METEI: AN EPILLOGUE

Stanley C. Skoryna, M.D.

Dr. James Boutilier of the Royal Military College in Victoria, B.C., presented a succinct history of the Medical Expedition to Easter Island (RNJ 6(2) and 6(3) 1992). What I appreciated is the fact that Boutilier has shown both the "Ying and Yang" of the undertaking—he did not say that everything was perfect. However, anybody who is familiar with "expeditions" will realize that certain shortcomings are inherent to the operation, with specific reference to the personnel; I was happy to report that we avoided major problems which occurred in similar projects in isolated locations; this in itself was a great success. In addition, the departure of the Expedition was accelerated by one year, because of the pending airport construction. Since the primary purpose of METEI was to study the Easter Island population prior to changes brought about by permanent contact with the civilized world, we wanted to make sure that no construction crews would suddenly appear while we were on the island or that permission to conduct the studies would have been canceled because of the forthcoming airport construction.

On the whole, the Chilean Government was very cooperative, largely due to the excellent relationship between the Chilean and the Canadian Navy. It was unthinkable that Chile would disallow a visit of a ship from a politically neutral country, no matter what was the cargo, the METEI people. Chile, rightly so, had reasons to fear their sovereignty over Easter Island might be threatened by French nationals, though not the Government. Prior to the METEI visit, there was the visit of a French observer, Maziere, with his Tahitian wife who promoted the connection between French Polynesia and Easter Island, with obvious implications. Commander Rojas made one of the best decisions a naval commander could make: he declared free elections on the island during our stay; he did more than the islanders asked and transformed an explosive situation into a "glorious revolution" with one of the best Sau-Sau held on Rapa Nui. A native leader, Alfonso Rapu, was elected Mayor. The world saw it through our eyes, and Carl Mydans' reports, that Chile was the best protector Easter Island could have.

Due to this political turmoil which was unexpected, combined with the demands of Easter Islanders for greater autonomy, it took a considerable amount of diplomacy to present our scientific case to both the Chilean authorities on the island and the population. Fortunately, the "unpredictability" factor was included in our stochastic plan of studies, which I shall discuss later.

Easter Island was going to enter a new environment both from the sociological and biomedical viewpoints; following the construction of the airport, an influx of tourists and diseases (AIDS), which had been non-existent, was to be expected. A good example was the "cocongo" virus studied by Boudreau of METEI which caused major epidemics on the island each time a ship arrived from Chile. METEI did not bring the cocongo for reasons not clearly defined; therefore, we were already in a favorable psychologic position on arrival as far as contact with the local population was concerned. A French warship, Frigate F707, which visited the island on January 2, 1965, did not disembark its crew, so there was no question of cocongo. The Chilean Navy ship, Yelcho sent to Easter Island to quiet the discontent could have brought cocongo; however, thanks to the assistance...
of Commander Rojas, probably the same man who is currently the Minister of Defense, the ship's crew bivouacked on the shore. One of the most agile members of METEI, Dr. Georges Nogrady, assisted by Dr. John Cutler, took throat swabs from the sailors to identify the cocongo virus. The fact that the crew of the Yelcho was kept at bay by our examinations achieved three goals: 1) it contributed to pacifying an explosive situation; 2) it convinced the Chilean government that our studies were valid and serious; 3) it convinced the islanders that we were on their side. As one of the expedition members recalled, "You must have felt like you were sailing between Scylla and Charybdis", but the events actually favored our ability to continue the study.

Speaking about wisdom, I should quote from an article by Dr. Grant McCall, an outstanding student of Polynesia, who discusses the effects of "civilization" (McCall 1992:43-44). The development of Tahiti under French rule into a popular and culturally polluted tourist spot is an example of the fate which we sincerely hope will not befall Easter Island. The island needs tourism as an industry, however, the more natural the island remains, the more tourists will be attracted. We do not need "Polynesian Cocktails" or a commercialized version of native dancing. I hope that the native population and Chilean authorities understand that a demonstration of history, such as moai and native dancing in grass skirts, and not the glitz, attracts tourists! When Chile celebrates National independence day, the moai in Santiago should not be wearing "huaso" hats but red stones to emphasize that Easter Island's native culture is part of Chile.

I agree with Dr. Lee that it is of interest to Chile that Easter Island should remain native and populated by natives. If a lighthouse has to be built on the island, and this is not certain, it should be manned by Easter Islanders, either locals or those serving in the Chilean Navy. Chile is certainly in a difficult position giving priority to Easter Island. However, at this time, they are fulfilling an international obligation for the preservation of one of the most outstanding natural history museums in the world. The moai are a worldwide symbol for all countries, including Japan, who are becoming one of the contractors on the island. Knowing the Japanese not only for their engineering skills but also for their appreciation of native cultures (as shown by their promotion of Ainu culture in Hokkaido), they will respect Easter Island heritage. Probably, at the same time, somebody could accelerate the process of prevention of soil erosion, using methods applied so successfully in other countries. Dr. Hugh Brodie, my Canadian conferee, and I are trying to convince the Canadian Forestry Department to initiate tree plantations on Easter Island. Our country has more forests than most places and it should not strain their budget to conduct a project on Easter Island.

Speaking about METEI, our problems were not different from those of any other Expedition. Try to imagine a group of scientists, all individualists, daring enough to pursue their studies in an isolated "far-away" place, with many unknowns. They did not know each other prior to the month-long "ship conference" on board the HMCS Cape Scott. The Expedition was like a pre-arranged marriage: it worked because it had to work; for each member who was too tired to work, we had a replacement; for each procedure that could not be carried out, we had an alternative method which frequently, but not always, brought desirable results. One thing that worked in our favor was actually the fact that people who undertake this sort of "venture in sobriety" are ingenious by nature: capable of improvising and compromising by necessity. Some good examples are: Georges Nogrady with his soil-sampling and sea water study; Carl Mydans of Time-Life with his Collins radio transmissions of the events on Easter Island, which certainly helped to draw international attention to the demands of Easter Island for autonomy; and Garry Brody, a surgeon from Los Angeles, who helped patients in the Leprosarium by doing the much-needed surgery.

The dual personality of all people became evident in the small community of 38 members of METEI when we stayed on Easter Island for two months. It is true what Boutillier says, that our main problem was how to reconcile the members of the Expedition. Had he read the history of other expeditions, he would have known that personality problems are common under such circumstances. For instance, those who chose their roommates on the ship wanted to "divorce" them a few days after our landing. Those who felt we should examine only 50% of the population started to work harder once they realized that our goal, a 100% sample, would be met regardless. I had no alternative but to make these people believe that they were "right" in their judgment, even when they were wrong, to prevent rebellion. As I mentioned earlier, circumstances and the enthusiastic support of Easter Islanders tipped the balance of the scale. The inhabitants of Easter Island expected our visit; they lit bonfires so we would not "miss" the island. This was largely due to Father Sebastian Englert, the uncrowned king of the island (and not Pere Eyraud as some people claim). I was in touch with Father Sebastian one year prior to the Expedition (personal communication, 1963). He had kindly sent us a 100 word Rapa Nui/Spanish vocabulary from his dictionary; we translated the Spanish into English; this was of tremendous help in meeting with islanders. We were able to greet them with "pehe koe" instead of "How do you do?", and they could answer the customary "Riva-raki". some of them confused METEI with Matua because of the two moai on the Expedition flag; this increased our local identity. The fact that islanders worked with us in the laboratories, kitchen and in camp maintenance, made us really a part of the local population. The shirts and skirts that I purchased in Puerto Rico were given to each person that was examined; by the way, we also knew who was not examined and could concentrate on bringing him to the "El Campamento". Our Medical Survey and Examination became a status symbol!

Speaking about stochastics, perhaps I should explain the word, since the general public is not familiar with it. The Stochastic Model of Jerry Neyman (1960) (at that time Professor of Mathematics at Stanford University), attempted to devise a hypothetical chance mechanism operating on various clearly-defined entities, so that the resulting frequencies of the various possible outcomes correspond approximately to those actually observed. I have applied this theory to the causation of diseases, such as peptic ulcer and cancer (Skoryna 1963). In the course of
preparation for the Easter Island Expedition it occurred to me
that it may be useful to construct a stochastic model which
might help to predict the outcome of the Expedition. The
applicability to other categories of observations of Neyman's
(1960b) model has already been established. It was obvious that
if the operation of factors affecting the organization of the
expedition is presented diagramatically, we are dealing with a
multi-coordinate system (fig. 1).

**Fig. 1:** Diagrammatic representation of operation of multiple
causative factors contributing to the organization and outcome
of METEI. To obtain a geometric representation one takes \( X(t) \)
as the position vector of a moving "particle" \( P \). Certain
combinations of contributory factors will define Zone \( D \), an \( n \)-
dimensional space, which is defined as the examination of the
total population of Easter Island. The key components of the
organization of the Expedition were \( X_1 \): staffing, \( X_2 \):
equipment, \( X_3 \): cooperation of the population. We tried to
improve methodically the three vector-components to stay as
close as possible to the D-zone. Each component has a time
factor.

The three main organizational components could be considered
as 1) staffing \([X_1]\), 2) equipment \([X_2]\), 3) cooperation of the
population \([X_3]\). To obtain a geometric representation of \( X(t) \)
as the position vector of a moving "particle" \( P \) is in an \( n \)-
dimensional Euclidean space, certain combinations of
contributory factors can be considered to be sufficient for
participle \( P \) to enter the critical zone \( D \), which is defined as the
examination of the total population of the island. What we were
trying to fulfill, after the transportation to Easter Island was
obtained, (a prerequisite factor), was to improve methodically
these three factors: expedition staff, equipment and cooperation
of the population. Obviously, we were successful since, for the
first time in medical history, a total population sample was
obtained; however, some of the intended studies, such as
parasitology and biology of the island, were not completed due
to factors that could not be foreseen: that is the essence of
Stochastic theory: operation of chance mechanisms. If you wish
to be successful, you have to maximize the probability of
success; in other words, stay as close as possible to the D-zone.

To reminisce about the preparation for the Expedition, it
would take about ten pages. As the late Rear Admiral Richard
Roberts, Deputy Director of the Expedition, said: "People
applied by the boatload to join us; fortunately, mostly were
faint-hearted and resigned prior to departure." Naturally they
later gave numerous reasons why they did not go. This reflects
human nature; if one does not do something, one has to find an
excuse for not doing it. An undertaking of this type is always
"risky" from the scientific viewpoint; one cannot expect that all
samples will be collected and that all of them will be examined.
But, where else was a total primitive population examined in
such detail?

We were fortunate to select the right members for the
Expedition, though probably they selected themselves by being
persistent, like the well-known English writer, Carlotta Hacker.
Originally she was going to be literally parachuted over the
island since the Canadian Navy initially refused to take women
on board. She wound up being "chief organizer" of the
Pasquense volunteers who worked in the microbiology and
specimen-processing Laboratory.

I never forget people who have vision like Rock Robertson,
Principal, and Peter Laing, a Governor of McGill, Roger
Gaudry, Rector of Université de Montréal, who with Gertrude
Hurum Lord Shaughnessy, formed the Easter Island Expedition
Society, after the University Senate refused (rightly so!) to take
responsibility for the Expedition. We were lucky that Ray
Farquharson, another man of vision, was the President of the
Medical Research Council of Canada; otherwise, we never
would have started. Other luminaries were Stanley Haidasz,
Parliamentary Secretary for Health and Welfare, Air Marshall
John Easton, Director of the Physical Plant of METEI, and Dr.
B.D.B. Layton, Director of International Health. My two
Spanish speaking secretaries, Isabel Griffith and Anna Eccles,
provided the basic link with the Spanish-speaking population.

**Fig. 2:** Design of the Expedition camp by Schoenauer. The
positioning of the trailer units formed a closed compound with
a gate.

Equipment was another matter. Commander Anthony Law of
HMCS Cape Scott, a painter by "second profession", oversaw
the arrival of most of the equipment. How lucky can you get to
have an artist who commands a ship! Some of the equipment
did not arrive in time and joined us in Bermuda, Puerto Rico and Panama; other pieces never arrived! Power generators, secured by Jack Easton from the DEW line, so vital for power supply if solar still did not work, fortunately arrived at the last minute. I do not know how we managed to establish a 24-unit "portable laboratory" on Easter Island but, somehow, we did. Norbert Schoenauer, architectural professor at McGill, designed our camp (fig. 2), a close compound which protected us against late-night celebrations of Easter Islanders, yet was open during the day for all people to be examined.

The reverse side of the postcard (fig. 3) is the first Easter Island stamp, actually the design of Neehah Molson; souvenir postcards were carried by the HMCS Cape Scott, which was declared a "Royal Mail" ship, appointed by the Government of Canada. They may be very valuable today because of their rarity and official postage.

Fig. 3: A sample of the First Mailing Expedition Stamp which was brought by the Royal Mail Ship HMCS Cape Scott to the mainland. These cards were requested by numerous friends of the Expedition.

To finish on a lighter side, one of our staunch benefactors, whom I remember vividly, provided us with soups and Pumpernickel bread from Knorr. The bread almost caused a quiet revolution among Expedition members: the European members liked this sort of bread, the North Americans did not. Since we did not want to convert the Medical Expedition into a Baking Expedition, the only alternative was to declare that those who did not like Pumpernickel should help the cook to bake fresh bread for everybody. No wonder they were tired; man is what he eats but eating becomes tiresome if it involves also baking.

To summarize: METEI was a fantastic experience for all participants. We not only fulfilled our task to obtain a total sampling of the population, as outlined by Boutllier, but developed and completed several other unforeseen tasks, i.e., how to help the Easter Islanders to achieve autonomy, how to help Chile to realize the full potential of the island and last, but not least, how to encourage biomedical studies in isolated or underdeveloped countries, for scientific as well as humanitarian purposes.

P.S. The Donner Biological Station, which was established through a donation of the Donner Foundation of Canada for further studies on Easter Island, was not planned. At our departure, we found it simply impossible to load the trailer units onto the ship, due to rough seas as well as for humanitarian reasons. Ronald Southern, President of ATCO, gave us a generous two-year grace period to pay for the housing units. They are still in use today, certifying to their durability.

Fig. 4: The first surgical pavilion established on the island after completion of the Expedition.

References


"AT THE TEETH OF SAVAGES"

Steven Roger Fischer, Meersburg, Germany

"Young Lieutenant-Commander Frédéric Ollivier, of the vessel Jules-de-Blosseville which has just arrived at Saint Malo, barely escaped being the victim of cannibals. On 29 January 1845, the ship put into Easter Island, in the Gambier archipelago, to take on water. Mr. Ollivier was seized by the savages of this island; nimble, courageous, and of unusual strength, he managed to escape; but, recaptured and violently struck over the head several times with a stone, he lost consciousness. When he came to, he was still in the hands of the savages, who were carrying him to the place where they ate their victims.

"Despite his wounds and the loss of blood, Mr. Ollivier, masterful before imminent danger, sallied his remaining strength, got clear in an instant of his executioners, and ran away at an extraordinary speed. All the savages ran after him, howling furiously. Mr. Ollivier was losing his strength...the distance which separated him from the savages grew smaller and smaller; only a few seconds more and he would be caught... The poor man was on top of steep cliff that jutted out over a
small bay and lorded over the sea at thirty to forty feet at the least. "The savages, whose circle was narrowing in upon him, were certain of taking him; but the young Lieutenant, who preferred a thousand times to take his own life rather than die at the teeth of savages, flung himself from the crag and had the good fortune of maintaining enough strength to swim toward a ship's dingy sent toward him. The savages overwhelmed him with a shower of stones thrown with great skill, not one of which however hit him.

"Mr Ollivier was brought back on board; his whole body was covered with wounds. He had, on various part of his body, the teeth marks of these cruel islanders, who had begun to eat him alive."

What must certainly constitute one of the most fantastic if not downright absurd accounts of an early landing at Rapanui appears as the foregoing anonymous and untitled story, in French, in the 31 March 1845 issue of the Parisian journal L'univers. In the course of my continuing documentation of the Rapanui scripts, in October 1990 I chanced upon a faded clipping super scribed in a 19th century hand "Ile-de-Paques. 1845. Un lieutenant de vaisseau sur le point d'être mangé" ("Easter Island, 1845. A Lieutenant-Commander about to be eaten") in the General Archives of the Padri dei Sacri Cuori, Rome, where it is catalogued as Pq 75th G. So far as I have been able to determine, this story is mentioned in none of the secondary works describing early visits to the island.

Rather than ask "What is unbelievable in the story?" we should perhaps pose the more relevant question: "What is believable in the story?" For in the 270-year record of Rapanui callings there has never been published a more contumelious assault on a reader's credulity. The entire tone of the piece evidences sheer sensationalism, entertainingly packaged in this action-packed style of mid-19th-century mediocre French romanciers, one which later excited wider audiences as the silent-film "cliff-hangers" of Keaton and Lloyd. It is more than doubtful that Lieutenant-Commander Ollivier, if he even existed, experienced a sou of what the reporter of L'univers is trying to make us believe happened.

It cannot be entirely dismissed that a French vessel named Jules-de-Blosseville might indeed have anchored at Rapanui sometime before the 31 March 1845 "scoop", although this visit does not feature in any of our documented lists and the given date of 29 January 1845 is insultingly erroneous: It allows only eight weeks for Mr. Ollivier to voyage from Rapanui in the South Pacific to Saint Malo in France (alone the voyage Rapanui-Valparaiso normally took three to four weeks under sail). The further fallacy that Easter Island is supposed to be in the "Gambier archipelago" is found in other European accounts of the time and therefore should not be given too much importance. But that the French crew put into Rapanui "to take on water," when every competent master knew that at that time that good water was not to be had at the island, signals rather that the captain of the Jules-de-Blosseville was wholly unfamiliar with East Polynesia or that the entire story is an invention.

The most striking part of the account is of course the Rapanui's behavior. Although offensive when provoked, as has been documented many times for the first half of the 19th century (particularly for the first quarter), the Rapanui never once are known to have attacked an individual without overt or implied provocation, much less to strike an innocent visitor over the head with a stone in order to drag him off "to the place where they ate their victims." This latter exaggeration is particularly ludicrous, implying as it does repetitive cannibalism in a site set apart for this purpose, hitherto unattested for the island. ('Ana Kai Tangata need not hold a cannibalistic significance: The name could signify the place where ritual meals were served, or embrace the inherited name of the legendary East Polynesian chief Kai Tangata who is also attested on Aotearoa [New Zealand], Hawai'i, and Rarotonga.)

The scene on the crag—with the poor wretch caught between the howling, encircling cannibals and the beckoning bay "thirty to forty feet" below—is pure theatrics: Nowhere on the island can one plunge from a similar steep into a bay deep enough to cushion a dive of such height. This contrived climax, perhaps more than anything else, should set off the old warning bells in any educated reader. But hold on—the thrilling adventure is not yet over. Under a shower of stones from ravid Rapanui "savages"—evoking of course the memory of Odysseus fleeing in his ship as the Cyclops Polyphemus tosses boulders from high above—the young Lieutenant-Commander Ollivier escapes in a ship's boat most conveniently "sent toward him" and climbs back on board showing "teeth marks of these cruel islanders, who had begun to eat him alive." One wonders what to rage more against: the bold-faced lie, or the insult to our intelligence?

The real significant of this singular and hardly amusing reportage lies not in whether a French vessel named Jules-de-Blosseville might have anchored for whatever reason and under whatever circumstances at Rapanui sometime in 1844 (1845 is untenable). It lies in the assumed reaction of the French reading public to such irresponsible journalism. For such lies as these formed the public opinion toward the Rapanui and other Polynesians in this mid 19th century, and, what is worse, underlay a profound European reactionary posture of unmitigated offense which led directly to further and wholly unnecessary bloodshed.

The account in L'univers is anything but a factual report of Rapanui barbarism; It is the fictional exaltation of European arrogance, which reveals far more cruelty in its author and his society than what it purports to reveal among the true victims, who in 1862-63 suffered so greatly "at the teeth of savages." We should not dismiss this account, but we should learn from it, in a way its author never intended.
there is a modern connection by means of some Rapanui artisans living and working there today.

The late Patricio Paté lived in Villarrica for many years, carving Mapuche souvenirs from wood for a well-known Chilean businessman. Paté's production includes both Mapuche and both classic and modern Rapanui wooden figures. Some are an interesting mixture: for instance, a classic Mapuche wooden spoon (huitri) has handles carved with typical moai kava-kava heads. This type of artifact is now very rare.

The explanation for asking a Rapanui carver to produce Mapuche plates, forks and spoons is quite simple: they do it better. Mapuche specialties are textiles and silver jewelry.

There are now at least two Rapanui artisans living in Temuco and Chiloé who created Rapanui style wood figures for the local markets. Surely there are more in Santiago and Valparaíso. At Temuco's beautiful mercado, there is a crowded stand with Mapuche textiles, musical instruments, wooden figures, jewelry and a lot of modern local souvenirs including the famous "indo picaro" but also a good number of different kinds of moai, swords and masks by Mauricio Teao. Some of them have been carved from large pieces of whale bone.

This example, as well as Paté's work, indicates the Rapanui ability for adaptation. They are keeping their own culture alive but, at the same time, they are displaying the complex dynamics of cultural contacts, despite time and distance.

The artisana's stand in Temuco displays a dizzying array of statues and knick-knacks in wood, stone, and bone.
**UNIVERSITY OF THE SOUTH PACIFIC**

**THE PACIFIC ISLANDS STUDIES PROGRAM**

**SUVA, FIJI**

Strong families sought for South Pacific Research Project. People who live in strong families—good families, emotionally healthy families, happy families in which people feel good about themselves and each other—are encouraged to write the University of the South Pacific and tell their story.

"We have been studying strong families around the world for more than 15 years," said Dr. John DeFrain at USP. More than 10,000 people in 24 countries have participated. But, to date, no study has focused on the strengths of families in the South Pacific. DeFrain is seeking family members in 22 Pacific Island countries. "If you feel good about your family, please write me a letter, like you were writing to a friend. Tell me why your family is so special. Answer the following four questions:

1) Who are the members of your family, and in what kind of community do you live? How old are the family members? What do family members do for a living? Give me a good picture of what your family is like.

2) What are the strengths of your family? What makes your family a good, healthy family? Please write each strength down, and explain each strength.

3) What are the challenges or problems your family faces in life? What are some things you would like to see change?

4) Please write a story which best illustrates the strengths of your family, and why your family is such a good one.

Please send to Dr. John DeFrain, University of the South Pacific, P.O. Box 1168, Extension Services, Suva, Fiji.

DeFrain said the results of the study will be reported in the South Pacific as well as in the US: "...I know many Americans will be interested in learning about how people in the South Pacific live successfully in families."

The University of the South Pacific in Suva welcomed its new Chancellor, Sir Geoffrey Arama Henry, in July. Sir Geoffrey was born on Aitutaki and educated in New Zealand. He is the Prime Minister of Cook Islands. USP is a regional University serving the Cooks, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Solomon, Tokelau, Tonga, Tuvalu, Vanuatu and Western Samoa.

**Women in the Pacific.** The latest issue of Tok Blong SPPF (#40 for August 1992), a quarterly of news and views on the Pacific Islands, is devoted to problems of women in the Pacific. This takes on such issues as violence against women, the role of women in processes of development, and primary health care, including the problem of AIDS. Tok Blong is available from 415-620 View St., Victoria BC V8W 1J6, Canada.

**HE RONGO HO'OU; WHAT'S NEW IN HANGAROA**

**Kon Tiki lives!** An adventurous Spaniard, Don Quitin Muñoz, plans to construct a thirty foot long totora reed boat at Anakena—and sail it to Japan taking along some Rapanui as crew [Sayonara, baby]. The totora reeds must be imported from Lake Titiaca, as the local variety apparently does not do the job.

**Tongariki.** According to El Mercurio, Valparaiso, once the work at Tongariki is completed the Tadano crane will be used to undertake the rehabilitation of the ahu at Hanga Piko which is...
danger of disappearing due to the abrasive action of the sea on one side and construction at the port on the inland side of the ahu. Also under study is the idea of raising some moai in the vicinity of the quarry at Rano Raraku, in order to produce an "avenue" of statues.

As of this writing, the excavations at Tongariki consist of a long trench, two test pits and some clearing of debris. A small statue eye of coral, fishhooks, and many obsidian artifacts have been found. Dr. William Ayres of the University of Oregon was placed in charge by the Consejo de Monumentos, Santiago de Chile, but he has withdrawn (we hope only temporarily). A recent visitor to the island, Bob Grosvenor, reports that it is difficult to find anyone in the village; they're all out working at Tongariki! The excavation area has not been fenced off and thus inquisitive tourists--trying to see what is going on there--have become a problem.

✓ Roberto Bravo, considered Chile's greatest living pianist, traveled to Rapa Nui to give two concerts in September. He personally financed most of the trip to the island as he is determined to bring his music to all corners of Chile-- and because of a young Rapanui girl, Mahani Teave. Mahani is studying the piano (her teacher has the only piano on the island). Mahani wrote a moving letter to Bravo and in return, he gave a special class to the little girl. Bravo gave two open air concerts plus one in the church. The program, filmed by Chilean National TV, is wonderful. Imagine a Steinway grand piano being played in front of the ahu at Tahai-- awesome.

Bravo was so moved by his experiences on the island that he made a commitment to the islanders to try and prevent the Armada from constructing the monumental lighthouse at Vai Atare which, if it goes forward, will be in plain sight of the ceremonial site of Orongo. Bravo stated "As these things are decided in Santiago without consulting the islanders, it becomes a case of ignoring the culture, tradition, and language that without any doubt should be protected internationally through UNESCO or some other organization."

✓ The infamous "monumental" lighthouse is once again in the news (El Mercurio de Valparaiso, 14 November 1992). Islanders are now circulating a petition to try and stop construction and, on November 8, over 150 islanders marched in protest from the church to the residence of the acting mayor.

An island group, Corporación de Resguardo Cultural (CdRC) has opposed the lighthouse from its inception. The site chosen for this structure is so far from the edge of the ocean cliff and so far to the west, that a light will not be seen from either the northern or the eastern part of the island at all, nor from most of the surrounding sea. It will simply stick up--to the height of a three-story building-- on the edge of the crater, visible to all who come to see the sacred site of Orongo.

Armada Commander Ricardo Menzel Zanzi delivered a declaration, pointing out all that the Navy has done for the island and how important it is that the island have a Naval contingent. He reminded the Rapanui about "the sad reality that Captain Policarpo Toro found on this land... and how islanders were saved from extinction by the Navy." [emphasis ours].
Response to Fischer's review of Pacific Rim RNJ 6(3): In its discontent, our time reproaches its heroes for their shortcomings: Gandhi was a poor father, Churchill drank too many brandies, and de Gaulle was a prude. Our time often distrusts the man or woman of action and prefers the flawed genius or the gifted failure; it idolizes the figure who turns his back on success, who resolutely—however neurotically—walks away from rank, fame and success into obscurity. American/New Zealander Steven Roger Fischer is such an honorable man, only occasionally leaving his dusty isolation like a barking hound in his hut. It is difficult however to guess whom this Kiwi piece made in USA would appeal to. To suggest that it falls between stools is to ascribe to it weight and substance, which it utterly lacks. Thus we cannot believe that the "reviewer" in his Rapanui fixation has read the whole book. What for instance about the Greenberg 'faux pas'? (No, no page. Dr. Fischer, you have to find it for yourself.) And as the reviewer has not seen it: Behring (thrice on the first page) is not the four authors', but the publisher's fault. The rest is silence.

W.W. Schumacher, F. Seto, J. Villegas Seto, and Juan R. Francisco

The photograph of ersatz moai wearing hats and scrapes and standing in front of Santiago's Bali Hai restaurant as shown in our last issue (RNJ 6(3):58) was taken by Joanna Becker. Sorry we missed the photo credit, Joanna.

MEMORANDUM ON THE FOUNDING OF AN INTERNATIONAL SOCIETY FOR OCEANIC RESEARCH

By Horst Cain, Ph.D. Blumenthalstr. 30-5000 Köln 1, Germany. (translated by Steven R. Fischer, Ph.D.)

The following statements are the result of an initial (and purely personal) confrontation with a situation that for years has produced concern, dissatisfaction, and aggravation, as well as limitations and existential distress in some professional circles. With those who are not involved, or those profiting from this situation, it leads to manifestations of indifference, inconsideration, egotism, and a lamentable professional provinciality; in other words, to attitudes that are customary in societies in which, under extreme existential conflicts, man becomes his own worst enemy.

We are speaking of the situation of German ethnology, in particular of the traditionally-represented branch of Oceanistics still, as a matter of course, claimed by ethnology but factually long abandoned. To say that this branch of ethnology leads to vita reducta within the present university/scientific community, would constitute irresponsible palliation. In reality, the branch is dead and no euphemism can obscure this fact. Whereas a few oceanistically-oriented ethnographers can or must be happy to have found a refugium as administrator of ethnographic collections in some museum—where it is to be hoped they can indulge in research, given time and opportunity—their colleagues at our universities today have hardly a chance. German universities with large ethnographic institutes never voluntarily renounce their professorships for the ethnologies of others.
Africa, Asia, America, and Europe, of which they often have several; but in 99 out of 100 cases, they would gratefully renounce a specialist for Oceania, who in any case would be the only one. Institutes with only one Chair have in the meanwhile all been lost by Oceanic Ethnology. The ethnology of Oceania is treated by specialists in other fields who, with reduced competence, handle the subject reluctantly and only peripherally.

German ethnology has amputated Oceanistics and does not seem even to feel the phantom pain.

Who, like me, drags himself twelve years long from research grant to research grant and from time contract to time contract, with professional substituting and miserably remunerated lectureships, constantly threatened with unemployment, yet holds one's own in science, needs not only strong nerves but an inexhaustible idealism. Whoever, like me, has applied in vain for ten open positions at German universities could lose his belief in scientific objectivity and in the goodwill of established ethnology, especially when his professional qualifications are not questioned but are always pointed out, even in writing, since he can show that he has passed his examinations with excellence, has spent six years of field research in Polynesia and has published series of internationally regarded publications.

One has to ask oneself, how could Oceanistics have deserved this contempt out of all the other ethnological specialty fields?

In the meantime we can take stock: the fact remains that Oceanic Ethnology is being instructed today at only a very few German-speaking universities, namely in Vienna, Basel and Göttingen. Professors with an oceanistic orientation are active only in Hamburg and Bayreuth, but according to their own testimony, are otherwise engaged so they can seldom offer lectures on Oceania.

Proper attention is also not given to Oceania's philology, with its hundreds of languages, except in the form of sporadic language courses through lecturers. All teaching facilities that occupy themselves with Austronesian languages and literatures do not proceed beyond Indonesia and the Philippines. The question poses itself: where and from whom is the present or even future generation of students in these fields to receive an adequate education? There happens to be not a small number of students with a serious scientific interest in Oceania. However, all complain about faulty orientation and lack of support at their respective universities. Oceanistic lectures within the scope of lectureships are always somewhat of a luxury for students in a regulated course of studies with examination-conscious attendance constraints.

Whoever spends much time abroad can hear amazed inquiries from foreign colleagues about the reasons for the relinquishment of a once-great German tradition in the field of ethnological Oceanic research. One can ascertain that, apart from few exceptions, the German contribution to this field is still being represented through names like Adolf Bastian, Karl von den Steinen, Augustin Krämer, Paul Hambruch, Richard Thurnwald, Hans Neermann and Hans Damm. A linguist like Otto Dempwolff must be celebrated as an isolated stroke of luck, without wishing to lessen the merits of Hans Kähler and Wilhelm Milke. Internationally known Oceanists from German speaking countries in my own generation and younger can be counted on the fingers of one hand and without requiring all five.

One can only decide to look for an alternative. On the basis of my own personal concern and because of a special circumstance, I possess a so-called "remnant farm" with an old lattice-work house and a two-story stable which I should like to see put to meaningful use, and I have developed, together with friends, an idea that can give a new impulse to Oceanic research in Germany and Europe. I wish to recommend this suggestion to all persons who feel a responsibility toward our field of research: It is to found an International Society for Oceanic Research which we shall register as a legally incorporated nonprofit organization. This society is to function as the body responsible for an institute, still to be funded, for oceanically relevant research and studies. The designation "Oceania" should not be taken as restrictive but expansive, to include the entire Austronesian language area of the Indo-Pacific from Easter Island to Madagascar. Out of the circle of consulted colleagues came the idea to also include Australia in these considerations. However the process of opinion-making may develop, Oceania consists neither geographically nor ethnologically--and certainly not linguistically or philologically--only of New Guinea. The Institute should be organized strictly scientifically, but should not exclude the possibility of affording popular activities through lectures and films. The main activities, however, should be seminars, workshops, language courses, colloquia, formal and informal gatherings of students and colleagues, as well as the cultivation of scientific contacts with colleagues in Germany and abroad who in any case are to be welcome at any time as members or guests.

The Institute or "Landakademie" could be installed in the largest part of the stable which would be adapted to this purpose. The property affords room for at least one other building. The remainder is garden and grassland. The property belongs to the village center of the community Güsen not far from the State border between Sachsen-Anhalt and Brandenburg, and stretches from the church square to the shore of the Elbe-Havel Canal. The village of Güsen lies some 100 km southwest of Berlin and is easily reachable by rail, car and steamer. Besides that of Berlin, the closest university cities with ethnological institutes and museums are Leipzig, Göttingen and Hamburg. All this has been discussed with 30 other interested persons from the academic and scientific community, all of whom endorse the idea with enthusiasm.

Many colleagues mention the problem of financing such a facility. In this case there would be no costs for the acquisition of the property and suitable buildings except for their restoration and relevant appointment. Possible sources of financing would be membership fees and, as a registered society with nonprofit status, the society would be authorized to collect contributions and thus try to win sponsors and public support from the budgets of the German ministries responsible for science and research. In conclusion, it should be mentioned that all political and administrative authorities, both local and regional, are very positive in regard to this project.
Easter Island Foundation*  
Fundación Rapa Nui....  

Foundation headquarters have been moved to new, larger (and permanent) quarters. The new mailing address is Easter Island Foundation, 666 Dead Cat Alley, Woodland, CA 95695.

The Executive Committee of the Foundation held their annual meeting on November 21-22 and discussed a wide range of topics including the publication of the book Easter Island: The Ceremonial Center of Orongo, our first in a planned series of books on Rapa Nui subjects; the Rapa Nui Rendezvous, the conference that will take place next August at the University of Wyoming in Laramie; as well as ways to encourage donations for the Foundation's several projects. A "Buy-a-Book" (or Journal subscription) campaign will soon be underway to insure that new books and current journals will be available in the Mulloy Research Library.

Several new members were welcomed to the board: Kay Kenady Sanger, Vice-president in charge of Acquisitions; Steven R. Fischer, Vice-president for European Affairs; Thomas Christopher, Director of Grants and Donations; A.J. Bock, Executive Secretary; Alan Drake, Director of Publications, and Scott Carson, Director of Marketing.

The EIF executive committee wishes to express its gratitude to our former Secretary, Kristi Wessenberg, for her past efforts.

Several recent events on Rapa Nui—the election of a new mayor and city council members, and the excitement (and confusion) caused by the projected restoration at Ahu Tongariki, have slowed progress on the Mulloy Research Library. As was reported in the last issue of RNJ (Vol.6, 3:68), all that is lacking for the work to begin is money to pay the all-island construction crew. That responsibility was given to the Municipalidad in the agreement signed a year ago by the Dirección de Bibliotecas, Archivos, y Museos, the Sociedad de Amigos de Isla de Pasqua, and the Easter Island Foundation. We all hope that the money will soon be allocated.

BUY-A-BOOK

You can help supply Easter Island's soon-to-be-built Mulloy Research Library with books. It's as easy as 1,2,3! Here's how:

1. Write a check for $50, $75, or $100 for the purchase of a book or subscription to a journal for the Library.
2. We will let you know which volume(s) will be purchased by your gift.
3. The book (with your name as donor on the book plate) will be placed in the Library on Easter Island.

The Mulloy Research Library will become THE leading research center for scientific study of the Rapanui culture, archaeology, and related topics, including general Polynesian studies.

Become a part of this exciting institution by buying a book relevant to Easter Island research. We also accept donations of books from your library; please contact us to prevent duplications.

Make your check out to Easter Island Foundation. Mail your check to Buy-A-Book, Easter Island Foundation, 666 Dead Cat Alley, Woodland, CA 95695.

PUBLICATIONS


* Centre for South Pacific Studies, Newsletter. VI(5) for October 1992. School of Sociology, Univ. of NSW; Kensington NSW 2033, Australia.


These volumes contain the results of a collaboration between two well-known scholars who specialize in Pacific cultural history. Taking the valley of the Anahulu River in Oahu, they chronicle the changes that swept through 19th century Hawaii.


* Pacific News Bulletin, No. 7(10) for October 1992. P.O. Box 489, Petersham, NSW 2049, Australia.


Review by Frank Bock, Ph.D.
American Rock Art Research Association

The enigmatic qualities of Easter Island too often are shrouded in foggy memories or wisps of misty insight, either bent on proliferating the Navel of the World concept, or perpetrating myths about its original inhabitants. These unfortunate attitudes all but obscure the facts about this isolated particle of real estate, named by a European because of an accidental encounter on Easter Day in 1722.

These mystic approaches are especially perpetuated when the fascination for early Rapa Nui culture focuses on the moai, those incredible statues staring with empty eye sockets into long-abandoned villages or unceremoniously lying face down, heads broken, toppled from their positions of dignity. In all that has been written about Rapa Nui, there is but a glance and passing nod given to the rock art. That is until now.

The foremost authority on Easter Island rock art, Georgia Lee has written and illustrated what no doubt will become a major reference. Her scholarly probe into pre- and prothistoric culture is anchored on the most acceptable theories espoused by early researchers, as well as contemporaneous writers. Luckily she quickly abandons the pleasant but inaccurate poetry of the Kon-Tiki voyagers.

The reader must peruse the brief but vital culture history at the book's beginning, especially concerning the clan structure and the extraordinary role of the Big Men. For it is this social ranking that plays a prominent part in all of the historic manifestations still extant: the moai, the ahu, the hare paenga, the marae, and of course, the outstanding rock art—both petroglyphs and pictographs.

Lee establishes much of her argument on a thorough discussion of physical and natural forces at work on the early Rapa Nui, then ties in her research in a manner both relative and concise. (One example is her look at the importance of birds in Polynesian culture, then her discussion—based on the most acceptable historical accounts—of the Birdman Cult and ritual. This method of reasoning is necessary to understand—-even a little—the complexities of the Birdman motif petroglyphs that abound at Orongo.

And all of this is prologue, the author's well-read and researched reflection on earlier work, combined with her own documentation.

Chapter 3—Dealing with Rock Art— is a comprehensive overview of the myriad problems inherent in rock art research. From lack of previous (or dubious) recording, to establishing the most effective methodology for documentation. The results, virtually learned in the field, have led to a comprehensive, solidly established data base that not only current researchers will find valuable, but future scientific inquiry will be able to depend upon for thoroughness and accuracy. This data base is a well thought use of a numbering system that allows efficient computerization for both flexibility and growth.

Building on this extensive base, Lee proceeds with an excellent account of pattern and motif distribution on the island, with related cultural attributes.

To this reviewer, the most spectacular rock art on the island is the Birdman motif, especially when done in bas relief. (This motif eventually may prove to be less important to the Rapa Nui than say, makemake. However, it does remain the most striking). Lee's extended discussion on the Birdman motif in all of its configurations and relationships, is exemplary. The accompanying drawings and illustrations add a graphic dimension to the data presented.

However, in her thoroughness, the author does give adequate coverage to other motifs doubtlessly of extreme importance to the earlier Rapa Nui: birds, marine life, ceremonial paraphernalia, watercraft; in short, these and other manifestations of culture.

Orongo, located on the rim of Rano Kau crater, is probably the area most studied by archaeologists and historians alike. The plethora of information creates a mental picture of what life must have been like at this village. Lee carries the significance of this information forward, by emphasizing the significance of the Birdman motif found carved so prolifically on the boulders. She states: "The intensity of carving is a clear indication of Orongo's ritual and ceremonial importance. Although other sites on the island have concentrations of petroglyphs, Orongo has no equal" (p.149).
Although, perforce, Lee's discussion of Orongo is substantially exclusive, she does cover the island's other sites, such as Motu Nui, Anakena, Tongaririki, etc., but always with stringent attention to detail. This documentation includes paintings at Ana Kai Tangata, the house slabs from Orongo, and other isolated island caves.

A single chapter where the author compares Easter Island with Polynesian rock art is unfortunately short.

The illustrations are excellent. The photography is clear, the drawings by the author are not only correct, but illustrate that her artistic observational eye catches nuances often not captured by a camera. The inclusion of a Glossary is helpful. Her Bibliography is a literal who's who of Polynesian research (and even includes a few on--or beyond--the fringe, such as von Däniken).

In conclusion, Lee documented over 4000 examples of rock art and another 4000 cupules. This type of documentation goes beyond a "petroglyphic inventory". She has constructed a database that gives excellent support to her typology, relating motifs to a purposeful legacy left by the Rapa Nui. She also recognizes that her Janus-like report faces both directions; a scrutiny of the past through earlier culture's carvings and paintings, while also providing a point of departure for further study. This scientific attitude is a consummation devoutly to be wished, since any scientific inquiry cannot be considered an epilogue.

Frank Bock, Professor Emeritus, is an anthropologist, editor of ARARA's newsletter, and has been involved in rock art research for over 35 years. He spent several months on Rapa Nui, working on a moai documentation project.


Review by Steven R. Fischer, Ph.D., Germany

What's black and white and read all over Rapa Nui? Ka 'Ara te Mata! (lit. "Wake up the eye"), the new Rapanui-language cultural broadside, of which issue number one appeared in maro (June) of 1992. Produced by the pupils of the Liceo Municipal "Lorenzo Baenza Vega", the publication is a single, photocopied, A-4 sheet which is folded once to give four pages of text. And for those who read Rapanui, it is sheer rivariva from the introduction's happy "Ioranai!" to the last delightful songs on page four.

Ka 'Ara te Mata! is a joint project, with each pupil assigned a different aspect of Rapanui culture or history. Director and Editor is Francisco Edmunds Paoa. The column "Manu'a Tupuna" ("Ancestral Beliefs") is written by Rodrigo Paoa Atamu. Lucas Pakarati Tepano offers us "Kimi Vananga" ("Search the words"), a letter-square in which Rapanui words are to be searched out. Catalina Hey Paoa's "Vananga mo Hapi" ("Words for School") explains archaic words in the Rapanui language. "Me'e Papa'i e Tatou" (Something Written by Us) is a collection of three poems by Hilaria Tuki Pakarati and Virginia Haoa Cardinale. Further contributions come from the above and from Marcos Rapu Tuki ("He Riu Rapa Nui") and David Teao Hey ("Te Ta o te Rongo nei"). The material basically follows the older, and in places, outdated, scholarship of Routledge, Metraux, Englert and others.

For those of us who realize the precarious status of the Rapanui language at the end of the twentieth century, Ka 'Ara te Mata! is a heart-warmer. Only through projects such as this will the Rapanui language be able even to greet the next millennium. The publication displays a love for and pride in the achievements of one's ancestors...and the young people's active desire to share this language (with a plethora of Tahitianisms).

Ka 'Ara te Mata! has delighted this reviewer with its rongo rai'e ("First issue"). May there be many more rongo to come, for even the ngangata hiva ("non-Rapanui") to enjoy and profit from.


Review by W. W. Schuhmacher, Risoe National Laboratory, Denmark

By 1990, Mururoa and Fangataufa, two atolls of French Polynesia, had been used as a testing ground for 164 atomic bombs. ("Mururoa" is the name the French army has created for their nuclear base in the Tuamotu group, the construction of which began in 1963.)

Three large volume seawater and two plankton samples from locations near the territorial limit outside Mururoa (Mururoa) Atoll have been analyzed by three different research labs, viz. the DIRCEN-CEA Laboratory at Monthéry, France; the Lawrence Livermore National Laboratory (LLNL), USA; and the IAEA International Laboratory of Marine Radioactivity (IAEA-ILMR), Monaco. As an inter-comparison exercise, the participating labs were to assess the presence and determine the quantities of 40K, 234U, 238U, 90Sr, 134Sc, 137Cs, 239+240Pu, and 60Co. As a result, the only man-made radionuclides found in the seawater and plankton samples that were above detection limits included 90Sr, 137Cs and 238, 239+240Pu, which could be anticipated from atmospheric fallout in the different media.

The French naturally were happy about this IAEA "counter-attack" (cf. La Recherche, January 1992, page 6) as it does not verify an earlier Greenpeace study demonstrating the existence of anomalous contents of 134C (the half-life of which is two years).

The questions however is whether the people of French Polynesia, New Zealand, Pitcairn, or Easter Island are happy, also. As for the latter island, Dr. Helmar Kunzendorf, geochemist at Risoe National Laboratory, Roskilde, Denmark, has in mind to analyze a sediment sample from Rano Raraku, collected by Kio Teao Atan in May 1991 and brought to Denmark by his sister, Ana.


Review by William D. Hyder. University of California, Santa Cruz

Emily Mulloy writes in the preface, "Orongo is one of the special places on this special island, a place where one feels..."
closer to sea and sky than to the earth." Having spent far less time at Orongo than Emily Mulloy, but more than enough time to have had the opportunity to make my own peace with the site, I heartily agree with her sentiment. One can easily become so overwhelmed with the presence of sea and sky and the euphoria of the place, that the site itself becomes a secondary experience. It's as if Jimi Hendrix saw Orongo through the purple haze when he cried, "Scuse me while I kiss the sky!"

Alan Drake cuts through the haze to deliver a practical guide to Orongo. The various chapters document the natural history and written history of the site, construction details for the Orongo village, and an overview of the petroglyph site, Mata Ngarau. The final chapters detail the birdman and puberty ceremonies that took place there and on the offshore island of Motu Nui. Photographic tips and the do's and don'ts for visitors round out the text. Everything the visitor will want to know is here, albeit free from the emotions that permeate the site. To transport the armchair tourist to Orongo requires poetry, not careful description. But The Ceremonial Center of Orongo is primarily a guide for the visitor. The site of Orongo itself will supply the necessary poetics better than any guidebook could hope to do.

Half the book is composed of illustrations and photographs by Georgia Lee and others. These are clearly referenced throughout the text and can enhance a visit to Orongo by taking the reader inside the stone house for views of painted slabs that have not been seen in nearly a hundred years. The illustrations of the confusing array of petroglyphs at Mata Ngarau help focus the visitor's attention on some of the more important elements to be picked out among the boulders.

There are certainly more weighty tomes available on the art and archaeology of Easter Island, and Lee's Uncommon Guide to Easter Island is the indispensable reference for the tourist. For those with a general interest in the island, Bahn and Flenley's Easter Island, Earth Island is good reading. Drake's guide, on the other hand, fits a more specialized niche in Easter Island publications. Visitors to Orongo will find their trip greatly enhanced with a copy of this guide in hand. It can easily be read while at the site and its maps and illustrations insure that no points of interest are missed.

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**THE KA'UPULEHU PETROGLYPH SITE, HAWAI'I**

Edward Stasack and Georgia Lee, Ph.D.

A petroglyph site at Ka'upulehu on the big island of Hawai'i was scientifically documented in April 1992. The site is an integral part of the Kona Village Inn, Hawai'i. The following is a brief report of the project.

**THE LEGEND**

A young boy named Paka'a had no father, but his grandfather's brother looked after him and always urged him to do his best. But Paka'a seemed to always be last--last to get his catch of fish, last to paddle back to shore.

One day Paka'a watched a leaf being blown across the water. It was shaped somewhat like a crab claw. He asked his mother to make him a larger version of the leaf. As Paka'a practiced with it, others could see him out in the ocean and they all laughed. But Paka'a continued to practice with his leaf sail and when he was skilled with it he challenged the others, saying he could beat them out to sea and back. They laughed even harder. Then Paka'a said he would bet them their day's catch of fish. Still they laughed. So the men took their canoes and went out, paddling hard. But Paka'a swiftly sailed out and back and was waiting for them when they came in. So Paka'a picked out all the fish he had won and went home.

He was grateful to his grandfather's brother who had encouraged him to do what he believed right and to follow his dream. The old man's name was Mailou. Today we can see his name carved on the pahoehoe as we enter the petroglyph field at Kaupulehu. [Legend as told by Lani Opunui-Ancheta].

The extensive lava flows that characterize many parts of Hawai'i provide good surfaces for the carving of petroglyphs, and ancient *kahuna* (ritual priests) placed their sacred designs on many of them. Hawai'i is rich in rock art sites and many are well-known and well-visited. However, since tourism has become a major industry, many sites have been damaged by vandalism and foot traffic and some have disappeared due to construction projects. A few have been lost due to recent lava flows; indeed a lava flow in 1800-1801 just to the northeast of the Ka'upulehu site no doubt covered over many petroglyphs. The Kona Village petroglyphs have been fairly well preserved, although some vandalism took place prior to its curation by the resort.

One certain way to preserve the data for future generations is to make a scientific record of the rock art. In this light, our project focused on careful documentation, making a permanent record for the future.

Petroglyphs are fragile and endangered, and often are poorly studied by "dirt" archaeologists for they are generally not datable and they are often difficult to place in the matrix of other prehistoric evidence. This reluctance to 'deal with' petroglyphs is unfortunate for they have a potential to tell us much about an ancient society, especially in regard to ritual beliefs and cultural origins.

We estimate that more than 324 petroglyphs are exposed now at Ka'upulehu; we were able to map the site and document slightly more than one-half of the total units in 12 working
days. Recent removal of portions of the kiawe forest by Kona Village Resort employees has revealed several additional areas with petroglyphs. It is to be expected that more motifs will be located if clearance continues. "Totals" are not particularly germane at this site for many of the designs are compounded, that is, part of something else. Some appear to be "scenes" and are most unusual in Hawaiian rock art.

The Ka'upulehu petroglyphs are located on fairly level pahoehoe, although some sections are tilted around collapsed bubbles in the lava.

The vast majority of the designs at Ka'upulehu were made by pecking although a few appear to have some abrasion in the pecked grooves. We noted a variety of types of pecking; some designs are beautifully carved, obviously by experts. Others are formed poorly and made with a minimum of expertise. A few of these latter types may date from fairly recent times.

Datum was established at a high point on the north end of the major collapsed lava bubble. Main north-south/east-west lines were constructed from that point and string grids were placed in ten meter squares, covering the petroglyph areas. A total of 3800 square meters was grided. Within each ten meter square, detailed drawings were made on grid paper by means of 20 centimeter string grids placed over the petroglyphs.

Precise and careful scale drawings are important for several reasons. One of the most important is that it forces the recorder to scrutinize the designs for super-impositions, method of manufacture, faint traces, and any other features that may not be captured in a photograph. When a design was in association with others, these associations were carefully noted and drawn. Although a laborious process, scale drawings provide excellent results and are far better than photography alone because the human eye can discern important features that are often not visible in photographs.

Fig. 1: This "akua" figure with its elaborate plumed headdress is beautifully carved. Pecking is even and controlled, suggesting it was made by an expert.

The site and the motifs themselves were also photographed with Kodak 64 slide film. No chalking was done to enhance the designs; we relied upon natural lighting which was adequate at particular hours in the day (early morning and late afternoon). Several difficult petroglyphs were examined at night by flashlight in an attempt to extract further information.

Each recorded panel also has an information sheet and all petroglyphs will be entered into a computerized data base for comparative purposes (as was done for Puako, Kalaoa Cave, and Lana'i).

The computerized data base is a relational one, DBIII+ (IBM format). Once all the data for each petroglyph is entered, we can then select out specific information such as how many examples of a particular type are at a site, what the attributes are, and so forth.

Ka'upulehu's petroglyphs have several interesting features, and some are unique to Hawai'i. There appears to be an emphasis on chiefly concerns as is indicated by figures wearing headdresses (fig 1), some of which appear to refer to legends or myths. The number of sails infers that something special was going on here in relation to canoes, sailing, and fishing.

In addition, some petroglyphs consist of complex groupings. And the many papamu suggest that the often competitive sailing activities may have been linked to the playing of konane, the Hawaiian game compared to Chinese Checkers.

Fig. 2: Kite motifs have not been previously recorded in Hawaiian petroglyphs. Two are at this site. The design is very close in style to an extant example in New Zealand with a wingspread of 183 cm.

The kite motifs (fig 2), which are unique in Hawai'i, as far as we know, may also refer to Maui who used a kite to pull his canoe. It may be significant that the Hawaiian word for kite (pe'a) is the same as for sail. Ethnographically, kites are known from the Society Islands, Easter Island, and New Zealand. [See end notes]

In comparing Ka'upulehu with other petroglyph sites in Hawai'i, it is interesting to note the differences in design elements. Variations between sites on the Big Island (and with other islands of Hawai'i) have not often been noted or studied. However, sites tend to have a different universe of design elements. Although all of them have variations of human figures, some sites have significantly different design types and
this is important: these data are telling us something. The reason for variations may be functional (i.e., cupules made at Pu'uloa for the *piko*, or the *papamu* "game boards" such as we see at Ka'upulehu), or perhaps they are the result of different ritual activity.

At Anaeho'omalu (a few miles to the north of Kaupulehu), circles and variations on curvilinear elements predominate; nearby Kalaoa Cave has only human figures. Kaeo A at Puako has designs that differ from nearby sites directly to the north; many of Kaeo A's figures are "attached" to others, as if part of a family tree (*ohana*). Puako also has numerous tiny footprints, like a record of birth, and many female figures have vulvae clearly indicated. Pu'uloa has a concentration of *piko* holes; Lualua peninsula of Lana'i) has a plethora of dog petroglyphs.

Ka'upulehu's sails are both outstanding and numerous (fig 3). They represent the typical crab-claw sail that was in use when Captain Cook arrived to Hawai'i. The use of the sail motif here may be due to some practice dealing either with sail technology or perhaps a sailing "school".

Other "standouts" are figures with elaborate headdresses and "complex" motifs such as figures combined with fishing lines and fishhooks, or paddles, etc. (fig 4,5). Perhaps these refer to legends and myths, for instance, the fishing up of the islands by the demi-god Maui or it might be a metaphor for a conquering chief whose rights to land and fishing extended along the coast. Maui is said to have invented the barbed fishhook as well as the kite. Might these symbols hint of a Maui connection? The *akua*-type figures seem to be close in spirit to wooden sculpture in the round, showing considerable artistic and technical skill. The feathered headdress may refer to crowns reserved for *ali'i* and/or gods.

Fig. 3: Sails and human figures are common combinations. This example has a sail within a sail.

Fig. 4: An active figure with a long line has four fishhooks on the end. The figures appears to be standing on a platform (?) Part of the connecting line to the fishhooks has been damaged by pecked vandalism.

Fig. 5: A chiefly figure with a headdress is connected to a long fishing line with hook and fish. The two odd shapes on either side of the anthropomorph may represent kihili (feathered standards). The long (270 cm) fishing line has been curtailed in the drawing for editorial purposes.

Fig. 6: A long complex panel with many sails and figures. The elegantly ribbed sail on the left has a fan-like ornament at the top. Sails run up to 244 cm in length.

At least twenty *papamu* were noted. These vary from clearly-defined patterns to barely visible pecking. Some are beneath other petroglyph motifs and a few have been partially destroyed by vandalism. However, without doubt, sails are the dominant motif here (fig.6). The elegant sail motifs are carved with great sweeping curves; they are often associated with small anthropomorphic figures (a tendency noted at Puako, also), some have pennants flying from them and at times they are superimposed, with small sails inside larger ones.

A few sails have ribbing indicated. There seems not to be any set number for ribbing; we recorded up to 26 ribs. There are at least 90 full sails in the petroglyph inventory, with ten more that are fragmentary.
Fig. 7: Four triangular-bodied anthropomorphs, some with wing-like arms. Note cupules in the crotch of the two figures connected at the head.

We counted eleven "T-figures"; 25 regular type stick figures; 63 triangle-bodied anthropomorphs (including muscled figures); and six "open body" anthropomorphs. Twelve others do not fit into the above categories. As for the human forms, triangle-bodied figures outnumber "stick" figures by 40%. Of 106 anthropomorphs (not counting T-figures), only 8 are clearly phallic. Two others are indeterminate; and six others have a cupule in the crotch area which may refer to a female or to the genital piko (fig. 7). Compared to the usual petroglyph field in Hawai'i, this is a low percentage of phallic figures. One stick figure in a running pose shows great animation. Famous

Fig. 8: Some of the most curious petroglyph motifs consist of circles and lines, some forming stick figure anthropomorphs.

runners appear in legends of Hawai'i such as Keli'i-malolo of Maui who ran 90 miles without effort. Actively sprinting figures are known from other sites such as Puako. The example at Ka'upulehu is in the same tradition. The so-called "string figures" found in two sections are puzzling designs without known parallel in Hawaiian rock art (fig. 8). These motifs resemble circular elements arranged on a rectangle with connecting lines running through the circles. One row resembles seated human figures. It is tempting to suggest that the unadorned row of circles may be a form of "shorthand" or abstraction, and represented to the artist a second row of seated figures. However, caution must be exercised in making such

postulations: we have no way of penetrating the mind of the kahuna who made these motifs and it is unlikely that they will ever be fully understood. What we can say about them is that they are unique to this site, as far as we now know; they appear to be very ancient.

Another unique design appears to be a burial scene composed of three stick figures. Two men are carrying a third figure, slung below a pole (fig. 9). The image is quite graphic. This panel has been damaged by attempts to make a latex mold.

Fig. 9: This petroglyph may represent a burial scene. "Scenes" are very rare in Hawaiian rock art.

Gross pecking activity can be seen in many parts of the site. Some pecking appears to have been done on "blank" pahoehoe; other pecking is over petroglyphs. At times the pecking does not fully obscure the design beneath and we were able to record the petroglyph (fig. 10). However, in a few cases, destruction was such that we were not able to determine the motif.

Fig. 10: Two muscled figures are associated with a sail; they have been badly damaged by vandalism in the form of gross pecking, apparently with a claw hammer.

It appears that, in the 1920s and 30s, while this area was still occupied, teen-agers damaged the designs with claw hammers. By experimenting with a small detached piece of pahoehoe and a claw hammer, we were able to duplicate the marks on the motifs. An early resident, now in his 70s, recalled participating in such activity (Opunui-Ancheta, personal communication 1992).

Triangular-bodied anthropomorphs with raised paddles (fig. 11) surely must connect to the sailing tradition, but also may refer to battles or ceremonies. This particular form is also seen at Puako and other sites around the island.
The site at Ka'upulehu probably had continuous use from early times clear into the historical period. The latter time frame is indicated by dates and names pecked into the pahoehoe. Many of these are made in the style of Missionary-type "block" letters, and several overlay more ancient motifs. In contrast, several petroglyphs seem to be quite ancient. The bulk of the designs, however, probably date from AD 1500 onward. This estimate is based on a study of the predominant figure types. Excavations at Hilini Pali (Cleghorn 1980) provide strong evidence for this general date. Hilini Pali has both stick figures and triangular bodied figures below the carbon-dated fill level where the former outnumber the triangular type 8 to 1. Above the fill level, the triangle figures outnumber the stick figures. This supports Cox and Stasack's (1970) proposition that was based on stylistic evolution of figure types and general weathering and patination rates.

The move from linear stick figures to triangular bodied figures was a large step, and likely signals change in the culture.

It is not possible to make overall conclusions at this stage of research, for only half of the site has been documented and the data base incomplete. We can state, however, that Ka'upulehu's petroglyphs represent some of the finest images in the Hawaiian islands. They exhibit enough differences from other island locales to suggest that this site was dedicated to special purposes, most likely dealing with status concerns, sailing, and perhaps mythological concepts.

Hawaiian petroglyphs reflect a remnant of ancient ritual life; they are also an important and non-renewable resource that deserve to be preserved and protected for all who treasure the past.

REFERENCES

The authors wish to thank the Kona Village Resort, General Manager Fred Duerr, and the Resorts staff for their assistance and hospitality. Lani Opunui-Ancheta and Herman Puou Kunewa assisted with the documentation. Mahalo.

Notes on Polynesian kites
Easter Island: "Kites, called manu hakare here (flying birds), were made of tapa cloth and the head of a bird was painted on each of them." (Métraux 1971:353).
Mangaia: Rongo was the patron of kite-flying." (Poignant 1967:66).
Hawaii: "...the god of Maui called Lu-lupe...is represented in the form of a kite (lupe) shaped like a sting ray." (sent into heavens to ensnare souls of those who have done evil) (Beckwith 1970:109).

The Hawaiians said that when Maui's kite was in the sky they knew the weather would be fine and they spread their tapa to dry. Maui also used a kite to pull his double canoe (Poignant 1967:66).

"In Hawaii, where the kite-shaped god of the wind, Lo-lupe, is sent out to entangle the souls of enemies to the chief, we have a story of Maui as a kite flyer in control of the winds." (Beckwith 1970:121).

"The grateful grandfather shows Maui how to fashion a bird-shaped ship (a kite) out of feathers, ti leaves, and iieie vine, in which he flies through the air to Moana-liha and sees "the houses of Limalaoa" and the people gathered on the shore. The chief...orders the strange bird brought into the house....." (ibid.:233)

Tahiti: "...in the Society Islands ...kites were formerly used to propel [rafts]." "There is a well-known story of a time when the district of Vairao in Tahiti...loaded rafts with food and sent them across the bay by means of kites...."

"Kites have been used for towing rafts of timber and bamboo at this part of the coast--Mataiea and Paparei!" (Haddon and Hornell 1975).

"Kite-flying was another sport well suited to Tahiti's location within the trade winds. Made of cane and covered with bark cloth, kites were flown by men and boys alike." (Ferdon 1981).
New Zealand: "Kites were used for play by children and adults. Some were used in ritualistic magic, when priests flew them for divination purposes. From their movements, those initiated in this art could read omens. These influenced tribal actions, following the advice of the priests concerned. " (Barrow, 1984:103). A Maori kite in the form of a bird with a human head is illustrated in Poignant (1967). The wing span is six feet.
Kite-flying has many mythological associations in Polynesia. The Maoris say Tawhaki ascended to the sky world as a kite or by means of a kite. One version says his wings were broken when he fell and another says he abandoned his kite for a hawk. The Maoris of Chatham Island have charms called Tawhakis which they recite to disperse storms. These refer to Tawhaki as a kite, and Rata has similar associations. (Poignant 1967:66).

**HAWAIIAN PETROGLYPH PROJECT**

Join us in the field!

In April/May 1993 there will be a University of California project to document the petroglyphs on the Big Island of Hawaiʻi in Volcanoes National Park.

This project, a *University Research Expeditions Program*, will be directed by Georgia Lee. If interested in participating, please contact UREP, University of California, Berkeley, CA 94720, or call (510) 642-6586 for a free brochure.

**COLLATION OF ORONGO HOUSE NUMBERS**

Robert R. Koll, Ajijic, Mexico

Ever since researchers have been exploring the archaeology at the ceremonial site at Orongo, different numbering systems have been applied to the stone houses. Routledge numbered the houses from northwest to southeast, as did Ferdon; Mulloy numbered them from the southeast to the northwest. Not everyone counted every house, further confusing the issue. This compilation and collation of Orongo's house numbers provides a cross-reference.

**Description of the number series**

Mulloy's numbering system is a combination of two sets: his own number followed by the that of Routledge, in parentheses. House numbers 1-36 (those restored in 1974) were obtained from the Mulloy report of 1975. There was no report following the completion of the Orongo restoration in 1976 (houses 37-53) because of the untimely death of Mulloy in 1978. These numbers are taken from the author's own field notes made while recording petroglyphs inside the houses in 1976.[1]

Routledge has a regular numerical sequence. However, three numbers are duplicated by the addition of "a" (3a,19a, and 28a). Although the largest number in her series is 45, the total is actually 48. Ferdon's numbers are preceded by "R" (for room). There are two exceptions: R-48E and R-49E. The "E" refers to "revealed by excavation".

**Unrestored houses**

Houses 52 and 53 were not restored in 1976 but were left as examples of their condition prior to the restoration project in 1974.

**Two-room houses**

Three houses have two rooms; one has a "basement" room and two have a rear room connected by a tunnel.

House #30 is beneath #29. It was filled in by Mulloy due to danger of collapse. Neither Routledge nor Ferdon recorded it.

House #32 (19A) is joined by a tunnel to #31 (19). Not mentioned by Ferdon but it appears on his map. Mentioned in Routledge's text but not shown on her map.

House #38 (14) is joined to #39 (15) by a tunnel. It is not numbered by Ferdon but is shown on his map. Ferdon considers both #32 (19a) and #38 (14) as two-room houses, therefore he did not assign separate numbers.

**Non-house numbered features**

Mulloy's #25, the partial elliptically-shaped stone house foundation, was not restored. The cave (#47) is also regarded as a feature.

**Double entrance houses**

Four houses have double entries: #23 (25), #49 (4), #27 (22), and #39 (15). Routledge's map shows one entrance for houses #27 (22) and #39 (15) but her text mentions two.

**Reconciliation of the number series**

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**Collation of Orongo house numbers**

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### References


[1] Footnote: A search is underway for Dr. Mulloy’s documents and maps for the 1976 restoration of Orongo’s houses. In lieu of the missing Mulloy house numbers, this writer’s numbers, when he recorded the petroglyphs inside the house and entrance passageways in 1976, are used; they correspond to those of the expedition cartographer, Carlos Corrasco.

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