arriving at sesame, but these all proved difficult to grow. The income from sesame now stands at over ¥100 million year annually.

Most farms on Kikai are comparatively large scale with an average acreage of 2.8 hectares. (The national average is about 1.5ha and neighbouring Amami-Ōshima is 1.7ha), which helps secure income from the sugar cane crop.

Sugar cane is planted in either spring or summer. Spring crops are harvested in the following January, whereas summer crops take 16 months to reach maturity. The sugar manufacturing plants stop operations in March, so it means that farmers have to harvest all of their cane, either spring or summer crop, in a relatively short period. Large-scale sugar cane farmers prefer the summer crop because it gives them more time for harvesting. Another Amami island, Yoron, only has a spring crop due to the lack of land available there.

With harvesting taking place by March and summer planting starting in August, the farmers were idle during the interim months. Now sesame is being planted in May and harvested 80 days later just before sugar cane planting.

There are currently about 10 farms with an area of 1ha. If they work for three to four months, they can produce 70kg of sesame on average up to a maximum of 100kg. If

the unit price is ¥2500, they can earn ¥1.85 million as a unit crop. This is a large income for only a couple of months work. As a result, there has been a big increase in the number of farmers who have begun sesame production while continuing sugar cane cultivation.

Costs have been able to be kept low. On the Japanese mainland mulching is often used for seeds, but in Kikai they apply the scattering method. Sesame seeds are put into 1.8 litre containers and scattered over a third of a hectare. Many farmers who only cultivate small areas sow by hand. No chemicals are applied because the seeds are labelled as organic. In addition there is no insect pest problem on Kikai. This has cut out costs. Furthermore, good soil has kept fertiliser costs down, and the same harvesters that are used for rice can be used for sesame, which has meant no further outlay. Sesame grading machines can be purchased for about ¥50,000. Therefore the total cost even for a large-scale farm that would need to obtain an engine-driven sowing machine is as little as ¥300,000. The local council has also purchased sowing machines, which it lends out to farmers.

The next issue is sales. If there are no sales channels, the situation would be very different. In 2002, 10 tonnes of sesame was produced, of which 9.69 tonnes were bought by manufacturers to make sesame oil. A further 0.3 tonnes is made into salad dressing on the island. Kikai Agricultural Cooperative had invested about ¥100 million in a sesame cleaning machine, but it is left unused now because the oil manufacturers prefer to buy unwashed sesame. Two of the biggest manufacturers are Kadoya and Wadaman and they are vying with each other to get a larger share of Kikai production.

Previously farmers took their products to the agricultural cooperative, which then would pay the farmer up to two months later. Manufacturers on the other hand will pay in as little as three days, and what is more offer a higher price, up to 10% more, than the local cooperative. This has led to a shift in sales processes. Whereas once 60% of farmers sold through the cooperative, last year 80% was sold directly to the manufacturers.

Currently distribution has turned into a seller's market and expansion has become another issue. About 95% of the sesame handled now is a domestic variety of white sesame. The remaining 5% is a new variety called Gomazoū which was introduced on the request of Kadoya. It contains higher amounts of sesamin and sesamol than the

normal variety. However unlike the normal variety, Gomazoū needs 90 days before harvesting.

Typhoons pose the biggest threat to sesame cultivation. During a typhoon small plants can be blown away and salt water in the wind can cause damage too. If the plants are still sound, they can be replanted. However if they have been destroyed it can be difficult for the farmers to manage to fit in a sesame crop before their sugar cane needs planting in August. This has been a further hurdle towards the introduction of the better Gomazoū crop, since if its longer life span is disrupted by a typhoon, it can be a real burden to farmers. Nevertheless, Gomazoū production is growing gradually. It is likely that sesame production will decrease in the future. The area for planting the summer sugar cane is about 800ha (400ha per year), which can be planted twice in four years. Sesame is currently planted in 80ha, but probably it can be increased to a little over 100ha. The increase is more likely to come in the area of cultivation rather than number of cultivators. Those farms which used to cultivate an area of 0.5ha can possibly increase that to 0.8ha. This is because those who want more cash income will work harder, despite most of the labour, remembering that it is mostly by hand, taking place in the oppressive summer heat.

Another problem is the low germination rate of sesame. Increasing that may depend on the government. Then there is also the problem of whether sesame should be considered a primary or secondary industrial product. Instead of having the oil manufacturers go to the island to buy the produce, the island farmers could sell the sesame directly to the customers themselves. On the current market, 50g of sesame sells for ¥500, in other words ¥10,000/kg. This is four to five times more than the farmers receive.

Another point is the impact from the sugar cane production. The spring sugar cane has decreased greatly because the summer cane is better. Summer planting should take place in August, but many farmers had to delay their planting due to delays in the sesame harvest caused by typhoon damage.

Amami Authors

Maetoshi Kiyoshi

Maetoshi Kiyoshi was born in China on Okinoerabu. He has written several articles about the Amami islands . He currently works in China Town Hall and is also member of the Okinoerabu Local History Society and the Japan Society of Island Studies.

Amami has produced some award-winning authors, such as Isshiki Jirō (Dazai Prize winner), Hikari Agata (Akutagawa Prize nominee) Yasuoka Nobuyoshi (Akutagawa Prize nominee) and Adachi Seiichirō (Naoki Prize nominee). When you compare their novels, you can see the different identities prevalent in the islands, those closer to Satsuma and the mainland and those identifying more with Ryūkyū to the south.

The fiction of both Yasuoka and Adachi takes place in either the period of colonial rule by Satsuma or the eight years under US protection after World War II. Okinoerabu writers, Isshiki and Hikari, wrote novels about the experiences of islanders seeking jobs on the mainland.



The grave of the mother of Dazai prizewinner, Isshiki Jirō.

Migration from Okinoerabu to the Japanese mainland started in around 1886 with many men becoming sailors. In 1898 following a devastating typhoon, which had hit the island, a mass migration to work as shipbuilders in Kuchinotsu in Nagasaki took

place. Yoron islanders also left for Nagasaki, but their migration followed a different pattern to their Okinoerabu neighbours. Once the construction of Miike port for the transportation of Kuchinotsu's coal was finished, the Yoron islanders moved en masse to Ōmuta. The Okinoerabu labourers on the other hand, dispersed, either returning to the island, or moving on to shipbuilding jobs in Nagasaki or Kōbe. The reason for this is still unclear.

Both Isshiki and Hikari readily took up these topics in their novels. From them we can see the real difference between the two migrating groups. Okinoerabu at the time was enjoying a prosperous economy but with a shortage of labour due to so many looking for work elsewhere. The smaller Yoron on the other hand was suffering from overpopulation which caused people to migrate out of sheer economic necessity.

Whatever their motives many of the islanders suffered the same prejudice in their new homes. One 1913 article in the Fukuoka Ichinichi Newspaper describes Yoron immigrants as having strange manners with a special mention to the fact that the local people were surprised to learn that they were in fact Japanese.

In one of his essays, Isshiki Jirō describes his childhood spent moving back and forth between Okinoerabu and the Kagoshima mainland. At that time he was bullied by the Kagoshima children and called a *jikijin*, a word of contempt used to describe people from the Ryūkyūs.

Whenever Isshiki or Hikari moved to other areas of Japan as migrants, they clearly met with discrimination, but both acknowledged their island heritage positively which



Nékina Beach as featured in Higari Agata's novel, *Irie no utage*.

can be seen in their works. However, both authors have at times been rejected by the islanders or have rejected the islanders themselves.

Isshiki's *Sun and Chain and Father You Were Innocent* both try to clear the name of his falsely-accused father. These novels were not received well on the islands. On the other hand, his more famous, *Sei Genki*, was positively welcomed.

In the case of Hikari Agata, it was the relationship with his own father who had returned to the island and the conflict that broke up their relationship that formed the basis for his first novel, *Furimun Collection*, which he published in 1980. Copies were sent for distribution on the island but Hikari's father bought them all saying that they revealed the family's shame. In fact Hikari refused to return to the island as long as his father was still alive.

Another writer, Shimao Toshio, who although not from Amami has written books based there, took up the question of family names. Traditional Amami family names have only one character compared to the more usual two characters found in other parts of Japan. Many islanders changed their names or characters when they moved to other parts of the country so as to avoid being confused for Chinese or Koreans who



During the closing years of the war the novelist Shimao Toshio was stationed on Amami-Oshima as a captain with the 18th Special Attack Unit. The picture shows one of suicide boats that were to be used by the unit.

also only use one character. Shimaō stated that a one-character name was one means of relaxing the inflexible standardization of Japan by using the word *Japonesia*.

There is quite a difference in perception of the word *Japonesia* in Japan. In Okinawa they have a theory called the 'Ryūkyū-Out Theory', which shows *Japonesia* as a means for including Okinawa in the nation of Japan, whereas in Amami, the opposite is true. In particular, having a local author support *Japonesia* has at last justified the inclusion of Amami into the nation of Japan.

The reason for this completely different appreciation is the historical difference between Okinawa and Amami. Okinawa was the independent Ryūkyū Kingdom and also spent 27 years under American rule; Amami never had its independence or its own government and its occupation was over in just eight years.

Coral Reefs and Marine Leisure Safety

Nishi Ryūichirō

Nishi Ryūichirō is a professor in the Faculty of Engineering. He specialises in coastal engineering, in particular the protection of coastal environments.

Objective

The coral reefs around the Amami Islands, the Okinawa Islands and the Ogasawara Islands have become valuable tourist resources due to their beauty. For example, about 60% of all tourists to Okinawa Prefecture will spend some time at the sea. On the other hand, some of the people who use the beautiful reefs for leisure activities such as swimming and snorkeling will meet with accidents due to the reef currents that are characteristic of coral reefs. Most of these accidents are concentrated around the reef gaps. Consequently, if people taking part in marine leisure activities were to avoid the reef gaps it would be much safer for them. However, if we look at the accidents that are thought to have taken place due to reef currents, we can see that gaps are where there are likely to be currents out to sea. When there is no current the waters are exceptionally clear and provide an ideal place for swimming and snorkeling. In other words, many people taking part in marine leisure activities are not fully aware that where there is scenic beauty and it is good for snorkeling are the same places that you can be easily swept out to sea by reef currents due to the hydrographic conditions.

Marine leisure accidents have a high fatality rate, so as much as possible, they need to be given the information of where it is safe to be in the water and where it is not. Which is why, it is necessary to collect and correlate data from marine leisure accidents as well as measure the physical properties of currents around coral reefs.

Research focusing on accident prevention.

I have collected and correlated data from marine leisure accidents. Also I have measured waves, currents and the ocean floor at Tomori Beach in Kasari on Amami-Ōshima in Kagoshima Prefecture and at Yoshihara Beach on Ishigaki in Okinawa Prefecture using WaveHunter99 Sigma, Acoustic Doppler Current Profiler (ADCP),

HGPS floats, sea markers (dyes), total stations, thermal infrared cameras, digital video cameras, digital cameras, SLR cameras.

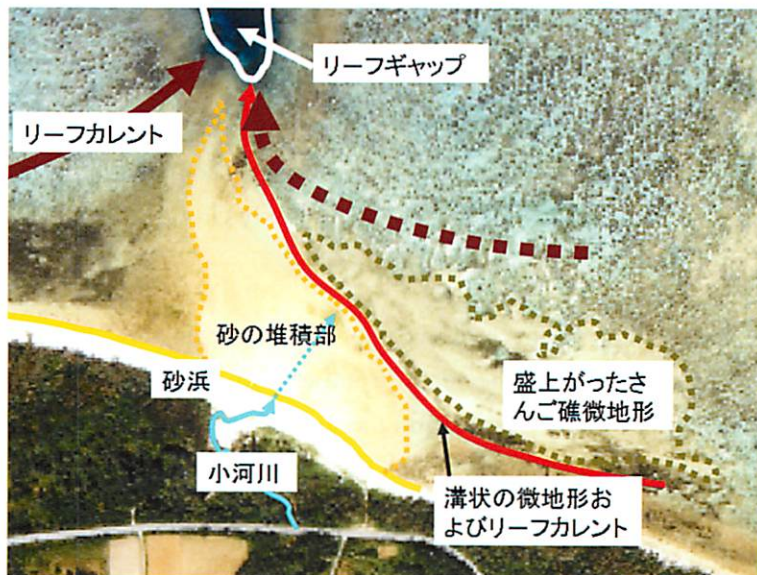
I surveyed Tomori Beach from late July to early August 2005 and Yoshihara Beach from 26th to 31st of September. Both periods were restricted by the arrival of typhoons. Furthermore, in Okinawa Prefecture I was able to use aerial pictures to locate the gaps in the reef.

Results

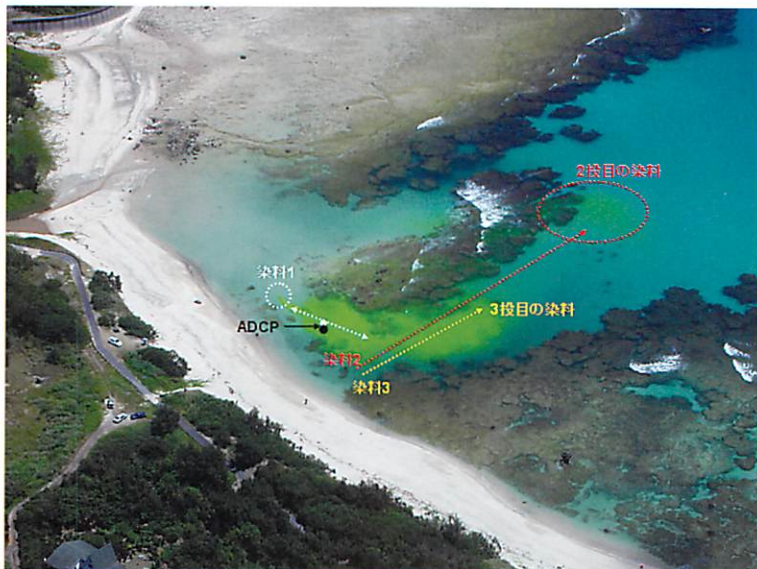
Looking at the data from recent accidents along Yoshihara Beach, it can be said that all of them were connected to the current which goes out over the reef gap and out to sea. At Tomori too the current that heads for the reef gap was very prominent. Local lifesavers said that the current flows like a river out to sea and it was impossible to swim straight. All Tomori Beach's accidents were also connected to the current going over the reef gap out to sea.

At Tomori there was a tendency for the average speed of the current to increase at high tide, and the fastest speed was 0.4m/s recorded with the ADCP. Also during a preliminary survey we conducted when there was significant swell from an approaching typhoon, the small GPS float gave an average current speed of 0.9m/s.

At Yoshihara Beach, in an experiment using a surface dye in the water, we found out that there was a narrow reef current. However, as you can see in figure 4, the measurements were only taken on one day, and the incoming waves were small, so we only recorded an average current speed of 0.2m/s. Basically, with reef currents the set up is fixed due to the ratio of wave height to water depth, so as a result, the mechanism that decides the current speed is distinct. The vertical components of the speed at a range of depths showed uniformity the deeper you went, although with several peaks. This trend can be seen at high tide, but we could not determine it at low tide due to lack of data.



The topography of Yoshihara coast and the currents. The red lines show the movements of water going off shore.



The experiment at Tomori coast. The stain is going from the seashore toward the spot the red circle shows. The movement of the green stain shows the current.

The Amami Diaspora

Ōhashi Ayuhito

Ōhashi Ayuhito currently runs a publishing company in Kōbe. His interests include the history of the first and second generation Amami islanders who migrated to the Kansai region. He also founded the Kōbe Amami Study Group.

The term diaspora refers to the movement of peoples from their homelands due to social or historical pressures, the most prominent of which would be the Jewish people. However it can also be applied to the movement of people from Amami that took place throughout the 20th century. This migration can be illustrated by the lives of four people, Motomae-san, Nakagawa-san, Honda-san and Namura-san whose parents were all born and bred in the Amami Islands.

Motomae-san was born and raised in Nagasaki. His father had moved there with many other islanders to work in the coal mines. On August 6th 1945 when the atomic bomb was dropped, he lost both his father and his own son, but escaped physically unhurt. With no work left in Nagasaki, Motomae decided to return to his parental homeland in Amami. However the Amami Islands were below the 30th parallel, which GHQ had defined as non-Japanese, a measure which was taken to try and save food supplies on



Many Amami Islanders move to the Kansai area. New Year's and Obon see many people returning home for the festivities.

the mainland. For this reason many people of Amami origin, including former military, were encouraged with financial incentives to return to the islands. The result was overpopulation.

Life on the islands at that time was very pleasant, however there were not enough jobs for the swollen population, so many had to move on to Okinawa to work or attempt to return to the mainland, which at the time was illegal.

Motomae-san chose to go to Okinawa where, like many others, he worked on one of the military bases. Yet in 1953 when Amami was returned to Japanese sovereignty, all those from the islands working in Okinawa, which was still an American protectorate, lost their jobs. Motomae chose to stay in Okinawa to work as a public servant, however to give himself a better chance of finding work, he decided to change his name. Motomae is a traditional Amami family name, yet like many others in the islands it is written with just one kanji. Many islanders chose to change their names or the characters for their names when they moved to the mainland or Okinawa to avoid being mistaken for Chinese or Koreans, who also only use a single character for their family names.

Nakagawa-san was born in Sumiyō on Amami-Ōshima and attended Ōshima High School before the war. His life is representative of the changes that took place in Amami then. Ōshima High School was a state-run school, but unlike those on the mainland where money for basic facilities came out of public funds, all of the classroom furniture and materials had to be bought by the parents. This was because pre-war Amami had an independent economic system: if tax revenue was low, then expenditure in the islands had also to be low.

Petitions were drawn up to try and rectify this discrimination from 1942 onwards.

However it was not only in facilities that those attending school felt prejudice. Dialect was another area in which a difference was felt between the mainland and the Amami Islands. Five very different dialects were in use in the area at the time: the original Amami dialect, standard Japanese as broadcast on radio, Kagoshima dialect as spoken by teachers, police and public workers drafted in from the prefectural mainland, Kansai dialect since the islands have long had a strong connection with that region, and finally the Yamatagushi dialect which can be seen as an islander's attempt at speaking standard Japanese but with non-standard accent and vocabulary.

All the islanders considered their Amami dialect, peculiar to each island, their mother

tongue and very different to standard Japanese dialect. School children such as Nakagawa-san suffered identity crises because they only knew how to speak their local dialect and not the Japanese that belonged to the nation as a whole. For many there was a feeling that since they did not speak standard Japanese, they were not Japanese themselves.

Unlike Motomae-san, Nakagawa-san decided to risk his fate on the Japanese mainland instead of migrating to Okinawa to work, which although legal was controlled by a time-consuming, bureaucratic process. Like many others, even those over 70 years old, Nakagawa was smuggled into Japan via ship.



A ferry bound for the Kansai area.

Honda-san was raised in Taiwan to fourth-generation catholic parents from Kasari on Amami-Ōshima. Kasari and neighbouring Tatsugō have one of the highest percentages of Catholics in Japan. However even in Amami, the Catholics were severely oppressed. Schools were forcibly closed by the military. Many had to leave the islands, usually escaping to Taiwan, in order to maintain their religion.

Namura-san moved with his family to Kōbe, where he attended primary school. Later he fought on the front line in China. He returned to Japan to find his home destroyed in the air raids and all of his family and close relatives who had moved there from Okinoerabu had left to try and return to the island. Their first stop was Kōyama in

Kagoshima where they stayed for several months. However on 2nd February 1946 all of those who were wishing to return to the islands were prevented from doing so. The Namura family abandoned their plan to cross the border and instead returned to Kōbe to work in the public school system.

In today's society it is much easier for the individual to have the power to overcome this kind of social circumstance. On the Kagoshima mainland, as well as in the Kansai and Kantō regions, Amami Islanders have formed associations to help and support one another. In Kansai in particular, the associations have a very strong unity, which is based on a collective image of all the islands in the Amami chain, differing from those who still live in the islands, who only have an image of their own particular island.

Sweet potato weevils

Tsuda Katsuo

Tsuda Katsuo is an associate professor in the Faculty of Agriculture, Kagoshima University. He specialises in pestology and insect pathology.

In the Faculty of Agriculture we have been conducting a project on the islands' development and the use of sweet potatoes.

Sweet potatoes are ideal as an emergency crop, because not only are they extremely adaptable to high temperatures and drought, they are also easy to cultivate and have a high yield with good nutritional value. What is more, since they are a root vegetable they have good typhoon resistance.

However despite this, there is reluctance to grow sweet potatoes commercially. This is due to weevils that can wipe out complete crops. The weevils are small, only 7mm, and may only nibble on the tubers, but this leads to a chemical reaction in the potato where it becomes very bitter and foul smelling, thus rendering the crop inedible.



Sweet potatoes were once a staple part of the Amami diet.

In the past farmers have tried to control the weevil with chemical pesticides, but since the potatoes are underground the pesticides have little effect. This is where we have been conducting research to find a method of protecting the crops from the harmful weevils.

One solution is to use wood chips that have been coated with chemicals to draw out the weevils. In other parts of Japan, the wood chips can be spread in wooded areas by the farmers, however due to the presence of the habu, a venomous snake, farmers in Amami have had to resort to dropping the chips from helicopters.

Another possible solution is to introduce sterilised weevils to the weevil population. The insects are first sterilised with radiation from cobalt 60. They are then bred in large numbers to deplete their reproduction ability. For example if 10 thousand sterile male weevils are released into an area, the wild females, who mate only once, will have a decreased chance of finding a wild male to mate successfully with and so reducing the population. If sterile weevils are continually released into the same area, eventually the population will become zero.

For this technique to work there are several conditions necessary. Firstly, the sterilised weevils will still eat the potatoes, so care needs to be taken to prevent that from happening. Also, the area needs to be isolated, so that no weevils from other places can migrate into the area and make the technique less effective. Amami is a small island, so it is thought that this kind of technique will work well.

We are currently studying how to breed and expose such a large number of weevils to radiation. Currently we can breed 300,000 insects per week, but this should rise to about 3 million per week by next year. Another minor problem concerns feeding the weevils being produced. A nutrient-rich artificial diet has had to be designed, because shipping and storing the amounts of sweet potatoes that millions of weevils need is too costly.

At present, we are still in the trial and error stage of our research. However once we succeed it is possible to imagine that the world food issue could be solved because sweet potatoes will be able to be grown anywhere in the world.

An Amami industry: brown sugar shōchū

Yamamoto Kazuya

Yamamoto Kazuya is an assistant professor in the Faculty of Law, Economics and Humanities. He specialises in the economics of Asia. He has written several articles on the Amami Islands looking at the distribution of goods and economic independence.

Amami is the only brown sugar shōchū producing area in Japan. Many people believe that this is a legally protected right and has been since the Amami Islands were returned to Japanese sovereignty in 1953, yet if we look closely at the alcoholic beverage tax law, it only states that brown sugar is approved to be used as raw material for genuine shōchū (*honkaku shōchū*). This approval is an exception, but there is no mention of Amami, etc. at all. A notice made by the National Tax Agency issued in December, 1959 states that in the area under the jurisdiction of Ōshima Taxation office, the use of brown sugar for genuine shōchū is approved under the condition that it is used with rice and kōji malt. As a result, only Amami has become able to produce brown sugar shōchū. Therefore, there is no specific indication of Amami in the alcoholic beverage tax law.

Currently there are 25 manufacturers and two bottling companies which are jointly managed on Amami. Most manufactures are concentrated on Amami-Ōshima: there is only one manufacturer on Yoron, one bottling company on Tokunoshima, and one on Okinoerabu. Another bottling company which was located on Amami-Ōshima stopped operation in 1989. In terms of turnout, the largest producer is estimated to be Machida Shuzō Distillery, but since Machida is not a member of the agricultural cooperative, the exact amount of production is unknown. The second largest producer is estimated to be Kikaijima Shuzō Distillery because it has recently completely overhauled its factory and tank capacity. These are followed by Kaiun Shuzō Distillery in Uken on Amami-Ōshima. The Amami Shurui Company, the bottling company on Tokunoshima, has the largest shipments.

Together with Nishikawa Shuzō Distillery on Tokunoshima, Machida and Kaiun are new entrants in the shōchū business from other industrial fields, yet they now have the greatest share in shōchū production. However the agricultural cooperative has said

that no new production licenses will be issued, which means that despite the huge popularity and growth in sales, the only way to obtain a license is to purchase that of an existing distillery. In fact figures show that by 2003 brown sugar shōchū production had grown into a 10 billion yen industry. As a result, it is now the main industry of the Amami region.

The first "shōchū boom" took place in 1985, when there was a large increase in consumption. But renewed popularity since 2000 has been more prolonged. And brown sugar shōchū has increased output and sales in line with this big shōchū boom, with more shipments outside Kagoshima Prefecture being an important factor. In 2003 and 2004, about 60% of the shōchū produced was shipped outside Kagoshima Prefecture. Production has been continuously increasing at a high pace. In 2004 there was an increase in turnout of 16,649. However this has caused a big gap between production and shipment values. Unlike shōchū made from sweet potatoes, brown sugar shōchū products must wait at least six months before they are shipped. So in order to meet the increasing demands, each manufacturer has increased its production and the products are being stored in tanks while waiting for shipment.

Much of the shōchū transported outside Kagoshima Prefecture goes primarily to the Kantō region and then the Ōsaka area. During the first shōchū boom of 1985, Ōsaka was the major destination, because there are many people there who are from Amami.



Brown sugar shōchū factories can be found everywhere throughout Amami.

But this time, the boom has been nationwide, and therefore the Tokyo area is the main destination.

A survey was conducted of 15 of the manufacturing and bottling companies. The results showed that 6 companies had more than 50% of shipments sent outside Kagoshima Prefecture, out of which the shipment ratio of 5 companies exceeds 80%. Only Arimura Shuzō Distillery on Yoron puts the highest priority on sales within the island. Apart from that very little brown sugar shōchū is shipped to mainland Kagoshima, which means most of the brown sugar shōchū is consumed on Amami islands where the production is carried out. Likewise, very little amount is shipped to the other parts of Kyūshū, where shōchū made from sweet potatoes, buckwheat, and barley are more popular.

Most brown sugar shōchū is transported to Kagoshima by ferry, then, transported to the Kansai and Kantō areas by truck. Some companies ship products directly from Amami to ports in Kansai or Kantō. Others are shipped to individuals by door-to-door parcel delivery service or air mail. The transportation cost to the Kantō and Kansai areas accounts for about 9 to 10 percent of the wholesale price. This is not limited to the shōchū industry alone, but in the case of Amami, the transportation forms a big part of the cost.

The brown sugar shōchū of Amami does not actually use Amami's brown sugar. According to the survey conducted by The Kagoshima Regional Economic Research Institute, 3.7% of the raw material is supplied from Okinawa, and 34% is imported from Bolivia, Indonesia and China. Raw materials from Amami account for a relatively small 2.3% of the total. This is somewhat surprising since many would assume that with the name Amami brown sugar shōchū, Amami local ingredients would be used. In fact, when the volume of production was more limited, people used to use local sugar cane to extract brown sugar to produce the shōchū. But gradually use has shifted to sugar produced in Okinawa, and from the mid 1990s, even to imported sugar.

The reason for this has to do with 23 out of the 25 manufactures being members of the Amami Alcoholic Beverage Manufacturers' Association. The member companies mainly purchase Okinawa brown sugar from the Okinawa Brown Sugar Industry Association and a very small amount of Kakeroma brown sugar through Amami Agricultural Cooperative, although most of the sugar cane grown there is used for

confectionary. The association is responsible for distribution to the manufacturers. However this is simply not enough. Especially now, with the current popularity, there is a shortage of raw materials, which has forced each manufacturer to try to purchase sugar from Okinawa or foreign countries through trading firms. Although the amount is quite limited, there are companies that use raw materials produced themselves or locally, such as Kaiun Shuzō Distillery.

Another reason for this change in sourcing was the government's Sugar Policy which saw the supply base gradually shift to Okinawa and focus of production from brown sugar to molasses sugar. As a result, the production of brown sugar on Amami decreased drastically. This was also worsened by price-support subsidies from both the national and Okinawa Prefectural governments, keeping the supply of brown sugar at a very low price.

Furthermore changes in the legal system, accompanied by the introduction of consumption tax, have changed the alcoholic beverage tax law and this allowed the use of foreign brown sugar. Another factor in the increase of use of foreign sugar was the reluctance of Okinawan companies to sell to Amami. A health fad for brown sugar saw Okinawan sugar flow into areas where it could be purchased at a higher price. As a result, it became difficult to secure Okinawa brown sugar and so lower priced foreign brown sugar was introduced. At 2003 prices, Amami sugar was three times more expensive than Okinawan, and four times more than foreign imports. Kakeroma sugar though is pinned at the same price as Okinawan due to subsidies from Kagoshima Prefectural Sugar Promotion Council, although the amount used in shōchū making is negligible.

Some manufacturers are beginning to use Amami sugar again, eg. Asahi Shuzō Distillery on Kikai, Kaiun Shuzō in Uken, and Tomita Shuzō in Naze. However this is conducted at each individual company level alone. So, in terms of total turnout, the amount of local raw material is still limited. What is interesting to note is that Tomita Sugar Company is a member of the Arimura Group. Amami-Ōshima Shuzō in Tatsugo is also a member of this group. So, Amami-Ōshima Shuzō began to consign Tomita Sugar Company to produce brown sugar from 2005.

With its ¥10 billion turnover producing brown sugar shōchū has become the main industry in the Amami Islands.

The constituent ratio of primary industry in Amami and Kagoshima Prefecture is almost the same, but the ratio of the secondary industry of Amami is lower than that of the prefecture or Japan. What is noteworthy is that the ratio of both the primary and the secondary industries dropped greatly between 1975 and 2002. In particular, the ratio of manufacturing industries dropped from 16.5% to 4.2%. This is due to a drop in the Ōshima Tsumugi silk industry and sugar industry. When we look at the constituent ratio, the ratio of agriculture, the primary and secondary industries have decreased. On the other hand, the tertiary industries, especially the service industry, has shown a substantial increase from 9.2% to 20.4%.

In the past 20 years Ōshima Tsumugi silk and sugar, which used to be the islands' major products, have been replaced by brown sugar shōchū. In 1980, Ōshima Tsumugi silk exceeded sugar production with a turnover of ¥28.6 billion. This was the peak time for Ōshima Tsumugi silk. Production of sugar was ¥18.6 billion and sugar cane was ¥13 billion, whereas brown sugar shōchū made only ¥1.7 billion. However, figures for 2003 show that production of Ōshima Tsumugi silk dropped to ¥2.6 billion. Sugar cane, vegetables, and brown sugar shōchū had a similar turnover of around ¥8 billion, followed by flowers and beef cattle. Sugar turnover also dropped drastically.

Even though brown sugar shōchū has become the main industry, the reality is that it has still not reached the heights that Ōshima Tsumugi silk did in its hey-day. The volume of silk production remained almost stable from the 1970s to 1985 decreasing only slightly, hitting its peak in 1980. In 1980, Ōshima Tsumugi silk had an overwhelmingly large turnout. However, in 1983, brown sugar shōchū exceeded Ōshima Tsumugi silk greatly.

There are many ways to compare Ōshima Tsumugi silk and brown sugar shōchū, but what is worth mentioning is employment figures. As both industries have different employment systems and wage standards, it may not be appropriate to make simple comparisons. Ōshima Tsumugi silk industry has more than 4,000 employees today, whereas brown sugar shōchū has an estimated 250 employees. During the peak period of the Ōshima Tsumugi silk industry, the number of employees was 18,000. Currently, despite the huge increases in the brown sugar shōchū industry, there has not been a direct impact on job opportunities. This is because the factories rely mostly on large machinery rather than manual labour.

Another important point is the inter-industrial relationship. In the past there was an inter-industrial relationship in the brown sugar shōchū production because sugar cane was grown on the islands, the brown sugar was then made there, and the final link being the brown sugar shōchū. Unfortunately these links have already been lost today. Today sugar cane is shipped to large scale factories to be processed as molasses sugar, and then transported outside Kagoshima Prefecture, whilst the raw materials for brown sugar shōchū are supplied from Okinawa or foreign countries. After production, very little is consumed on the island, but shipped outside of Kagoshima Prefecture. So, the inter-industrial relationship is thoroughly disconnected here. Even if there is a big boom in the sales of brown sugar shōchū, there is no benefit to the islands, or to the sugar companies. If this relationship is revived again, and if the brown sugar shōchū industry expands, both sugar cane and sugar industries will grow as well.

In Uken on Amami-Ōshima they are trying to rekindle the traditional relationship between the industries. Local sugar cane is turned into brown sugar at the local factory with which Kaiun Distillery then produces its shōchū. The inter-industrial relationship within the community has been reborn, providing benefits to the area such as employment for about 40 to 50 local people. If this kind of activity becomes prevalent, it will provide huge benefits for all of the islands' communities.

According to the media, it has been reported that the brown sugar shōchū industry has become an industry for external currency acquisition. What is meant here is the selling of goods outside of the islands through external trade, gaining capital from outside, and then purchasing the commodities needed on the island. So, this industry is established as an industry to purchase such goods. As previously mentioned, the shipment value is 10 billion yen, which is fairly large. However, it is estimated that about 60% is shipped outside of the island, which means that the total external currency here is estimated to be about 6 billion yen. In addition the brown sugar shōchū industry depends on its raw material, almost 100% of which comes from outside the islands. Equipment and machinery is also brought in from outside the islands. Only water is supplied locally. So even though they earn 6 billion yen, most of that money must be spent outside of the islands. Then how much money actually comes into the island locally? This is a big question. Despite all of the talk about the external currency acquisition, it may not be so beneficial for the island.

Abandoned Cars

Doi Masanori

Doi Masanori is a professor in Kagoshima University Law School. He specialises in administrative law, environment law and local government law.

This article is about the problem of abandoned cars in the islands but it was brought about by events which took place on Teshima, which is a small depopulated island of just 1400 people in the Seto Inland Sea administered by Kagawa Prefecture. Half a million tonnes of cars and other industrial waste were dumped illegally on the island and it took 25 years to solve the problem with the arbitration of the Environmental Dispute Coordination Commission. Today, Teshima is actively working towards the regeneration of its community.

In this age of sustainable societies, waste disposal and in particular recycling has become a serious problem for Kagoshima Prefecture with its many islands. These problems include the recycling of household electric appliances, the dumping of old cars, and the illegal disposal, management and incineration of industrial waste.



Old cars are often abandoned up in the hills.

In the past, the authorities relied on the morals of the citizens not to abandon their old cars, however this did not solve the problem and so a legal solution was necessary. This came in the form of the Abandoned Vehicle Prevention Bye-Law, which was enacted in January 2002 by 18 municipalities in Kagoshima Prefecture, 15 of them on islands. From then, the question of abandoned vehicles has become a critical issue for both the authorities and the islanders. The following is a review of the measures taken by islands to prevent cars from being dumped.

Firstly, the government announced its automobile recycling law on 12th July 2002 to be implemented from January 2003 to regulate the recycling of used cars which included the collection of a recycling fee from the owners. Any surplus from the money collected is then used to deal with illegally dumped cars and financial assistance for the islands amongst other things.

The first municipality in Kagoshima Prefecture to enact a bye-law to prevent the dumping of old cars was the island of Shimokoshiki in 1996. This has been followed by 17 other municipalities, which all realised the necessity for a legal solution to the problem. The introduction of the law had a huge effect on Shimokoshiki, where there are no longer any abandoned cars. Principally the bye-law regulates measures for public spaces (the prohibition, cautioning, removal and impoundment of abandoned vehicles), the assessment committee, the disposal of abandoned cars (including the collection of disposal fees) and also criminal punishment.

Finally, the problem of abandoned cars is also linked to the depopulation of the islands. On Teshima, it took a vast amount of money and 25 years to solve the problem and remove all of the industrial waste. Recently the illegal dumping of industrial waste has also become a problem in the north of Japan on the prefectural border of Aomori and Iwate.

Local resources and the business world in Amami: Competition and local resources

Hagino Makoto

Hagino Makoto is a professor in the Faculty of Law, Economics and Humanities. He specialises in management information.

Interviews with business people in the Amami Islands were carried out on the assumption that business management in islands would be different to that on the mainland.

Small businesses on the islands are different to those on the mainland because they start at a disadvantage, are forced to use local resources and are unlikely ever to be able to compete with their rivals on the mainland.

Unlike many of the businesses in Amami islands which rely on local resources such as guava and sugar-cane, some firms have tried to incorporate outside products. An example of this is ostrich-breeding. There are breeders in other parts of Kagoshima Prefecture, but the market is nationwide, even global. This is why there are doubts as to whether this kind of enterprise can succeed in the islands, despite ease with which ostriches can be breed.

This interview by Hagino Makoto, professor of economics at Kagoshima University, with ostrich breeder, Izumi Tetsuhito, on Tokunoshima looks at the reasons behind the decision to start this kind of business.

Ostriches

Hagino: Where did you get the name Izumi Public Services from?

Izumi: Our main line of work is funeral services.

Hagino: Really?

Izumi: Yes, that's right. I am also a funeral director.

Hagino: So, how did you get into ostrich breeding?

Izumi: About ten years ago my father went to a talk by Professor Itogawa at the Nansei Tōgyō sugar company about starting businesses keeping ostriches or

alligators. Not a lot came of what was said, but in 1997 my father suddenly decided he was going to start an ostrich farm.

Hagino: What is the attraction?

Izumi: At the time I was doing my training at Taniyama Funeral Home and came back to Tokunoshima in 1996. The following year the ostrich idea came about. Actually I had spent a year in America.

Hagino: That's how you can work with the Australians?

Izumi: Actually, I am not that good, but it helps.

Hagino: Where did you get your first chicks from?

Izumi: Australia. They actually helped us bring the chicks here to Tokunoshima.

Hagino: They came all the way to Tokunoshima?

Izumi: Yes. In the beginning we didn't know a thing about ostriches. I'd only ever seen them at the zoo.

Hagino: So they gave you some advice about how to keep them. It must have cost you a lot.

Izumi: Each chick was about ¥100,000. We bought 25. It also cost quite a lot to stay in Australia.

Hagino: How did you transport them here?

Izumi: When they are chicks they are at their most vulnerable. Which is why the Australian breeder came with us. At Kansai Airport we had to go through quarantine formalities. At the time the chicks were just 2 or 3 days old. They had to stay in dog kennels for one night, but because it was so cold, it was December, we left them in their crate. Unfortunately one of them was crushed to death, which was a big shock.

Hagino: What did you feed them on?

Izumi: When they are new-born chicks they have all of the nutrients they need stored in their bodies, so when they reach 4 or 5 days old they start feeding.

Hagino: So from there you brought the chicks to Tokunoshima?

Izumi: Yes, but even though Tokunoshima is warm in December, Australia is in the middle of its summer, so we built a heated shed for them.

Hagino: Are they really that sensitive to the cold?

Izumi: They are when they are chicks. Ostriches originally come from Africa. There are different breeds such as the African Black and Zambian Black.

Our ostriches are a mix of four different breeds. Also all of them have different parents.

Izumi Public Services

Hagino: Was it your father who started the funeral business?

Izumi: Yes, as well as a stone dealership.

Hagino: Is that gravestones?

Izumi: Yes, it was the first one on Tokunoshima.

Hagino: When was that?

Izumi: In the mid 1970s.

Hagino: What are funerals in Tokunoshima like?

Izumi: About 90% of them are home funerals. Most people like to see their loved ones off from home.

Hagino: Doesn't the agricultural co-operative organise funerals?

Izumi: Yes, they have been for the last 5 years. There are also other companies now, too. But of course there are a lot of farmers on the island.

Ostrich products

Hagino: Are you breeding the ostriches for their skins?

Izumi: Not really, we are breeding more for their meat than their skins. We make jerky here. Also when BSE was happening in Europe, ostrich meat became quite popular. In Africa they even have ostrich ranches of up to 50,000 birds for meat production.

Hagino: So most of your meat is processed?

Izumi: No, we do ship it to different places. Even yesterday, a restaurateur from Kagoshima came to try some of our meat. It's a shame you missed it.

Hagino: I've never had ostrich. Is it like turkey?

Izumi: Not at all. There is no fat and it looks like a red meat.

Hagino: More like game-birds then?

Izumi: Well, it's red meat and it doesn't smell.

Hagino: It's hard to imagine.

Izumi: It tastes good raw. The other day we had it as sashimi.

Hagino: Is it a fine meat?

Izumi: I suppose you could say that it is like tuna. When the marathon runner, Takahashi Naoko came to Tokunoshima, she had it with wasabi and soy sauce.

Hagino: I will have to try some.



The Izumi brothers who keep the ostrich farm.

Production capacity

Hagino: How many birds can you ship a year?

Izumi: We are hoping to be able to ship 100 a year. But we only finished getting all of our facilities ready last year.

Hagino: Do you mean the paddocks?

Izumi: No, the waste disposal unit.

Hagino: So you're ready to start shipping them?

Izumi: Yes, the chicks will be hatched in March this year, so from then we will be able to start selling the ostriches. I think it will all be ok.

Hagino: Are you going to ship outside Kagoshima Prefecture?

Izumi: One of our business acquaintances is now working on establishing a client list.

Hagino: Will you not be selling the skins?

Izumi: Actually, there is only one company in Japan that can tan the leather, so one of my brother's friends in Korea is looking for a tannery which we can work with. The Koreans are much better at tanning than the Japanese. For example if you have a leather jacket order-made it will cost you about ¥20,000.

Hagino: I see.

Izumi: Hopefully we can make Tokunoshima ostrich leather a recognised brand in Japan. At the moment we have all the skins in storage waiting to be used.

Hagino: They're too expensive to get rid of.

Izumi: We will be using our own original designs. We are also looking into using the claws for inkans.

Hagino: It's very similar to water buffalo horn. You could use lasers to engrave them.

Izumi: What do you think?

Hagino: I don't know very much about that sort of thing. Anyway, I heard from the Minami Nihon newspaper reporters here on the island that an "ostrich revolution" is going to take place. What do you know about that?

Izumi: Everyone on the island is watching to see how things turn out. It was the same when we opened the funeral parlour and then the stone dealership. If we are successful with the ostrich breeding then other people might give it a go. Actually, so far we haven't really publicised the fact that we are breeding them. If people are interested in trying it, then they will come and talk to us. We may even then be able to make a cooperative.

Hagino: I think an agricultural corporation would be much better than a cooperative.

Izumi: The chamber of commerce said the same thing. But I have to ask, will ostrich be counted as an agricultural product?

Hagino: If you are thinking about getting agricultural subsidies, they maybe it isn't such a good idea. I understand that when you are starting out or trying to expand business that the subsidies can be useful, but they can also be very constraining. For instance, if you want to renovate your facilities, it is very difficult to do that, if the original ones were put up with subsidies. It's probably best not to use them.

Izumi: A friend of mine raising cattle had that problem.

Difficulties with breeding ostriches

Hagino: Do ostriches need a warm climate to be bred in?

Izumi: Not at all. They are bred even in Hokkaidō.

Hagino: Really?

Izumi: Yes, they are up there running around in the snow. However in cooler climates fattening them up is a problem. They tend not to grow so well. The feathers are also rougher.

Hagino: What do you do with the feathers?

Izumi: Nothing at the moment. If we are going to do anything with the feathers, then we will have to change our paddocks by having them grassed. And even then, you can only use some of the inner down of the bird.

Hagino: That wouldn't really be worth it, would it?

Izumi: Exactly.

Hagino: Are your ostriches breeding well?

Izumi: We use an incubator to hatch the eggs, which is the most difficult part of our job. When the chicks hatch, they are connected by an umbilical cord allowing bacteria to get into them which resulted in many dying to begin with. We now use disinfectant. We have also had problems with them getting squashed by other chicks in the incubator and getting sprains. Feeding them the right amount is also complicated.

Hagino: What do they eat?

Izumi: A special feed made for ostriches.

Hagino: Do you import it from Australia?

Izumi: Yes. Ostriches are farmed on the Gold Coast and we get our feed from there. Sometimes we have to force-feed the chicks using hoses for up to a month. They do this in Australia, too.

Hagino: What is the ostrich temperament like?

Izumi: They are rough. The two-month old chicks will chase our dog around.

Hagino: That's a bit scary.

Izumi: Ostriches legs bend the opposite way to humans, so they can give a powerful front kick. It can be quite dangerous.

Future development

Hagino: How do you want your business to develop?

Izumi: Of course, primarily to sell the meat, and then also the leather as a Tokunoshima product.

Hagino: What is your father involved in at the moment?

Izumi: He's looking into growing cassava. He planted some at the end of last year.

Hagino: I've heard that cassava doesn't give much of a profit.

Izumi: That's right. We all helped with the planting but it was hard work. But my brother has decided he will take it over.

Hagino: How many brothers and sisters do you have?

Izumi: A younger brother and sister. My brother studied in Canada and my sister in China.

Hagino: You're an interesting family.

Izumi: My brother has lots of friends in Korea and Taiwan and they have proved to be good business contacts. So in that way each of us has our own uses.

Hagino: You have a very resourceful father.

Izumi: Sometime in the future we would like to start a farm in China. The labour costs are very attractive.

Hagino: You will probably be the first to do that. By the way, there is an emu farm on Okinoerabu, do you have any rivalry with them?

Izumi: When I went to the farm in Australia, I asked them the same question. They simply answered, can you tell us what emus are famous for? So we knew that ostriches would be a good investment.

Hagino: I see.

Increasing the added value

Izumi: We feed the chicks on turmeric and aloe vera, which is working very well.

Hagino: That sounds good. You can't do that on the Kagoshima mainland. It's a good way of trying to make your product unique.

Izumi: We are already selling the meat to a restaurant, Rheinbach, in Kagoshima and it is going down very well. We were told initially that we could maybe get ¥2000 a kilo, but I didn't accept that. As Tokunoshima-grown filet, I am hoping for ¥4000 a kilo. At present we sell for ¥3000. We hope that our

biggest market will be restaurants.

Hagino: That sounds very good indeed. You have to make your product as unique as possible.

Izumi: What about turmeric ostrich or Tokunoshima ostrich?

Hagino: No, it should be Izumi ostrich using your name. That makes it truly unique. Are you thinking about having your brand-name registered? The local products bureau can help you.

Izumi: Actually, we haven't thought that far ahead yet.

Hagino: In Kagoshima now they are trying to develop Satsuma-French cuisine. I hope that they will think about using ostrich meat. You could even send them your aloe vera.

Izumi: Is it that different?

Hagino: Yes, the fragrance is very different.

Afterword

It is still difficult to cast aside doubts about whether turning ostrich into a local product will be successful or not. However it is a good business chance based on something which is not necessarily dependent on the island.

The Izumis seem to be at the forefront in all their businesses and are mindful of the international economic climate, which is a good strategy. However they will definitely face competition in the future, so their success then will depend on how strong they can make their brand value. Furthermore, it will be the local resources on Tokunoshima that will help improve the strength of the brand. So even though the ostriches have come from outside, the turmeric and aloe vera are from the island and they can be used to help sell the product. Indeed this is a very thought-provoking example of how local resources can be used.

In addition, the international outlook of the Izumi family is fantastic. You see many examples of this in the islands, where the islanders see little difference in Kagoshima, Tokyo or overseas, which is truly what this project is all about.

Island Rulers and the High Seas

A comparative archaeological and historical perspective

Nitta Eiji

Nitta Eiji is a professor in the Faculty of Law, Economics and Humanities. He specialises in south-east Asian archaeology.

How did island royalty and the kingdoms they ruled come about? By comparing the dynasty-building peoples of South-east Asia and the sea-faring tribes that had no royalty, we can begin to understand how the ruling families of Amami and Okinawa started to take shape.

Shell trade in Okinawa and Amami

From 300BC to 300AD in Okinawa, trade in shells which were used in bracelets flourished between Okinawa and the Kyūshū mainland. In Okinawa which was the major source a systemized response developed to the growing demands for the water snail shells that were most popular in northern Kyūshū. This involved the shells being preprocessed and then shipped to the trading posts as semi-finished goods. A network



In ancient times coral was used as jewelry in the Amami Islands.

for collection and distribution was established in Okinawa, which was then used to export the goods from Amami to the mainland and also for transporting shells in the opposite direction. However, those communities which had become distribution points and their leaders began to grow in power. And as these leaders' authority was strengthened, others merely eroded. Many of these powerful communities were located on the plains of southern Okinawa mainland and both their trade and populations flourished. It was in these communities that the first rulers emerged.

If we contrast Okinawa and Amami in this period, Amami was populated with seafaring people involved in intermediate trade, who were nowhere close to establishing a ruling system, whereas Okinawa on the other hand with its trading system and larger hinterland was well on the way to forming its royal power due to the levels its tribal society and chieftainships had reached. For the establishment of regal power both internal factors and external factors such as its long distance trade are necessary.



The drowned valleys along the south coast of Amami-Ōshima provided excellent natural harbours.

Maritime kingdoms and maritime peoples

Brunei was the first kingdom to be established in the south-east Asian area. It flourished as an intermediate trading post for spices for ships from China. It is documented in Zhao Rushi's Zhufanzhi (Survey of Foreigners) that it had over 10,000

inhabitants. The sultanate was formed in 1511 when Muslim traders, escaping the Portuguese conquest of the Sultanate of Melaka, converted the people to Islam.

What brought this about was a strengthening of the area's dominance as a centre for intermediate commerce as well as the legitimizing of the control of Islam. Small kingdoms, such as Ternate and Tidore, had already begun to appear in the spice islands, the Moluccas, from the 16th century. Indeed the kingdoms were born out of the tribal societies, yet it was the cloves and nutmeg that were being exported throughout the world that established them. The situation changed with the arrival of the Europeans in the 16th century. Before that trading stations were dispersed and so no one central ruling power emerged. However from the 16th century it became necessary to have one centralized port to deal with the vast amounts of cargo. When this happened, the other smaller ports became less important and hence the rulers of the larger port gained greater economical and political dominance. In order to maintain this trading system, internal control was strengthened and those who were against the system were excluded. This is what caused the change from tribal society to kingdom.

Throughout south-east Asia sea-faring peoples lived outside the kingdoms but worked trading goods between the ports. These people were under the control of the local rulers, but they also carried out their own business.

Just as there were many island kingdoms that grew in south-east Asia based on their roles as intermediate trading stations for internationally desirable commodities, there were also the sea faring peoples with their command of the sea who acted as intermediaries. A similar situation can be found in Okinawa, which succeeded in integrating and controlling the many trading routes, and then prospering as a trading nation and kingdom, and Amami which was unable to bring together its multiple trading channels.

The refinement of *shimauta*

Nishimoto Hisaaki

Born in Kagoshima, Nishimoto Hisaaki was a research assistant for the Kagoshima University Island Development Grand Design Project. He is currently in his final year of his PhD course specialising in the sociology of music.

The Refinement of Shimauta

It was the books published by Amami writers from the 1920s to the 1940s that has given the general image of shimauta (lit. island song) in Amami. Their plaintive nature was as a direct result of the oppressive rule by Satsuma (now Kagoshima Prefecture). However following the reversal of the Amami islands to Japanese sovereignty in 1953, Amami Islanders living in Osaka or Tokyo were subjected to the same kind of discrimination as the Zainichi Koreans.

Today the continuing success in the pop world of Hajime Chitose and Amami singers nationwide winning the top prizes in folk song competitions over the last 30 years have been the turning point for Amami Islanders to positively reaffirm their identity through their shimauta. Shimauta festivals are flourishing and Amami musicians are continuing to break through.

I wanted to investigate what musical environment was behind this change in shimauta.



Good shimauta singers soon become favourites amongst the island people.

From oral tradition to art form

As is well known, in Amami the *shima* of *shimauta* means village (in standard Japanese, *shima* means island). In Amami the dialect differs slightly from village to village and if the intonation is different, the same song melody will change. According to shimauta singer Tsuboyama Yutaka, the shimauta are not music but an oral tradition which is why improvisation is their soul. This is why their change was brought about by the restoration of Amami to Japanese power.

When NHK, the national broadcaster, started broadcasting TV and radio in Naze in the 1960s, entertainment in the islands started to change dramatically. Participatory amusement such as shimauta games where a group of people would take turns in singing was replaced with passive entertainment. The social cost of opening the island up to the outside world was that local culture started to be lost. In 1972 the first Shimauta Contest covering all of the Amami Islands was held and the transition from oral tradition to performing art was well under way.

From 1975, shimauta competitions became a way of promoting the spread of the culture to a wider audience, but interesting to note is that the positive nature of the reversal to Japanese sovereignty went hand in hand with the negative effect of the loss of local culture. However for young people shimauta has become a means of preserving the local dialect, which remains to this day. Shimauta competitions then joined up with national folk song competitions on the mainland and provided shimauta with a quantum leap.



Young people are brought up singing shimauta.

The shadow of refinement

The world of shimauta is currently very much in the limelight with more and more competitions and concerts in large metropolitan areas, however what was once an oral tradition talking about everyday life is now being refined to fixed aesthetic standards. To get a good score in a competition, it's no longer the case of everyday tales but slow tempos, more plaintive phrasing and weaker improvisation.

It is true that since Hajime Chitose became famous more children are taking up the shamisen. Yet the traditional style has changed for example by the shimauta schools making sheet music for the shimauta as well as the hitherto unknown paying for lessons and emergence of different schools of shimauta.



Shimauta used to be sung at home rather than on stage and many families today still own sanshin.

As traditional culture is being redefined, the world of shimauta and the lifestyle that surrounds it is changing. The flexibility of the improvisation that the local culture had cultivated, is now embracing collaborations with western music. And that these changes are taking place are a sign that the tradition of shimauta is very much alive. However what has changed most is that in competitions what is deemed orthodox and the environment from which the songs are emerging.

Impressions on Okinoerabu Research

Sakida Mitsunobu

Sakida Mitsunobu was born in Wadamari on Okinoerabu. He is currently the curator of the Wadamari History and Folklore Museum and the chairman of the Okinoerabu Local History Society. He has written several books on the folklore and history of the island.

Introduction

As a target for folklore and historical research, Okinoerabu is a somewhat mysterious island. Firstly, most of the annual festivals that should have been passed on to future generations have ceased to exist. The gods that used to be worshipped by village communities as a whole have been forgotten. Secondly, there are no historical documents. The reason for this is not clear, but it could be the annual pounding the island gets during the typhoon season. Next, the local arts were involuntarily developed under policies from the ruling mainland. As a means of rewarding officials, cultural artifacts were distributed out amongst the villages, and it is those dances that have survived until today. Finally, there is the combined spirit amongst the islands for both compliance and enterprise. So even today you can still see a certain submission to the authorities, but on the other hand the island has introduced new policies to energise its agriculture and floriculture.



Traditional dances in brightly-coloured costumes.

Research on Okinoerabu

Even under these anomalous conditions, research into the local community with the collection of archives and recordings has taken place since the late 1800s. Accordingly the accumulation of materials proceeded with a compilation of chronologically arranged historical archives and an anthology of folk tales were published before the war and a cultural magazine and dialect dictionary in the post-war years. In recent years, comparative research with other areas has been undertaken by folklorists from the island and elsewhere and the meanings of many local events have started to become unraveled. What is more, recently cultural anthropologists have started looking at the island's multiplicity as a border region, and the islanders' identity has also come under the scrutiny of the academic world.



Okinoerabu is a flat island without high mountains.

Map of Folk Customs and History

Since the late 1960s I have been collecting documents and narrations about the islands customs and history and after analyzing the data I have begun to perceive their structure. Here are two examples.

Firstly, we have a map showing the distribution of folk tales. Even though the island is less than 100 sq. km., it is easy to see the local characteristics in folk stories and their relation to the different areas that have controlled Okinoerabu. Stories about the local

ruling families in mediaeval times are concentrated in the western part of the island facing the Ryūkyū Islands; in the central part tales are told about the lords who ruled the island under the Ryūkyū Hokuzan Kingdom around the 15th century; finally, the eastern part of the island where the ruling Satsuma domain had its garrison from the late 17th century, and anecdotes relating to it and Saigo Takamori, led to the construction of Nanshū Shrine which is still central to the beliefs of the local community today. The distribution of folk tales into three clear areas symbolically shows the historical transitions of the island.



Parties are held in front of graves on the 33rd anniversary of a relative's death.

The second is a diagram showing a comparison between the Amami Islands and the ways in which they have adopted outside culture. It concentrates on the stepmother invocations that came from the Ryūkyūs and how they took hold on each island. By contrasting these traditions, the characteristics of each island emerge.

I also examined the influence that the emergency granaries that the exiled Saigo Takamori advised the islanders to build in case of famine. Through the mutual stockpiling system of the granaries, the islanders learnt about modern organisations and how to manage them. This kind of organisation was not seen on other islands in the late 1800s.

I also examined shamanism through the ikabiki shimauta that are an underlying part of island society. These songs originate in the dead singing with a shaman acting as a medium and indicate their origin in animistic society.



Spring waters on Okinoerabu are the basis for daily life.

For the future

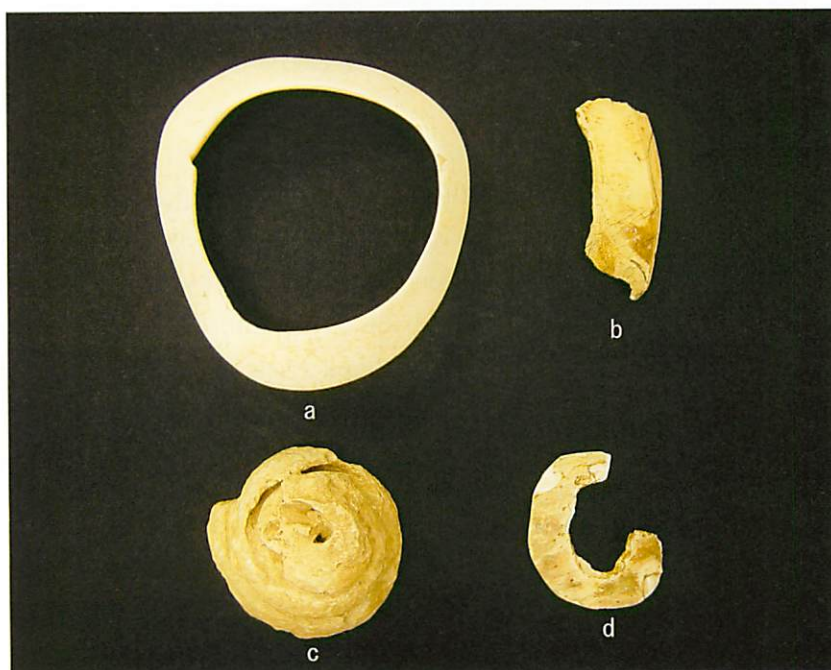
Research about the island has left the times when it concentrated mainly on folklore and history. From now on I hope that it will move towards defining the islanders' cultural identity, tackling problems confronting the community, as well as passing on research results to the local people. However we have to take care not to let this degenerate into a mere boasting about one's cultural assets. This is why I would like to see folklore and historical research develop so that the community as a whole learn more about its cultural anthropology and traditional culture as well as participate in folklore and historical research.

Recent studies in the trade of shells in Amami

Shinzato Takayuki

Shinzato Takayuki is a research assistant specialising in the archaeology of the southern islands of Japan in the Faculty of Law, Economics and Humanities as well as advisor to the Kagoshima University Museum.

The turban shell trade is the name given by Takanashi Osamu to the trade in large shells out of the Nansei Islands from ancient to medieval times. His evidence was i) the many archaeological sites in the Amami Islands, ii) judging from the pottery remains the sites are from the 7th century, iii) the unearthed turban shells were food waste, iv) there were vast amounts of turban shells, v) there were also vast amounts of shell fragments, vi) not many finished spoons made from the shells were found, vii) there are records from the 9th to early 14th centuries that mention turban shells, and viii) there are actual examples of mother-of-pearl inlay found at the Shōsōin Treasure



Shells from Amami were made into ornaments and jewelry and exported to mainland Japan.

Repository of Todai-ji Temple in Nara (8th century onwards) and also in the Golden Hall of Chūsonji Temple in Iwate (from the 12th century when the trade was at its height.) From the viewpoint of economic anthropology, the turban shell trade, which was controlled by the upper echelons of Ritsuryō society, brought about social change in the Amami Islands in the form of the hierachisation of the island societies which had been formed around tribal chieftains. Due to mainland policies towards the southern islands, the recognised borders of Amami fluctuated, even so the old potteries were said to have been established at Kamwiyaki on Tokunoshima due to their rich source of fuel. Thus Amami became able to do trade which was good for the Ryūkyū Kingdom, too.

On the other hand researcher in Okinawan history, Asato Susumu regards the Kamwiyaki pottery market area as virtually the same as the later Ryūkyū Kingdom market area. He outlines societies which have developed on the basis of trade such as the Okinawan Islands and its shell trade and social superiority in the Nansei Islands. Asato attempts to understand the creation of a kingdom as one step in the social development of the Okinawan Islands. This prompted scathing criticism from Takanashi as manipulation of history in trying to converge theories on the Ryūkyū Kingdom using reference to the archaeological remains of a shell factory in Ōhara on Kumejima reported by Asato, despite the fact the it is unclear whether the site actually exists. However we have to ask why there are no external archives documenting the creation of a kingdom in the Amami Islands despite the fact that, as stated by Takanashi, the Amami Islands had become a hierarchical society with flourishing trade within and beyond the archipelago and were importing external commodities.

On looking more closely at Takanashi's theory, we see that there is a chronological discrepancy since the shell trade was at its height, from the archaeological record, in the 7th century, whereas written archives show that use of shells peaked in the 12th century. There are also no existing archives that support mass production in the 7th century. It is possible that the presence of the shells could be explained as kitchen waste since cooked turban shells were found at an archaeological site in Matsunoto in Amami. The motive for the argument is that the shell trade was administered by the central government.

Looking at the distribution of the sites where large amounts of turban shells have been found in the Amami Islands, we can see that the majority are on the eastern coast of

Kasari with others in Naze. In Okinawa they were found on Kumejima. Evidence of processing the shells was also found unevenly distributed around the islands as above. However, in the following attributes as subsidiary materials of the analysis of the inequality between settlements at the time, analysis on whether the sites were actually involved in trade, as well as the difference in the amounts of ironware and old Chinese coins found at sites from the same period all need to be investigated as attributes. In addition, while both Takanashi and Asato recognise that the sites in the Amami Islands and on Kumejima are from the same period, they have not compared the similarities and differences of the sites in the social backgrounds that form the bases of their arguments. The reason for the distance between the locations of these areas is



Members of the public viewing an archaeological site on Tokunoshima.

left unanswered. In recent years, an intermediary point in the turban shell trade has been found at Shiroitobaru on the Satsuma Peninsula which has prompted more investigation into the trade. Recent discussion about the formation of early realms among Amami and Okinawa specialists can be perceived as opposing ideas on the ideologies on the Ryūkyū Kingdom and the establishment of nationhood in ancient and medieval Japan. It may not be the intention of the researchers, but as can be seen in today's society, questions of a territorial nature can be inflammatory.

From the archaeological evidence it can be seen that the Amami Islands played an important mediatory role in the shell trade from the 300BC to 700AD. If we take the Amami Islands, which Takanashi variably calls the border or frontier, as the crossroads for two relatively differing cultures, the key point concerning the islands is how their cultural autonomy as a border area should be perceived. This is where archaeological analysis of the culture must be used to reassess. Archives are always the records of the policymaker, yet referring to them; we just get a biased picture, because they only tell about a particular place at a certain time. Studies based on the administrative archives written by the policymakers of the time, such as in the Amami Islands in ancient times and Okinawa in the Middle Ages, clearly show a one-sided portrayal of regional and social aspects. In addition, even in the island areas, it is necessary to understand the process in the long run rather than just one short historical depiction because people have lived there continuously. Azato's and Takanashi's theories are not conflicting; they merely reflect the rich history of the Amami Islands. Studies on the turban shell trade have helped to fill out some of the grey areas of Amami Island history from the 6th to 10th centuries. In particular, Takanashi's research has exhibited the most importance. His confirmation of archival resources, his theories on nation-forming based on trade, and also his observations on the island area from an economic anthropological standpoint have added diversity to the historical analysis of the region. Archaeological activities in the Amami Islands are turning out new finds, which can only lead to revised historical interpretation and the construction of new models. And it is recent research that is fuelling this.

Attending classes in the Amami Access Centre The registration of Amami as a World Heritage Site

Takarabe Megumi

Takarabe Megumi is a post-graduate student at Kagoshima University's Amami Access Centre.

Since they are surrounded by steep mountains previously all the settlements on Amami-Ōshima were small village communities with their own traditional culture and dialect. However, these traditional societies have been disappearing, and Amami is becoming one big community. In recent years, campaigning with the support of Kagoshima University has started in order to have the Amami Islands registered as a World Natural Heritage Site.

Kagoshima University has also provided people in Amami with an option to further their education. The Amami Access Centre for the Division of Humanities and Social Sciences started in the community centre in Naze in April 2004. For the first two years six of us were enrolled in courses and this increased to seven this year, with three of us full time master's students.

The class sizes in the centre are almost always small. They are held either over the weekends or on every weekday evening. Since all of the students are of different age and career background, we can have a lot of active discussion. The teaching staff also delivers us stimulating lectures that are relevant to our circumstances and at the same high level that they work to on the university campus.

Now in their third year the centre is fully-equipped. And in the not too distant future we will be able to take part in university campus classes over a teleconferencing system. Next year sees the opening of another centre on Tokunoshima.

From now on, the whole university will work towards enhancing the educational functions of the centre as an ongoing, local based centre for further education. Being able to learn in a relaxed environment is one of its main characteristics.

However, there have been problems such as how to increase student numbers. Concerning the management of the centre, difficulties with enrolment procedures, enrolment qualifications, class size and lecturers' schedule has meant that you cannot



A symposium presentation about the access centre.

always enroll for the classes you want to. Students are also burdened with the fact that not all of their credits can be recognised and there are further compulsory courses that they can only take on campus. However steps have been taken to ameliorate the situation, as the number of courses offered has been increased and there is financial support for those who have to go to the mainland for classes. Even as the numbers of students attending national universities is peaking, we can expect to see the students promoting the centres far and wide, which is unusual if we look at other universities throughout the country.

The first class this year was Economic Policy on 29th April. The course has a broad spectrum but I was especially interested in the development of environmentally sustainable communities, in particular the registration of Amami Islands as a World Natural Heritage Site and Kagoshima University's supporting project. The project concept is to create an island cosmos society in Amami, and ultimately a new kind of sustainable island community where the environment and the economy can coexist. This community would be a new society encompassing Amami's ecosystem, economy and culture. If it succeeds both our environment and our convenient lifestyles will be

able to coexist, a hitherto unknown achievement.

Once Amami was returned to Japanese administration after the war, a number of major infrastructure projects (the Amashinhō special law for the development of Amami) to improve the roads, airports, ports, schools, communications and electric power were introduced. Even though the Amashinhō leant heavily on improving the convenience of the islanders' lifestyles, it also led to disturbance of the ecosystem due to red soil runoff amongst other things. The price of attaining a lifestyle of similar standard to the mainland was the large scale destruction of our forests and the pollution of our environment.

With the development also came the destruction of the traditional village societies, which began to suffer from depopulation, ageing and low birth-rates.

Kagoshima University's new project is aiming to change the current development pattern to a system where both the environment and the economy can prosper. This huge project hopes to replace the one-way economic system of the Amashinhō with a sustainable model. This will establish the viable use of its scarce resources, the restructuring of a recycling-orientated environmental economic system as well as create a lifestyle which will not disrupt the ecosystem through the use of the latest technologies.

Unfortunately local enthusiasm for the introduction of a sustainable society is lacking compared to Kagoshima University and the prefectural government. Voices of concern have been raised that there has been no active promotion from Amami city council or conservation groups and that the business community may go in the opposite direction and put pressure on any campaigns. Local people too are also lacking in care and knowledge of their environment.

Bearing all of this in mind I had thought that registration of the islands as a heritage site would not happen, until I took the Economic Policy class, which changed my opinion a good deal.

Large-scale infrastructure improvements have been underway since the war in Amami, destroying our forests and polluting the beautiful coral seas that surround the island. In exchange for an easy life, we have lost many of our treasures. Which is why I think that it will be possible to halt further destruction of our natural environment and at the same time create a social system that maintain the quality of life.

Kagoshima University's island cosmos project is about the revitalization of a stable

Amami society where there is a fine balance of nature, economy and culture. The authorities, businesses, environmental groups and local researchers are supporting the university and are taking a lead in the community. Yet the biggest boost to the project would be the listing of the Amami islands as a World Natural Heritage Site, which would give the islands broad recognition on the islands and on the mainland too and help develop the tourism industry.

Environmental protection and the role of local government The Amami black rabbit lawsuit

Uneme Hirofumi

Uneme Hirofumi is a professor in Kagoshima University Law School. He specialises in civil law.

When a company starts developing private property, is it possible for that development to be halted in order to protect the environment? Even if the local environment is destroyed, companies are free to conduct business. One company wanted to turn the woodland it owned into a golf course. According to law, to develop woodlands the prefectural governor's permission is needed. This is because reckless development of woodland areas can lead to landslides, flooding and destruction of water sources. On receiving the application, the governor granted the company permission. In response, a law suit was filed to annul the permission because the area intended for the golf course would threaten the habitat of the Amami black rabbit, a species endemic to Amami-Ōshima.



The Amami black rabbit can only be found on Amami-Ōshima.

Some people of course would be financially supported by the development of the golf course. It would also not directly affect the lives, health or environment of the local people. However, the survival of wild animals would be threatened. When an individual has their rights or profits violated then they can sue. However what became the sticking point of this lawsuit was whether an individual can represent the rights of wild animals, when that individual's rights have not been directly violated.

On 22nd January 2001 the Kagoshima District Court ruled the plaintiffs were not eligible to represent the animals' interest. However this court case gave several signals concerning the problem of development and protecting the environment.

Existing laws including the forestry law do not actually enable the conservation of ecosystems and biodiversity. Protecting the environment has remained as a political objective. What is more, under the current legislation individuals or environmental groups cannot take the initiative themselves. The court ruling referred to Article 10 of the Forest Law which states that the interests of the individual to life, health etc. are protected. However, in this case, the woodland to be developed and the surrounding area did not constitute protection of the life or health of an individual.

According to the ruling, eligibility for being able to file a lawsuit to annul the governor's permission for the development on the basis that it would destroy the environment would depend on the physical relationship of the plaintiffs' homes and the proposed golf course. Unfortunately, not one of the plaintiffs lived near the woodland: the nearest one living some 16km from it. Therefore the court ruled based on this distance, since it seemed that none of the plaintiffs lived in an area where their lives or health would be affected should the golf course development cause any flooding etc.

To me in a case concerning the protection of the natural environment and ecosystem it seems very irrational to reach this kind of verdict rejecting eligibility to take legal action based on distance from the golf course.

As the plaintiffs in this case said, anyone could conduct a survey of the area, find traces of the black rabbit and then get the message across to the local people that their natural environment was in need of protection. However under existing law the will to protect the environment has to come from the local residents and not from outsiders. The lesson to be learnt from this court case was outsiders do not have the right to preach to local residents about the importance of the natural environment.



Amami's forests are home to many endemic species.

It is a given fact under our legal system that landowners can freely control the life or death of the animals and plants living on their land. Over a long period of time, in order to maintain balanced economic activity and the natural environment as a social common resource, the landowners' freedom only goes as far as not destroying or polluting that resource. Nobody has the right to give consent to destroy this resource. It is true that in Japan's legal system it goes without saying that nature such as a forest, animals or plants, regardless of whether it has a rarity value, cannot act as plaintiff or defendant in its own right. But now, there is a need for us to lay out the options available to those individuals and organisations who have a genuine interest in environmental conservation so that they can be eligible to file lawsuits on behalf of animals and plants. However at present those options are not clearly defined.

Just looking at the structure of civil court cases, they take the shape of local people representing environmental conservation against the authorities that give permission for development. But if nature can be seen as a communal resource for society, then the value of environmental groups and the authorities working together can be more greatly emphasized. Also if authorities don't take firm control of privately-owned companies which assume communal resources to be their private property, then it will be difficult to actually draw up an effective environmental policy.

