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## **Oceanic Encounter with the Japanese: An Outrigger Canoe-Fishing Gear Complex in the Bonin Islands and Hachijo-Jima Island**

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### **Introduction**

The sea that lies to the east of the Philippines and west of the Marianas is called the Philippine Sea (Figure 1). It is surrounded by the islands of the Japanese Archipelago and the Ryukyu Islands to the north. To the west, there are a series of islands comprising Taiwan, the Philippines, and Maluku of Indonesia. The southern edge includes New Guinea and the Melanesian islands. North of Melanesia, there lies a series of Micronesian islands – Palau, Yap, and the Marianas, the latter of which are connected to the Bonin Islands and the Izu Seven Islands in the Japanese archipelago. These areas have so far been studied as if belonging to different cultural regions: East Asia, Island Southeast Asia, Melanesia, and Micronesia.

In this paper, however, I will tentatively disregard this traditional division and propose the “Circum-Philippine Sea” as an alternative framework. I do not intend to argue that the Circum-Philippine Sea has been a coherent cultural unit, but instead, I would like to characterise this area as a maritime interactive sphere (Rainbird 2007). This means that if a certain cultural element originating from other areas (c.f. Spain, Hawai‘i, etc.) is incorporated into the indigenous cultural system, that system, in turn, further develops as part of its interactive relationship with the Circum-Philippine Sea. The single-outrigger canoe design, brought from outside—in this case, Hawai‘i—to this area, was eventually combined with Japanese types of fishing gear and planking techniques. This cultural convergence resulted in a unique technological integration of the Hawaiian single-outrigger canoe and the Japanese fishing gear complex in the Bonin Islands and Hachijo-jima Island. I will subsequently demonstrate that these tiny islands have been a melting pot of human interaction in the Philippine Sea and the larger Pacific.

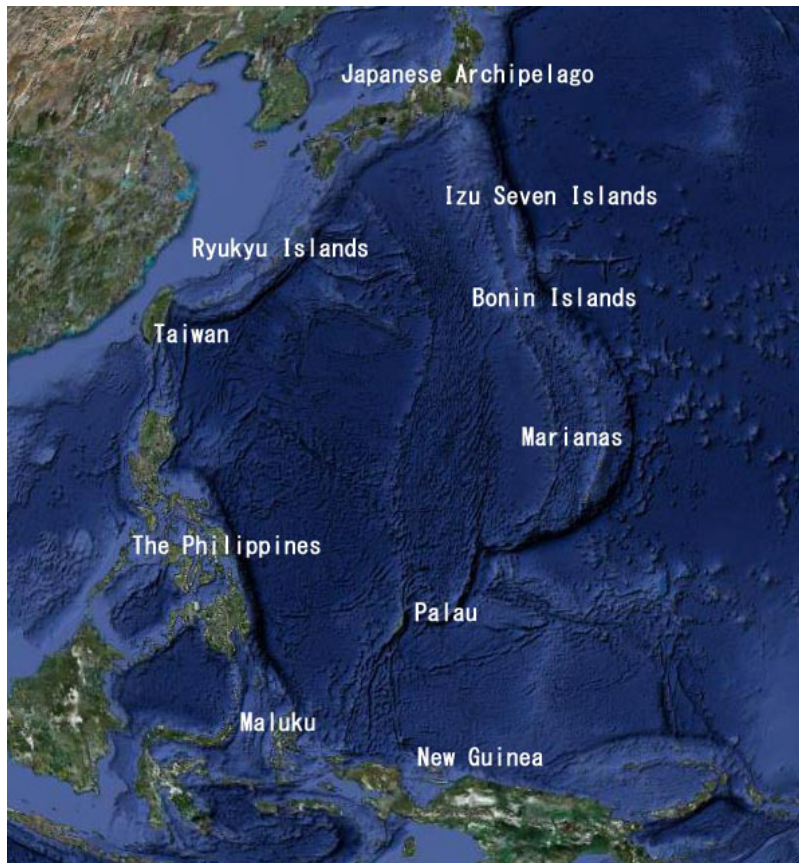


Figure 1. Map of the Circum-Philippine Sea.

Source: Map by author, based on a Google Earth map.

## The Bonin Islands as a Centre of Maritime Interaction

### *Geography and prehistory*

The Bonin or Ogasawara Islands (now part of the City of Tokyo) lie between the Izu Seven Islands to the north, and the Northern Marianas to the south. The Bonin Islands consist of 30 islands, about one third of which are inhabited. All of them are small, with a total landmass of 104 square kilometres. The Bonin Islands are geographically remote from all other major landmasses in the Circum-Philippine Sea: 1000km from Tokyo, 1000km from Guam, and 1500km from the Ryukyu Islands.

Although they appear to be isolated, these tiny islands have been characterised by a frequent flow of peoples from varying origins. In prehistory, the Bonin Islands seem to have been inhabited by people from the Marianas. A discovery of polished stones adzes with oval bodies and concave edges is indicative of wood working, such as canoe making. Most archaeologists agree that these adzes have an affinity with those of the Latte Period in the Marianas (around the first millennium BC). They are not similar to those of the Jomon or Yayoi axes of mainland Japan, which is separated from the Bonin Islands by the strong Kuroshio Current. Similar adzes, however, have been found on Hachijo-jima Island, south of the Kuroshio Current. Recent archaeological surveying by the Tokyo Metropolitan Historic Preservation Office has also uncovered shell artefacts and reddish plain pottery, the stylistic features and temper analyses of which reveal that they are indicative of the Austronesian tradition (Oda 1990; Oda *et al.* 1992).

### *Abandonment and re-habitation*

The Bonin Islands were abandoned around the first millennium A.D. The name “Bonin” is considered to have come from the Chinese words, “*bu*” (=no) and “*nin*” (=people). Explorers’ records suggest that castaways, beachcombers, and whalers had started to settle the islands after the 19th century (Ohkuma 1985).

In 1830, during the reign of Hawai‘i’s King Kamehameha III (Kuykendall 1938), pioneers from Hawai‘i (Sandwich Islands) emigrated to the Bonin Islands. They consisted of five Westerners (American, British and Danish), 20 Native Hawaiians, and possibly people from other Pacific Islands. They brought with them crops and domesticated animals, along with Hawaiian style houses, clothes and tools.

In 1836, an American ambassador who visited the islands wrote, “I embarked with a friend in a small canoe, paddled by two Sandwich Islanders, and crossing the bay, ran through a natural tunnel, or rocky cave...” (Ruschenberger 2005:446). It has also been written that, “a canoe loaded with melons and pumpkins, floated on its surface; and a Sandwich Islander, asleep in the shade of a rock hard by, declared it to lead to some habitation or cultivated ground” (Ibid.).

In 1861, the Tokugawa Government, surprised by the presence of Westerners on the islands, delegated officials to explore the islands and declare their possession. Soon after (1868), Japan came into the Modern Era following the Civil War. The new government named the islands “Ogasawara”, after a legendary *samurai*, Ogasawara Sadayori, who is said to have found these islands at the end of the 16<sup>th</sup> century. In 1876, the Japanese possession of the islands was internationally recognised.

After modernisation, the number of Japanese immigrants increased in the islands, where they mixed with the existing inhabitants of Caucasian and Hawaiian origin. During WWII, the Bonin Islands became the most important strategic location of the Japanese Army in defending the capital city; consequently, many military facilities were constructed.

After World War II, the Bonin Islands were occupied by American troops, and only the descendents of Caucasian origin were allowed to remain in the islands. The inhabitants of Japanese origin were forced to go back to Japan. Only after the return of the islands to Japan in 1968 did Japanese start to resettle the islands.

As a result, the Bonin Islands developed a complex history. For instance, the Bonin Islands dialect, formed by a “pidgin-Creole” process since 1830, has a complicated feature: the language consists of several dialects of English (c.f., Hawaiian English, standard American English, etc.) fused with several dialects of Japanese, Hawaiian, and even Micronesian (Long 2002).

## **Outrigger Canoes**

### *The tradition of Hawaiian canoes*

The Hawaiian Islands are part of Polynesia, and the canoes used there have a Polynesian heritage. There were two types of canoes in Hawai‘i: the single-outrigger and the double-hulled canoe. Both types could be propelled either by paddling or sailing. Hawaiian canoes were further divided into many types according to function, structure and hull shape (Hiroa 1975:255; Holmes 1981:70).

Both the bow and stern of Hawaiian canoe hulls were pointed and curved upward. Although the inside of the hull was supported by transverse frames, they seem to be degenerate or vestigial. If Hawaiian canoes were rigged, the sail was shaped like a “crab-claw” or reverse triangular shape. This basic feature is most similar to that of the Tahitian half-claw sail (Bowden 1952; Horridge

1986; Lewis 1994:62-64). Both of them probably developed from the Oceanic spritsail used in the Marquesas and by the New Zealand Māori; they are different from the Oceanic lateen sails of Micronesia, Tonga, Sāmoa, and Fiji.

Concerning outriggers, single outriggers were mainly used throughout Oceania, including the Hawaiian Islands, so there were many varieties of boom and float assemblies. Hawaiian canoes consisted of two curved booms directly lashed to the float on the port side; no connective or peg was used. The paddle had a board and short blade that was either cordate, ovate, obovate, or elliptical (Hornell 1936:442).

Since Hawaiian canoes have changed rapidly since first Western contact in the late 18<sup>th</sup> century, there is not enough detailed information on canoe features from the time when the first emigrants from the Hawaiian Kingdom came to the Bonin Islands. The most detailed drawing is given by the 1804 Russian expedition (Barratt 1987:A-14).

Rev. William Ellis, whose record is one of the most valuable on Hawaiian life at that time, wrote:

The canoes of the Sandwich Islands appear eminently calculated for swiftness, being long, narrow, generally light, and drawing but little water. A canoe is always made out of a single tree; some of them are upwards of 70 feet long, 1 or 2 feet wide, and sometimes more than 3 feet deep, though they are seldom in length more than 50 feet. The body of the canoe is generally covered with a black paint, made by the natives with various earthly and vegetable materials, in which the bark, oil, and burnt nuts of the *kukui* tree form the principal ingredients. On the upper edge of the canoe is sewed, in a remarkably neat manner, a small strip of hard white wood, from 6 to 8 inches in width, according to the size and length of the canoe. (Ellis 1826: 315).

Although Hawaiian canoes often were drawn in the late 18<sup>th</sup> century, photos of canoes came after the 1880s (Holmes 1986:79-80). Thus, there is little visual information of Hawaiian canoes from around 1830. In the drawing recorded by the Russian, Langsdorff, curved booms are directly connected to the float, whose head was shaped like a “lizard”. By 1839, when Admiral Paris visited Hawai‘i, the old type had disappeared and been replaced by:

...a [European] spritsail laced to a boom as well as the mast. This latter, which is stepped in the bottom, is secured to the outrigger boom and stayed on each side by two shrouds, and also by a stay attached at the bow. All these spars are of ordinary wood, bamboo appearing to be very rare in these islands. (Paris 1941: 141; cited by Hornell 1936: 25).

In a picture taken around 1885, the rectangular sail was supported by a fixed mast, boom and sprit. The bow and stern were curved upward like the indigenous type, and a paddle with an elliptical blade was shown. Although this picture was taken after the first emigrants from Hawai‘i arrived at the Bonin Islands, this canoe was most similar to the one drawn in 1861 by the Tokugawa Government discussed below.

### *Canoe drawing in the Bunkyu Period (1861)*

The emigrants from Hawai‘i introduced single outrigger canoes to the islands. They have been called “*kano*” until today (Figure 2). The oldest Japanese record of the presence of canoes on the Bonin Islands came from the end of the Tokugawa (Edo) Period.

Figure 8.3 illustrates the picture drawn by the officials delegated by the Tokugawa Government in the Bunkyu Period, 1861. The structure of the canoe was Hawaiian, but the sail already had a Western influence: it did not have a typical Hawaiian crab-claw shape but rather a rectangular sail with a split. The bailer drawn under the canoe had an inner handle, that is, a typical Oceanic



bailer. The shape of the paddle blade was similar to that of the Hawaiian paddle. Hence, the original Bonin Islands canoe was a copy of the Hawaiian canoe already influenced by Western design.

As cited above, Rev. Ellis wrote that the canoe hull was painted black. The upper part of the canoe hull in the above picture was also blackish, although hull bottom and float were white, indicating its possible succession from the Hawaiian tradition.



Figure 2. The Bonin Island Canoe with Sail, Visitor Center, Chichi-jima Island.

Source: Photo by the author, 2008.

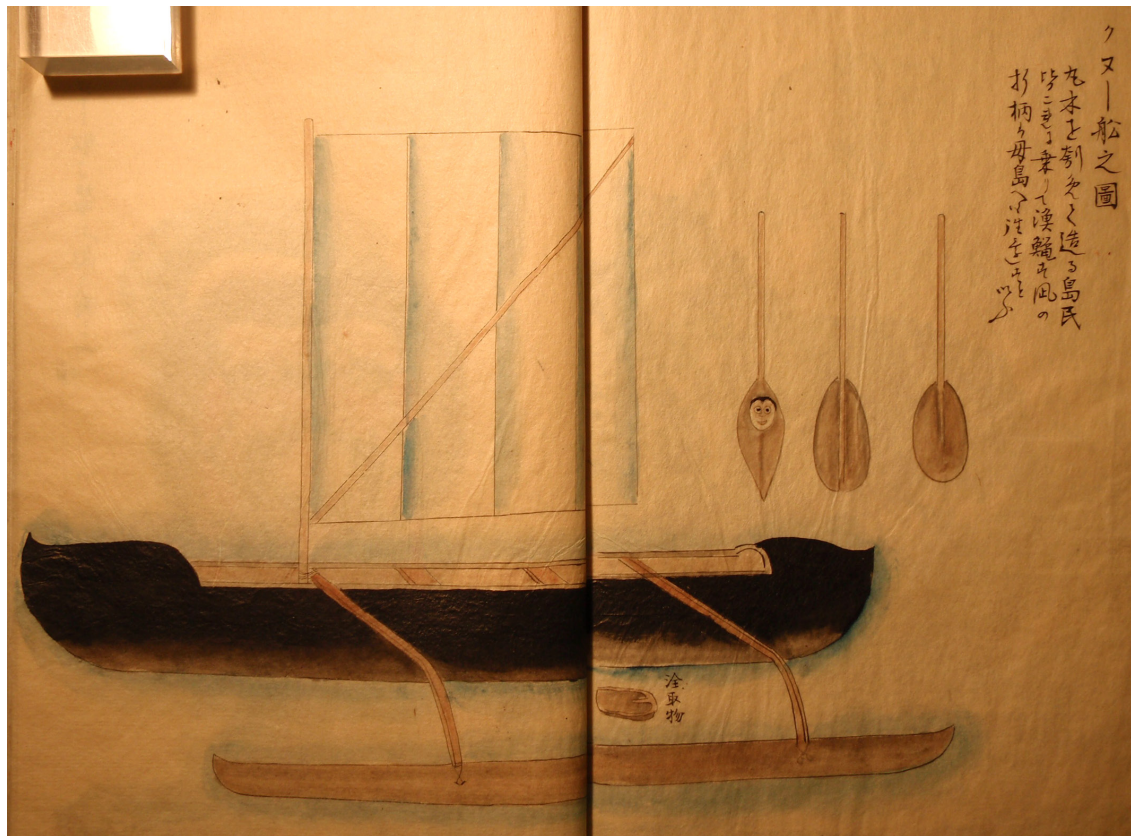


Figure 3. The Canoe Drawing in 1861 Expedition.

Source: Tokyo Metropolitan Archives. Photo by the author, 2008.

### *Canoes of the Bonin Islands seen in Hornell's volume*

Canoes in the Bonin Islands were mentioned in Hornell's *Canoes of Oceania*, Vol. 1, following the section regarding Hawai'i:

The hull of the canoe is a double-ended dugout. The ends are almost identical, curved, sharp, and capped above by short and pointed triangular end pieces sharply curved upward; Weatherly qualities are given by a short, slight arched deck at each end, butting against the after side of the small end piece. These canoes run to 30 feet in length...

The outrigger consists of two similarly shaped booms curved downward in their distal part to their insertion into the float at the distance outboard of about 8 feet. The pointed end of each is forced into a hole made in the ridged midline of the float and is further secured by a collar lashing to a peg inserted on the inner aspect of the float.

The proximal ends of the booms lie athwart the dugout hull and rest upon the gunwales. Crossing the hull a short distance immediately below each boom is a convexly bowed wooden thwart bar or boom brace; its ends pass through the sides and show on the outside a couple of inches below the gunwale. To this the inboard part of the boom is secured by two collar lashings. A method of attachment of the same type is found in the South Celebes and in a varietal form is generally throughout Indonesia. (Hornell 1936:26).



Concerning the nature of the boom attachment, Hornell wrote, “The boom lashings, though essentially Indonesian in method...must yet be considered a simplification of the Hawaiian U-shaped spreader” (Hornell 1936:28). As for the float, Hornell wrote:

...[the] float is two-fifths of the length of the hull. The ends pointed and the upper surface is ridged longitudinally; the sides and bottom are rounded as in the dugout hull. A curious feature is its compound construction; it consists of a basal part hollowed out in canoe fashion, and an upper part made of long board broadly triangular in transverse section, fitting over the hollowed under part like the ridged cover of sarcophagus. (Hornell 1936:26).

The overall shape of the float resembled that of a canoe hull, and I have heard that the Bonin Islanders call the float a “small canoe”.

Introduced in 1830, Bonin Islands canoes have since acquired modifications: “The half-sprit rig employed is a rough adaptation of ordinary European sprit sail, the rig which the peripheral Polynesians have found it most easy to adopt when abandoning the old Polynesian type of triangular sail which was tied to the mast” (Hornell 1936:28-29).

Concerning the paddles, Hornell wrote, “The paddles used are essentially of the Japanese sculling type, long-shafted and cross-handled, with the blade elongated and narrowed” (Hornell 1936:29). The last point is not adequate, since both the Oceanic type of paddle with oval blade (*maru-gai*, or round paddle) and the Japanese sculling type with rectangular blade (*hira-gai*, or flat paddle) have been used. As discussed later, only the Japanese sculling type came to be used on the Hachijo-jima Island.

## Further Discussions

An interesting characteristic is the masks that were recorded as being painted on canoe bows as a kind of charm (Figure 4). These masks were certainly not Japanese or Hawaiian; rather, they appear to be of a Melanesian style. The proportions of the head with the face and the large tusk are reminiscent of the Malanggan type of masks from New Ireland in the Bismarck Archipelago (Helfrich 1973:Plates 9a-10b). Since further information is not available, we simply do not know why Melanesian-style masks were used in the Bonin Islands in association with Hawaiian canoes; nevertheless, it certainly indicates a complex interaction between the Bonin Islands and other islands of the Circum-Philippine Sea.

Another interesting item is a canoe paddle on which a human face was painted (see Figure 3, above). Although Oceanic canoe paddles were often decorated, this kind of concrete expression of the human face was not widely used. I would argue that the most similar example comes from Bougainville, Papua New Guinea. If these Melanesian-style elements actually existed together with Hawaiian-type canoes, it indicates another route of cultural transfer in the Circum-Philippine Sea. It does not necessarily mean that indigenous Melanesians themselves arrived by some means in the Bonin Islands. I rather suspect that Westerners either introduced these cultural elements, or brought indigenous Melanesians with these elements to the Bonin Islands.

With these further modifications, single outrigger canoes of Hawaiian origin have been used mainly for fishing and transportation until today. In particular, they are used for catching turtles and spearing Spanish mackerel. The harpoons used are of Tokyo Bay and Izu Seven Island types. Eyeglasses of wood used for dive fishing are of the Okinawan type. Modification is also seen in hull building. Originally a hull was dug out from *Hernandia sonora*, but later, hulls came to be made by combining planks of Japanese cedar trees and using a Japanese-type boat nail.



Figure 4. The Mask Drawing in 1861 Expedition.

Source: Tokyo Metropolitan Archives. Photo by the author, 2008.

After the Japanese were forced back to Japan following WWII, canoe builders continued making Bonin Islands type canoes in the Tokyo area. One canoe builder, Mr. A., who was born on Hahajima Island and was living in Ichikawa, near Tokyo, at that time, made several canoes (Figure 5). These were the most recent wooden canoes recorded, constructed using cedar trunks for the keel parts (Figure 6); the basic shape of the dugout keel, however, still retained the tradition of the original canoes. These canoes were ordered by the American inhabitants during the American occupation period. Curved outrigger booms that were originally made of one kind of wood eventually came to be made, combining straight athwart parts and curved parts directly attached to the float. They were sent to the Bonin Islands by American navy ships and distributed to the inhabitants. There were islanders of Japanese origin who had obtained some of them for fishing and transportation after returning to the islands.

The fiberglass canoes used today were molded from one of the wooden canoes introduced at that time. Now, the canoes are propelled by outboard engine and the sail is seldomly used. However, fiberglass canoes still retain a projection on the stern board that is a remnant of the attachment for rigging a rope for sailing (Figure 7).



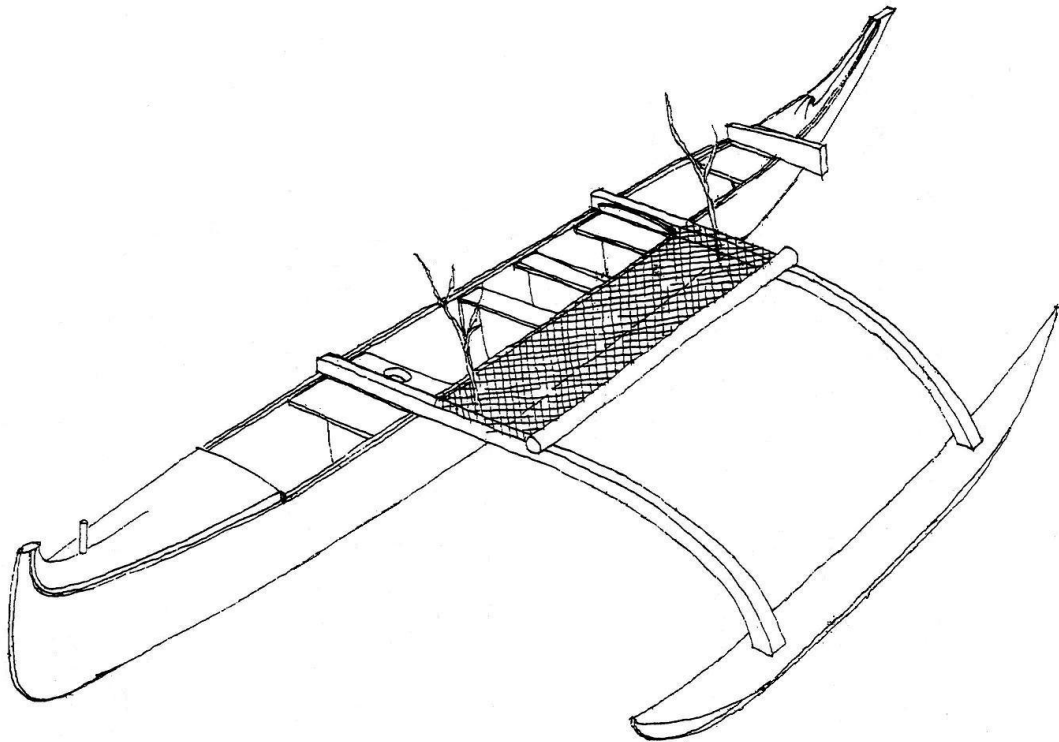


Figure 5. Sketch of the Canoe made around the 1950s: the hull length 7.3m, width 0.41m and depth 0.53m.

Source: Board of Education, Ogasawara Village.



Figure 6. Canoe Hulls at the Workshop of Canoe Builder, Mr. Asanuma.

Source: Photo taken around 1950 by Mr. Seitaro Asanuma (owner of the material).



Figure 7. Canoe of Glass-fiber used today, Chichi-jima Island. Notice the “hook” at the stern that is the remnant of the sailing canoe used in the past.

Source: Photo by author, 2008.

Thus, the canoes of the Bonin Islands were originally introduced from Hawai‘i, already with some Western influences and possibly with a temporal influence from Melanesia, used with Japanese fishing and planking techniques until today. After the war, the tradition of “Bonin Islands Type Canoe” has been kept, not in the Bonin Islands, but in Tokyo. The canoe is very much a witness of multi-directional cultural interaction and transfer of technology encountered in the islands.

### Hachijo-jima Island

Hachijo-jima Island is the southernmost island of the Izu Seven Islands. Before modernisation, the island had been used mainly as a penal colony. Fishing boats with a single outrigger have been in use until today. The hull is now made of fiberglass and shaped not as a canoe hull, but as a regular fishing boat; however, the hull is asymmetrical to facilitate the use of an outrigger on the port side.

Most of the islanders agree that these outrigger canoes came from the Bonin Islands. As I have already mentioned, after the war, the Bonin Islanders of Japanese origin were forced to return to Japan. There are some Bonin Islanders who came to live on Hachijo-jima Island, as well as some Hachijo-jima Islanders who went to the Bonin Islands as military workers before WWII and came back during the war. They were the ones who transmitted canoe building techniques. One canoe builder, Mr. S., born on Hachijo-jima Island, was sent to Chichi-jima Island to build military facilities. He then learned canoe building there. After coming back to Hachijo-jima Island, he started experimenting with canoe building following the advice of the immigrants from the Bonin Islands.

Although it seems reasonable that the introduction of the canoe to Hachijo-jima Island was during or after WWII, I found one picture taken before the war in which a canoe was used on Hachijo-jima Island (Figure 8). The overall shape of the canoe was identical to that of Bonin Islands canoes, so the experimental use of outrigger canoes by local fishermen dates back to before



the war. The difference between the canoes of the Bonin Islands and Hachijo-jima Island is that the canoes of the Bonin Islands were propelled by paddle (like an Oceanic canoe), but those of Hachijo-jima Island were propelled by a Japanese-style oar or “*ro*” (Figure 9).



Figure 8. Canoe in the Hachijo-jima Island, before the War. Note that the man sitting in the middle is using Japanese type oar or “*ro*”. situated at outrigger boom. Photo taken at the Hachijo-jima Historical Museum.

Source: Photo by the author.



Figure 9. Canoe Manipulated by the Japanese Style Oar. Note that the standing fisherman is using Japanese type oar: this is the special body technique for using “*ro*”.

Source: From *Living in the Kuroshio Current: Izu Islands*, 1981:248. Tokyo Toshio Village.



Unlike the Bonin Islands type, canoes of Hachijo-jima Island were later modified with considerable influence from fishing-boat building in Japan. A canoe builder, Mr. Y., said that he was the first builder to use plastic hulls with an outrigger device. Gradually, since then, the shape of the hull has changed and become more similar to a regular fishing boat; they still retain uniqueness, however; that is, an asymmetrical shape to accommodate an outrigger to one side (Figure 10).



Figure 10. Canoe Fishing Boat at the Hachijo-jima Island, today.

Source: Photo by the author, 2008.

### The Bonin Islands and Hachijo-jima Island: A Melting Pot in the Circum-Philippine Sea

In addition to canoes, other artefacts used in the islands also show maritime interaction. For example, the water jar used on the Bonin Islands is of typical Ryukyu Island-type pots for containing alcohol. Historic records show that immigrants came from Ryukyu Island to the Bonin Islands as sugarcane laborers. There were also specialised fishermen (including divers) from Okinawa.

*Nanyo Odori*, or the “South Sea Dance”, is also evidence of the interaction between Japan, Micronesia, and the Bonin Islands. The dance was introduced from Micronesia to the Bonin Islands before WWII. After WWI, Japan came to govern the previous German colonies of Micronesia while Japanese troops settled in the major Micronesian islands. Carolinians witnessed the marching of the Japanese army and incorporated soldiers’ marching behaviour into their traditional dance. The dance was thus formed, mixing traditional Micronesian dance with Japanese soldiers’ athletic motion (Konishi 2006). Then the dance was introduced to the Bonin Islands by a Bonin Islander who had returned from Micronesia, and it became an “indigenous” dance there as well. The dance is now qualified as a form of intangible cultural property of the City of Tokyo.

Hachijo-jima Island is also an important location in the discussion of maritime interaction in the Philippine Sea. There is a legend of Gramdam *Tana*. The legend has it that there lived an old lady, called *Tana*. One day, she predicted the coming of a big tsunami. She was saved by clinging to a boat, while all the other people were drowned in the wave. She was pregnant, and later she begat a boy. Since there were no other people who survived, she mated with her son, and they had children. They are the ancestors of the present islanders.

This legend clearly contains motifs of original myths that are often found in the Austronesian and Austro-Asiatic traditions (Walk 1949; cf. Goto 1999, 2010). This example, together with those from the Bonin Islands, indicates that these islands south of Tokyo have been a melting pot of maritime interaction in the Circum-Philippine Sea.

In conclusion, the Circum-Philippine Sea, including Japan, Taiwan, the Philippines, Indonesia, and other Oceanic islands, is a rich field that has not been explored enough yet. We should explore these interesting aspects of culture history in this area. The technological integration seen in the canoe-fishing gear complex of the Bonin Islands was not a mere result of “diffusion”, but it is rather explained by the “dynamics of self-interested technical agents, the artifice of technical acts” (Dobres 1999:126). As Pfeffenberger (1999:159) notes, the canoe builders must have built canoes by:

...drawing from conventional modes of social, economic, and legal relationships, including partnership, kinship, auctions, speculative investment, markets, and contracts; but it weaves them together into a unique and distinctive totality – an artifice resulting in a socio-technical phenomenon that actors themselves recognize to be distinctive.

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