

'Austronesian' and 'Jōmon' identities in the Neolithic of the Ryukyu Islands

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ABSTRACT – *This paper examines Neolithic cultural identities in the Ryukyu Islands of southwest Japan. It is argued that there were two different identities in this archipelago: a 'Jōmon' identity in the northern and central Ryukyus and an 'Austronesian' identity in the southern Ryukyus. These identities were constructed despite broad similarities in subsistence adaptation in both cultural zones.*

IZVLEČEK – *V članku analiziramo neolitske kulturne identitete na otočju Ryukyu, jugovzhodna Japonska. Ugotavljamo, da sta bili na arhipelagu dve različni identiteti: 'Jōmon' v severnem in osrednjem delu in 'Avstronezijska' na jugu. Identiteta sta se izoblikovali kljub podobnim subsistenčnim prilagoditvam v obeh kulturnih conah.*

KEY WORDS – *identity; island archaeology; coral reefs; Ryukyu Islands; Austronesian expansions*

Introduction

This paper compares two different cultural identities in the prehistory of the Ryukyu Islands. The Ryukyus stretch for over 1000km between Kyushu in Japan and Taiwan. The islands are now divided between the Kagoshima and Okinawa Prefectures of Japan. Archaeologically, we can distinguish two major cultural zones in the Ryukyu archipelago: (1) the southern Sakishima islands and (2) the central Okinawa and northern Amami islands (*Kokubu 1972*) (Fig. 1). This paper focuses on the Holocene prehistory of the Ryukyus through to about the 12th century AD. This period will be referred to as 'Neolithic' for reasons explained in the next section. The main argument of the paper is that there were two contrasting Neolithic identities in the Ryukyus: 'Austronesian' in the southern and 'Jōmon' in the central/northern Ryukyus. These two identities were, however, constructed despite significant similarities in subsistence.

The 'Neolithic' in the Ryukyus

The Neolithic period had begun in Taiwan by at least 3500 BC. After a pause of around a thousand years – perhaps the time during which a maritime tech-

nology was developed – Neolithic populations began to expand south from Taiwan into Southeast Asia from around 2200 BC (*Bellwood 2005; 2011*). The southern Ryukyu Islands were re-settled (Pleistocene humans having apparently become extinct) by around 2300 BC. Although there is currently little archaeological evidence that this Sakishima colonisation derived directly from Taiwan, it seems appropriate to see it as part of the same Neolithic Austronesian expansion for reasons discussed in more detail below.

In Japan, the term 'Neolithic' is not commonly used for the cultures of the Jōmon period. However, the widespread use of pottery was a notable feature of the Jōmon. Similar cultures with pottery but without agriculture in the Far East regions of Russia are regularly termed 'Neolithic'. In the central Ryukyu Islands, an early chronology proposed by Hiroe Takamiya (*1978*) used 'Neolithic'. Several archaeologists, including Asato (*1991*), have also used 'Neolithic' for the prehistoric cultures of the southern Ryukyus. For these reasons, the two cultures considered in this paper can be placed under the broad rubric

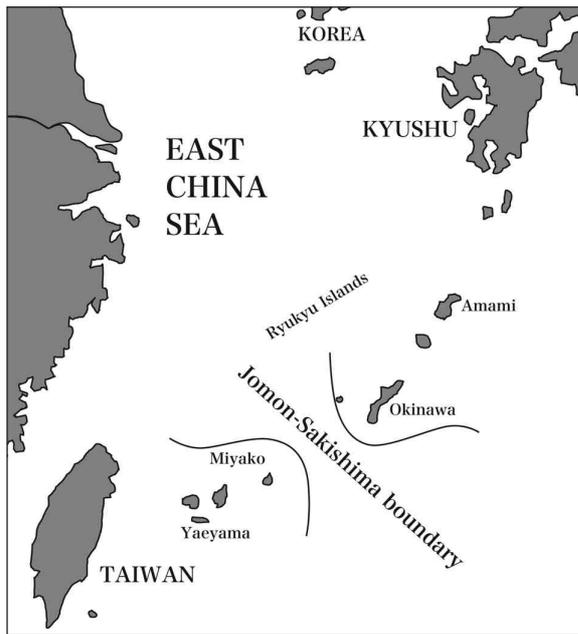


Fig. 1. Map of the Ryukyu Islands.

of 'Neolithic'. However, the real question that concerns us here is, What sort of Neolithic cultures and identities existed in the Ryukyu Islands?

Jōmon expansion to the central Ryukyus

The Jōmon expansion from Kyushu to the central Ryukyus represents a major long-distance migration by hunter-gatherers (*Hudson in press*). Jōmon groups also visited offshore islands such as Rebun and Rishiri off Hokkaido and the Izu Islands south of Tokyo, but the islands of Okinawa were much farther in total distance.¹ Furthermore, the settlement of the Ryukyus required substantial changes in Jōmon subsistence-settlement systems. The Jōmon developed as a series of broad adaptations to the post-glacial environments of the main islands of Japan, where seasonality was high and winters were cold even in the southernmost island of Kyushu. The Jōmon settlement of the Ryukyus, however, required a new adaptation to a completely different environment – that of sub-tropical coral reefs (*Takamiya 2004; 2006*).

The Jōmon occupation of the Okinawa islands required an ideology, not just of regular exploration, but of actual settlement expansion. Despite the length of the Jōmon period, such an ideology was no means

common and examples of long-term settlement expansions are limited. At the northern end of the Japanese archipelago, for example, some Jōmon groups visited Sakhalin, but there was no long-term expansion to that island. What push/pull factors were at work in Jōmon migrations to the Ryukyus is unclear. As seen from ceramics, Ryukyu Jōmon culture was characterised by the maintenance of remarkably constant links between Okinawa and Kyushu (*Itō 2000*). One reason for the maintenance of these links may have been the need to find marriage partners in an island system with low population densities. Marital and other social networks can also be assumed to have promoted the resilience of social-ecological systems in the prehistoric Ryukyus (*Hudson et al. in press*).

Austronesians in the southern Ryukyus

Jōmon people do not appear to have crossed the 250km gap between Okinawa and Miyako Islands. The Sakishima islands of the southern Ryukyus were settled around 4300 years ago by a quite different group of people(s) who seem to have come not from Japan, but from somewhere in Taiwan and/or South-east Asia. Two Neolithic cultures are known from the southern Ryukyus (*Asato 1991; Shimabukuro 2011; Pearson in press*). The Early Neolithic dates to around 4300–3500 years ago and is characterised by sites with pottery that is completely unlike anything known from the Jōmon. Between about 3500 and 2700 years ago, there is an apparent hiatus in the region with no evidence of human settlement. The next, Late Neolithic phase dates to around 2700–900 years ago and is characterised by shell adzes and by the absence of pottery. Again there are no artefacts that suggest a relationship with the Jōmon or later cultures of Okinawa and, based on the presence of shell adzes, the Philippines is thought to be a possible source for this Late Neolithic culture (*Asato 1991*). While agriculture was, of course, being practiced in the Philippines and elsewhere in South-east Asia at this time, the Late Neolithic of the southern Ryukyus appears to have been based on hunter-gathering.

Subsistence

Settlement of the Ryukyu Islands by hunter-gatherer groups was made possible by the heavy exploitation

¹ The islands of the northern and central Ryukyus are largely inter-visible and require maximum ocean crossings of about 60km when calculated as direct distance. Other islands visited by Jōmon populations were closer to the mainland, with the exception of Hachijō Island in the Izu archipelago, which is about 80km from the nearest island, Mikurajima. Despite this exception, the Jōmon settlement of the Ryukyus required much more frequent and sustained voyages over longer total distances to reach islands that were actually settled on a permanent basis.

of coral reef resources (Takamiya 2004; 2006). Similar species of reef fish and shellfish were exploited in the Ryukyus over very long periods. Commonly exploited shellfish were giant clams (*Tridacna* sp. and *Hippopus hippopus*), *Turbo argyrostomus*, *Tectus niloticus*, *Conidae*, *Strombus luhuanus*, and *Atactodea striata* (Kurozumi 2011). Three types of reef fish (parrot fish, wrasses and emperor fish) dominate almost all assemblages (Toizumi 2011). In addition to fish and shellfish, wild pigs were also hunted on the (mostly larger) islands where they were available. Though less common, dugong was hunted at sites in all parts of the archipelago.

These similarities in subsistence adaptation reflect the availability of similar resources along the Ryukyu archipelago. In the southern Ryukyus, Kurozumi (2011:95) notes that similar shellfish species were exploited over the 1000 years of the Early Neolithic and then again in the Late Neolithic, which began after a hiatus of around 800 years. Although ceramics were presumably used for cooking in the Early Neolithic, pottery disappeared in the Late Neolithic and stone roasting pits seem to have been widely used in this period. According to Kurozumi (2011), however, the presence and absence of ceramics in the Early and Late Neolithic periods, respectively, does not seem to have affected shellfish prey choice in the southern Ryukyus.

Cultural identities

Despite these similarities in subsistence, prehistoric cultural identities in the Ryukyu Islands were very different. As noted, the cultures of the northern and central Ryukyus originated primarily in the Jōmon tradition of Kyushu, but they soon evolved into a distinctive type that is sometimes known as the 'Ryukyu Jōmon'. Some of the main characteristics of the Ryukyu Jōmon were an adaptation to a new environment, which included a growing dependence on coral reef resources, the modification of aspects of Kyushu Jōmon culture to the new island environment (pottery, for example, became smaller in size) and the development of new technologies for new lifestyles in the Ryukyus. The Ryukyu Jōmon continued the mainland Jōmon tradition of pit dwellings, but in Okinawa these used coral limestone slabs for wall supports, "a usage completely absent from the mainland Jōmon" (Itō 2003:63). Ryukyu Jōmon culture could easily have become very isolated, but frequent voyaging between the islands and even back to Kyushu maintained a certain commonality of culture over a wide area. Such broad, regional commo-

nalities of culture were one characteristic of the mainland Jōmon (e.g., Kobayashi 1992), but in the Ryukyus, this frequent exchange of culture required a technology and ideology of marine voyaging that was perhaps rather different from anything known in the mainland Jōmon.

One of the most distinctive aspects of the mainland Jōmon was a rich material culture related to ritual practices. Artefacts such as clay figurines, masks, and phallic rods were widely used. Features associated with ritual and feasting include earthen mounds and wooden henges (Kawashima 2005; 2008; 2010; Naumann 2000). The Ryukyu Jōmon lacks almost all of these rich ritual artefacts and features of the mainland Jōmon. Of course, the lack of such remains in the archaeological record does not mean that the Ryukyu Jōmon people lacked an elaborate ritual or spiritual life. It does seem safe to propose, however, that the beliefs and rituals found in the Ryukyus at this time were different from those on the mainland.

As noted above, the archaeological record offers no evidence for the movement of people or artefacts across the gap between Okinawa and Miyako Islands, and it is widely assumed that this marks the boundary between two different cultural zones (Kokubu 1972). At present, the precise origin of the prehistoric cultures of the southern Ryukyus is unknown and we cannot completely rule out the possibility that they derived from a stray voyage by people of the Ryukyu Jōmon culture. Given the geographical proximity of the southern Ryukyus to Taiwan and Southeast Asia, however, an origin in the latter regions is much more probable. The fact that the Early Neolithic of the southern Ryukyus began at around the same time as Neolithic populations started to expand from Taiwan also supports this interpretation.



Fig. 2. Late Neolithic dog mandible from the Nagabaka site, Miyako Island. Photograph by R. Takahashi.

For these reasons, I believe the Neolithic of the southern Ryukyu Islands was part of Austronesian culture (see also *Summerhayes and Anderson 2009*).

Bellwood (2011) suggests four phases of the Neolithic in Taiwan and the northern Philippines (Tab. 1). Bellwood's phases 2 and 3 are distinguished by the presence of expansions from Taiwan to the south in phase 3. As noted by Bellwood himself, Summerhayes and Anderson (2009) suggest that movement from Taiwan north to the southern Ryukyus may have occurred a little earlier than his phase 2, perhaps around 2500 BC. This date is a few centuries earlier than that proposed for the start of the southern Ryukyu Neolithic by most Japanese archaeologists, *i.e.*, around 2300 BC, although it should be noted that both estimates predate the 2200 BC proposed by Bellwood for the beginning of the Austronesian expansion to the south. This seemingly minor problem in chronology is actually quite important, and two possibilities present themselves: (1) the three estimates (2500, 2300 & 2220 BC) in fact reflect the same historical event, and further work on chronometric hygiene would remove the apparent differences between the dates; or (2) the expansion to the Ryukyus was in fact earlier than that to the Philippines and reflects a (slightly) different cultural process. Whichever interpretation is correct, it can be said that the historical results were very different: the Austronesian expansion south from Taiwan led to a dramatic series of migrations as far as Polynesia, whereas the movement north to the Ryukyus ended there.

An Austronesian origin for the Neolithic of the southern Ryukyus is by far the most parsimonious hypo-

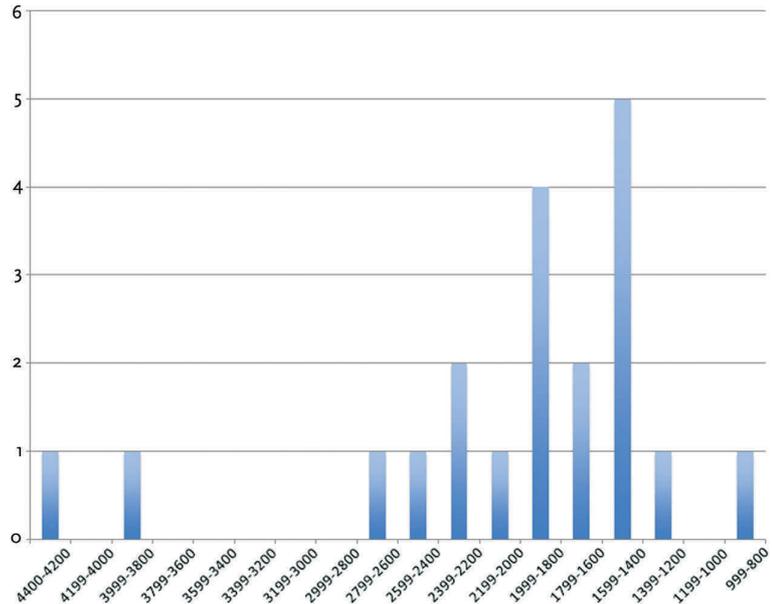


Fig. 3. Frequency of radiocarbon dates from the Neolithic of the southern Ryukyus. Dates are calBP taken from Najima et al. (2008).

thesis at present, but in the context of the present paper, it has to be emphasised that the Neolithic cultures of the southern Ryukyus were, in many ways, not typically Austronesian. Most Austronesians possessed farming and, as a result, “cultivated territory was always the fundamental basis of [their] social life” (Kirch 2000:304). In the southern Ryukyus, however, there is no evidence for plant cultivation or domesticated animals (except for the dog, *cf.* Fig. 2). Despite the use of pottery, the southern Ryukyu Neolithic seems to have been a hunter-gatherer society from its beginnings.

Long-distance oceanic voyaging was another characteristic of Austronesian society (Horridge 1995). The apparent total absence of such voyaging in the Neolithic of the southern Ryukyus presents us with a paradox. If, as suggested by some Japanese scholars (*e.g.*, Asato 1991), the southern Ryukyu Neolithic originated in the Philippines or Micronesia, then sophisticated ocean-going technology must have exi-

Phase	Description
1 (before 3500 BC)	Flaked lithics and shell tools. No evidence for Neolithic technology such as pottery.
2 (3500–2200 BC)	Appearance of Neolithic technology. Cord-marked pottery develops into red-slipped plain ware. Use of nephrite and slate. Rice and foxtail millet cultivation. No known expansion south of Taiwan at this time.
3 (2200–1000 BC)	Neolithic expansion to Batanes and Luzon from southern Taiwan about 2200 BC. Followed by increasing flow of material culture, including red-slipped and stamped pottery.
4 (first millennium BC)	Frequent contacts between Taiwan, Batanes and Philippines in both directions, particularly involving Taiwan nephrite.

Tab. 1. The Neolithic in Taiwan and the northern Philippines from before 3500 BC to 500 BC. Adapted from Bellwood (2011).

sted at the time of settlement, only to be lost over time. Alternatively, the origins of this culture may have been in neighboring Taiwan and a complex voyaging technology and ideology may have been absent from the outset. Whatever the case, the southern Ryukyus developed a Neolithic that was culturally isolated, even though those islands cannot be counted as geographically isolated when compared to many other islands in the Pacific.

Another distinctive aspect of the southern Ryukyu Neolithic was the apparently slow rate of population growth. Particularly in the malaria-free islands of Remote Oceania, Austronesian societies often developed high population densities based on intensive cultivation and land-use (Kirch 2000). If we plot the number of radiocarbon dates from the Neolithic of

the southern Ryukyus, we do see a pattern of increase that may be related to growing population levels over time, especially in the Late Neolithic (Fig. 3). Sample sizes in this graph are, however, very small and the general impression obtained from the Neolithic archaeology of the southern Ryukyus is not one of extensive population growth and expansion.

Conclusions

There are many ethnographic and historical examples of different cultures exploiting the same environment (e.g., Bennett 1969). Classic studies of ethnicity such as Barth (1969) have argued that contact between different groups of peoples leads to the formalisation of ethnic identities. In the case study examined in this paper, two archaeological cultures exploited the same chain of islands in remarkably similar ways, both basing their subsistence on foraging of coral reef resources. Yet, as far as can be determined from the archaeological record, there was no contact between the two cultural zones of the southern and the central/northern Ryukyus in prehistory. Both cultures developed very different patterns of material and social life that cannot be explained simply by their separate origins.

ACKNOWLEDGEMENTS

Support for this research was provided by the Ministry of Education, Japan for the projects 'An Investigation of Interactions Between Humans and the Environment in Foraging and Farming Societies in the Sakishima Region' and 'Pan-Pacific Environmental Change and Civilizations'.

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REFERENCES

- Asato S. 1991. The distribution of *Tridacna* shell adzes in the southern Ryukyu islands. *Bulletin of the Indo-Pacific Prehistory Association* 10: 282–291.
- Barth F. 1969. *Ethnic Groups and Boundaries: The Social Organization of Cultural Difference*. Universitetsforlaget. Oslo.
- Bellwood P. 2005. *First Farmers: The Origins of Agricultural Societies*. Blackwell. Oxford.
2011. Holocene population history in the Pacific region as a model for worldwide food producer dispersals. *Current Anthropology* 52, Supplement 4: S363–378.
- Bennett J. W. 1969. *Northern Plainsmen: Adaptive Strategy and Agrarian Life*. Aldine. Chicago.
- Horridge A. 1995. The Austronesian conquest of the sea – upwind. In P. Bellwood, J. J. Fox and D. Tryon (eds.), *The Austronesians: Historical and Comparative Perspectives*. Australian National University, Canberra: 134–151.
- Hudson M. J. in press. Japan: Archaeology. In I. Ness and P. Bellwood (eds.), *The Encyclopedia of Global Human Migration, Vol. 1. Prehistory*. Wiley-Blackwell, Oxford: 224–229.
- Hudson M. J., Aoyama M., Hoover K. C. in press. Navigating hunter-gatherer resilience: Networks and insularity in the prehistory of the Ryukyu Islands. In C. Damm and J. Saarikivi (eds.), *Networking, interaction and emerging identities*. Mémoires de la Société Finno-Ougrienne. Suomalais-Ugrilainen Seura, Helsinki.
- Itō S. 2000. *Ryūkyū Jōmon bunka no kisoteki kenkyū*. Myuze. Tokyo. (in Japanese).
2003. The position of the Ryukyu Jomon culture in the Asia-Pacific region. *Bulletin of the Indo-Pacific Prehistory Association* 23: 63–66.
- Kawashima T. 2005. Another aspect of figurine function. In M. Budja (ed.), *12th Neolithic Studies. Documenta Praehistorica* 32: 177–185.

2008. Feasting and inter-village networks. In M. Budja (ed.), *15th Neolithic Studies. Documenta Praehistorica* 35: 205–213.
2010. Mounds and rituals in the Jomon period. In M. Budja (ed.), *17th Neolithic Studies. Documenta Praehistorica* 37: 185–192.
- Kirch P. V. 2000. *On the Road of the Winds: An Archaeological History of the Pacific Islands Before European Contact*. University of California Press. Berkeley.
- Kobayashi T. 1992. Regional organization in the Jomon period. *Arctic Anthropology* 29(1): 82–95.
- Kokubu N. 1972. *Nantō senshijidai no kenkyū*. Keiyūsha. Tokyo. (in Japanese).
- Kurozumi T. 2011. Ryūkyū senshi jidaijin to sangoshō shigen: kairui o chūshin ni. In H. Takamiya & S. Itō (eds.), *Senshi, genshi jidai no Ryūkyū rettō: Hito to keikan*. Rokuichi Shobō. Tokyo. (in Japanese).
- Najima Y., Anzai E., Miyagi H. 2008. Ryūkyū rettō ni okeru kōkogakuteki jiki kubun to hōshasei tanso nendai. *Nantō Kōko* 27: 23–48. (in Japanese).
- Naumann N. 2000. *Japanese Prehistory: The Material and Spiritual Culture of the Jomon Period*. Harrassowitz. Wiesbaden.
- Pearson R. in press. *Ancient Ryukyu: An archaeological study of island communities*. University of Hawaii Press. Honolulu.
- Shimabukuro A. 2011. Sakishima shotō no senshijidai: Yaeyama shotō o chūshin ni. In H. Takamiya & S. Itō (eds.), *Senshi, genshi jidai no Ryūkyū rettō: Hito to keikan*. Rokuichi Shobō. Tokyo. (in Japanese).
- Summerhayes G., Anderson A. 2009. An Austronesian presence in southern Japan: early occupation in the Yaeyama islands. *Bulletin of the Indo-Pacific Prehistory Association* 29: 76–91.
- Takamiya Hiroe 1978. Okinawa shotō ni okeru shinsekijidai no hen'nen. *Nantō Kōko* 6: 11–22. (in Japanese).
- Takamiya Hiroto 2004. Population dynamics in the prehistory of Okinawa. In S. M. Fitzpatrick (ed.), *Voyages of Discovery: The Archaeology of Islands*. Praeger, Westport: 111–128.
2006. An unusual case? Hunter-gatherer adaptations to an island environment. *Journal of Island and Coastal Archaeology* 1(1): 49–66.
- Toizumi G. 2011. Ryūkyū senshi jidaijin to dōbutsu shigen riyō. In H. Takamiya & S. Itō (eds.), *Senshi, genshi jidai no Ryūkyū rettō: Hito to keikan*. Rokuichi Shobō. Tokyo. (in Japanese).