## [Paper]

# Early Human Cultural and Communal Diversity in the Ryukyu Islands

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#### **Keywords**

Ryukyu Islands, archaeology, chronology, cultural diversity, cultural uniqueness

#### Introduction

Social resilience or community resilience is mainly used as a buzzword to deal with expectations of crisis, such as the declining availability of natural resources and creeping environmental changes, including climate change or disasters (see Wisner and Kelman 2015). That resilience is expressed in various ways, depending on the unit and nature of each human community, and its diversity can be based on the diversity of the communities themselves. Regarding community diversity, island regions that consist of multiple islands are known for the multifarious cultures and communities in smaller regions or island units. The Ryukyu Islands in the southwestern Japan Archipelago (fig. 1) are also an island region where diversified cultures and communities have developed.

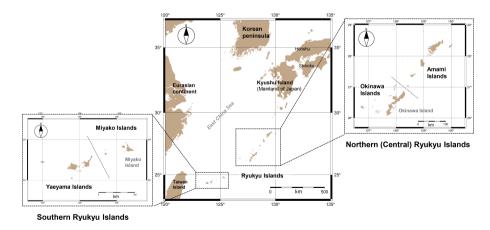


FIGURE 1. Geographical location of the Ryukyu Islands.

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Although the Ryukyu Islands are part of Japan, their history and culture are different from that of mainland Japan north of Kyushu Island. For example, the prehistoric period lasted longer than on mainland Japan north of Kyushu (fig. 2). This specific historical background makes the culture and community of the Ryukyu Islands unique. For instance, the spoken languages of modern Ryukyuan people are distinctive enough to be classified separately from the other Japanese languages (fig. 3) and show a high degree of linguistic diversification within the region after branching off from the ancestral Ryukyuan-Japanese language (Heinrich, Miyara, and Shimoji 2015; Karimata 2015). Genetic research also revealed that Ryukyuan people acquired distinctive characteristics and regional diversity after branching out from ancestral mainland Japanese (Sato et al. 2014). These data show that the Ryukyu Islands have a human society and community with a different history, culture, and genetic character from that of mainland Japan, and that these are further diversified within the region. From the perspective of community resilience, this diversity of communities is expected to affect the nature of resilience in the Ryukyu Islands.

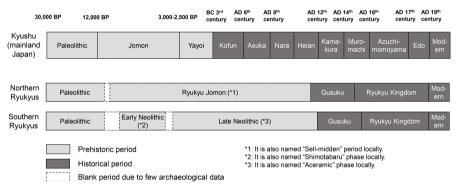


FIGURE 2. Chronological difference between Kyushu (mainland Japan) and the Northern and Southern Ryukyus.

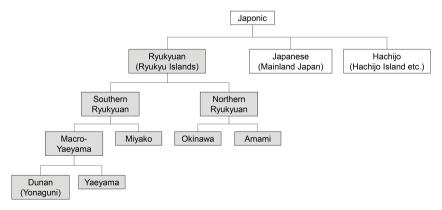


FIGURE 3. Language tree of Japanese (modified from Pellard 2015, 15).

When and how did the uniqueness and diversity of societies and communities in the Ryukyu Islands arise? What influenced their formation? In order to answer these questions, this paper will review the forms of community in this region from the beginning of human habitation, mainly based on archaeological data, and review the background of the acquisition of regional uniqueness and regional diversity of the communities. Community can be defined in various ways based on a variety of information and characteristics. Nakamaki (1998), for example, assumes that a general definition of community is difficult and gives the stipulation that community "presupposes some kind of 'shared' consciousness and requires some kind of substantive self-containment as a social group" (Author's translation from Nakamaki 1998, 12). Unlike communities in modern societies, it is extremely difficult to observe the consciousness of past community members from archaeological data. Therefore, strictly speaking, archaeological data cannot discuss such community. On the other hand, archaeology restores cultural populations that shared characteristics of material culture based on archaeological data and discusses the history of the populations and the interaction among them. This paper deals with these archaeologically definable populations as a kind of community and discusses the emergence of uniqueness and regional diversity of communities in the Ryukyu Islands.

### Geographical Characteristics of Ryukyu Islands

The Ryukyu Islands in the southwestern corner of the Japanese Archipelago consist of various smaller islands and are adjacent to southeastern Eurasia and the Taiwan Islands (fig. 1). In terms of administrative divisions of Japan, the islands south of Okinawa Islands were contained in Okinawa Prefecture; by contrast, the Amami Islands and islands north of them were included in Kagoshima Prefecture. Most of the islands have coasts with rich coral reef lagoons, which are blessed with abundant marine resources. The Ryukyu Islands can be geographically divided into the Northern Ryukyu Islands (also called the Central Ryukyu Islands) including the Amami and the Okinawa Islands, and the Southern Ryukyu Islands containing the Miyako and Yaeyama Islands (fig. 1). There are some differences in the environments, such as the distribution of flora and fauna, between the Northern and Southern Ryukyu Islands.

The Ryukyu Islands are known as a region where unique cultures developed, and human populations in this region show regional diversity according to such geographical divisions as the Northern and Southern Ryukyus. For instance, modern Ryukyuan languages show uniqueness compared to mainland Japanese; moreover, have different linguistic characteristics between the Northern and Southern Ryukyus (fig. 3), and genetic traits also suggest roughly the same tendencies (Sato et al. 2014). The languages and genetics indicate that Ryukyuan populations have been isolated from surrounding regions such as mainland Japan, the Eurasian Continent, Taiwan, and Southeast Asia for a relatively long time, and that regional diversity has developed even within the Ryukyu Archipelago. When did the uniqueness and regional diversity arise? Archaeological data show

that these occurred at an earlier stage of human chronology.

#### Prehistoric Period: The Beginning of Unique and Diverse Communities

Regarding the earliest human evidence in the Ryukyu Islands, some human fossils dated between 32,000-20,000 years ago were found on multiple islands (Nakagawa et al. 2010; Kaifu and Mizoguchi 2011). Although this period corresponds to the Paleolithic period in mainland Japan, such as Kyushu, Shikoku, or Honshu, some morphological and mtDNA analysis of human remains suggested that they may have originated from southwestern regions such as the Taiwan Islands or maritime Southeast Asia, unlike the inhabitants of mainland Japan (Kaifu et al. 2011; Shinoda and Adachi 2017). On the other hand, it is unlikely that they were the direct ancestors of modern Ryukyuans. Recent genomic analysis indicated that modern Ryukyuan people were derived from the ancestral population of mainland Japan; there are no traces of Paleolithic human populations that originated in the southern regions (Sato et al. 2014). Unfortunately, because of little archaeological evidence (especially artifacts), excluding human fossils from this period, characteristics of their culture and community are not clear, but some research concludes that ancient Ryukyuans during this period had a regional uniqueness characterized by maritime adaptation, based on the fact that there are no Paleolithic artifacts similar to those found in mainland Japan, Eurasia, or the Taiwan Islands, and on the existence of shell products (Fujita et al. 2016). These data suggest that the uniqueness of human populations and communities in the Ryukyu Islands might have emerged from the early stages of settlement.

It was not until archaeological evidence from 7,000–6,500 years ago in the Northern Ryukyu Islands and from 4,800 years ago in the Southern Ryukyu Islands increased that the regional characteristics of the populations from those eras could be confirmed. Artifacts such as pottery, stone tools, and shell/bone products were excavated from many sites, and several faunal remains show that the ancient lifestyle used mainly lagoon resources. Since little evidence indicates food production such as cultivation, it is accepted that during this period, food sources centered on food acquisition methods such as hunting, fishing, and gathering. This period lasted until approximately the eleventh century CE and is called the prehistoric or Neolithic period (and locally, with more specific period names) (see Okinawa Archaeological Society 2018) (fig. 2). This prehistoric period is unique compared to southeastern Eurasia, where the Neolithic period arose with agriculture from 10,000 years ago, to Taiwan Island, where the Neolithic culture spread from the continent 6,500 years ago, and to mainland Japan, where the Yayoi culture with cultivation began 3,000 to 2,500 years ago. According to the analysis of prehistoric artifacts, it was indicated that the prehistory of the Northern Ryukyus may have been related to or derived from the Jomon culture (12,000-3,000 years ago), which developed on southern Kyushu Island (Takamiya et al. 2016) (fig. 4), but the relationship was intermittent, and the Northern Ryukyus did not exhibit the same or extremely similar cultural characteristic as Kyushu. Therefore, it is thought that a region-specific culture and community existed in the Northern Ryukyus during this period. In addition, variations in material culture were also identified within this region: several comparative analyses of unearthed artifacts showed that the characteristics of pottery, such as surface patterns and forms, were common throughout the whole of the Northern Ryukyu Islands in certain phases but showed regional differences in other phases (Shinzato and Takamiya 2014). This indicates that even if the range of information and technological exchange on pottery production once covered a large area, it eventually differentiated into smaller regional units. This expansion and contraction of pottery culture shows that there was a network of people and information movement among the islands of the northern Ryukyu Islands, but it also shows that sometimes this network was severed, and each island or region became isolated. It can be assumed that the island environment, which is surrounded by the sea and not connected to land, caused this situation; on the other hand, regarding the intermittent cultural relations between the Northern Ryukyu Islands and Kyushu Island, it has also been suggested that an environment surrounded by lagoons and stable marine resources may not have provided strong motivation for islanders to seek contact with the outside regions (Kinoshita 2012).

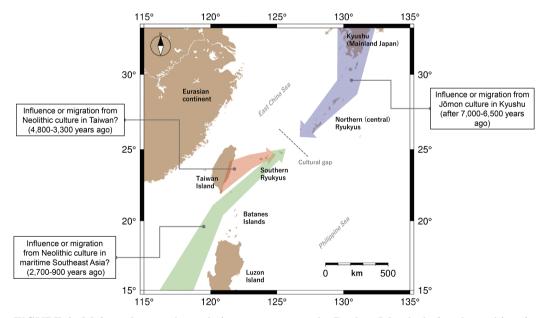


FIGURE 4. Major culture and population movement to the Ryukyu Islands during the prehistoric period as inferred from archaeological surveys. In contrast to the North Ryukyus, which is thought to have had cultural relations with Northern Kyushu and beyond, the Southern Ryukyus are estimated to be related mainly to Taiwan, from 4,800 to 3,300 years ago, and to Southeast Asian islands such as the Southern Philippines from 2,700 to 900 years ago.

In contrast, a different material culture developed in the Southern Ryukyu Islands

than in the Northern Ryukyus or Kyushu. In this region, the number of artifacts increased after 4,800 years ago. Prehistoric earthenware in particular had different characteristics from those of the Northern Ryukyus. Additionally, pottery utilization was lost from their culture until 2,800 years ago, a transition that is also clearly different form the Northern Rvukvus. These cultural differences indicate that the Northern and Southern Rvukvus were disconnected culturally. Most researchers theorize that the prehistoric Northern and Southern gap depends on a geographic factor. There is a three-hundred kilometer marine distance, named the Kerama Gap, between the two regions, and the islands are not visible to each other. The ancient Ryukyuans did not seem to be able to cross this marine gap (Kinoshita 2012). Furthermore, this cultural difference between the Northern and the Southern Ryukyu Islands has led to the hypothesis that the Southern Ryukyu Islands, unlike the Northern Ryukyu Islands, may have a cultural origin in Taiwan or the Philippines (Asato 1993; Summerhayes 2016) (fig. 4). However, this hypothesis is still being debated (see Yamagiwa 2017; Yamagiwa et al. 2019); recently, it has been suggested that the prehistoric Southern Ryukyuan population and communities may have been isolated during this period because there is little archaeological evidence of constant interaction with surrounding regions (Yamagiwa 2017; Aoyama et al. 2018). Some argue that the isolation of the Southern Ryukyu Islands was due to the region's economic unattractiveness to surrounding regions such as Taiwan (Chen 2002; Kinoshita 2012), but geography may also have played a role. A northward current, the Kuroshio, has been flowing between Taiwan and the Southern Ryukyu Islands since at least the Holocene (Gallagher et al. 2015), and this strong current carries most of the drift off Taiwan to the middle of the East China Sea instead of to the Ryukyu Islands (Kaifu et al. 2020). Prehistoric peoples did not have the technology or motivation to enable them to constantly move across such currents, which may have led to the regional uniqueness of the Southern Ryukyu communities. On the other hand, regional diversity in material culture also emerged within the Southern Ryukyu Islands. Differences in artifacts have been identified among various islands and regions, which may be the result of adaptation to the different environments of the various islands (Yamagiwa 2017).

# Historical Period: Continuing the Uniqueness and Diversity of the Ryukyuan Community

From around the eleventh century CE, there was an increase in artifacts in various parts of the Ryukyu Islands brought from surrounding regions, and a major social transition occurred. This stage is generally called the historical period because the Ryukyu Islands appeared in several historical records, and the phase until the fifteenth century is named the Gusuku period (Okinawa Archaeological Society 2018, 128–186). The Gusuku period is characterized by symbolic, large architecture with stone walls named gusuku (fig. 5A). The role of the gusuku is assumed to be that of the walls of a palace of a chiefdom or a kind of fort, suggesting the development of a hierarchical society (Oki-

nawa Archaeological Society 2018, 144-145). Additionally, some evidences of cultivated resources have been excavated, and it is thought that this was the beginning of a shift to a food production society. In this period, the commonality of material culture between the Northern and Southern Ryukyus rapidly increased. Some similar artifacts, remains, and buildings suggest that the same social transition occurred in the Northern Ryukyu Islands and the Southern Ryukyu Islands. As for the background of these social changes, the influence of the development of a maritime trade network with the Chinese dynasties and mainland Japan has been mainly postulated. During this period, the Japan-Sung trade (tenth-thirteenth centuries) developed, and evidence related to trade networks increased in the Ryukyu Islands. For example, a large-scale ruin in the Amami Islands, which is thought to be related to an administrative body for military and diplomatic affairs in Fukuoka, Kyushu, was discovered (Board of Education in Kikai-iima Town 2015). These archaeological data suggest that migration mainly from Kyushu brought about a major social transition of the Northern Ryukyu Islands (Seto 2018). As for the Southern Ryukyus, the analysis of pottery also suggests some migration from the Northern Ryukyus (Aoyama et al. 2018; Yamagiwa et al. 2018). As supported by language and genetic data, genomic analysis indicates that modern Ryukyuan people diverged from mainland Japanese populations, with Northern and Southern Ryukyuan populations estimated to have diverged between 2,600 and 130 years ago (Sato et al. 2014). In addition, comparative analysis of linguistic and archaeological data has proposed a model in which the ancestral Ryukyuan language arrived from mainland Japan during the Gusuku period and diffused throughout the Ryukyu Islands (Pellard 2015, 24–32). Therefore, it is suggested that during the Gusuku period, the Ryukyu Islands were greatly influenced by surrounding regions, and the Northern and Southern Ryukyu Islands were culturally and socially integrated (Okinawa Archaeological Society 2018, 32).

However, some archaeological data also show cultural uniqueness and the existence of regional cultural and communal variations within the Ryukyu Islands. The gusuku in the Northern Ryukyus developed into a unique architecture with no analogues in the surrounding regions; additionally, these showed regional variation within the Ryukyu Islands (Okinawa Archaeological Society 2018, 148–150). Furthermore, a stratified society developed into three political communities, the *Hokuzan*, *Chuzan*, and *Nanzan* on Okinawa Island, and each fought for supremacy. By contrast, in the Southern Ryukyus, large gusuku did not appear, and only settlements with stone walls were developed (fig. 5B). The Southern Ryukyus also showed regional differences in pottery transition between Miyako and Yaeyama Islands (fig. 6), which further indicates various communities within this region.

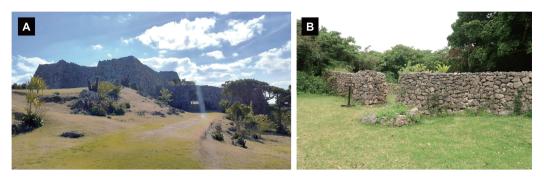


FIGURE 5. The symbolic architecture with stone walls from the Gusuku through Ryukyu Kingdom periods. (A) The Nakagusuku-jo ruin on Okinawa Island, Northern Ryukyus (reconstruction), was used as a chief's residence, fort, castle, etc. B: The Furusuto-baru site on Ishigaki Island, Southern Ryukyus (reconstruction), seems to have been used as a settlement surrounded by stone walls.

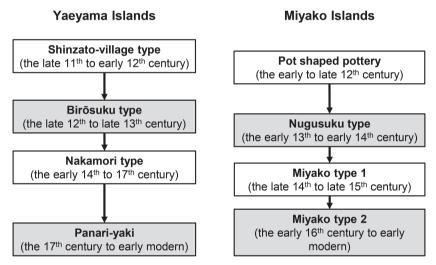


FIGURE 6. Chronological transition of historical local pottery types in the Southern Ryukyu Islands (modified from Yamagiwa 2015, 154). The differences in pottery type (characteristics) indicate that pottery manufacturing was not shared constantly between the Miyako and Yaeyama Islands.

Around the fifteenth century, the communities on Okinawa Island were unified politically into the Ryukyu Kingdom, and by 1571, the entire Ryukyu Islands had been placed under their control, which can be labeled the first national community on the Ryukyu Islands. The Ryukyu Kingdom had a feudal relationship with the Chinese dynasties, such as Ming and Qing, and there is substantial archaeological evidence that shows the development of a trade network with mainland Japan, the Chinese dynasties, the Taiwan Islands, and Southeast Asian regions (Okinawa Archaeological Society 2018, 188–216).

Archaeological data, however, show that the Ryukyu Islands were still a region with cultural uniqueness and a society with regional characteristics within the islands. Many buildings from the Ryukyu Kingdom have been registered as World Heritage Sites (International Council on Monuments and Sites 2000), reflecting its highly unique culture. In addition, variations in local communities may have increased during this period. Some population records for taxation indicate a rapid increase in population throughout the Ryukyu Islands; for example, the establishment of new villages increased in line with the population growth (History of Miyako-jima City Editing Committee 2013, 141–156), and migration that took place in response to population decline due to disasters was recorded even on the smaller islands such as Miyako (History of Miyako-jima City Editing Committee 2013, 182–195). Genome analysis generally supports this population history and communal dispersion (Matsunami et al. 2021), suggesting that population growth led to more diversification and fragmentation of communities in each region.

In 1609, the Ryukyu Kingdom was invaded by the Japanese feudal state of Satsuma and placed under their indirect control, but the Ryukyu Kingdom maintained its status as a national community superficially and its cultural uniqueness. The Ryukyu Kingdom came to an end between 1871 and 1879, when it was converted to a Japanese administrative district, with the south of Okinawa and the Miyako and Yaeyama Islands becoming Okinawa Prefecture, and the Amami Islands becoming part of Kagoshima Prefecture. In the modern Ryukyu Islands, educational policies were implemented to create a sense of community as a Japanese nation (Uema 2007), but many of the unique customs that were formed in Ryukyuan history have been passed down to present-day Okinawa (e.g., Yamazato 2017). This indicates that they maintained their uniqueness as a culture and community. On the other hand, the differences in political regional divisions after 1609 strongly shaped the cultural and communal differences between the Amami and Okinawa Islands (Tsuha 2012). Furthermore, Okinawa Prefecture came under US military rule after the Pacific War (1941-1945) and developed a complex sense of community. The cultural peculiarities and regional variations of the Ryukyu Islands' communities have persisted for a long time in history, and the various political contexts of modernity seems to have made them more complex.

#### Discussion: Uniqueness and Diversity of the Community in Island Region

Based on archaeological data, the uniqueness and regional diversity of communities in the Ryukyu Islands appeared relatively early in prehistory. This uniqueness is thought to be due to the characteristics of islands, such as marine distance and ocean currents preventing constant human contact with other regions as well as the cultural adaptations of each island environment. Interestingly, the uniqueness and regional diversity of these communities were maintained in the Ryukyu Islands even after the historical period when marine navigation technology and trade networks were developed and continued even after the appearance of a national community, the Ryukyu Kingdom. Modern Ryukyuan

languages and genetic features are also consistent with the chronological data: they indicate that human populations in the Ryukyu Islands have been culturally and physically separated from mainland Japan and surrounding regions for a long time and have maintained regional diversity even within the islands. It is not certain whether the uniqueness and diversity of the settlements since the historical period is based on the same background and factors as in the prehistoric period, but it is highly possible that the environmental conditions of the islands influenced the formation of the culture and settlements of the Ryukyu Islands.

This unique and diverse chronology of the Ryukyu Islands has also influenced the sense of community of the current inhabitants of the Ryukyu Islands. Diverse local histories have been compiled and published in each region of the islands (fig. 7), and these have contributed to the formation of local communities through their inclusion in education and museum exhibits. Even though created by long-term chronological events, local histories have become one of the important "vitalities" of the local communities. The diversity of these communities and vitalities will lead to various degrees of resilience; therefore, we need to correctly understand the origins and backgrounds that created the resilience of the various communities to correctly recognize and respond to their individual resilience. For example, the resilience of Okinawa cannot be understood from the perspective of the national community of Japan alone, nor can the resilience of smaller regional or island communities in the Ryukyus be understood from the perspective of Okinawa Prefecture alone. We need to be flexible in our understanding of and response to resilience based on the multifaceted history, culture, language, and identity of individual communities.



FIGURE 7. Introductory books on the history of each district or island in the Ryukyu Islands. These are mainly edited and published by the board of education in each prefecture or municipality and are reflected in some public museum exhibits and school education.

This process and background of community uniqueness and diversity may not be unique to the Ryukyu Islands. In the Remote Oceania region of the South Pacific, such as Melanesia, Micronesia, and Polynesia, cultural and communal diversity also developed, even though they have the same Austronesian language group ancestor (Gray et al. 2000; Bellwood 1978: 2011). As for prehistory, it has been pointed out that the background of cultural diversity in the Ryukyu Islands may be similar to that of Remote Oceania (Yamagiwa 2020). This indicates that the environment of islands and insularity may be triggers for the diversity of human culture and communities. Diversification of communities also means that the population size of individual communities is likely to be smaller and may create minorities; the Ryukyu Islands have been at the mercy of larger communities such as various nations since the modern era, and this is still a social issue today. Unfortunately, these problems are similar in a variety of other modern island regions as discussed in the other essays in this volume. In order to understand and respond to the issues and resilience of diverse communities in island environments, it is necessary not only to understand individual phenomena and their background but also to approach their common mechanisms by comparing case studies of various island regions.

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