The Canoe Is the People

Indigenous Navigation in the Pacific





LINKS
Local and Indigenous
Knowledge Systems

VOYAGES AND REVIVAL1
Video 1 - A young man from Satawal1
Video 2 - Maori master canoe builder, Hekenukumai Busby (New Zealand)1
Video 3 - Hoturoa Barclay-Kerr of Te Toki Voyaging Trust
Video 4 - Cook Islands navigation student Te Aru Rangi Reitu (Rangi)2
Video 5 - Maori master canoe builder, Hekenukumai Busby (New Zealand)2
1 Traditional Voyages3
Story 1 - Why Fasu Disappeared from Ifalik (Yap, Micronesia)4
1.1 Sawei Gifts5
2 Modern Voyages6
1936-37 Kaimiloa (double hull): Hawaii > France6
1947 Kon-Tiki (raft): Peru > Tuamotu Islands6
1956-58 Tahiti-Nui (raft)6
1964 Rehu Moana (catamaran): Tahiti > Aotearoa6
1964 Tangaroa (catamaran): Atlantic Crossing7
1965-66 Nalehia (double hull): Hawaiian Islands7
1970 Maiisukul (single outrigger): Satawal > Pikelot > Saipan7
1976 Hokulea (double hull): Hawaii > Tahiti > Hawaii7
1976-77 Taratai I and II8
1980 Hokulea (double hull): Hawaii > Tahiti > Hawaii8
1985 Hawaiki-Nui (double hull): Tahiti > Aotearoa8
1985-87 Hokulea (double hull): Hawaii > Aotearoa > Hawaii9
1992 Takitumu, Te Aurere, Hokulea, Waan Aelon Kein9
1995 (Feb-Mar) Sailing to Taputapuatea Marae on Raiatea10
1995 (Apr-Jun) Sailing to Te Henua Enana (Marquesas Islands)10
1996 Te Au o Tonga (double hull): Rarotonga > Samoa > Aotearoa >
Rarotonga10
1999 Makalii (double hull): Hawaii > Satawal > Hawaii10
1999-2000 Hokulea (double hull): Hawaii > Rapa Nui > Hawaii11
2000 (Jan) Mileniume (outrigger): Tonga11
2000 (Feb-Apr) Te Aurere (double hull): Circumnavigation of North Island,
Aotearoa11
2000 (Sep-Nov) Te Au o Tonga (double hull)11
2004 Hawaiki-Nui II (double hull) – proposed voyage: Tahiti > Chile > Cook
Islands > Aotearoa
Pacific Map12

Voyages and Revival

In parts of the Pacific, especially Micronesia, much navigational knowledge has been kept alive. In others, it has been lost.

Now, all over the Pacific, there is a growing revival. There are now many voyaging societies, including those in Hawaii, Tahiti, the Cook Islands, Aotearoa (New Zealand), and the Marshall Islands. People are making more and more voyages in traditional canoes – rediscovering the past and carving the way to the future. New schools are being started to teach navigation to young people.

Sometimes, European ways are used – like teaching with books, building canoes with modern tools, navigating with the help of western maps and compasses, and using inboard motors and *escort boats** for support. People have different opinions about these things, but everyone has the same aim – to keep the traditional knowledge alive and hand it down to the young navigators of the future.



Video 1 - A young man from Satawal

See, there are some young people from these islands who went out to school in the United States or somewhere outside, and when they came back, they lost all these ... they lost all these things. And, you know, I'm kind of ashamed. If I'm those people, I'll be ashamed for losing our, you know, way of life. That's why I want to learn this.

From The Last Navigator © INCA 1989. Directed by Andre Singer.



Video 2 - Maori master canoe builder, Hekenukumai Busby (New Zealand)

Since my first time in Hawaii, my friends know I build these canoes because I felt ... I feel a great debt for the things they have shown us. I believe without the Hawaiians and Mau Piailug sharing their navigational knowledge we would be in a state of ignorance today. But today this knowledge is strong and will never be lost again. The outcome is that we are now teaching young people things like navigation and sailing.

^{*} NOTE: Definition of words in *italics* can be found in the Glossary in the CD-ROM Storehouse.



Video 3 - Hoturoa Barclay-Kerr of Te Toki Voyaging Trust

One of the things that we've been very interested in is learning the kinds of ways of navigation that Mau Piailug has been teaching everybody. So a few of us have been lucky enough to spend a little bit of time to listen to him and the things that he has to tell us about navigation and all those things. We're starting to find that there are some young people here in New Zealand who are interested in listening to those kinds of stories and doing those kinds of things too. So, something like the programme that we have here with these young children is we sit down and we spend time and look at the old traditions about canoes and the people who sailed – not just to Aotearoa but other stories from all around the Pacific Ocean.



Video 4 - Cook Islands navigation student Te Aru Rangi Reitu (Rangi)

I had a vision many, many years ago, with me sitting out here on the water in a canoe. I've never told anyone this. This is the first time I'm relaying this to anyone. And in my dream I was saying, "What am I doing here?" I was frightened, and then I realised what I was here for. This is where I'm meant to be, not in New Zealand. This is where I'm meant to be. I'm meant to be part of this voyaging society.



Video 5 - Maori master canoe builder, Hekenukumai Busby (New Zealand)

In 1985 a Tuhoe elder, John Rangihau was overseas. In Hawaii he met some Hawaiians thinking about sailing a canoe from Hawaii to Tahiti onto Rarotonga, but they were unsure about a journey between Rarotonga and Aotearoa. Then Nainoa Thompson one of Mau Piailug's first students came to New Zealand. He had to decide whether or not to sail to NZ. I accepted responsibility for their care and he agreed to sail here and made me a very happy man. That is when they prepared themselves for their Voyage of Rediscovery.

1 Traditional Voyages

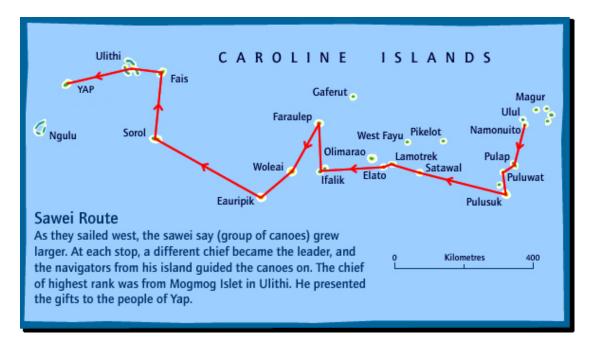
In the Pacific, special trading and religious voyages between islands used to be made. The sawei voyages are an example. Every few years, people from the *atolls* of the Carolines travelled to Yap (a larger volcanic island) with gifts. Some were kept in sawei baskets (woven baskets made of coconut fibres). The coral islanders believed that the Yapese controlled the weather. If they didn't bring sawei gifts to them, they could be hit by very bad storms.



The Yapese gave gifts in return. The gifts were often valuables that were not available on the other island and religious offerings. They recognised the *kinship* between the two cultures. The families in Yap treated the visitors as if they were their children.

The German administration stopped the sawei voyages in the early 1900s, but many people still know their sawei connections – and how to make the sawei basket.

Sawei basket photo © Rosalind Hunter-Anderson. This image is from the Ethnology Museum at the Academia Sinica in Taipei.



Story 1 - Why Fasu Disappeared from Ifalik (Yap, Micronesia)





This story tells of another voyage involving people from Yap and the atolls. One day, a sailing canoe from Yap came to Ifalik. The people of Ifalik welcomed the navigator and his crew and gave them many gifts. They invited them to stay as long as they wanted. However, the chief asked them not to leave the area of the canoe house. He knew that the Yapese had spiritual powers and didn't want this danger around Ifalik.

One morning, the Yapese navigator broke the chief's rule. He left the canoe house and went to the other side of Ifalik to swim. Suddenly, he saw something strange on the horizon. Even though the sun made it hard to see, he thought it was a big storm. So he collected some special leaves, said some enchanted words, and made the thing disappear.

He went to tell the chief that he'd just stopped a storm from hitting Ifalik. The chief was shocked. He told the navigator that it wasn't a big storm but Fasu, an island with a large mountain. The navigator was terribly sorry for what he'd done. The chief accepted his apology but told him to leave Ifalik. Today, Fasu lies just below the sea north-east of Ifalik. Boats avoid the area, but men fish there when the winds from the east make it easy to return to Ifalik.

1.1 Sawei Gifts

The coral islanders gave many special gifts to the Yapese through the sawei voyages. They included foods; mats and sails; dance belts; coconut oil, rope, and sweets; tobacco; and special shells. They also made religious offerings to the spirit Yangolap, like tur (valuable weavings).

The Yapese gave gifts in return – for example, turmeric powder for ceremonies; Tahitian chestnuts and other foods; red soil used for colour; clay pots; and giant clam shells. They also gave large trees for making voyaging canoes or even finished canoes. They promised to help the coral islanders after storms too.

The women made many of the gifts that were exchanged in the sawei system – for example, the tur, mats, sails, clay pots, and foods. Men were responsible for the soil, clam shells, trees, and finished canoes – and for navigating. They also performed the religious *rituals*.







2 Modern Voyages

The story of revival is the story of people weaving into each other's lives like the strands of a mat. The whole mat would not be complete without all their experiences and thoughts.

1936-37 Kaimiloa (double hull): Hawaii > France

When he built the Kaimiloa, Eric de Bisschop was inspired by Pacific voyaging canoes and guided by the indigenous people of Hawaii. However, he used modern building materials and methods. For example, he joined the two hulls together with old car springs instead of tying them to wooden beams (long pieces of strong wood). After many adventures, he succeeded in sailing west across the Pacific and Indian Oceans and then around Africa to France.

1947 Kon-Tiki (raft): Peru > Tuamotu Islands

Thor Heyerdahl didn't believe that canoe voyages from South-east Asia could have sailed east to Polynesia against the trade winds (winds that blow steadily towards the equator for half the year – from the south-east south of the equator and from the north-east north of the equator) and currents. He thought that raft voyages from South America were the first people to reach Polynesia. To support his idea, he built the raft Kon-Tiki from light balsa wood. He sailed it from Peru to the Tuamotu Islands of Polynesia. However, after studies of languages, cultures, and artifacts (objects created by people) from the area, modern researchers believe that Heyerdahl's theory is incorrect.

Note: After landing in the Tuamotus, Kon-Tiki was shipped to Tahiti and then to Oslo in Norway, where it is now in a museum.

1956-58 Tahiti-Nui (raft)

Tahiti-Nui (raft): Tahiti > off Chile

Tahiti-Nui (raft): Peru > northern Cook Islands

After Kon-Tiki's voyage, Eric de Bisschop wanted to prove that Polynesians could have sailed by raft to South America. He built Tahiti-Nui (a bamboo raft) and sailed south from Tahiti to catch the west winds east. Tahitian navigator Francis Cowan went with him. However, he and his crew had to abandon (leave) the broken raft near Chile. They were rescued by the Chilean navy. Later, they sailed back to Polynesia on Tahiti-Nui II, a raft made from Cyprus wood. As they neared Polynesia, it began to fall apart and sink. It finally crashed onto the coral reef of Rakahanga in the northern Cook Islands, killing De Bisschop.

1964 Rehu Moana (catamaran): Tahiti > Aotearoa

New Zealander David Lewis sailed a modern catamaran from Tahiti to Aotearoa (New Zealand), navigating by the stars in the old Polynesian way. He made one mistake in the Cook Islands, but his voyage still showed that it is possible to navigate without instruments over long distances. He learned from the traditional navigators

like Hipour (of Puluwat atoll in Micronesia) and Tevake (of Taumako Island of the easter end of the Solomon Islands). His book *We, the Navigators* is still the most complete book about Pacific navigation.

1964 Tangaroa (catamaran): Atlantic Crossing

Englishman James Wharram wanted to make yachting something for everyone, not just the rich. He mixed the design of the double-hulled voyaging canoe with European building materials. First, he crossed the Atlantic in a basic catamaran (double-hulled sailing boat based on the Polynesian double-hulled canoe). In the Caribbean, he made a better catamaran and sailed back to England. Since then, many sailors worldwide have successfully built and sailed boats that Wharram has designed.

1965-66 Nalehia (double hull): Hawaiian Islands

In the mid-1960s, a New Zealand historian named Andrew Sharp claimed that the Polynesians did not explore and settle the Pacific on purpose. He said that their canoes and ways of navigation weren't good enough. He argued that they'd been blown to the islands by storms and bad winds. To show that Sharp was wrong, anthropologist (person who studies human cultures) Ben Finney started a project to build double-hulled canoes. He wanted to test these canoes on long voyages and recover the old ways of navigating. The first tests were made with Nalehia, a copy of a Hawaiian double hull. The tests showed how well double hulls could sail on the open ocean. They provided the information needed to build the big voyaging canoe Hokulea and sail it to Tahiti.

1970 Maiisukul (single outrigger): Satawal > Pikelot > Saipan

The name Maiisukul means "his first teaching canoe of breadfruit wood", referring to Rasemai, who used it when he began to teach navigation. Rasemai and the canoe belonged to Asuukwow canoe house in southern Satawal, where Rasemai had married. For the trip to Saipan, Repwanglug borrowed the canoe from Rasemai/Asuukwow.

The voyage of Repwanglug and his crew re-opened the sea lanes from the Carolines to the Marianas. In the next decades many other voyages within the Carolines were made, although they were not officially recorded.

1976 Hokulea (double hull): Hawaii > Tahiti > Hawaii

Hawaiian artist Herb Kane designed Hokulea, a 19-metre-long voyaging canoe. Hokulea was built mostly with modern materials (plywood hulls and cloth sails). However, it sailed like a traditional canoe. At the launch in March 1975, Kane blessed it: Eia ka waa I kalai ia; e kapaia hainoa o Hokulea. Ke ui aku nei na alakai o ka po, na alakai o ke ao, na alakai o luna, na alakai o lalo. (This is the canoe that has been built; its name is to be Hokulea. As our gods of po and of ao, from above, from below to bless it.)

From a piece by Kenneth Emory on http://leahi.kcc.hawaii.edu/org/pvs/launching.html

No old Polynesian navigators were available to guide Hokulea from Hawaii to Tahiti, so Ben Finney brought a master navigator from Satawal, Micronesia. His name was Mau Piali. Hokulea arrived in Tahiti to a great welcome and then voyaged home. Mau has since played a huge part in the rebirth of traditional navigation. Hokulea continues to sail around the Pacific. It has become a symbol of indigenous revival, inspiring other Pacific Islanders to reconnect to their voyaging past.

1976-77 Taratai I and II

Taratai I (single outrigger): Kiribati > Fiji Taratai II (single outrigger): Fiji > Tonga

Taratai is a small island in Kiribati (Gilbert Islands) with few large trees. New Zealand photographer James Siers wanted to give the people of Taratai the chance to build a large voyaging canoe. He sent them wood for it. The largest piece was for the keel (structure on the bottom of a boat that works against the force of the wind to keep it upright). The master canoe builder had never seen such a big piece of wood. He didn't want to cut it smaller and so made a 21-metre canoe! It had two sails, which made sailing difficult. Finding wood light enough for the outrigger was also a problem.

In 1976, Siers and a crew from Taratai sailed for Tahiti but only got as far as Fiji. In 1977, they tried to complete the trip in a new plywood canoe (Taratai II), but it broke after leaving Tonga.

1980 Hokulea (double hull): Hawaii > Tahiti > Hawaii

After the 1976 voyage, the Hawaiins sailed Hokulea back to Tahiti in 1980. Nainoa Thompson, a young Hawaiian trained by Micronesian master navigator Mau Pialug, guided the canoe. This was the first time in hundreds of years that a Polynesian had navigated a canoe so far. The voyage marked the rebirth of long-distance voyaging in Polynesia.

1985 Hawaiki-Nui (double hull): Tahiti > Aotearoa

The building of Hawaiki-Nui was a joint project between Tahitian and Maori canoe builders, led by navigator Francis Cowan and carver Matahi Avauli Brightwell. Matahi had a dream that his grandmother wanted him to rediscover the path to Hawaiki, the mythical homeland of all Maori. He went to Tahiti with his dream and two hulls that he had carved. There, Francis helped him to complete the canoe and sail it from Tahiti to Rarotonga and then on to Aotearoa (New Zealand). Unlike some other canoes, Hawaiki-Nui sailed without the support of any escort boats (modern boats that follow a canoe) or an inboard motor. The canoe was shipped back to Tahiti and displayed in the museum there.

1985-87 Hokulea (double hull): Hawaii > Aotearoa > Hawaii

The Hawaiians sailed Hokulea to Aotearoa (New Zealand) and back. They stopped at the Tuamotu Islands, Tahiti, the Cook Islands, Tonga, and Samoa. They wanted to develop Hawaiian knowledge of the rest of Polynesia and encourage other Polynesians to join in the voyaging revival. The voyage took two years because they waited for the right winds for each stage. This is the traditional way of voyaging. For example, they waited for west winds before sailing east from Samoa to Tahiti instead of going against the trade winds (winds that blow steadily towards the equator for half the year – from the south-east south of the equator and from the north-east north of the equator).

1992 Takitumu, Te Aurere, Hokulea, Waan Aelon Kein Festival of Pacific Arts, Rarotonga, Cook Islands

These big Pacific canoes and many smaller ones met in Rarotonga to celebrate the canoe voyaging tradition.

Takitumu (double hull): Cook Islands

Takitumu had just been built on Rarotonga by former Cook Islands Prime Minister Sir Tom Davis (Papa Tom). Takitumu is a shunting kalia. It shows the tie between the Cook Islands and the western Pacific, Tonga, and Samoa. It's one of the fastest of the long-distance voyaging canoes. Its two plywood hulls are of different sizes. The smaller one is like the float of an outrigger. It uses a triangular sail thought to have been copied from Micronesian canoes. Like those canoes, Takitumu is shunted not tacked.

Te Aurere (double hull): Aotearoa > Cook Islands Hokulea (double hull): Hawaii > Cook Islands

Te Aurere sailed from Aotearoa (New Zealand) for the festival. Hekenukumaingaiwi (Hec) Busby built the canoe in 1991. Stanley Conrad was the captain. Jacko Thatcher was the navigator. After Hokulea's visit to Aotearoa in 1976, Hec wanted to build a Maori voyaging canoe with traditional materials. He feared that the knowledge could disappear, and so he wanted to rediscover canoe culture completely – from the prayer before cutting a tree down to the rituals (ceremonies) on the building site.

Waan Aelon Kein (outrigger): Cook Islands

Waan Aelon Kein is a long outrigger canoe from Eniwetok atoll of the Marshall Islands. It was built in 1991 by master canoe makers who had built and sailed big canoes when they were young. Walap isn't a long-distance canoe, so it was shipped by yacht to Aitutake atoll in the southern Cooks. From there, it sailed to Rarotonga using the Marshallese way of navigating by the ocean swells.

1995 (Feb-Mar) Sailing to Taputapuatea Marae on Raiatea

Hokulea (double hull) and Hawaiiloa (double hull): Hawaii Raiatea Takitumu (double hull) and Te Au o Tonga (double hull): Cook Islands > Raiatea

Tahiti-Nui (double hull): Tahiti > Raiatea Te Aurere (double hull): Aotearoa > Raiatea

Pacific stories say that canoes from across Polynesia used to sail to Taputapuatea Marae on Raiatea (near Tahiti) to take part in rituals (ceremonies) of the faatau aroha (friendly group). Then the group was broken when people from its eastern and western sides began fighting. In 1995, canoes once again voyaged to Raiatea to celebrate the rebirth of Polynesian voyaging and the rebirth of the group.

A ceremony of forgiveness and renewal was held on the marae.

Some of the canoes were built just for the voyage. Hawaiiloa was made in Hawaii using dugout logs from Alaska. Te Au o Tonga was built from plywood in Rarotonga using a Tahitian design. Tahiti-Nui was made from the old hulls of Hawaiki-Nui.

1995 (Apr-Jun) Sailing to Te Henua Enana (Marquesas Islands)

Hokulea (double hull), Hawaiiloa (double hull),

Makalii (double hull), Takitumu (double hull),

Te Au o Tonga (double hull), Te Aurere (double hull): Raiatea > Te Henua Enana > Hawaii > home islands

Five of the canoes that were at Taputapuatea Marae in Raiatea plus Makalii (a new one with fiberglass hulls from Hawaii) sailed to Te Henua Enana (Marquesas Islands). This island is thought to be the homeland of the Hawaiians. From there, the canoes sailed together to Hawaii to remember and celebrate the discovery of these most northern islands of Polynesia. Then they all sailed home. After Te Au o Tonga returned to Rarotonga, the Cook Islanders sailed her to French Polynesia's Tuamotu Islands to protest the testing of nuclear bombs on the atoll of Mururoa.

1996 Te Au o Tonga (double hull): Rarotonga > Samoa > Aotearoa > Rarotonga

Te Au o Tonga sailed on a long voyage to Aotearoa (New Zealand), visiting events like the 7th Pacific Arts Festival in Samoa and the 1996 Waka Moana Symposium in Auckland, Aotearoa.

1999 Makalii (double hull): Hawaii > Satawal > Hawaii

The crew of Makalii (Hawaii's newest voyaging canoe) wanted to honour the master navigator Mau Pialug for all he'd done to help Hawaiians to revive voyaging. They sailed Mau from Hawaii back to his home island of Satawal in the Federated States of Micronesia.

1999-2000 Hokulea (double hull): Hawaii > Rapa Nui > Hawaii

Hokulea, still strong after 25 years, succeeded in reaching Rapa Nui (Easter Island), the most eastern island of Polynesia. It stopped at Te Henua Enana (Marquesas Islands), Mangareva, and Pitcairn Island on the way. Finding Rapa Nui with traditional navigation methods was a great success. The island is very small. There are no islands around it to make a larger target. On top of that, nearly all the seabirds that once fished around the island are now gone.

2000 (Jan) Mileniume (outrigger): Tonga

This 33-metre kalia (Tongan double hull) was built by Tuione Pulotu and his men in Nukualofa, Tonga, to celebrate the year 2000. They also built two smaller 12-metre kalia as training canoes. Tuione: "We need four men just to handle the steering paddle. In the old days, if they didn't steer right, the king or chief would knock them on the head...and they would be replaced. We obviously can't do that sort of thing nowadays."

From www.tongahighschool.com/king_1.html (Originally from John Hamilton, Melbourne Herald Sun, July 1999.).

2000 (Feb-Apr) Te Aurere (double hull): Circumnavigation of North Island, Aotearoa

This journey right around the North Island of Aotearoa (New Zealand) was more difficult than an open ocean voyage (for which traditional double hulls are really designed). Te Aurere visited many marae (Maori communities) on the way.

2000 (Sep-Nov) Te Au o Tonga (double hull)

Te Au o Tonga (double hull):

Rarotonga > Aotearoa > New Caledonia > Rarotonga

Te Aurere (double hull):

Aotearoa > New Caledonia > Aotearoa

Te Au o Tonga sailed to Aotearoa (New Zealand) for the Millennium celebrations. It met up with Te Aurere in New Caledonia for the 8th Pacific Arts Festival.

2004 Hawaiki-Nui II (double hull) – proposed voyage: Tahiti > Chile > Cook Islands > Aotearoa

At the time that this CD-ROM was being created, Matahi Avauli Brightwell and Francis Cowan were building Hawaiki-Nui II, with the help of Tarepa Wharepapa and Ole Maiava. The 25-metre double hull follows the Maori Horouta tradition of canoe building. The sections of the hull are tied together.

