Vol 5, No 4  EASTER ISLAND FOUNDATION  December 1991

Lost Islands Cruise
Georgia Lee

The September-October 1991 Society Expeditions cruise, "Polynesian Migration", took us to some of the far-flung and hard to reach places in the south Pacific ocean. This begins a two-part article describing the islands visited, their history, and life today. Although our visits on shore were brief, they were memorable. Those islands which will be described are Ra'ivavae, Rapa Iti, Morotiri, Mangareva, Pitcairn, Henderson, and Ducie.

RA'IVAVAE (Australas)

This is one of the loveliest islands in the South Pacific. A jewel-like lagoon surrounds a dozen picturesque islets, and fern covered mountains reach to Mt Hiro, the highest point on the island (1500 feet). The tiny island is just south of the Tropic of Capricorn and measures only 6 square miles. Its vegetation is tropical, and the many rivers plus runoff from the mountains are the source of five great taro-growing areas. A great variety of food grows on the island, including breadfruit, coconuts, vanilla, coffee, and bananas. A barrier reef forms the deep lagoon between the motu and the shore; the Society Discover glided into the lagoon just a few meters above the clearly visible reef.

Most of the small tin-roofed stucco houses cluster near the churches. There are four small villages scattered around the island with some 1200 inhabitants. Aging school buses were employed to carry our group around the island. We visited one of Ra'ivavae's famous statues (second only to those of Easter Island in size)—and the only one remaining on the island. A considerable number of large and small stone statues in human form had been erected in various parts of the island prior to its discovery by Gayangos in 1775, who came to the island from an abortive Spanish attempt to colonize Tahiti. All the other statues were carried off to Tahiti where they now are displayed in the Gauguin Museum and the Museum of Tahiti at Punaauia. The one remaining statue is still on the island due to an accident: two statues were being transported to Tahiti via ship. In the process, one fell into the lagoon. The islanders took this as an omen and continued on page 3

Has the British Museum a "stolen friend" from Rapa Nui?
Steven Roger Fischer, Ph.D.

For more than a century the British Museum has perhaps been harboring a "Stolen Friend" of the Rapanui. For "Stolen Friend" could well be the proper translation of the name of the famous moai Hoa Haka Nana Ia. And no one in these 122 years since its unveiling has turned an ear to its loud opprobrium.

Perhaps this is because of the name's unpardonable bastardization. "Hoa Haka Nana Fa [sic] of Tau-re-re-nge" (Palmer 1870a:370) was the red-and-white colored "sacred image" of 'Orongo, or so the Rapanui informed Palmer in November 1868 once the British sailors had laboriously moved the "four or five ton" moai onto H.M.S. Topaze for shipping back to London and the British Museum.

In other accounts, Palmer writes "Hoa-haka-nana-ia" (1870b:112), "Hoa-haka-nana-ia" (1870b:115), "Hoa-hakanana-ia" (1870b:117), "Hoa-hakanana-ia" (1870b:117), and "Hoa-hakanana-ia" (1870b:117). In both of the 1868 photographs of this famous statue taken while it was aboard the Topaze (Roussel 1926:496-497, falsely identified the ship as the Challenger, apparently the first two photographs in history of anything Rapanui) the name has been printed upon its...
protective tarpaulin. And into the moai's specially fashioned stone pedestal was engraved in 1869 the name "HOA-HAKA-NANA-I'A"

Routledge (1919:257) wrote "Ho\-haka-nanaia," saying this name was "roughly to be translated as 'Breaking wave'"—although in the Rapanui language none of these three words has the slightest to do with either "breaking" or "wave" (the action of breaking waves is haiipū in Rapanui). Métroix (1940:298) called the moai "Ho\-haka-nanaia," whose translation he took directly from Routledge as "Breaking waves" without checking this for himself, apparently, despite his keen interest in the Rapanui language.

Fuentes' dictionary provides the forms "Hoa-hakanana-ia," calling it a "nombre de un moai (1960:208), and "Moai-ho\-hakana-nana-ia" which is the "nombre de la estatua tomada en Orongo y transladada al Museo Britanico" (1960:262). Fuentes does not attempt a translation of the apparently jumbled name, with good reason. Recall that the German missionary Father Gaspar Zumbohm had already told Palmer on Rapanui back in 1868 that "the meaning of the name is very doubtful" (Palmer 1875:290).

The form "Hoa Haka Nana Ia" is of course gibberish in Rapanui. Certainly we can recognize in it the two Rapanui words hoa 'companion, comrade, friend;' proprietor, lord, master' from Proto-Polynesian *soa 'friend' (Walsh/Biggs 1966:100), as well as Rapanui haka 'to make' which is the common Polynesian causative prefix, Proto-Polynesian *faka-'causative' (Walsh/Biggs 1966:7). But "Nana Ia" tells us nothing in this orthography. It is obviously incorrectly spelled, in other words.

We might take "Nana Ia" to be the result of the following hypothetical conversation: "Ko ai te ingoa 'o te moai nei?" "Ko Hoa Hanana Ia?" "Hoa Hakanana Ia?" "Eeee" ("What's the name of this moai here?" "It's Hoa Hakanana, it is." "Hoa Hakanana It Is?" "Yes") in which hakanana is Marquesan "to spy upon" or Mangarevan "to hate," or even Mangarevan hakananaana "to put, to sulk" which supplies a perfect description of this moai's sulking or pouting lips. But then almost all moai show sulking or pouting lips. And why should these replies come in Marquesan or Mangarevan and not in Rapanui? --apart from the possibility that Palmer/Zumbohm might have been chatting with one of the three Mangarevan presbyters on Rapanui in 1968, which is unlikely.

The truth of the matter is that the name was recorded in 1868 with an "improper" spelling which was then passed on from generation to generation without correction up to the present day. Only Routledge (1919:257) came close to the name's "correct" form when she wrote "Ho\-haka-nanaia" -- but still hit a bit shy of the mark.

For the name witnessed in 1868 could have been "Ho\-Hakananaia." We know from Palmer (1870a,b,c,1875) that the Rapanui used the word hoa to designate such smaller moai. Its meaning in this context probably fell somewhere within the semantic range of "friend, companion, comrade" or, if there had truly been some ritual meaning attached to these smaller statues, "lord, master, proprietor, officiant."

What does Rapanui hakananaia mean? Old and Modern Rapanui haka is of course the aforementioned causative prefix "to make." Modern Rapanui nanaia is "to pass quickly by," which appears to be rather irrelevant in this context; that is, it is difficult to imagine a four-ton moai "passing quickly by" or a local rite--here on a cliff some 1000 feet above the sea--in which this moai might cause people to "pass quickly by," wholly unattested at 'Orongo anyway, although it is still entirely within the realm of possibility. But nanaia also signifies "thief" in Modern Rapanui, and this might very well be what is meant in the name which I shall hereafter write as Hoa Hakananaia. The lexeme Hakananaia, not attested in Modern Rapanui, would be Old Rapanui and probably mean something like "stealing, stolen, inciting to theft, having incited to theft, etc."

How might we interpret the name Hoa Hakananaia? If I were an archaeologist or ethnologist I would of course readily point out the obvious fact that the moai Hoa Hakananaia was situated in 'Orongo where the "theft" of the first egg of the manu tara from Motu Nui represented the highlight of the Birdman rites. Perhaps the name signifies "Lord Inciting Theft" or "Master (Who) Makes (a) Thief"--or "The Instigator." Such an interpretation would perhaps fit in well with what we already know about these rites, and its implications would represent important new additions to our knowlege: i.e., that this particular hoa was immediately involved in the Birdman celebration; that the mana to fetch the egg seemingly emanated from it; that Rapanui monolithic architecture was intimately associated with these rites too; and--although none of this is attested in Rapanui oral tradition--all sorts of fascinating possibilities which spring to mind in educated speculation. But here a word of caution would be in order, because with this we are likely to be reading into the name what is not even there.

I am a linguist and philologist: I must recognize hoa first as "friend" and haka-- as a Polynesian causative which, statistically speaking, whenever it fills such an obvious "adjectival slot" as it is doing here, usually translates--in all Polynesian languages--more often (but not exclusively) as "made" than "making". In other words, rather than "Lord Making Thief" we would more likely have "Friend Been Made Stolen," an implied passive construction (only in Indo-European terms) perhaps more properly translated as "Friend Who Has Been Purloined"--or simply "Stolen Friend."

If this is true, then the statue's name Hoa Hakananaia is not its "ancient name" after all but would have been coined by the Rapanui in 1868 when the British purloined the moai from 'Orongo and peremptorily packed it aboard the Topaze. When Palmer, through Father Zumbohm, enquired after the
statue's name, the helpless Rapanui merely replied, "Stolen Friend"—tongue-in-cheek, and with no one the wiser. And so it was officially presented a year later (1869) at the British Museum, with Queen Victoria herself proudly unveiling to London's cheering public Easter Island's glorious Hoa Hakanaai'a... "Stolen Friend." More than a century it has stood there in the world's most hallowed museum in mute stoicism while each curious passerby has read out aloud in unwitting fascination the quaint and charming Polynesian legend on the pedestal "HOA-HAKANAIA-I"—or "Stolen Friend." Scores of years of veiled reproach and silent accusation... "Stolen Friend." All for the want of a "proper" translation. This could become one of the great—and politically most embarrassing—anecdotes in the annals of the British Museum.

If this interpretation is correct. And what would the statue's original name have been? Anybody's guess. It seems most likely that the "Hoa" part of the name was in fact its actual name or at least its generic designation, because the statue Hoa Haoa/Hoa Hava was also identified and retrieved at the same time (Palmer 1870a,b,c,1875). Here we must recall Englert's (1948:440) information that at 'Orongo it was the hoa manu who received the first egg of the manu tara from his champion's hands; perhaps the statue known as Hoa was the actual symbol of this hoa manu and was known originally by the name Hoa Manu. But we have no proof of this. Palmer (1870b:113) was also intrigued by this question of the original significance of the hoa's name, and asked the Rapanui what they might possibly know about its meaning. Their reply: "Many, many dead round about!"

References:
Englert, S. 1948. La Tierra de Hotu Matua. Padre Las Casa (Chile): "San Francisco."


CRUISE CONTINUED FROM PAGE 1

decided it was bad luck to try and move this last statue; they say the one that fell actually jumped into the sea rather than leave.

Our trip around the island included a stop at a ruined marae, Pomaovao. This marae, perhaps that of a chief, has a ceremonial walk from the lagoon, an unusual feature. We noted many fragments of broken statues; the advent of Christianity in 1822 triggered the destruction of the ancient sites. Nearly all ancient marae were destroyed. The on-going archaeological survey on Ra'ivavae has recorded 92 marae on this tiny island. Archaeologist Edmund Edwards greeted us on the beach and escorted the group around to see the sites. One of his most recent finds are bas relief petroglyphs, described by him as the finest in French Polynesia.
Although the most dominant prehistoric remains are ancient marae, Heyerdahl's crew excavated a hillside terraced village in 1956. It was reported to the Heyerdahl researchers that one category of marae was purely for ceremonial activities, and some of these were places where virgins selected by priests were sequestered. They were not allowed to leave the marae but stayed there, singing and praying. Material necessities were brought to them by the people. At some marae important knotted genealogy ropes were kept; these were made of the hanging roots of the Aoa which were prepared and split into thin strings. Each family took care of recording its own genealogy, and each district had a marae where the ropes were kept.

Aside from the Heyerdahl expedition, a fascinating study of the sexual mores of the natives of Ra'ivavae was made by Donald Marshall in 1957. Marshall went to the island to reassess information collected by Frank Stimson in earlier days. Stimson (to some, a controversial figure in Polynesian anthropology) had reported on customs from Ra'ivavae that focused on human sexual behavior. Calling it the "island of passion", Stimson described sacred areas as being studded with stone phalluses where erotic fertility rites were conducted, including public copulation. Marshall's conclusion is that Ra'ivavae indeed appears to have had a local efflorescence of concern with erotic elements, that sex was a dominant theme in the culture, and that these elements were squelched by early missionaries.

Erotic interests are known to have occupied all Polynesians; famous chiefs were bisexual and love was the favored means of access to power and property. Children were socialized in the acts of love, and sexual conquests marked a successful political career. All this was celebrated in dance, poetry and song (Sahlins 1985:10). As can be imagined, all this sexual activity drove the missionaries wild. They complained bitterly about the twenty forms of illicit intercourse, naked bodies, and uninhibited free love. And they were successful in stamping most of it out.

The missionaries did their work well. And our brief visit to Ra'ivavae certainly revealed no evidence of erotic activities. As we returned to the beach where we boarded the zodiacs to return to the ship, some very mature local vahines of amazing girth put on an impromptu dance to the rhythm of drums. Dressed in flowery print pareus and with flowers in their hair they entertained the departing visitors.

An interesting footnote to history comes from letters written by William Mulloy to his wife, dated 1956: "Yesterday we put in at Ra'ivavae to pick up Gonzalo [Figueroa] and Arne Skoldsvold whom I mentioned before we were left there while we went to Rapa [Iti]. By the time we got back they had gone so native that we had to draw lots to decide which two they were. They had gotten a lot of work done principally excavating a small hillside terraced village somewhat similar to the thing on Rapa and a couple of marae. My principal job for that day was to go back into the bush with the captain and a couple of natives to bring out a large statue or tiki that weighed about five hundred pounds. We finally found it in a rather inaccessible place and had to build a sledge around it from the local materials and drag it through the bush cutting a trail ahead to the sea. Here the lagoon was so shallow that we couldn't get the launch closer than about 500 meters to the shore so we had to drag it through the water for that distance and then lift it into the launch. It was quite a job and took about all day so I didn't get much chance to look at Ra'ivavae. It appeared to be an island somewhat similar to Rapa but a good deal warmer and with more outside contacts as the people grow coffee and schooners come every once in a while to pick it up."

**RAPA (Australis)**

Rapa Iti is the southernmost of these islands at 27°, 37' south. Its nearest neighbor is Ra'ivavae some 300 miles (600 km) away; like Ra'ivavae, there is no airport. The island is considered a nature preserve.

![Outline of Rapa showing how the sea has entered the caldera to create the harbor. The x marks the location of the prehistoric hill-top fortress of Morongo Uta.](image)

Scenically, Rapa is very impressive with great peaks and cliffs. Previously called Oparo, the island is basically horseshoe shaped with high peaks reaching to 2,000 feet (650 m). There are no surrounding reefs. Scattered offshore are a number of small sugar loaf-shaped islets. At its greatest dimension, the island measures 15 square miles. Black basalt seaside cliffs rise to 1500' and "Some of these are infamous as places where men have plunged to their deaths while hunting barehanded the birds that nest there." (Hanson 1970:6).

A small population (516 in 1988) lives on either side of the bay. There is an infirmary and a nurse, and a tiny store with a few items. Our zodiacs tied up to an eroded cement pier.

Temperatures here vary considerably. It is nearly always raining and the island is shrouded in clouds. In particularly cold winters, sleet has been experienced. The abundance of rainfall has resulted in one of the most rugged landscapes in
Polynesia with fantastically jagged mountain peaks. Rapa was originally covered with forest but this has been replaced by grass and ferns; however, a reforestation project in now in progress and rows of conifers can be seen above the village.

According to Bellwood (1979:344), Rapa does not fit the cultural "chain" (of Austral Islands) and has many local idiosyncrasies. The ancient Polynesians lacked pigs, dogs, and chickens; taro and fish were (and are) their staple foods. Rapa lacks lush tropical vegetation, beaches, and most edible plants that are seen in other Polynesian islands, such as breadfruit, mangoes, etc. For the cultivation of taro, they built elaborate terraces in great shallow "steps". Today, taro and coffee are the major crops. Coffee groves are harvested between May and August and processed by the women. After it is washed and dried, it is exported to Tahiti; the Rapans drink instant Nescafe!

There is a subsistence economy; they produce practically all of their food, shelter and other materials themselves; most islanders spend a good part of every day in some work connected to food. A few grow European vegetables, exporting potatoes and onions to Tahiti. Purchased goods must come in from Tahiti. There are few salaried jobs on the island besides that of pastor and school teacher. This was the only occupied island we visited that didn't have something to sell to tourists.

The ancient society used a unique adze form, one similar to that of Easter Island. Although they built earthwork forts, as did the Maori of New Zealand, it appears that Rapa was settled from other islands in the Austral group.

Rapa's most spectacular archaeological remains are those of a series of forts or fortified villages on the crests of ridges. One, at Morongo Uta, was excavated by Mulloy in 1956 (see below). There are about a dozen of these pa above the bay to defend territory in overpopulated Rapa (or from outside dangers; Mulloy thought perhaps raiders from Ra'ivavae might have been the enemy). At any rate, the ancient inhabitants of Rapa must have feared someone, for living on these high ridges is cold and unpleasant with heavy rains, fog, and cloud-shrouded peaks.

In order to construct the fortified villages, the whole mountain top was cut off in a series of terraces that provided the only flat spots in the area. The area of the pa at Morongo Uta was almost a quarter of a mile wide and from the top to the bottom terrace, almost fifty meters. All else was an almost sheer drop. The forts were constructed by excavating a ridge to leave a central tower surrounded by two or three terraces; further terracing branched out from the central section along the ridges. The tower and many of the terraces were faced with dry masonry walls. The terraced surface of Morongo Uta was 5406 sq.meters.

William Mulloy, the archaeologist who excavated this site, describes working here and the problems of dealing with heavy storms and mud while trying to keep from falling off the dangerous cliffs: he says, "...one thing I remember especially that happened right after the storm was seeing a goat on the mountainside far below me fall and go head over heels about 200 feet down the mountain."

We all could sympathize with the unfortunate goat as we followed a local guide up a steep mountain path to see Morongo Uta, one of the fortified villages. It was raining and the grass-covered path was slick -conditions that added to the difficult climb.

Morongo Uta pa is in the south central part of the island, at the highest point of 3 steep sided ridges. This was a fort and a village built on a complex arrangement of house terraces with many rooms and fortifications. The village could have held 400 people. Small rectangular niches were found at this site: they were about 130 cm long and contained rows of vertical prismatic stones. The island of Rapa is reported to have only three marae, but these small shrines in the fort-villages may have served a religious function, as miniature marae.

View of the fortified village of Morongo Uta excavated by Mulloy in 1956. Today it is overgrown with grasses. (Photo: Carlyle Smith).

The tiny shrines are artificial groupings of dike-stone prisms, found in excavated niches in the rear wall of terraces, although in a few cases, they were found on minature open terraces. They usually consist of two rows of prismatic stones driven upright into the floor and parallel to the opening. In three cases, each row has five stones; in another, the front row has 5, the other 7; in a third, the front row has 6, the rear row seven. These are associated (and/or connected) with horizontal stones. The only other place where small vertical stones are found on terraces is far-away Nihoa Island.

Vancouver discovered Rapa on 22 December 1791 and, at that time many, if not all, of the forts were occupied and appeared to be protected by one or more enclosing palisades. Vancouver estimated the population at 1500. "...fortified places, resembling redoubts; having a form of block houses...with rows of pallisadoes a considerable way down the sites of the hills...these...seemed intended for...defending the citadel by a few against a numerous host..."
of assailants. On all of them, we noticed people, as if on duty, constantly moving about. What we considered as block houses...were sufficiently large to lodge a considerable number of persons, and were the only habitations we saw." (Hanson 1970:15). Most researchers have concluded that the terraced forts were designed for defense and early accounts mention chronic warfare, probably due to population pressure on the available land. However, these forts were also permanent habitations, at least during the times when warfare was endemic. One early visitor suggested the move to the highlands was also to free up the flat land for agriculture. There are at least 35 fortified places, capable of holding from 25 to 400 people. Considerable planning and effort went into these constructions which suggests a fairly centralized social and political organization.

Ancient burial practices on Rapa varied according to status (and this is true throughout all Polynesia). Low status individuals were placed on a reed raft and launched out to sea; higher status individuals were either placed in a shallow grave or in a thicket and the bones retrieved after several years. High status chiefs, kings, priests were buried in caves. One unusual burial place was found by the Heyerdahl expedition. This is a tomb on Mototunga, overlooking the end of Ahurei Bay. No bones or artifacts were found, but a rectangular chamber had been cut into the vertical face of solid rock. The opening was closed with fitted slabs, and carved in bas relief on the west end is a human figure. The figure (110 cm high) stands out some 10-12 cm from the rock. It is supposed that this represented a supernatural guardian (Smith 1965).

Rapa was devastated by diseases from the time of contact. In 1826, Davies thought there were 2000 inhabitants. By 1834 Moerenhout reported only 300 natives due to the introduction of European diseases. In 1851 there were 70. During the twenty years following arrival of missionaries in 1826, fully 90% of the population was swept away (Hanson 1970:31).

In 1863 a raiding Peruvian slave ship came; however, the Rapans captured it and sailed it to Tahiti, turning in the captain and crew to French justice. But later that same year, Peru sent back into the Pacific a shipload of islanders (from various islands in the Pacific) to be returned. Arriving to Rapa, the captain forcefully unloaded some sick Polynesians-who were carrying the smallpox virus. The resulting epidemic took a fearful toll.

It is assumed that the move to the shore areas of the island is a modern one; after the decimation of their population, there was no longer any need to fight over scarce land and resources and the lowlands are more convenient to taro terraces and the sea.

Rapa became a protectorate of France in 1867, mainly for use as a coal depot. But steamships did not prosper and the route across the Pacific was discontinued. At one point, Great Britain was prepared to exchange land in the New Hebrides for the island of Rapa— for Rapa was anticipated to have strategic importance equal to Gibraltar once the Panama Canal was completed. After neglecting Rapa for some 12 years, the French appeared in 1881 to change the status of the island from a protectorate to outright possession. The Rapans protested their independence but when faced by a warship and threatened by armed marines, they accepted French rule. In 1887 the Governor of French Oceania arrived and enforced French control over the island's affairs. Again due to threats and show of force, the Rapans gave up. The monarchy was abolished, native laws were replaced with French civil rule, and France took direct control of the island affairs.

Rapa's potential as "a perfect Gibraltar" never was realized; in 1900 a French engineer named Kunkler applied for permission to construct a major port at Rapa and if he had succeeded, it is possible that Rapa rather than Tahiti would have become the most important island in the eastern South Pacific. But Rapa is small and remote, with few resources; by 1909 (before construction of the harbor began) the French government withdrew approval of the port project and developed Tahiti instead. Rapa remains lonely and politically of little importance.

A few excerpts from Mulloy's letter from 1956 describes the hardships of working on Rapa Iti:

"The next stop was Rapa Iti...It is a beautiful place--circular group of fantastically jagged mountain peaks surrounding a beautiful lagoon into which our ship could come. It is by far the most primitive island we have seen. About 300 natives almost none of whom speak any French...This seems pretty close to the Polynesia you read about in books—the village, grass shakes and pareus. Here we really hit the jackpot archaeologically. This place seems to have supported a large prehistoric population. There are remains of prehistoric villages, agricultural terraces up the mountain slopes, and most fantastic of all; on inaccessible or almost inaccessible mountain peaks are any number of large stone forts which are almost unknown in the literature. They are apparently refuges used by the prehistoric people to protect themselves from raids by people from other islands...."

"The most characteristic thing about Rapa is that it is cold! The temperature is usually down around 60 degrees and is almost always raining and the island is shrouded in clouds. In the whole month we were there we had only three days in which we saw the sun....The moisture is such that it is practically impossible to wear very much clothing for it is wet all the time and far from keeping you warm it keeps you cold. The natives wear very little clothing and I adopted the same custom as the only possible adaptation to the conditions. I did most of my work in a pair of shorts or a pareu and sometimes a raincoat—a strange combination.

"The village we selected was traditionally called Morongo Uta and was on the peak of a steep mountain rising 790 feet out of the sea. Martin [Rapu] and I made a camp on the
mountain side near the top on a small ridge that provided
just exactly enough space to pitch our tents. On either side
of us was an almost cliff-like drop into the sea. The camp
was continually covered with mist and was altogether a very
unpleasant place.

"The fortified village was a truly fabulous thing. The whole
mountain top was cut off in a series of terraces which
provided absolutely the only flat spots in the vicinity.
Everything else was a sheer drop. These terraces were dug
out in the back and built up in front with excellent masonry.
The area of the fort itself was almost a quarter of a mile
wide and from the top to the bottom terrace almost fifty
meters so you can see that it was a hell of a big thing.

"We got quite a lot of artifacts out of the site, but of very
limited kinds. There were dumbbell shaped popoi pounders
in great numbers and some very beautifully made. There
were no artifacts of perishable materials preserved in the
very wet material. As a matter of fact the whole site as you
can imagine was just one big mud hole all the time and was
very difficult to work.

"We sure had some adventures up at this camp. One time
for two days we were isolated by a storm that just about
reached hurricane proportions. It started in the middle of the
night with high wind and heavy rain. One of our tents was
blown down and the other partly down and in the wind there
was nothing we could do about it but hang on to the
mountain top and try to avoid falling or being blown off....
The next day there was no dawn and we continued to be
unable to move an inch out of the spot where our tents were
pitched. We could see nothing and every minute the wind
was trying to pull us off. We stayed this way all day and the
next night before it cleared up and we were visited by a
rescue party.... During this time all we could do was to open a
couple of cans of corn beef. Incidentally, Hellaby's New
Zealand corn beef is something that will stick in my mind for
the rest of my life as the keynote of that camp. It was our
staple food and I never want any more."

**Morotiri (Bass Rocks)**

We sailed out of the bay at Rapa at dusk; by the early light
of dawn the next day we could begin to see the faint outlines
of Morotiri's mysterious islets. Through the morning mists
the pinnacles stood like jagged and contorted basalt icebergs.
Morotiri consists of ten islets located some 74 km southeast
of Rapa Iti. They are enormous and forbidding, with vertical
cliffs rising from the sea. There is neither water nor
vegetation here, only seabirds. But amazingly enough, some
of the pinnacles are crowned by man-made stone platforms
and round "towers".

---

The fortified village was a truly fabulous thing. The whole
mountain top was cut off in a series of terraces which
provided absolutely the only flat spots in the vicinity.
Everything else was a sheer drop. These terraces were dug
out in the back and built up in front with excellent masonry.
The area of the fort itself was almost a quarter of a mile
wide and from the top to the bottom terrace almost fifty
meters so you can see that it was a hell of a big thing.

We got quite a lot of artifacts out of the site, but of very
limited kinds. There were dumbbell shaped popoi pounders
in great numbers and some very beautifully made. There
were no artifacts of perishable materials preserved in the
very wet material. As a matter of fact the whole site as you
can imagine was just one big mud hole all the time and was
very difficult to work.

We sure had some adventures up at this camp. One time
for two days we were isolated by a storm that just about
reached hurricane proportions. It started in the middle of the
night with high wind and heavy rain. One of our tents was
blown down and the other partly down and in the wind there
was nothing we could do about it but hang on to the
mountain top and try to avoid falling or being blown off....
The next day there was no dawn and we continued to be
unable to move an inch out of the spot where our tents were
pitched. We could see nothing and every minute the wind
was trying to pull us off. We stayed this way all day and the
next night before it cleared up and we were visited by a
rescue party.... During this time all we could do was to open a
couple of cans of corn beef. Incidentally, Hellaby's New
Zealand corn beef is something that will stick in my mind for
the rest of my life as the keynote of that camp. It was our
staple food and I never want any more."

**Morotiri (Bass Rocks)**

We sailed out of the bay at Rapa at dusk; by the early light
of dawn the next day we could begin to see the faint outlines
of Morotiri's mysterious islets. Through the morning mists
the pinnacles stood like jagged and contorted basalt icebergs.
Morotiri consists of ten islets located some 74 km southeast
of Rapa Iti. They are enormous and forbidding, with vertical
cliffs rising from the sea. There is neither water nor
vegetation here, only seabirds. But amazingly enough, some
of the pinnacles are crowned by man-made stone platforms
and round "towers".

---

The people of Rapa have two legends about Morotiri: some
say a defeated chief fled here in his canoe, and took up
residence. Others say that Rapans first settled here and
occupied the pinnacles and later on moved to Rapa. One
would have to be desperate to try to survive on Morotiri. To
my knowledge, no archaeological work has been done here;
we have no information on "who" or "why" or "when." A good
project for an Indiana Jones-type archaeologist!

In the next issue of Rapa Nui Journal, we will describe the
Society Discoverer's visit to Mangareva, Pitcairn, Henderson
and Ducie Islands.

**to be continued in the next issue**

**References:**

York: Oxford University Press.

Hanson, F.A. 1970. *Rapan Lifeways: Society and history on a
Polynesian island.* Boston: Little, Brown and Co.

Garden City.

Mulloy, William. 1965. The Fortified Village of Morongo
Uta. IN: Heyerdahl, T. and E. Ferdon, eds. *Easter Island
and the East Pacific,* Vol.2: Misc. Papers; Pp.23-61. Reports of
the Norwegian Archaeological Expedition. Monograph 24
(2): School of American Research and the Kon-Tiki
Museum.

Mulloy, William (1956) Letters to Emily Ross Mulloy.

Sahlins, M. 1985. *Islands of History.* University of Chicago
Press.

Smith, Carlyle. 1965. The Burial Complex on the Island of
Rapa Iti. IN: Heyerdahl, T. and E. Ferdon, eds. *Easter Island
Reports of the Norwegian Archaeological Expedition. Monograph 24(2): School of American Research and the
Kon-Tiki Museum.
REVIEWS

Mysterieuse Ile de Paques
A film review by Paul Bahn, Ph.D.

Another video concerning Easter Island has become available in France and may be of interest to RNJ readers. Called Mysterieuse Ile de Paques on its packaging, its actual title on the screen is Les Mysteres de l'Ile de Paseques; but fear not, this is no von Däniken-style fantasy but a sober and excellent documentary by eminent French film-maker Christian Zuber.

Although released on video in 1990, the one-hour film dates from about 1979. Zuber's commentary (all in French) tells us that he spent 123 days on the island with family and film crew, and that their visit coincided with that of some Unesco archaeologists. His stay included 14 days and nights at Rano Raraku, and 5 days/nights at El Gigante, taking detailed measurements.

There are many fine sequences to recommend: the pounding sea, a four-master off shore, the close aerial view of Akivi, the landing on the Motu, and in particular the close studies of El Gigante and the unfinished figures in the quarry. At one point a sound-effect of multiple hammers striking rock is added which helps one to imagine what a noisy place Rano Raraku must once have been.

Zuber shows commendable concern for conservation, stressing that they only walked on El Gigante in bare feet; showing some of the horrible tourist graffiti on certain statues; and--in a sequence showing the outlining of petroglyphs with white talc--claiming that this was OK because the talc would wash off with the next rain!

The islanders themselves also feature often, together with their crafts. Zuber himself tends to remain in the background, concentrating on presenting his subject; this is in marked contrast to the otherwise excellent Cousteau film (see Rapa Nui Notes 3, Spring 1987:4) where Cousteau and his questions tend to be given more prominence than Mulloy's answer.

Zuber's film, of course, does not feature Mulloy, but it does have a youthful Charlie Love, drawing his meticulous aku plans, and showing the palm root-molds which he had discovered, thought in those pre-Flenley days to be coconut. At the end of the film, Zuber brings a little toromiro from Sweden to the island, and we see the (ill-fated) specimen being planted. And the then-recent discovery of the eye is given full coverage, culminating in a pair of reconstructed examples being fitted to a moai.

I could detect errors: Zuber is a little shaky on the date and authorship of some of the drawings by early visitors; he claims the statues have no arms; and he has the strange notion that Tukuturi is a female giving birth and that Heyerdahl believed the statue has actually been brought over from Peru!

All in all, a most enjoyable film with some truly memorable sequences. Be warned, however: it is a video for the French system (VHS Secam), which means that in Britain (VHS Pal) I can see it only in black and white. And to be viewed in the U.S. it would probably require expensive treatment to be compatible with the American system.

Available from CITEL—Service consommateurs, BP 110, 91412 Dourdan-Cedex, France. Cost, c. $35. [Paul G. Bahn obtained a Ph.D. in archaeology at the University of Cambridge and has held a series of fellowships, most notably at Liverpool University and a J.P. Getty Postdoctoral Fellowship. He is a freelance writer, broadcaster and translator in archaeology. He has published over 200 papers and articles and several major books. His most recent book (with John Flenley) is now in press at Thames and Hudson (London), and titled Easter Island: Earth Island. We hope to have further information on this new Easter Island book and how to obtain it in our next issue.

EASTER ISLAND FOUNDATION NEWS........

The official ground breaking ceremony for the Mulloy Research Library took place at the Sebastian Englert Museum on Rapa Nui on 13th of October, 1991. The new facility is a memorial to Mulloy, an internationally renowned anthropologist who arrived to the island in 1955.

This auspicious event was opened by Claudio Cristino, director of the Anthropological Museum. The Master of Ceremonies was Professor Helmut Kaufmann. The President of the EIF, Dr. Joan Seaver, welcomed the guests, and Sr. Patricio Tupper of the Amigos de la Isla de Pascua gave a stirring speech. Emily Ross Mulloy spoke in English while her daughter Kathy Mulloy Bonilla translated it into Castellano. Juan Haoa of the ElF, Dr. Joan Seaver, welcomed the guests, and Sr. Patricio Tupper of the Amigos de la Isla de Pascua gave a stirring speech. Emily Ross Mulloy spoke in English while her daughter Kathy Mulloy Bonilla translated it into Castellano. Juan Haoa of the ElF, Dr. Joan Seaver, welcomed the guests, and Sr. Patricio Tupper of the Amigos de la Isla de Pascua gave a stirring speech. Emily Ross Mulloy spoke in English while her daughter Kathy Mulloy Bonilla translated it into Castellano. Juan Haoa of the ElF, Dr. Joan Seaver, welcomed the guests, and Sr. Patricio Tupper of the Amigos de la Isla de Pascua gave a stirring speech. Emily Ross Mulloy spoke in English while her daughter Kathy Mulloy Bonilla translated it into Castellano.
visitors included Derek Hodgson, Vice President in charge of research at the University of Wyoming; Dr. George Gill, University of Wyoming; Sonja Haoa; Dr. Ted Kurze; Georgia Lee; Frank Morin; and many of the passengers who arrived on the Society Discoverer.

Gill noted that from the beginning of Mulloy's research, the University of Wyoming has worked closely with the people of Rapa Nui; Hodgson added that the Library and Museum will be the basis for continuing interaction between the University of Wyoming and Easter Island: the University of Wyoming will explore the establishment of a fellowship for an islander to attend the University and is also planning to conduct an international conference on anthropology and other related studies regarding Easter Island culture.

Emily Ross Mulloy's moving speech is included in its entirety: "Welcome to all the guests who are here today from all parts of the world to begin the construction of the Mulloy library. Exactly 31 years ago, October 12, 1960, many of us gathered to dedicate Ahu Akivi, the first of the island's ancient monuments to be restored in modern times. This event, through commemorating the past, also began the island's entry into the modern age. More and more people, scholars as well as tourists, came here to marvel at the works of art from the past and learned to value the talent and industry of the people now living.

"Bill and I had been planning, before he became ill, to retire from University teaching and to come here to continue his work. We were going to bring his own books and other research materials here, and we were planning a small house close to the museum. Of course, as you know, he was not able to complete this plan. But we did send his works to become a nucleus of a scientific library for students and researchers to use while working here. Now, at last, this building is going to be built, and the dream will become a reality."

Patricio Tupper spoke eloquently: "It is with great satisfaction that I have come to represent, at this ceremony, the friends of Easter Island Society and the Cardoen Foundation, and to deliver a special message and the greetings of their president, Mr. Carlos Cardoen, a determined promoter of the grand cultural initiative which brings us together today.

"We conclude, this afternoon, one phase, and begin yet another of a dreamed-of study center for scholars and lovers of Rapa Nui, and which will stand as a magnificent and enduring memorial to, perhaps, the greatest student and lover of this island, Bill Mulloy.

"Today we celebrate the successful culmination of the preparatory phase of the endeavor. During this phase, information concerning the objectives of the project was disseminated in Chile and abroad; the desires of both public and private entities were coordinated; a search was begun for the initial financial and material resources needed; and an agreement was reached about an architectural design which we all find exciting.

"The concurrence of the various entities' desires, after three years of careful consideration, is clearly evident in the formal agreement which was signed, just days ago, by Sergio Villalobos, Director of Libraries, Archives and Museums; William Liller, Representation of the Easter Island Foundation; and myself, on behalf of the Friends of the Easter Island Society.

"In that agreement, the signing parties assume responsibilities with regard to financing the construction, furnishing and equipping of the Cultural Center and Mulloy Library, as well as the continuing expense of its maintenance.

"Paragraph 10 of the agreement establishes that the Center shall have an Advisory Board which will function to propose and assure the execution of the general policies characteristic of an entity of this nature, always bearing in mind that the primary objectives are to study, preserve, and hold in high value the cultural heritage of Easter Island,
while not avoiding tasks, when they are appropriate, relating to social and economic development.

"The Advisory Board will be composed of one representative from the Directorship of Libraries, Archives and Museums, who will preside over meetings; and one representative from each of the following entities: the Easter Island Foundation, The Friends of Easter Island Society, and the University of Chile. "We are currently studying a set of rules that shall govern the functioning of the Advisory Board, and are committed to having this drafted within the next three months.

"In accordance with Chilean legislation, the Cultural Center and Library will administratively be a dependency of the Archaeological Museum and, therefore of the Directorship of Libraries, Archives and Museums. The latter will staff the new center with a librarian and other assisting personnel. The EIF, in turn, will provide the means for also contracting a research librarian with ample experience and specialized knowledge of the Polynesian bibliography.

"I wish to mention, in a special way, the excellent cooperation we have received, at all times, from the Governor's office and the Municipality. The latter has assumed responsibility for supplying the stone and the manpower needed. The library, which will soon be a tangible reality, we will owe in great measure to the faith and drive of the Mayor, Mr. Juan Edmunds.

"I must also mention the encouragement received from the Directorship of Libraries, Archives and Museums. Its Director, Mr. Sergio Villalobos, and Mauricio Massone, head of the Department of Museums, have cooperated decisively so that this project might become a reality.

"This same zeal and dedication was encountered at the Office of Architecture of the Ministry of Public Works, which has selected a first-rate, professional architect, Mr. Fernando Moscoso, to design the plans for this new cultural center. Equally welcome has been the assistance of our friend, Gary Wirth of the EIF, in assuring that the building will comply with the exacting requirements established for it.

"The formulation of the agreement that now makes possible the scheduling of construction has, in general, been dominated by an attitude of openness on the part of all parties concerned, in the desire to express the spirit of the man we will be honoring, whose whole life was characterized by the giving of himself and of his talent.

"We of the Friends of Easter Island Society and the Cardoen Foundation join eagerly in this celebration that we share today with the Rapa Nui community and authorities, and with our friends from the World Discoverer who have come from great distances to position the first stone for the new building in memory of William Mulloy.

"I believe that this place and this moment are, without a doubt, the place and the moment to send out a call to all the world, to international organizations, to the countries of the Pacific, to scientific institutions, to universities, to cultural foundations, to join together in the ambitious task of rescuing and sharing with the world the heritage left to us by the Rapa Nui civilization. There is much to do. Much to save. The mission begun by Bill Mulloy is worthy of being continued.

"As we remember him, before his tomb in Tahai, I believe we should sincerely dedicate ourselves to that end."

*****

Tonga's Trilithon: A calendric device to mark the seasons?
Jeffrey Dhyne, Burlingame, California.

The most unusual example of megalithic architecture in Polynesia is the Trilithon on the island of Tongatapu. It consists of two upright rectangular stones set parallel to each other and a connecting stone which has been mortised into the top of each upright. Tongans call it Ha'amonga a Maui, Maui's Burden, a name suggested by its unusual shape. Ha'amonga is the term for a burden carried on a carrying stick. It is said the demi-god Maui carried the Trilithon from the island of Uvea on his shoulder, the connecting stone being the carrying stick and the uprights the burden. Unfortunately, most current explanations are just fanciful. Some believe it was the gateway to the royal compound. Others, because of a perceived likeness to England's Stonehenge, believe it was erected as a calendric device to mark the seasons. And there are still those who talk of sunken continents.

But there are trustworthy oral traditions that explain its origin and construction. These were recorded in 1920 by William McKern, an archaeologist who was then associated with the Bishop Museum in Honolulu. But first, a minimal amount of background information is necessary to understand this material.

Trilithon on Tonga
Tonga is a kingdom. The present king is His Majesty Taufa'ahau Tupou IV. Tonga's longest lasting dynasty was that of the Tu'i Tonga. Several conflicting genealogies of the Tu'i Tonga exist but those who have studied them are willing to accept there were probably 39 (Gifford 1929; Ve'ehala and Fanua 1977). The Tu'i Tonga died in 1865.

Early in this century anthropologists who studied Polynesian culture accepted 25 years as an average generation. So, adjusting for several generations which, according to oral traditions, are known to have been shorter, it has been suggested the first Tu'i Tonga reigned about 950 AD (Gifford 1929).

Using genealogies to arrive at dates is a very unreliable method. These dates may be off by 50 to 100 years in either direction. But since excavations at the Trilithon and Tonga's other ancient monuments are forbidden, it is impossible to date them using archaeological methods. Of course Carbon-14 derived dates have a similar range of error.

According to oral traditions, megalithic architecture was initiated during the reign of the 11th Tu'i Tonga, Tu'itatui, who presumably reigned about 1200 AD. Tu'itatui constructed megalithic tombs for his deceased relatives, a tradition that would continue for more than five centuries, but his most impressive accomplishment was the construction of the Trilithon.

William McKern's informant concerning the Trilithon was a well-respected chief named Tamale, whose family had been charged, since before the reign of Tu'itatui, with memorizing the great deeds of the Tu'i Tonga.

According to Tamale, Tu'itatui had the Trilithon erected as a monument to his two sons, represented by the uprights. The connecting stone represents the bond of brotherhood.

Tu'itatui was concerned his sons would quarrel after his death and had the Trilithon erected, as an act of sympathetic magic, to prevent that from happening. As long as the stone upright remained united, so would the brothers.

This might seem like a trivial reason to invest so much energy but the senior-junior brother relationship was an important factor in political tension and change throughout Polynesia. Rightful and peaceful succession was of great importance, certainly more important than erecting a gateway to the royal compound, which is simply a modern rationalization with no foundation in oral traditions.

According to Tamale, the stones were cut from the seaciff just north of the site and dragged to the site over wooden skids. Two pits were dug and a retaining wall of logs was erected perpendicular to the pits. Behind this they built a ramp of earth. The uprights were dragged on edge up the ramp and directed to fall into the pits. Along with wooden skids and heavy ropes they also used levers and blocking wedges. After the connecting stone was put in place, the ramp was removed.

An ingenious but not very precise method. The western upright is 17 feet high while the eastern one is 15 1/2 feet high. Consequently the western end of the connecting stone is higher than the eastern end. And both uprights slant inward while the whole structure lists to the north. This same lack of precision is evident in the megalithic tombs.

McKern excavated at the base but stopped at about two feet because he was afraid of destabilizing it. He reported that previously the local Weslyan school teacher had dug deeper but did not state how deep. The teacher told McKern the uprights were mortised into the limestone bedrock and the space around each upright was packed with small limestone chips which he did not remove.

It has been estimated that the western upright, if it extends three feet below the surface, weighs 13,000 lbs., the eastern one 11,000 lbs., and the connecting stone 1,800 lbs. (Spennemann n.d.).

In the center of the connecting stone's upper surface is a circular depression about eight inches in diameter and three inches deep at its center. Within this depression are markings said to point to the rising sun at the solstices and the equinoxes.

The idea that the Trilithon had been erected to mark the seasons has been suggested by His Majesty Taufa'ahau Tupou IV (Grosvenor 1968; Taulahi 1979) and is based on its supposed likeness to Stonehenge, which has been noted since at least 1943 (Wood 1943).

The markings consist of a "V" pointing along the connecting stone to the east and the rising sun at the equinoxes and, inside the "V", a "Y" (though it has been described as another "V") with its arms supposedly pointing to the rising sun at the solstices.

Unfortunately, Tamale was certain the depression was cut out long after the Trilithon had been erected, though he did not know why. And McKern, a very thorough investigator who recorded much more obscure markings on some of the megalithic tombs, did not record any markings in the depression at the time of his survey. Obviously the Trilithon had not been erected to support these markings.

David Lewis, asked by His Majesty to observe the sunrise at the winter solstice on June 21, 1969, writes "Did the marks on the horizontal stone denote the winter solsticce? So worn were the depressions that I could not tell" (Lewis 1978:72).

In 1985 I climbed the Trilithon and photographed the markings. The markings, although they do not look fresh, were clearly visible. Dirk Spennemann (n.d.) states "Today [in 1986], however, the entire lintel has been vandalized and is covered with modern graffiti and the mark can not [sic] be recognized at all." He does not state whether he inspected the connecting stone himself or accepted someone else's testimony.
Sign "explaining" Trilithon; note drawing of petroglyph in lower left corner. Photographs of the actual petroglyph show little; a staggering amount of vandalism has obscured and probably destroyed any marks that might possibly have been original. (Photograph by J. Dhyne)

As for its comparison to Stonehenge, at Stonehenge one stands inside the complex and looks through the lintelled circle. What one looks at is a distant stone upright behind which the sun rises at summer solstice.

To mark the sun's position on the horizon on a specific day, one needs a marker between their point of observation and the horizon. A directional line a few inches long at the point of observation is just not accurate enough.

Also, at Stonehenge the lintel stones are not mortised into the uprights but lay across them horizontally, secured by circular protrusions on the uprights which fit into corresponding depressions on the lintel stones.

Besides the question of the markings, the design of the Trilithon also negates its use as a solar observatory. There is no practical access to the proposed point of observation and the connecting stone is simply too narrow to allow an observer to stand facing east.

Every guide book that deals with Tonga repeats the theory that the Trilithon may be aligned to astronomical phenomena and although they state it is a theory, they leave the reader with the impression it is a plausible and valid possibility. But what is more disappointing is for a respected archaeologist to repeat it. Edwin Ferdon, in his book Early Tonga as the Europeans Saw it 1616-1810 (1987:84), states:

"Though I have found no mention in the early literature of solar observations for any purpose we have solid evidence that such observations were made in prehistory times. No less a scholar than King Taufa'ahau Tupou [sic] IV of Tonga personally determined, by direct observations, that at least one of several engraved lines emanating from a cuplike depression on top of the famous Ha'amonga 'a Maui Trilithon on Tongatapu pointed directly to the position of the rising sun at the time of the June solstice."

His reference for this solid evidence is the caption of a photograph in National Geographic that quotes a portion of the sign at the Trilithon (Marden 1968). He repeats this in the Journal of the Polynesian Society (Ferdon 1988) in response to an article by Georgia Lee and William Liller (1987).

Although William Liller is more cautious in his recent analysis in RNJ he does state "...the W-shaped mark does indicate the directions to the three significant solar rising points reasonably well (to better than 5°) and suggests that at some point someone did want to record these directions. " (Liller 1991:25). If so, they were recorded in the last half of the 20th century.

The evidence clearly does not support the theory that the Trilithon was erected to mark the seasons. If there was a deliberate east/west alignment of the connecting stone, and that is certainly possible, the reason for it must be sought elsewhere, perhaps in symbolism associated with its magical intent.

References:


Petroglyphs inside Orongo's houses, Easter Island
Robert R. Koll, Ajijic, Mexico

Orongo's ceremonial center is located on the windswept rim of Rano Kau's crater at the southwest corner of the island. The cliff to the south drops a breathtaking 1000 feet into the sea; on the north, the crater slopes steeply into the caldera's lake. The site is well-known for its carved rocks which bear ample evidence of the Birdman ritual held there in the spring of the year; most of the petroglyphs are found on huge boulders at that part of Orongo known as Mata Ngarau.

Orongo is also known for its unusual stone houses, constructed of laid up slabs of local basalt without mortar. Over the centuries, many houses had collapsed into heaps of rubble and some had been deliberately destroyed to obtain the painted slabs that decorated the interiors in many of them. Fifty-one of the stone houses—more aptly described as man-made caves—were restored by Mulloy in 1974 and 1976. Many of the houses are contiguous, sharing one or more walls. They form an irregular row that runs roughly northwest/southeast for approximately 625 feet with their doorways facing out toward the sea. Most consist of a single room, although one has a subterranean room and two have an attached room. The house walls were built up with slabs, called keho; dirt was piled on top to provide counterweight for the large cantilevered stone slabs that form the ceilings. The entry, and only source of light, is a tunnel-like crawlway. The sizes of the houses vary: 2.25m to 15.50m long; 1m to 2m high, and 1.35m to 2.60m wide (Ferdon 1961:233). They are cold, dark, and often damp. But they do provide shelter from rain and the gale-like winds that batter this exposed site.

During the restoration of Orongo, previously undocumented petroglyphs were discovered on some interior house slabs. At the request of Mulloy, I began the project on 9 August 1976 and finished it on 10 September. Many of the petroglyphs are faintly incised and are in darkened houses; for this reason, they had not been noted in the past. Only 20 of the 51 houses were found to have petroglyphs (see first Table) these are carved on vertically placed slabs that form the walls of the structures.

This report includes data on, and some illustrations of, the petroglyphs that were documented.

The most numerous design motif is that of komari (vulva forms). One hundred-thirty of these were documented in this recording project. A numerical breakdown can be seen in the second Table. Because of the numerous examples of the komari design, it is of interest to examine the variations. Ninety-eight are made with incised lines, 32 are in bas relief. They vary in orientation: 83 are right-side up; 29 are upside down; and 18 are horizontal. Komari also have unusual variations. The oval shape of the komari design is well suited for incorporation into other figures; for example, it combines to form the body of a whale and a fish, the head of a lizard, and the head of a human. Only one komari is superimposed: this example is carved inside a gourd-shaped motif. Of the 130 komari figures, 94 are complete figures; the remainder are incomplete.

The three major categories of design motifs found at Orongo are komari, birdman, and Makemake faces. I suggest these symbols represent three cults, that of bird (birdman); deity (Makemake face); and fertility (komari).

A breakdown of three types of petroglyphs found at Orongo.

<table>
<thead>
<tr>
<th>Petroglyphs</th>
<th>Exterior houses</th>
<th>Inside houses</th>
<th>Orongo total</th>
<th>Island total</th>
</tr>
</thead>
<tbody>
<tr>
<td>komari</td>
<td>204</td>
<td>130</td>
<td>334</td>
<td>564</td>
</tr>
<tr>
<td>birdman</td>
<td>380</td>
<td>5</td>
<td>385</td>
<td>473</td>
</tr>
<tr>
<td>makemake</td>
<td>160</td>
<td>3</td>
<td>163</td>
<td>517</td>
</tr>
</tbody>
</table>

Petroglyphs from house #8, Mata Ngarau.
(Drawing by R. Koll)

The total for all petroglyphs at Orongo is 1274; Island wide, there are 3993 petroglyph motifs (not including cupules) (Lee 1991). Totals include those of Koll's sites.
Incised petroglyphs from house 5, Mata Ngarau.

(Drawing by R. Koll)

References:

Publications
Cotterell, Brian and Johan Kamminga. 1990. Mechanics of pre-industrial technology. Cambridge University Press, Cambridge. Pages 226-232 describe the "Mulloy method" of moving Easter Island statues; their conclusion is that it is possible but no more efficient than other postulated methods. They also note that aside from the limiting factor of few trees, the demand for heavy-duty rope made from *Triumfetta semirotula* was also a limiting factor in statue building.
Danielsson, Bengt. 1991. Explosive political situation in Tahiti during the recent nuclear test season. Tok Blong SPPF, #37:11-12, October.
Fischer, Steven Roger. 1991. All glyph bright and beautiful: Rongorongo as literature. Archae 3. Cloud Mountain Press, N.J. [Dr. Fischer explores the possibility that rongorongo might be literature as westerners define it. Illustrations.]
McCall, Grant. 1991. "He got it wrong, or how can we trust him to tell us a fable. Archae 3. Cloud Mountain Press, N.J. [Dr. McCall views Umberto Eco's *Foucault's Pendulum* from the perspective of the novel's use of Rapa Nui. Included is a rare illustration of Andre Breton's 1929 "Surrealist Map of the World" showing Rapa Nui in the shape of a birdman larger than the South American continent.]
Radiocarbon Dates from Site 10-241, Easter Island
Christopher M. Stevenson, Ph.D.

In 1989 archaeological excavations were conducted at Site 10-241, a small disturbed prehistoric house pavement located on the flanks of Mt. Terevaka. Excavations around the house revealed that high concentrations of subsurface pits were present. Currently, these features are interpreted to represent umu, surface fire pits, and possible storage and processing pits. A precise behavioral interpretation of this site is currently indeterminate. However, the association of the site with a cluster of hypothesized planting circles and the low frequency of woodworking tools suggested that an upland food resource was being exploited. Preliminary identification of carbonized botanical samples from the features has indicated that palm shell fragments were present but it cannot be determined if this material was used as fuel or was the resource being harvested. The large number of different umu without stone perimeters and the absence of other above ground architectural features and food remains (eg. chicken, fish) indicated that the site was repeatedly used on a short term basis.

Three wood samples were submitted to Beta Analytic Inc. for radiocarbon dating. Sample 1 (Beta-47365) was selected from Feature 26 a large umu. The sample consisted of small carbon fragments recovered from the flotation heavy fraction. Sample 2 (Beta-47366) was collected from a large shallow pit. The materials consisted of a fragment of carbonized wood as well as many small particles. Sample 3 (Beta-47367) consisted of small twig fragments from Feature 41, a deep pit of unknown function.

The results of the dating are present on Table 1. The uncorrected radiocarbon dates presented in years before present were calibrated using the computer program of Stuiver and Pearson (1987). The calibrated dates indicated that occupation of Site 10-241 occurred at various points throughout the 15th Century. The absence of site occupation after this period suggested that this part of the island may have been deforested, a process that is estimated to have begun around 1000 AD (Flenley and King 1984). The generally small diameters (<1.0cm) of the few carbonized wood fragments recovered at the site tentatively supports this hypothesis. Additional investigations at upland locations will be needed to determine the manner and temporal periods in which the slopes of the volcano were utilized.

References:

<table>
<thead>
<tr>
<th>Table 1: Radiocarbon Dates from Site 10-241</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta Sample</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

* Uncorrected dates reported at one sigma. Calibrated dates reported at two sigma.

Christopher Stevenson received his Ph.D. from Pennsylvania State University. He first conducted fieldwork on Easter Island in 1981. His past research involved a study of ahu architecture, obsidian hydration dating and settlement patterns. He currently is involved in a long-term project directed toward the understanding of the emergence of a complex society on Easter Island and how it changed over time.

What's New in Polynesia

Hawai'i: The Bishop Museum has received a 200 year old shark tooth weapon believed to have been collected on the voyage of Captain James Cook to Hawai'i in 1778-1779. Donated by the Hemmeter Corporation, this specimen is unusual in that the koa wood frame is "open" and it has 42 tiger shark teeth inset with wooden pegs and hardened gum. The weapon was originally part of the Warwick Castle collection in England.

The Native Hawaiian Culture and Arts Program, administered by the Bishop Museum, is constructing a giant (55 foot long) double-hulled canoe from traditional materials. The completion date is May 1992, after which practice runs will begin for open ocean navigation to prepare for a trans-Pacific voyage from the Marquesas to Hawai'i in 1994. Nainoa Thompson, who navigated the Hōkūle'a from Hawai'i to Tahiti in 1976, will be the sail master of the new canoe which will be navigated by the stars. Thompson is training three other navigators for the 1994 voyage.

Unlike the Hōkūle'a, the new canoe is being built of all natural materials, from its 2,300 sq. foot lau hala sails to three
miles of coconut sennit (fibrous bark) serving for cordage. Originally they had hoped to make the hull of koa but no koa trees were found of sufficient size. The hull will be carved from Alaskan spruce logs instead. However, ship journals from the time of Captain Cook mention Hawaiian canoes made from drift logs from the Pacific Northwest. The Polynesian Voyaging Society is playing a key role by overseeing aspects of the canoe construction and crew training. Thirty individuals are participating in the training but only eight or nine will be chosen for the actual voyage. The crew will get a trial run for the final voyage when it sails down to the Cook Islands next year aboard the Hokule'a to participate in the Pacific Arts Festival.

University of the South Pacific: Students from Western Samoa, Vanuatu and Marshall Islands, as well as Fiji, are now enrolled in Tourism Studies classes in the School of Social and Economic Development. One objective of these courses is to provide high quality tourism education. Students participate in field visits to key tourism enterprises in and around Suva, attend lectures and complete assignments on various marketing strategies used by tourist companies.

**He Parau 'Apī**

**News from El Mercurio**

* A group of professionals from the Departamento de Programa de las Personas visited Rapa Nui in order to study the island's health situation. At this moment, the island hospital attends to 2700 inhabitants with two general doctors, one veterinary, a midwife, dentist, nurses, a para-medic, and other general services for a total of 35 persons. The visiting group was particularly interested in what kind of diseases are prevalent in the native population as well as with residents in general in order to provide better health care for all.

* A visit to Rapa Nui by President of the Republic Patricio Aylwin raised expectations on the part of islanders who hoped for an announcement that a port would be constructed on the island. Instead they were promised a new crane. Plans to construct a port on Rapa Nui were discarded because of the high cost of construction, estimated to be around 50 million dollars (U.S.). Some groups fear that such things as a deep water port may have serious ecological as well as social effects on this culturally fragile island.

Other priorities are to reinforce the runway, improve roads to archaeological sites, pave urban roads, change study plans in the local school, and make repairs to local rapanui homes. There are plans to enlarge the airport terminal, restore some of the moai, promote tourism and look into prospects for commercial fishing. Tourism has good prospects: it is estimated that 25% of the island population will be employed in tourist-oriented services. The director of Servicio Nacional de Tourism stated that they will complete a collection of tourist brochures to show what the island has to offer. By the end of this year, an informative brochure will be available for tourist agencies to show the island’s attractions.

* It was noted that in the 103 years since annexation by Chile, the relationship with Rapa Nui has been more romantic than practical; this was attributed to the distance from the continent, lack of adequate study, and the unhappy history of the island. It is said that plans are made but little progress occurs. The most ambitious project is with the Easter Island Foundation. Secretary-general of the Amigos de la Isla de Pascua, Patricio Tupper, stated that in less than one year, the EIF will construct a library to house the works of Mulloy.

* Several prominent politicians visited the island in October to discuss with islanders possible modifications of the law of the island in order to modernize it.

* According to Juan Andueza Silva of El Serviu al Intendente Regional, progress on the paving of Te Pito te Henua street is "normal" and should be completed by mid-November. The next paving project will be that of Policarpo Toro street which is the principle street where most commercial businesses are located.

[Editor's Note: In mid-October the paving was completed from the church to the gymnasium—with a half-block to go. The paved street is a vast improvement over the former dirt road which resembled a river bottom most of the year. The paving is made of cement bricks, fabricated on the island. That is the good news. The bad news is that some of the bricks appear to be somewhat shy of the necessary amount of cement and are already deteriorating.]

**The Stamp Act**

A guide book to Tahiti has the following note: "Polynesian philately is not only an important source of revenue for the Post Office budget, it is also a means of advertising Tahiti."

Two of the offending French Polynesian stamps show an octopus with tentacles reaching over all of Polynesia and, on the right, the stamp showing the Hawaiian Islands.

Titled "Le Monde Maohi", a set of beautiful stamps issued by French Polynesia show various native island societies in Polynesia: New Zealand, Hawaii, and Easter Island are
depicted—all with "Polynésie Française" clearly printed on them. One of the stamps in the series has an octopus with tentacles extending out to encompass Easter, New Zealand, and Hawai‘i; it is centered in French Polynesia. The appearance of two Easter Island stamps with a French Polynesia designation brought forth anguished protestations in Chile, including four inch high headlines (in red ink), and a diplomatic crisis. Surely a plot to take over Rapa Nui, darkly hinted the newspapers. Senator Sergio Onofre Jarpa denounced the stamps as a violation of Chilean sovereignty over Rapa Nui. At first, France shrugged its Gallic shoulders and a new diplomatic crisis. Surely a plot to take over Rapa Nui, so it appears this damage was done by local islanders, for some unknown reason. This is a tragic loss; the painting was the finest recorded in Oceania and was unique.

**Preservation Project: Easter Island**

Dr. A. Elena Charola

On November 13th, an informal meeting was organized jointly by the Embassy of Chile and World Monuments Fund for the presentation of "Preservation Project: Easter Island."

The meeting was held at the residence of the Chilean Ambassador in Washington D.C. Presentations were made by John Stubbs, Program Director of WMF; Dr. A. Elena Charola, WMF Easter Island Program Co-ordinator; Dr. Robert J. Koestler, Research Scientist of the Metropolitan Museum of Art, who will be collaborating in the development of the project; and Carlos A. Weber, Project Co-ordinator for the National Parks and Reserves of CONAF, the Chilean Forest Service.

John Stubbs outlined the long involvement WMF has had with Easter Island—over 25 years—and the present role it is assuming. This is a dual role as co-ordinator of international scientific and technical expertise for the conservation of the archaeological heritage of Easter Island and development of a funding strategy to assure the future maintenance of this unique site.

Elena Charola gave a brief introduction to the natural deterioration problems encountered in the volcanic stone out of which the monumental statues and the unique petroglyphs are carved. The Comprehensive Conservation Plan, given priority by WMF, was discussed in the context of the overall Preservation Project.

Robert Koestler described the Data Base that needs to be developed to gather all data available which might be relevant to the conservation Plan. This will allow to determine what other data need to be obtained to adequately design the site studies that need to be carried out before any new conservation treatment is applied.

Carlos Weber presented the Site Protection and Management Program that is currently being carried out at the Rapa Nui National Park. The improvements that this Program needs to assure adequate maintenance of the archaeological heritage and the surrounding sites were discussed in the framework of the Comprehensive Conservation Plan.
Some thoughts on Rapa Nui tourism and its impact on the island's cultural heritage
R. Morales Montero

The impact of tourism on Easter Island's monuments is usually subtle and not often noticeable to the average visitor to the island's archaeological sites. But for those of us who live and work here, or who have become familiar with the numerous sites on the island, attrition is clear. As protected areas of the State, the archaeological sites belong to all, not to any one individual. But many islanders make their living from tourism and some display little concern for impacts made by the very persons they are taking around to see the sites. What appears to be needed is an ethic for the local tourist industry; guides should be trained and perhaps licensed. Tour agents need to be aware that large groups can cause damage simply by the pressure of too many persons at one site at one time.

There is also a lack of healthy ecological conduct on the part of many visitors. Last June a project sponsored by various groups resulted in a clean up of trash that had been left behind by visitors while touring certain sectors of the National Park.

The advent of a large cruise ship brings a mass of tourists at one time. Fortunately, the ships and the passengers rarely stay more than one day, but for that one day every vehicle is in operation, and crowds swarm over the quarry at Rano Raraku, the site at Orongo, and Anakena (the three major sites that are on all island "quick tours"). The physical capacity of some sites is limited, such as at Orongo, but masses of visitors pack into the area, climbing on rocks and on the stone house tops. The Park Guards are so few and

of ignorance of the potential damage or because they do not wish to be critical of those who are paying them.

A conscientious attitude of conservation on the part of visitors and islanders is the only solution to these problems. The rapanui who now support themselves by tourism need to take the "long view" and realize that if sites are destroyed, tourists will no long come to the island in the center of the world.

Despite signs requesting visitors to stay off the petroglyph rocks at Orongo, visitors ignore the warning and contribute to the erosion of the designs by walking on them. (Photo: R. Morales)

Ignoring a warning sign, a tourist stands on unreinforced areas that are potentially dangerous. Many of the stone houses have collapsed in recent years. (Photo: R. Morales)
**Tiki lights**
Marcia Opal, Illinois

Move over pink flamingos, plaster ducks and revolving sunflowers—moai now have invaded the patio decor scene. If you've always dreamed your backyard would resemble the slopes of Rano Raraku, you may want to look into "Tiki God Party Lights", a product of Tiki, a Wisconsin firm.

The set retails for $15.99 and comes with seven 7½ inch moai-shaped plastic shades in four "designer" colors... all guaranteed to be more portable than the originals. Yes, your chance to have your own little Ahu Akivi in a handy cardboard box.

Although the "tikis" won't do a thing to illuminate any of Easter Island's mysteries, they ARE a lighthearted way to keep the presence of Rapa Nui hanging around.

*The saga of whether to write Rapanui or Rapa Nui has brought forth another anonymous (--and hopefully final--) limerick: "A recommendation in rhyme written irreverently upon reading the responses of the good Drs. Steven Fischer and Robert Weber."

A philol. from Schwarzwaldhochstrasse
Met another from L.A. and N.A.S.A.
They argued all night
As to who had the right
To spell names like La Nai and Mom Basa.

"Achtung! Osterinsel's correct,
Und so 'Rapanui', er specht.
But the other, outspoken
And raised in Hoboken
Screamed, "It's two words, you pain in the nect".

The facts? They're exceedingly plain:
Osterinsel's correct (ask Horst Cain).
But so's Easter Island,
Vai Teka--and Thailand.
Leave each to his own as he'd deign.

**Hotu Matu'a: What's in the name?**

W. Wilfried Schuhmacher, Denmark

Hotu Matu'a, the name of Rapanui's legendary "discoverer" and first ariki has been etymologized as "parent" and "god" (i.e., parent/god; Van Tilburg 1988:96). Indeed, Proto-Polynesian (PPN) *matu'a* (parent) is reflected in the Rapanui language (RAP) as matu'a id.; however RAP hotu does not translate as "god". The RAP term for god is 'atua, a reflex of the PPN *'atua* id.

Curiously, there is no post-contact lexical item hotu. If there were, it would presuppose PPN *hotu* or *sotu*. The latter has not been reconstructed, but we do find PPN *fotu* ("appear") (Walsh and Biggs 1966:15).

Thomas S. Barthel (1991:5) has another etymology: "Der fruchtbare Vater" (the prolific father), interpreting RAP matu'a as matu'a (tamaroa) "father" (cf. Fijian tama (father) with RAP hotu as "[the] prolific"? Even if RAP hotu "prolific" did exist, the interpretation would be wrong as the word-

---

**Our Readers Respond**

Dear Editor: "Thanks for yet another RNJ issue. I've read through it twice already with much interest and admiration. Bill Liller's "trivial request" reminds me to plea once more for the editor's identification of authors of articles and reviews. Some readers may not have heard of all "the usual suspects" such as the Mulloys, Bill, Fischer, Bahn, McCall. Sometimes they are identified internally, it is true, or even elsewhere in any issue, but I truly think RNJ would be enhanced to do as many other publicaitons do--a few lines on who's who...." Dorothy Feltham, Sunnyvale, CA.

*[Editor's note: Excellent idea, Dorothy-- whenever possible from now on, we'll include a blurb on our reviewers and authors.]*

---

Is nothing sacred? Tiki God Party Lights come in mixed colors: red, green, yellow and white! [Photo by Marcia Opal]
order is incorrect (*Matua Hotu would be correct); and who has ever heard of a "prolific father"? It seems that some "outside" help is need to clarify the etymology.

In the Maori language, we find Hoturoa (PPN *roa "long"), and the captain of the Taumata canoe, according to rapaui oral tradition was the brother of Hotu Matua (Viki Haua Cardenmoli, personal communication, 1991; however, this is not attested to in Maori legends, Bruce Biggs, personal communication, 1991).

The Maori hotu nui translates as "full moon" (lit., "big X") and in Hawai'i, hoku means "night of the full moon" (not to be confused with koku "star", which is a reflex of the Proto-Eastern Polynesian *fotu. Pukui et al. 1975:29). There is the Maori star name Hotu-te-iti-rangi [coalsack] (iti = "blow", rangi = "sky, weather", Johnson and Mahelona 1975:86). For Kap Ingramarangi, the personal name Uiu (hotu?) Matua is attested (Steven R. Fisher, personal communication, 1991).

On Easter Island the place name Hotu Iti ("little X"), today designates the area south of Rano Raraku: the ten tribes or mata of ancient Rapanui were divided into two main divisions—the western and northwestern tribes were called Tuu (usually spelled Ko Tuu) or mata nui (greater groups), whereas the eastern tribes were Hotu-iti (lesser groups); this is also found in the legends of the island (Métraux 1971:124;74).

Returning then to the above PPN *fotu ("appear"), we might deduce the meaning of hotu as "appearance" or "gestalt" so then the name Hotu Matua would mean "father gestalt". (1) The disappearance from the lexicon of the term hotu as meaning "appear" might then be due to a language taboo.

(1) As pointed out by Sigmund Freud and others, it is a father-longing that is the root of all religion.

[Note: an asterisk before the word, as in "*matua" means that the word is reconstructed; "id." following the word means "same"./

References:

RAPANUIPHILES TAKE NOTE:

The Institute of Archaeology, UCLA, has the special Easter Island issue of the Journal of New World Archaeology (Vol.7(1), August 1986, on sale: it can be had for $4 (U.S.); be sure to mention you saw this ad in RNJ for this discounted price. Checks/Money Orders must be payable to the UC Regents in US funds drawn on a US bank. Postage/handling: $3.50 for first book, $1 for each additional book. California residents add 7.25%. Allow 8 weeks for delivery. Send your order to UCLA Institute of Archaeology Publications, 405 Hilgard, Los Angeles, CA 90024-1510.

Also available from the Institute of Archaeology in early 1992: Symbols of power, prayers to the Gods: The rock art of Easter Island by Georgina Lee. This lavishly illustrated forthcoming volume (No.17) in the Monuments Archaeologica Series, contains a report and analysis of Rapa Nui's rock art, including chapters on the prehistoric and protohistoric Easter Island society; research methods; motifs and patterns of distribution of the petroglyphs; gender symbolism; chapters on the major island sites [Orongo, Anakena, Ra'a'i, and Tongariki]; plus rock art in Oceania. [Price not available at this time, but we'll announce it in our next issue of RNJ.]

An index of all back issues of RNJ is now available for $5 (U.S.); write to us at address below.

Georgina Lee, Ph.D. Publisher and Editor
P.O. Box 6774 Los Osos, CA 93412
Rapa Nui Journal is an international journal published quarterly for the benefit of those interested in Easter Island and Polynesia. It is the official journal of the Easter Island Foundation. Papers reflect the views of the contributors and are not necessarily those of the editor or the EIF.

Correspondence, articles, photographs, reviews of books and films, announcements of conferences and publications, and all related materials are invited. We cannot be responsible for unsolicited items or anything submitted without adequate return postage. If possible send submissions on floppy disk with IBM-ASCII format.

Annual subscription rate for four issues: U.S. and Canada $20; overseas airmail $30. Some back issues are available at U.S. $5 each, postpaid.

ISSN 1040-1385 (c) Georgia Lee 1992

RAPA NUI JOURNAL
DECEMBER 1991