

the premier source for Easter Island events and scientific studies...

RAPA NUI JOURNAL

Vol 6, No 2 **EASTER ISLAND FOUNDATION** June 1992

METEI: A Canadian medical expedition to Easter Island, 1964-65

James A. Boutilier, Ph.D.

Faculty of Arts, Royal Roads Military College, Victoria B.C.

Introduction

The story of METEI (Medical Expedition to Easter Island) is really three stories, each unique: of an international multi-disciplinary study of the inhabitants of Rapa Nui; of a voyage unmatched in Canadian naval history; and of a political "revolution" on Chile's only Polynesian dependency.

METEI evolved from medical research undertaken in the early 1960s by Dr. Stanley Skoryna of McGill University, Montreal. He persuaded the World Health Organization to provide the initial funding for a pilot project which would examine the relationship between heredity, disease, and the environment on Easter Island. The Royal Canadian Navy agreed to transport the members of METEI on board Her Majesty's Canadian Ship *Cape Scott* and they took with them a complete scientific encampment consisting of twenty-four prefabricated trailer units.

METEI spent two months on Easter Island (13 December 1964 to 11 February 1965) and carried out the most exhaustive medical and scientific examination that has ever been conducted on a South Pacific Island population. In the process METEI became inextricably involved in the Rapanui's efforts to achieve a greater degree of political autonomy. The paper is primarily concerned with the origins of METEI, the

RAPA NUI JOURNAL

IN THIS ISSUE

21

METEI: A Canadian Medical Expedition to Easter Island, 1964-5

James Boutilier

23

The Spanish involvement in the Peruvian pirate attack in 1862.

Francesc Amorós i Gonell

34

More Journals on Easter Island:

Part II

Herbert von Saher

39

What's New in Hangaroa

40

What's new in Polynesia

41

Easter Island, Earth Island

Review by Frank Bock

43

When it Reigns, it Poors: A Review of *Poisoned Reign* by Grant McCall

V o l . 6 (2) J U L Y 1 9 9 2

organization of the expedition, the execution of the under-taking, and the results of the expedition.

Background

METEI evolved from studies undertaken in the early 1960s by Dr.

Stanley C. Skoryna, Director of the Gastro-Intestinal Research Laboratory and associate professor at McGill University, Montreal. Dr. Skoryna was interested in the "elusive relationship between people of certain blood types, their stomach secretions and their susceptibility to stomach cancer and peptic ulcers" (Mydans 1966:56). However, he found it extremely difficult to pinpoint these connections in complex and migratory societies where there were an enormous number of uncontrollable variables. Ideally, what was needed was a "closed, isolated society with birth and death records, whose every member could be examined and tested by a whole range of modern medical techniques, where environmental and hereditary factors could be separated" (ibid.)

Easter Island appeared to be the logical site for such a study. Located 2300 miles (3700 km) off the coast of Chile in the empty reaches of the southeast Pacific, Rapa Nui, as it is known, is the most isolated inhabited island in the world; a tiny ironbound volcanic triangle of land, sixty-four square miles (166 sq.km), with an indigenous population (in December 1964) of 949. The only regular contact the islanders had with the mainland was in the form of an annual supply vessel, the 4100 ton Chilean Navy cargo ship *Presidente Pinto*.

Otherwise their isolation was complete.

Isolation of this sort suggested a number of interesting possibilities to Dr. Skoryna. It seemed likely that the indigenes would display significant genetic traits, that they would suffer from diseases associated with inbreeding, and that their pattern of immunity would be unusual (Roberts ca.1966:1). Furthermore, the local population recommended itself on the grounds that it was stable, literate, small enough to encompass, and large enough to be statistically valuable. In short Easter Island seemed destined to be a perfect "living laboratory" (Beighton 1966:347).



Commemorative seal issued by the Expedition
Created by Neehah Molson

However, the isolation which was so vital for Skoryna's purposes threatened to be short-lived. He discovered in 1961 that the Chilean authorities planned to build a runway, capable of handling large passenger jets, at Mataverí, near Hanga-roa, the only settlement. This intelligence raised not only the scientifically satisfying prospect of a comparative study of conditions in the microcosmic island community after regular contact had been established with the outside world, but injected a note of very considerable urgency in Dr. Skoryna's plans.

Development of the METEI Concept

Initially, Skoryna conceived of METEI as a modest undertaking consisting of himself, his colleague Dr. Georges N6gr6dy, a bacteriologist from the University of Montreal, one of his ex-students, Dr. David Murphy, a cardiac specialist with a background in veterinary science from the Royal Victoria Hospital, Montreal, and Dr. Harold Gibbs, an expert in parasitology from MacDonald College, Montreal (Skoryna interview 1979).¹

A review of the financial, scientific, and logistical problems associated with a small-scale project soon convinced him, however, that a larger multidisciplinary

study of the Rapanui would be more likely to garner support. Such a study, with an emphasis on the human component, accorded closely with the principal aims of the Human Adaptability Section (HAS) of the World Health Organization's Biological Programme (IBP); a "world-wide study of the functional relationship of living things to their environment" (Beighton 1966:347). HAS studies sought to establish "a kind of human baseline, an inventory of what mankind is really like biologically...in the middle of the twentieth century (Weiner 1966:358). Dr. Skoryna wanted to do the same thing. He wrote "...it seems imperative that attention should be devoted to the relative roles of hereditary and environmental factors in human physiology. In this respect the study of isolated population groups is important because the environmental changes introduced by Man proceed faster than his own biological adaptive changes. These groups are rapidly disappearing and with them the opportunity not only to study the limited number of factors involved but also to establish certain prototypes and baselines for further investigations" (Skoryna 1966:2).

The first public announcement of the enlarged undertaking came on Monday, 16 December 1963 when the Principal and Vice-Chancellor of McGill University, Dr. Rocke Robertson, issued a press release describing METEI. The expedition was to consist of twenty five scientists, divided into four medical teams to conduct "specialized studies in the fields of epidemiology, bacteriology, genetics, hematology, sociology, and anthropology." It was to be an undertaking, the release stated confidently, which would put Canada in "the forefront of the international health field" (Press release: 16 December 1963).

Preparations

As project METEI began to take shape Dr. Skoryna was faced with six inter-related problems: funding, the provision of research facilities on Easter Island, logistics, transportation, the recruitment of personnel, and the receptivity of the islanders. The World Health Organization awarded him a "token grant" of \$5000 in August 1963 (Goodman, personal communication 22 July 1976) and agreed that METEI should be a WHO pilot project in the IBP (Mydans 1966:56). Further contributions of \$10,000 each were forthcoming from the McConnell Foundation of Montreal and the Medical Research Council of Canada for the purpose of purchasing medical supplies and equipment.²

At the same time, Skoryna established the Easter Island Expedition Society (EIES) to handle the expedition's finances. Dr. Rocke Robertson was selected to head the EIES while the other directors were Mr. Peter Laing, a member of McGill's Board of Directors (EIES vice-president) and Mrs. Gerd Herum (EIES honorary

secretary-treasurer), who had worked with Thor Heyerdahl on Easter Island in the 1950s.

Central to the expanded vision of METEI was the provision of laboratories and staff quarters on Easter Island. But how were these to be acquired in a location entirely devoid of such facilities? The solution appeared to lie with prefabricated buildings. Ever resourceful, Skoryna turned to the Alberta Trailer Company (ATCO) of Calgary which made available 24 palletized industrial trailer units mounted on skids. These units were capable of being transported in a semi-constructed state, drawn into position, and erected quickly.³ The evidence suggests that while efforts were made to raise the \$55,200 needed to buy the trailers outright, ATCO labored under the impression that the trailers were to be returned at the end of the expedition (Skoryna interview 1979).⁴ However, well before the expedition departed for the South Pacific the decision had been made to leave the trailers on Rapa Nui, but this decision does not appear to have been communicated to ATCO.

In order to encourage the massive flow of in-kind contributions needed to make the expedition a success, Skoryna hit upon the idea of appointing 32 prominent men and women as honorary consultants to the expedition. These individuals represented a wide spectrum of goods and services and used their influence to expedite logistical support. Well over \$100,000 worth of food, pharmaceuticals, and equipment was made available to METEI through the generosity of Canadian and American companies, agencies, universities, and individuals. General Motors, for example, contributed a four-wheel drive truck while DuPont of Canada donated a complete set of x-ray films. Other firms throughout North America loaned or gave sophisticated apparatus including a lyophilizing machine to freeze-dry serum specimens and a low temperature device, capable of maintaining virus samples at minus 87°F (-66°C) until they were brought back to Canada for analysis. In addition, textiles, soap, sewing machines, carving tools, and other items were donated to be used as gifts in the expedition's dealings with the Rapanui (Press release: 21 October 1964; Hacker 1968:156).

HMCS Cape Scott

There remained the fundamental problem of how to transport METEI to the South Pacific. The Royal Canadian Navy (RCN) was the obvious choice and McGill University approached the Department of National Defense (DND) on Dr. Skoryna's behalf requesting that the Canadian government make a naval transport available as its contribution to the expedition. The Government agreed and on 26 March 1964 the Flag Officer Atlantic Coast (in Halifax Nova Scotia wascontinued on page 26

The Slave Trade Run by the Spaniards in the Pacific Ocean During the 19th Century: The Case of Easter Island

The Spanish involvement in the Peruvian pirate attack in 1862: The resolution of an historical enigma.

Francesc Amorós i Gonell,
University of Barcelona

In recent years there have been some professional historians devoted to researching the sources of the Spanish slave trade, so I can mention the studies about the Catalanian slavers during the 18th and 19th centuries, published some years ago by Manuel Moreno Fraginals, Jordi Maluquer and Josep M. Fradera. These studies set in motion many controversial discussions among local scholars, in spite of the undoubted scientific value of their conclusions.

There are two main reasons for the lack of interest in studying such a topic by historians in years gone by. First, this is due to the fact that there are few reliable sources of research and real evidences are extremely sparse and scattered. In addition, it was considered a tabu subject for the establishment. They preferred not to take into consideration the historical period (1790-1820) when such commercial activity was absolutely licit. Nevertheless, none of the aforementioned Spanish authors had ever published anything before that was related to the slave trade by the Spaniards in the Pacific Ocean area.

In order to give an approximate idea of the slave traffic volume during this free trade period, Prof. Josep M. Fradera has estimated a total of 203,432 slaves carried by 1,859 ships, of which 589 were Spanish. But, a fourth of the latter ships were from Catalonia, a country of Spain. One must take into account that Fradera only refers to the arrivals anchoring at Cuban ports when calculating the above figures. Nevertheless, in the Antilles area, there was a very high number of slavers belonging to different nationalities.

According to this author, the slave traders in the Cuban ports were, in order of numerical significance, Americans, Spaniards, British, Danish, French, Swedish, Dutch, Portugese and Germans. But near the end of the free trade period there was, among the activities of Spanish traffickers in slaves, a notable increase in the number of Catalanian. Curiously, in this period (1818), there is some information concerning a cargo of 606 black slaves being carried by the brig *Gran Turco*, commanded by a certain Maristany. The destination of these slaves was, in the main, the sugar plantations in the Antilles, the basic economy in these islands.

Until this time then, as already stated, slave traffic had been legal. However, from 1820 this commercial activity

became illicit and was prosecuted by international law. Despite this, the slave trade carried out by the Spaniards continued furtively for some years; Fradera has estimated that 220 slave expeditions were completed by Catalanian slavers during the period 1820-1845.

One must take into account the following facts: some important slave traffickers established in La Havana were Catalanians and Spaniards. Furthermore, and according to Fradera, these Spanish slavers captured or purchased not only black slaves on Mozambique and Guinea but also natives from the Yucatan and Chinese coolies.

Among the ships listed by Fradera, there are 233 Spanish slave ships being taken to court for judgement in Sierra Leone after the slave trade had been made unlawful! From 1845 onwards, there are very few trustworthy data concerning the Spanish participation in the lucrative slave trade due to the international pressure for the abolition movement. If the slave traffic between Africa and the Antilles was halted, they had to look for more distant but easier alternative routes.

Meanwhile, Peru had a real problem. The Peruvian economic system, based mainly on guano exploitation, urgently needed a new easy and cheap labor force to substitute for the Chinese workers contracted under semi-slavery conditions. The Pacific Islands could be the solution to these economic problems.

It is now my purpose to approach the new direction that some Spaniard and Peruvian slave traders took during the illicit period in the second half of the 19th century. They ascertained that the small and unprotected South Pacific islands could become an inexhaustible human quarry. The islands, which were spread throughout the Pacific Ocean, were distant from the Spanish slave areas and were not under the watchful control of the powerful British navy. These remote oceanic zones could be used to try the fearlessness and technical skilfulness of the Catalanian captains and seamen, as well as the naval design of their ships. Prof. Bassegoda took El Masnou as illustrative example of the seafaring tradition in Catalonia in the 19th century. This small Catalan village, a coastal town near Barcelona, through the 19th century had over 900 merchant captains, of whom 90 were called "Maristany"!

I have above written that very little evidence remains but fortune and my own scholarly tendency have enabled me to discover recently a specific case, not only exemplar, but absolutely unknown up to the present day. It is about the bloody and ominous piratical attack against Easter Island in 1862.

This raid was apparently led by a Captain Antonio Aguirre of the brig *Cora*, belonging to the piratical Peruvian fleet. With seven other ships, all under the Peruvian flag, they undertook a real war raid to recruit the maximum number of natives. This island had to be the first victim in a plan set up by the slavers themselves. It is

probable that the Spanish captain of the *Rosa y Carmen* had, while in Cuba, already conceptualized the capture the oceanic islanders. Afterwards, I will clearly state it.

Among the slave ships that attacked Easter Island in 1862 was the barque *Rosa y Carmen*, a wooden sailing ship only mentioned by historians. Likewise, her enigmatic and mysterious captain was up until now unknown. But now I can assert that the mystery is already solved!

The origin of this incredible discovery was in late 1990 during my stay at Easter Island. Professor J. Conte-Oliveros, a Spanish resident of the island, showed me some unpublished papers which mentioned an uncertain Spanish captain who played a leading role in the well-known Peruvian attack in December 1862. His name was omitted by all the historians. Then I suggested to Prof. Conte the hypothesis that a certain "Maristany" could have been the supposed captain of the *Rosa y Carmen*. This supposition was taken as a simple working hypothesis. On my return to Barcelona, I made this fantastic discovery.



Painting of the *Rosa y Carmen* by J. Barneda (Barcelona, 1897), Museu Municipal de Nàutica, El Masnou, Catalonia. Copyright, Joan Muray.

In fact the unknown and wicked captain of the *Rosa y Carmen* was none other than Juan Maristany y Galceran. He was a Spanish merchant navy captain of 40 years, born in El Masnou. At that time, he was described as a "one-eyed ogre, armed with a brace of pistols and a cutlass." Juan Maristany, alias "Tara", had set sail as Captain and Pilot from Barcelona just after 29 October, 1861, on the barque *Rosa y Carmen* for "Valparaiso, Lima and any other place of the Globe", according to the legal contract registered in Barcelona. This last explanation gave me the clue to finding out the true identity of the main protagonist in this terrible account. In fact, there were many Spanish and Catalanian merchant captains sailing across the Atlantic Ocean who usually mentioned their destination only as American ports. It could be a long and arduous voyage, and Capt. Maristany had to foresee where a safe port existed.

On 29 October, 1882, the shipment contract was signed in Barcelona by Juan Maristany himself "as Captain and Pilot of the barque *Rosa y Carmen*", as well as the shipping investors or shipowners: Pedro Bonet, Simón Riera, Francisco Roselló and Camilo Sánchez. The initial crew members were: Juan Gurri, boatswain, and Joaquín Baró as the cook. The sailors were: Juan Sisa, Pedro Jané, José M. de Segarra, Jaime Estradé, Juan Daviu, Juan Pellicer, Salvador Gelpí and Lorenzo Sisa. However, I cannot ascertain if these crew members actually took part in the piratical attack in 1862.

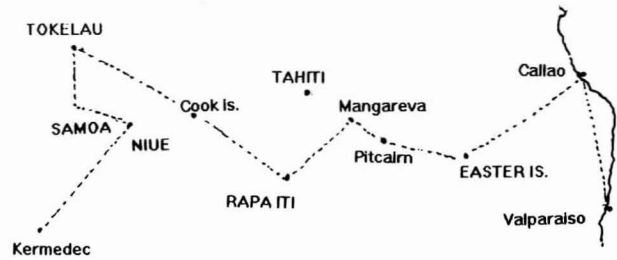
Moreover, I have just discovered another part of this confused story of Spanish piracy. It seems that Captain Juan Maristany himself traveled round trip from Barcelona to La Havana, the well-known center of the Spanish slave trade, on board the *Rosa y Carmen*. On 31 January, 1861, he carried out an unknown and strange voyage with a sudden return to Barcelona. It was nine months before he again sailed into the Pacific Ocean.

On 7 December 1862, the *Rosa y Carmen* captained by Juan Maristany reached the Peruvian port of El Callao and arrived to Easter Island after fifteen days at sea, joining the Peruvian fleet. The brig *Cora*, commanded by Capt. Aguirre, anchored at Easter Island on 19 December, to discover that other vessels had arrived with the mission of recruiting the islanders by force.

It seems that Capt. Maristany had had some kind of past experience in capturing slaves. He was chosen for executing the operation thanks to the fact that he was astute and skilled in slave trading, as well as he commanded a barque of higher tonnage than the other ships (including the flagship, *Cora*).

On 23 December the attack was mercilessly carried out by Maristany, together with 80 other members of the crews. Several seamen attracted the natives by showing them various articles which excited their greed. When they gathered, Maristany, as the chief of the pirates, gave the signal for a sudden attack. Two hundred islanders were captured and tied up. The others tried to escape, running in all directions. Some were killed with firearms.

The kidnapped islanders were put on board the *Rosa y Carmen* and other ships. Some days later the rest of the slave fleet, under Peruvian flags, sailed toward the central Pacific to fall upon other islands following some premeditated plans. Prof. Conte points out that the *Rosa y Carmen* had carried out similar attacks against several islands in the Polynesian archipelagos of Gambier (Mangareva), Austral (Rapa Iti), Cook (Rakahanga and Pukapuka), Tokelau (Atafu, Fakkafo and Nukunonu), Samoa (Savaii, Tutuila and Manua), Tonga (Niue) and finally reached the Kermadec Islands. On the way back to the American continent, the *Rosa y Carmen* landed at Pitcairn Island.



Route of the *Rosa y Carmen* in 1862-1863, according to J. Conte-Oliveros. After F. Amorós i Gonell.

Finally the ship arrived safely at the El Callao seven months later with a plentiful human cargo. Less fortunate was Capt. Aguirre whose ship, *Cora*, was captured at Rapa Iti. From there he, and his ship, were taken to Papeet where he was taken to court and his ship sold. [See RN 5(4):54].

In addition, I have another hypothesis to add: the *Rosa y Carmen* might not have been the only Spanish slave trading ship operating with the Peruvians in this part of the Pacific. Of the 30 ships mentioned on the list by van Hoorebeeck, there are names that happen to be similar to sailing ships employed in the Spanish or Catalan transatlantic commercial trade. For example, there is the *Gabriela*, the *Rosalía*, the *Teresa*, and the *General Prim* (the latter being named for a famous Catalan army officer).

Finally it will be necessary to investigate the other buccaneering activities of Maristany in Africa and in the Pacific. This is my contribution to help shed light on the hitherto unknown ship, *Rosa y Carmen*, and also of her enigmatic Captain Juan Maristany, one hundred years after his death.

Special thanks are due to Sr. Joan Muray, a Catalan historian, for bringing to my attention the existence of an unknown original painting by J. Barneda (1897) of the barque Rosa y Carmen. It is housed in the Museu Municipal de Nàutica in El Masnou, Catalonia (Spain). For the first time, it is reproduced here in Rapa Nui Journal.

References:

- Amorós i Gonell, F. 1992. La participació masnovina en l'atac piràtic peruà de 1862. *Gent del Masnou*, 59:12-14. El Masnou.
- Bassegoda-Musté, P. J. 1962. *Diseños de la Villa del Masnou y de su Marina de Vela del Ochocientos*. Barcelona.
- Fradera, J.M. 1984. Catalunya i Cuba en el segle XIX: el comerç d'esclaus. *L'Averg*, 75: 42-7, Barcelona.
- Fradera, J.M. 1984. La participació catalana en el tràfic d'esclaus (1789-1845). *Recerques*, 16:119-139. Barcelona.
- Hoorebeeck, Albert van. 1979. *La Vérité sur l'Île de Paques*. Editeur Pierre d'Antoine, Le Havre.
- Maluquer de Motes, J. 1974. La burgesia catalana i l'esclavitud colonial. *Recerques*, 3:83-136. Barcelona.

Moreno Fragnals, M. 1978. *El ingenio. Complejo económico social cubano del azúcar*. La Havana.

Murray, Joan. 1992. Un pirata i negrer del Masnou. *Gent del Manou*, 60:10-13. El Masnou.

Vilà i Gali, A.M. 1989. *Navegants i Mercaders. Una Nissaga Mariner de Lloret*. Club Marina "Casinet". Lloret de Mar.

Archival Sources:

Archivo Historico Notarial de Barcelona. Escribanía de Marina. Pedro M. Fortuny. Manuales del año 1861 (Legal documents concerning Rosa y Carmen).

Museo Marítimo de Barcelona. Cedula de Velers Vuit-centistes.

Addenda:

Juan Maristany y Galceran, Captain of the Spanish Merchant Navy; born 1822 in El Masnou. He was married. He died in 1892 in an unknown place.

Francisco Maristany y Galceran, Captain of the Spanish Merchant Navy. Brother of Juan Maristany.

Isidro Maristany y Galceran, Captain of the Spanish Merchant Navy. Brother.

Rosa y Carmen: wooden barque built in Canet de Mar, Catalonia. Shipbuilder: Gaspar Ferrer; registered in Barcelona in the 19th century. Displacement: 402 tons. Length: 125 feet; beam: 32 feet.

METEI continued from page 2.....

informed that the mobile repair ship HMCS *Cape Scott* had been chosen to carry out the assignment.

The 8500 ton *Cape Scott* was less than ideal for the job. While commodious and equipped with production and repair facilities, she was slow and lacked the range needed to reach Easter Island. But she was the only naval vessel on the East Coast capable of loading and off-loading bulk cargo and of delivering it across the beach. Her shortcomings would have to be made up and the RCN turned to increase her range, cargo capacity, and landing capabilities. Her fuel capacity was increased from 4441 to 9000 barrels and her forward hatch was enlarged so that it could receive the 10x20 foot ATCO trailers. The trailers had somehow to be gotten ashore and so the Navy borrowed a 26 ton, forty-eight foot LCM (3) (Landing Craft Medium) from the Department of Transport for the task (Law 1964).

On 11 and 12 June 1964 *Cape Scott's* commanding officer, Commander C. Anthony Law, and his fellow officers met Skoryna for the first time to begin detailed planning for METEI. Their principal concern was logistics: what should the expedition take to Easter Island; where were these items to come from; and how was the METEI cargo to be stowed in order to ensure its most efficient off-loading. Naval supply teams in Montreal, Halifax, and on board *Cape Scott* had to marshal, identify, and load roughly 150 tons of supplies and equipment in the right order.

Unfortunately 90% of the cargo had not arrived less than a month prior to sailing and when loading did take place during the last week it was so hurried that it was extremely difficult to keep track of storage locations (Law 1964:RCT 1926-1).

Personnel

The expanded nature of METEI and the expedition's reliance upon the RCN meant the recruitment of additional scientific and medical personnel and a new "command relationship" with the navy. Surgeon-Captain (later Rear-Admiral) Richard H. Roberts, RCN, was appointed Dr. Skoryna's nominal deputy and was placed in charge of the team of physicians responsible for medical examinations on Easter Island.⁵ At the same time the exponential increase in METEI administration obliged Skoryna to appoint a one-time Royal Canadian Air Force colleague and mechanical engineer, Air Vice-Marshal John A. Easton (Ret'd), to act as director of physical plant for the expedition (MacFarlane 1964:21).

By November 1964 the number of medical, scientific, and technical specialists associated with METEI had risen to 38. Skoryna was besieged by hundreds of applicants seeking to join the expedition, the *Montreal Star* summarizing his dilemma in an article entitled "Volunteers by the Boatload" (ibid.). Recruitment was complicated by the persistent overtures of individuals who were not suitably qualified (Roberts, personal communication 6 May 1976), the uncertainties associated with the withdrawal of expedition members, the need to fill positions on short notice, and the overarching problem of ensuring the right balance of disciplines.

The final list of METEI members reflected sheer chance, professional and personal relationships, the increased involvement of the navy and the media, awareness of the need for technical support in such fields as translation, communications, and laboratory assistance, and efforts made to ensure that METEI was more international and multi-disciplinary in character.⁶ While a complete list of members appears in Appendix A, a few examples will suffice. *Life* magazine contributed to METEI and made available one of its most seasoned photographers, Carl Mydans.⁷ When the anthropologist, Dr. Richard Salisbury, withdrew from METEI Skoryna turned to Cleopatra Montandon who was working on her Ph.D. in sociology at McGill.⁸ Mrs. Montandon's husband, Denys, was completing a qualification in plastic surgery at the time and Skoryna offered him an appointment with METEI. Similarly, Dr. Maureen Roberts, a pediatrician with a particular interest in genetics, accompanied her husband Surgeon-Captain Richard Roberts. Captain Roberts was not the only member of the Canadian Armed Forces to take part in the expedition. Wren Lieutenant Rita Dwyer served as a research assistant and Spanish interpreter

(Dwyer, personal communication, 6 August 1976) while Major Alexander Taylor of the Royal Canadian Dental Corps (Army) provided odontological expertise. Mrs. Ann Marie Eccles accompanied METEI as an interpreter. Colin Gillingham, a steward in the service of the Royal Air Force attaché in Ottawa, acted as the camp cook while Dr. Gonzales Donoso, a pediatrician, served briefly as one of Chile's representatives on METEI (Hacker 1968:153).

Roughly two-thirds of the METEI personnel assembled in Halifax in mid-November 1964 to join HMCS *Cape Scott*. The balance were scheduled to join the ship in San Juan, Puerto Rico, and Balboa, Panama. Each member of METEI was required to enter into a contract with the Easter Island Expedition Society which *inter alia* obliged those members to fulfill all assigned duties, to acknowledge METEI's exclusive ownership of all research materials, and to release METEI from all liability (Roberts interview, 24 January 1978).

The active participation of the Canadian Armed Forces in METEI was hailed as "a landmark in the international research programme" (Press release, 23 July 1964). It was a "first" for the RCN in a number of respects. It was the first time that the Navy had been involved in such an expedition (Appleton, personal communication, 17 May 1976). It was the first time one of HMC ships had visited Easter Island. And it was the first time that the Navy had carried women to sea for an extended period (Law 1964:RCT 1926-1).

Objectives

The selection of personnel reflected and in turn affected the overall objectives of METEI. Initially, the expedition had one major objective, the collection of data on "the distribution of disease and hereditary factors in the isolated population [of Easter Island]" (Press release, 23 July 1964). While this objective remained constant it was refined over the months into a four-point programme:

- 1) To carry out an integrated medical survey of the total native population of Easter Island, in order to identify and evaluate the relative role of environmental and hereditary factors in an isolated population. This included investigation of ecological, sociological, anthropological, genetical, micro-biological, and epidemiological factors.
- 2) To study and develop methods of sampling procedures, collection and transport of blood and other biological material.
- 3) To assist the population of Easter Island with medical problems with which they are not faced and to which they will be exposed after permanent contact with the mainland has been established.
- 4) To establish an Easter Island Biological Station for purposes of assistance in the health and welfare of the population and to provide facilities for follow-up studies

after isolation of the island has been abolished (Skoryna nd, PR:2).

In addition, METEI personnel came to realize that the work involved in organizing the expedition and fulfilling the programme was sufficiently important that it constituted an objective in its own right. Thus while the primary objective was data collection, the secondary objective was the study and development of methods for the transport and erection of self-sustaining medical research laboratories in isolated and under-developed areas of the world (ibid.:1).

The voyage

Cape Scott's departure date (16 November 1964) was the result of careful calculation. Skoryna had informed Cdr. Law that METEI would require roughly sixty days to complete. Law knew from his study of South Pacific pilot books that the most favourable three months of the year at Easter Island, in terms of the prevailing winds, were December, January, and February. During that period winds are from the southeast and the anchorage off Hanga Roa is most likely to be sheltered for off-loading operations. Benign sea conditions were a matter of particular concern because there were limited landing facilities on the island and *Cape Scott*, under-powered and slow to manoeuvre, had always to lie well off in case of a sudden change in weather. Allowing six days to put the expedition's trailer and equipment ashore, a mid-November departure from Halifax would allow *Cape Scott* to be clear of the island and on her way to South America before the *Presidente Pinto* made her annual visit in early January. That visit invariably precipitated the outbreak on an epidemic scale of a flu-like virus known as *kokongo* which METEI personnel were most anxious to study (Reid, personal communication, 15 June 1976). Cdr. Law planned to spend two months on a goodwill tour of Chile and Peru, returning to Easter Island in early February. This timetable would enable him to return METEI members to Halifax in mid-March in time for the examination period in Canadian universities.

The outbound voyage was relatively uneventful though a powerful storm off the Nova Scotian coast gave Cdr. Law cause for concern. The seas were mountainous and the upper deck cargo was vulnerable to wind and water damage. Although *Cape Scott's* engines were full ahead the ship barely moved, covering only 13 miles in one twelve hour period. (Law correspondence, 20 November 1964). However, the winds soon abated and the vessel continued on its way to the Panama Canal via San Juan, where six expedition members were embarked (Law 1964:RCT 1926-1). METEI personnel spent their time on board relaxing, studying, learning Spanish, receiving instruction in laboratory techniques, and developing physical examination procedures. Meanwhile, Cdr. Law and his

fellow officers were working out the final details of the "over the beach" landing operation. These were completed on 30 November and on 7 December, while the ship lumbered southward at the "fantastic speed" of 11.8 knots (23.6 km/hr), Cdr. Law briefed the entire ship's company on the off-loading exercise (Law 1965:RCT 1926-1).⁹ *Cape Scott* arrived off Easter Island six days later on Sunday, 13 December and came to anchor at 0700 in 24 fathoms of water in Cook's Bay near Hanga Roa.

The people and the place

METEI's objective was a windswept grass covered sub-tropical dependency of Chile with a limited inventory of flora and fauna. The indigenes are primarily of Polynesian stock and archaeological evidence suggests that their forefathers reached Rapa Nui about 400 A.D. (Jennings 1979:2). The genetic history of the population is complex and confusing.¹⁰ Legend suggests that there was a second (and possibly a third) wave of settlers but it is impossible to say whether they absorbed or were absorbed by the original inhabitants or whether, when the latecomers arrived, they found the island deserted. Whatever the case there would appear to have been two "peoples" on Rapa Nui in the 17th century, the *Hanau Eepe* or heavy set people and the *Hanau Momoko* or slender people (McCoy 1971:260). During that century the latter are reputed to have destroyed almost all of the former. The *Hanau Eepe*, however, left their mark behind. Prior to their defeat they had carried the Polynesian propensity for building ceremonial sanctuaries to "cyclopean heights" (Porteous 1981:109). Tradition attributes to them "the grandiose achievements of the great statues (*moai*) and altars (*ahu*)" (McCoy 1971:260).

The first Europeans visited Rapa Nui about this time. On Easter Sunday 5 April 1722, the Dutch explorer Roggeveen coasted the shores of the island and gave it its name. His visit inaugurated the age of contact and cultural violence. Of direct relevance to METEI researchers were the ways in which the indigenous population was transformed by contact and the ways in which the *Rapanui* adapted to their environment. Genetically speaking the island was far less isolated than Skoryna and his colleagues believed. At least 53 ships visited Easter Island in the period 1722 to 1862 and there was alleged to have been "much trafficking in women" though Meier suggests that the genetic impact was not profound (1969:43; McCall 1976:90).

Of far greater importance, however, was the recruitment and physical abduction of Easter Islanders in 1862-1863 for labour service in Peru. The Peruvian trade and its consequences, McCall observes, "wrought unparalleled havoc," terminating Rapa Nui's isolation and obliterating its culture (ibid.). The statistics tell the appalling story.

Maude calculates that 1407 islanders—or 34% of the estimated population—were taken away. They sickened and died in Peru and only 15 survived to be repatriated. They brought with them a deadly contagion, smallpox, which decimated the rest of the population. Probably 1000 died leaving only 1740 alive. "For Polynesia [and for Easter Island] the Peruvian slave trade... constituted genocide of an order never seen before or since in her history" (Maude 1981:182).

A seemingly irreversible trend was set in train and by 1877 the combined effects of famine, migration, demographic distortion, and strife had reduced the indigenous population to 111 of whom 26 were women. Easter Island society had, in fact, died culturally and biologically. A hybrid Easter Islander emerged, an admixture of that handful of survivors and expatriates from Tahiti, Chile, and Europe whose genetic impact was considerable because the host population was so small. Maude has described this regenerative process in the Tokelaus where it gave rise to "an improbably bizarre genetic mixture" (ibid.:173). "There is," Meier concludes, "virtually no way of determining what happened to the gene pool a hundred years ago" (1969:50).

At the same time newcomers were transforming the environment of Easter Island as much as they were altering the population. French, British, and Tahitian entrepreneurs viewed the ravaged land as a *tabula rasa*, a place they could treat as they pleased (Porteous 1981:18). Chile annexed Easter Island in 1888 and an Anglo-Chilean company, Williamson Balfour, established a vast sheep ranch there, turning Rapa Nui into a company state. The *Rapanui* were robbed of their land and transformed into "slaves of the company" (ibid.:74). Furthermore, the sheep barons and the Roman Catholic missionaries (the latter having arrived on the island in the 1860s) succeeded in ghettoizing the *Rapanui*, driving them on to a reserve which encompassed the tiny settlements of Hanga Roa and Mataveru. The missionaries had their flock close to hand and the barons had the entire island free for a flock of a different kind.

While sheep had the greatest environmental, economic, and social impact on Easter Island, they were only one of a number of faunal imports. Horses, cows, and goats shared the heathland while pigs constituted a new, if limited, source of food. These animals introduced parasites, altered the ecological balance, and competed for space with the *Rapanui*.

The pre-contact subsistence economy based on the exploitation of marine resources and of a small number of agricultural products like sweet potatoes, yams, bananas and sugar cane gave way to a state of increasing, even abject, dependence. Whereas prior to the 1860s the *Rapanui* enjoyed a "relatively stressless, uniform set of

living conditions" in which modest levels of activity by all members of the community were sufficient to sustain life,

shores of Cook's Bay waiting for the members of METEI to disembark.



RAPA NUI HILTON under construction. Photo: Canadian Department of National Defence

those conditions ceased to obtain with the advent of the company state (Meier 1969:39). Only a very small number of Rapanui were employed by the sheep ranch or the colonial authorities and the number of employed varied sharply depending on whether it was shearing time or the annual supply vessel had to be off-loaded. Wool became the island's main export and virtually nothing was done to encourage the diversification of the economy. Those who were unemployed lived on the edges of poverty, tending truncated garden plots, while all Rapanui--of whatever station--came to rely on mutton rations from the company and imported food from the mainland.

In December 1952 the Chilean Navy assumed responsibility for administering the island. The naval authorities inaugurated a *paternalista y generoso* rule but from the Rapanui's point of view nothing much had changed. The "basic social, economic, and political system developed in the company state era continued largely as before" (Porteous 1981:169). The urban infra-structure was extremely rudimentary: a church, a simple school, a clinic, and precious little else. The Rapanui were both "locationally and socio-economically marginal to Chile" (ibid.:175). These were the hardy, cheerful, clannish, hospitable, curious and neglected people who lined the

The Rapa-Nui Hilton

It took five days to off-load the expedition's cargo and six days to establish the METEI compound near Hanga Roa. The campsite was two miles from the government wharf at Hanga Piko and all the cargo had to be brought ashore in landing craft and transported into place by truck or tractor. Launching the landing craft, keeping them in position alongside Cape Scott, and loading them with equipment while they rolled in the heavy ground swell was "a very tricky [and dangerous] proposition" (Law Report:7).¹¹ Fortunately all went well and by the end of the first day a truck, six of the trailer units and a good deal of general cargo had been transported ashore. This included 18 of the 24 trailers and the diesel generators for the camp's electricity. Two days later, on 17 December, the entire off-loading operation was complete.

Meanwhile a party of officers and men from the ship's company, aided by expedition members and Rapanui, had been working 12 hours a day to establish the camp, known affectionately as the Rapa-Nui Hilton. Their three biggest problems were the positioning and erection of the trailers, the assembly of the solar and mechanical stills (complete with salt and fresh water reticulation systems), and the establishment of a self-contained electrical network.

Work on the trailers was arduous but straightforward. A local man, Papiano Paoa, served as Foreman of Works and was responsible for establishing the camp (Teao interview, 6 July 1983). The units were arranged in a roughly rectangular fashion so that the quadrangle formed thereby was completely enclosed. Living quarters, offices, laboratories and examining rooms were designated in such a way as to facilitate the movement of Rapanui families being examined.

Behind the compound and next to the sea were simple sanitary facilities, three 25 KW diesel generators, and the stills for fresh water production. Preliminary enquiries had alerted Skoryna to the lack of potable water on the island. The porous soil causes rainwater to leach away rapidly and Skoryna realized that if METEI were to function at all it would need to be nearly if not entirely self-sufficient in terms of fresh water. Some prefabrication work had been done on the stills while Cape Scott was a sea, but the crucial work of setting up pumps, storage tanks, and a salt water supply system could only be done ashore. Pipes were led into the sea to provide the 5000 gallons of salt water required each day to produce 500 gallons of fresh water from the mechanical distilling unit and 200 gallons from the ten unit solar still. Unfortunately, the solar still worked poorly probably because some of the essential elements had been left behind (Murphy diary, 22 December 1964).

The diesel generators necessitated the creation of a fuel dump at the back of the camp. One hundred and eight 45-gallon drums were brought ashore while naval technicians completed the power ring main and checked all of the circuits needed for laboratory equipment, pumping systems, and the galley (Law Report:10).

A timely visit

Quite by accident METEI arrived at a critical juncture in the island's history. While on the one hand METEI's inadvertent timing worked to its advantage, on the other hand it helped precipitate events that threatened the success of the expedition.

The Rapanui were normally dependent upon the annual supply ship but by the time *Cape Scott* came to anchor they had gone for over a year without a visit from the *Presidente Pinto*.¹² The ship reportedly had mechanical trouble and as the islanders were entirely without soap, flour, cooking oil, sugar, tea, and other items like shoes and antibiotics, the Governor, Captain de Corbeta, Jorge Portilla, asked Cdr. Law if *Cape Scott* could supply the people's basic needs. This the latter agreed to do and approximately 200 parcels of food were distributed to as many families on Saturday, 19 December.¹³ There was some uncertainty in Cdr. Law's mind, however, as to just how the distribution should be carried out. He turned to Father Sebastian Englert, the resident Roman Catholic priest and authority on Rapa Nui history, for advice and the cleric

recommended that he, Law, should do the distributing as the Rapanui did not trust the Chileans (Law, personal communication 27 April 1976).

Thus the "feeding of the multitude" (Law Report:11) did two things: it generated enormous good will for the Canadians at the very moment when they most needed it and it highlighted the increasingly unhappy political situation on the island where one of the first phrases a METEI member heard was "Chileno malo" (Hacker 1968:170).

The key to the political situation was a growing desire on the part of the Rapanui to have control over their own affairs. Although the island was part of Valparaiso province and the islanders were Chilean citizens they were not permitted to leave Easter Island or travel outside of Hanga Roa without permission. Their status as citizens was nominal. They did not enjoy the right to vote in state elections. Males could vote in the Hanga Roa native council elections but membership of this advisory body was subject to Portilla's approval (Porteous 1981:171). Naval law rather than civil law applied and according to one informant "the governor was god in those times." In addition, the Rapanui were obliged to work one day a week ("Fiscal Mondays") for the colonial authorities cutting grass, working on the roads, or planting trees; a form of *corvee* which symbolized the islander's colonial status. For their part, the Chilean authorities administered the island, provided services, and maintained communications links without levying taxes or fees. They did this at what was, allegedly, a loss but the islanders remained unmoved by penniless paternalism (Hacker 1968:210). What they wanted was political autonomy.

Three figures appear to have been primarily involved in increasing the islanders' awareness of their plight: Francis Mazière, Dr. Guido Andrade, and Alfonso Rapu. While it is difficult to determine exactly what Mazière's role was it would appear that this French archaeologist-manque and his Tahitian wife, who were on the island a few months before METEI, were deeply critical of the colonial authorities. Mazière's account *Mysteries of Easter Island* (1969:24,35) contains a stinging indictment of Chilean rule. He described Easter Island as a "forgotten imprisoned country" where the people lived in a state of wretchedness and the authorities evaded their obligations.¹⁴ There were allegations that Mazière had "started to spread communism" (Law correspondence, 22 December 1964), promoted an independence movement, and encouraged the Rapanui to support a Polynesian Union with Tahiti.¹⁵

Dr. Guido Andrade was the Chilean naval doctor on Easter Island. He appears to have been popular with the islanders and to have supported their campaign for greater autonomy. Portilla considered Andrade's activities treasonous and ordered him to stand trial before a naval

tribunal in Chile. As the annual supply ship was not available, Andrade was put aboard *Cape Scott* along with Dr. Donoso, the Chilean nutritionist with METEI. Why the latter chose to leave is unclear but the overall effect of their combined departure was to leave the Rapanui without regular medical treatment and to undermine an important element of the METEI programme (Reid 1965:41; Law correspondence, 28 December 1964).¹⁶

The ten doctors with METEI had no other choice but to carry on their research while acting as *locum tenens* for Andrade. However, this arrangement worked to METEI's advantage in the long term because it allowed the doctors to develop a closer rapport with the Rapanui and to develop a better understanding of the islanders' day to day medical condition over and against which the expedition's findings could be viewed (Murphy diary, 22 December 1964).¹⁷

The third actor, Alfonso Rapu, was the most important. His political career came to be linked intimately with METEI to the mutual advantage of both. Rapu returned to Easter Island in December 1963 to take up a position as a grade 3 teacher. He was a young charismatic figure with a deep commitment to educating his fellow islanders about the outside world and to righting what he and others considered to be an unjust colonial situation (Rapu interview, 7 July 1983). Two events gave Rapu the chance he needed. In October 1964 Eduardo Frei Montalva, a man of liberal views, was elected president of the Republic of Chile (Reid 1965:36). At more or less the same time Rapu learned that METEI was coming to the island. On Saturday, 5 December Rapu helped German Hotu draft an open letter to President Frei, outlining Rapanui complaints, many of which were directed against Governor Portilla.¹⁸

Three days later Rapu and a number of others challenged the prevailing political system by holding their own municipal elections. Rapu was elected mayor but, as there was already an incumbent mayor, Portilla declared Rapu and his councillors illegally elected. It is alleged (though with what veracity it is hard to say) that Rapu threatened to promote the idea of Easter Island's union with Tahiti and the governor, faced with the imminent arrival of an international audience, agreed that the political impasse should be resolved by holding fresh elections.

Cape Scott became the unwitting catalyst in the next round of political events. Not only did the ship transport Dr. Andrade away from the island but it carried 40 others including a Roman Catholic nun who was secretly carrying the Rapu-Hotu letter to Frei. The ship was also expected to embark an American bulldozer that had been on the island for a number of years. Dispatched originally to help free an airplane that had become bogged down on the airstrip, the bulldozer had become a valuable piece of

village equipment. The islanders were loath to see it repatriated and on the night of Sunday, 20 December they rendered it inoperative by removing some of its vital parts. Furious, Portilla threatened to jail Rapu if the purloined parts were not returned within 24 hours. Twenty-four hours came and went, Rapu retired into hiding, the bulldozer remained where it stood, a symbol of Rapanui defiance, and the *Cape Scott* sailed for Valparaíso (1200 Monday, 21 December).

Medical examinations

The political impasse on Rapa Nui threatened to prevent Skoryna from realizing his plans. On Monday morning, 28 December--the first day of the medical examination programme--two emissaries arrived at the METEI compound from the elusive Rapu. They announced that Rapu was not prepared to authorize the examinations until Saturday, 16 January by which time the second round of elections would have taken place and the Frei letter been published.

In fact, word of political unrest had already begun to reach the outside world. Although the Frei letter did not appear in *El Mercurio*, the leading Chilean newspaper, for some time, METEI personnel heard via radio on Thursday, 31 December that the *New York Times* had featured an article on the "revolution" on Easter Island (Murphy diary, 31 December 1964). No doubt METEI personnel had discussed the political situation over their ham radio links with Canada or news of events on the island had come ashore with the ship's company and passengers of *Cape Scott* when the vessel reached Valparaíso on 29 December.¹⁹ Whatever the case, international curiosity had been aroused and Rapu had in METEI timely and significant leverage in his contest with Portilla.²⁰

Dr. Skoryna was horrified at the prospect that METEI might collapse completely. He found himself in a nearly impossible position. While he and his colleagues were personally sympathetic towards the Rapanui position, they had to take the professional stance that Rapu's activities were a purely domestic matter of no concern to METEI. To do otherwise was to run the risk of alienating Portilla and having the Chilean authorities withdraw their support of the expedition. On the other hand, Skoryna dared not break openly with the islanders. Without their active cooperation the whole undertaking would be for naught.²¹ It is hard to say how Dr. Skoryna resolved the dilemma in his mind. He seems to have acted impulsively. Perhaps he reckoned that to do nothing was to admit defeat and that if he moved quickly he could still capitalize on the store of good will that had been built up with the food distribution. He hurried into Hanga Roa and managed to convince a family to come back to the campsite for examination. It

was a crucial gamble, one which no doubt ensured METEI's success.

Skoryna had already succeeded in hammering out the terms and conditions of examination with the governor's advisory council. The councillors had agreed that they would support the expedition and encourage the people to attend if the following arrangements were adhered to: there would be no gynecological examinations routinely, that females would be examined only by female physicians, and that the amount of blood to be taken would be limited (about 40 ml. from adults and older children and a pinprick for young children) (Roberts 1966:3,9).

Governor Portilla supplied Skoryna with census data which formed the basis of the examination schedule. Families were recorded alphabetically and family heads notified as to the date and time of their family's appointment. Data with respect to names, birth dates, parents' names, and so forth were prepared in advance. A numbered card was printed for each person which indicated the names of doctors to be visited (Dwyer, personal communications, 6 August 1976). When Rapanui presented themselves at the METEI compound Isabel Griffiths and Lt. Rita Dwyer acted as interpreters. They were also responsible for keeping all of the medical records and maintaining statistics. Another expedition member, Mary King, RCN, took Polaroid photographs of each islander in order to ensure correct identification and the families were divided according to sex. Doctors Helen Evans Reid and Maureen Roberts were responsible for examining women and small children of either sex while Doctors Richard Roberts, Peter Beighton, Gary Brody, Denys Montandon, and David Murphy attended to the men.

As METEI was an adaptability project the team members sought to collect a vast array of data with respect to the medical condition of the islanders and its relationship to the biology of the environment in which the Rapanui lived and worked. Thousands of samples were taken, some to be analyzed on the spot in one of METEI's two laboratories and some to be preserved for analysis in Canada. Each islander was subject to a thorough physical examination with particular attention being paid to any genetic abnormalities or markers. Eyes and ears were examined, blood and stool samples taken, bodily measurements were made, and electrocardiograms were performed on nearly all persons over fifty. X-rays were taken of adult heads and chests for medical, dental, and anthropometric purposes while children had their hands and wrists x-rayed as part of a growth study to be undertaken by Dr. Reid. G.A. Wilkinson, the radiographer took 3,450 x-rays in 33 days and examined 840 islanders, some of them repeatedly (Wilkinson n.:1). Saliva specimens were collected for Skoryna's secretor substance research and blood samples were distributed to team members working on simple

haematology, blood grouping, bacterial and viral antibodies in the blood, serological analysis and blood chemistry.

One of the most active, well-briefed and energetic members of METEI was the expedition's bacteriologist, Dr. Georges Nógrády. Nógrády was interested in studying bacteria of human origin, the germs of tuberculosis, whooping cough, leptospirosis (a liver and kidney disease), and actinomycosis (a fungus disease transmitted from cows.) His principal test vehicle was the swab. Nose, throat and rectal swabs were taken from most of the islanders examined (Skoryna PR:22).²² Germs from the swabs were introduced to specially prepared mediums and allowed to develop as cultures. Nose smears were tested for evidence of Hansen's disease or leprosy.

Leprosy was a long-standing problem on Easter Island. It appears to have been introduced from Tahiti in the 19th century. The colonial authorities maintained that one of the reasons that the islanders were not allowed to migrate to the mainland freely was the fear that they might introduce leprosy. In 1964 there were 15 recorded cases of clinical leprosy. Five of these lived in the leprosarium, one because he was regarded as contagious and four because their mutilations prevented them from caring for themselves (Roberts 1966:7). Island informants stated that their kin had been reluctant to visit the government hospital for fear that a routine examination might reveal the presence of real or imagined leprosy. They entertained the same reluctance with respect to METEI but soon set their fears aside. It was obvious that METEI was eager to help and that the quality of medical service proffered was far superior to that which they had been accustomed. What is more, there was a sense of excitement, a sense of status, associated with being examined and coming away with gifts of clothing and merchandise.

When he was not working with test materials from his Rapanui patients, Nógrády was analyzing samples from the island's livestock. Most of the livestock testing was carried out by Murphy and Gibbs. They were interested in determining the health status of the animals and the presence of common zoonotic diseases in the animal population (Skoryna PR:48). They visited the slaughtering facilities at Mataverí, the sheep station at Vaitea, and stumbled around rock-strewn fields in the rain testing horses and cows. They conducted a cow census, subjected cows to physical examination, took intestinal tract samples, and drew blood for serological analysis. In addition, they collected milk samples which Nógrády cultured and examined for bovine tuberculosis, a form of tuberculosis which produced TB in the bones of humans.²³

Nógrády was also interested in the problem of tetanus. The evidence suggested that Rapa Nui should be a high risk area. Tetanus spores are usually present when there

are horses and the fact that many islanders went barefoot rendered them vulnerable to cuts or puncture wounds through which the deadly spores could gain entry to the body. Yet, surprisingly, there was no evidence of lockjaw. In an effort to solve this puzzle, Nógrády divided the island systematically into one mile squares, removing soil core samples from the centre of each square (a total of 67), for bacteriological analysis in Canada (Reid 1965:76).²⁴

Nógrády's work and that of his colleagues involved the production of an enormous number of samples, many of which were subject to analysis in the METEI laboratories. Chief Petty Officer Joyce, RCN, did a sterling job as a laboratory technologist while Carlotta Hacker, an English woman with no formal scientific training, served as a research assistant and laboratory technician. Nógrády had tutored Ms Hacker on the outward journey, providing her with detailed instructions and cartoons outlining basic laboratory procedures. She was assisted by Margarita Tepano Kaituoe who normally worked as a laboratory technician in the government hospital. Ms Tepano was only one of a number of Rapanui who worked for METEI and whose contribution was vital to the expedition's success.

Rapanui worked as translators, maintenance men, security guards, cooks, nurses, laboratory assistants, secretaries, caretakers, and general aides. Six young women between the ages of 12 and 16 assisted in the laboratories and came to be known as "Carlotta's girls" (Hacker 1968:185). They were Raquel Paoa Hucke, Anna Julia Teao Atan, Norma Hucke Atan, Helena Hucke Atan, Maria Hucke, and Anna Rosa Laharoa. They did a variety of jobs including washing up laboratory glassware and distributing media in test tubes. Elvira Hucke Atan helped conduct general tests while Jorge Ika Pakarati assisted Margarita Tepano Kaituoe and Dr. Nógrády. Georgina Riroroko Tuki worked with Norma Hucke Atan on blood testing while Bernarda Hucke Atan and Theresa Tepihe Hotu assisted in the veterinary laboratory (Norma and Elvira Hucke Atan interview, 6 July 1983).

Elsewhere in El Campamento, as it was often called, Jorge Pont and Selma Tuki Pakarati worked as cooks. Papiano Paoa, José Teao Chavez, Jorge Pate Tuki and Miguel Atan Hotu worked as caretakers while Martin Pate, Belisario Rapu, Raphael Teao, Estevan Hito, José Hereveri, Pedro Laharoa, Felipe Riroroko, and Felipe Teao performed a variety of tasks.

One of Teao's jobs was to assist the METEI biologists, Ian Efford and Jack Mathias, to collect fish using Rotenone, a substance that stuns fish (Murphy diary, Saturday 9 January 1964; Teao interview, 6 July 1983). The collection of fish was one of three areas of investigation undertaken by Efford and Mathias. The other two were: a study of species composition and biomass of the grasses and soil

invertebrates in four study areas on the island; and a study of introduced plants and animals on the island, their country of origin and their relative importance to native species (Skoryna PR:50).

There were probably more Rapanui working in and around the compound than there were METEI members. The local staff were picked up each morning in the GM truck, known variously as "Jeep Mea Mea" or the ambulance, and worked from 0800 to 1700 with one hour off for lunch. They appear to have thoroughly enjoyed their time with the expedition. For those like Norma and Elvira Hucke Atan it provided a brief though valuable introduction to the world of medicine and for the whole it provide payment in kind, stimulatingly different experiences and strong personal friendships.

While medical examinations and laboratory tests consumed most of METEI's energies, a variety of other studies were being carried out as well. Dr. Bjorn Ekblom, whom the Rapanui nicknamed Kon Tiki, set up a mechanically braked von Döbeln bicycle ergometer to determine the maximal oxygen uptake of both sexes and different age groups of the population. While the Rapanui had some difficulty adjusting to the machine, riding the bicycle was a favourite pastime and Ekblom rewarded his volunteers in exercise physiology with bars of soap (Ekblom 1968). Dr. Donoso's departure robbed METEI of its nutritionist and that meant that the elaborate nutritional survey that had been planned had to be severely curtailed (Roberts 1966:19). However, Cleopatra Montandon, working with Doctors John Cutler and Elliot Alpert of the US Public Health Service, succeeded in undertaking a rough survey of eating habits as part of their larger epidemiological study. Mrs. Montandon also surveyed 140 households, roughly 80% of the whole, in pursuit of sociological data. Robert Meier, who was working on his doctoral research for the University of Wisconsin, took a vast number of bodily measurements in an effort to develop an anthropomorphic profile of the Rapanui while Major Taylor carried out dental examinations designed, in part, to complement Meier's work.

When not directly involved in their medical and scientific work METEI members stood kitchen duty, explored the island, visited the homes of Rapanui friends, and socialized with islanders at the METEI compound. Father Englert was particularly interested in the expedition's work and assisted in whatever ways he could while Governor Portilla and his wife were hospitable and supportive.

Our next issue concludes the saga of METEI as political unrest undermines the medical examination program and the island has "a perfect revolution".

More Journals on Easter Island :

The works of Johann Reinhold Forster (1729-1798) and
Johann George Adam Forster (1754-1794) [Part II]
Herbert von Saher

The Forsters' journal continues with the following excerpts taken from the chapter on Easter Island:

"On the 13th, early in the morning, we ran close to the south point of the island, where the shore rose perpendicularly and consisted of broken rocks....two detached rocks lay about a quarter of a mile off this point; one of them was singular on account of its shape, resembling a huge column or obelisk, and both were the habitations of numerous sea fowls which stunned our ears with their discordant screams. Soon after we opened another point about ten miles distant and as we advanced we perceived the ground gently sloping to the sea. On the slope we discovered several plantations...but the surface of the isle in general appeared to be extremely dreary and parched, and these plantations were so thinly scattered upon it that they did not flatter our hopes of meeting with considerable refreshments.....we distinguished a number of people nearly naked, hastily running down from the hills towards the sea-side....In a few minutes we saw them launch a canoe, in which two men came off towards us. They were along side in a short time...and immediately called out for a rope, naming it by the same word as the Tahitians. We had no sooner thrown them the rope, than they tied a great cluster of ripe bananas to it, making signs for us to haul it up. The sudden emotions of joy in every countenance at the sight of this fruit are scarcely to be described...."

Cook tied some medals and beads to some ribbons and gave them in return; the islanders fastened a small piece of barkcloth to a fishing line; this appeared to be made of the same bark as used in Tahiti. The Forsters immediately concluded the language to be dialect of Tahitian, and they noted that this language "...had now [been] found in both extremities of the South Seas." The tattoo markings and extended ear lobes were remarked upon: "They had punctures of the same nature with those used by natives of the Society and Friendly Islands and of New Zealand; but their whole body, which was perfectly naked, was marked with them. The greatest singularity which we observed about them was the size of their ears, of which the lap or extremity was stretched out so as almost to rest on the shoulder, and pierced by a very large hole, through four or five fingers might be thrust with ease."

The ships ran along the coast searching for a good anchorage, but finding none, returned to the place where the canoe had put off. They already were noticing the statues: "A great number of black pillars stood along the shore, many of which were elevated on platforms

consisting of several ranges of stone. We could now distinguish something resembling a human head and shoulders....Sometimes we perceived two, sometimes four, and even five together in a row; but some were likewise placed by themselves. We saw but few plantations towards the north end, the land being much more bluff or steep there, than about the middle of the island, and we could easily perceive that there was not a tree upon the whole island, which exceeded the height of ten feet."

Hoisting a boat for soundings caused the natives to assemble along the coast, and a crowd of men could be seen; some were dressed in a bright yellow or orange cloth. Most, however, were naked and it was assumed those wearing robes were principal people. Houses could be seen from the boat: "...extremely low and long, highest in the middle, and sloping down towards both extremities. They much resembled a canoe turned with the keel or bottom upwards. In the middle there seemed to be a small entrance or door, which was so low that a man of common size must stoop to get in."

One bold islander returned to the ship with the boat; Forster describes him as: "...about five feet eight inches high, and remarkably hairy on the breast and all over the body. His colour was a chestnut brown, his beard strong, but clipped short, and of a black colour as was also the hair of his head, which was likewise cut short. His ears were very long, almost hanging on his shoulders, and his legs punctured in compartments after a taste which we had observed no where else. He had only a belt around the middle, from whence a kind of net-work descended before, too thin to conceal anything from the sight. A string was tied around his neck, and a flat bone, something shaped like a tongue, and about five inches long, was fastened to it, and hung down on the breast. This, he told us, was a porpoise's bone (*eevee toharra*), expressing it exactly by the same words which a Tahitian would have made use of. To explain himself better, he also called it *eevee-eeka*, which we understood to signify the bone of a fish."

The islander spent the night on the *Resolution*, wrapped in some cloth from Tahiti, given him by Johann Forster. Mahine, the Tahitian native travelling on the ship, was pleased to find inhabitants who spoke a language similar to his own.

George's narrative continues the following day: "We dragged our anchor during the night...so we were obliged to set sail again in order to recover our situation. Immediately after breakfast, Captain Cook went ashore with the native, whose name was Maroowahai, together with Mahine, my father, Dr. Sparrman, and myself, though my feet and legs were still swelled excessively and I was hardly able to walk....About a hundred, or hundred and fifty natives were assembled on the spot where we landed, almost all of them naked, some having only a belt round

the middle....A very few of them had a cloak which reached to the knees, made of cloth, resembling that of



The now-famous etching by Cook's artist shows an Easter Islander with elongated ear-lobes.

Taheitee in the texture, and stitched or quilted with thread to make it the more lasting. Most of these cloaks were painted yellow with turmeric root. The people did not make the least unfriendly motion at our landing, but expressed a prodigious dread of our fire-arms, of which they seemed to know the deadly effects. We saw but few arms among them; some however had lances or spears, made of thin ill-shapen sticks, and pointed with a sharp triangular piece of black glassy lava.....One of them had a fighting club, made of a thick piece of wood about three feet long, carved at one extremity; and a few others had short wooden clubs, exactly resembling some of the New Zealand *patoos*, which are made of bone. We observed some who had European hats and caps, chequered cotton handkerchiefs, and ragged jackets of blue woollen-cloth, which were so many indubitable testimonies of the visit which the Spanish had made to this island in 1770....

"Their want of clothing and a great eagerness to obtain our goods without offering anything in return, seems altogether to be sufficient marks of poverty. They were all prodigiously punctured on every part of the body, the face in particular; and their women, who were very small and slender limbed, had likewise punctures on the face....The number of women in the crowd did not exceed ten or twelve; they were seldom satisfied with their natural clear brown colour but painted the whole face with a reddish brown ruddle, over which they laid on the bright orange of the turmeric root or ornamented themselves with elegant

streaks of white shell-lime." As for head coverings, "...most of the men wore a ring about two inches thick, strongly and curiously plaited, of grass and sitting close round the head. This was covered with great quantities of the long black feathers which decorate the neck of the man-of-war bird. Others had huge bunchy caps of brown gull feathers, which were almost as large as the full-bottomed wigs of European lawyers; and still others wore a simple hoop of wood, round which a number of the long white feathers of a gannet hung nodding, and waved in the wind. The women wore a great wide cap, made of very neat mat-work; it was pointed forwards, formed a ridge along the top; and two large lobes behind on each side, which we found extremely cooling for the head....The only ornaments which we saw among them were the flat pieces of bone in the shape of a tongue, or like a laurel leaf, which both sexes wore hanging on their breast, together with some necklaces and ear-jewels made of shells."

Cook and his small group began a walk into the island, noting the barren and rocky land: "About fifteen yards from the landing place we saw a perpendicular wall of square hewn stones, about a foot and a half or two feet long, and one foot broad. Its greatest height was about seven or eight feet, but it gradually sloped on both sides, and its length might be about 20 yards. A remarkable circumstance was the junction of these stones, which were laid after the most excellent rules of art, sitting in such manner as to make a durable piece of architecture....The ground rose from the water's side upwards; so that another wall, parallel to the first, about 12 yards from it and facing the country, was not above two or three feet high. The whole area...was filled up with soil and covered with grass. About fifty yards farther to the south there was another elevated area, of which the surface was paved with square stones exactly similar to those which formed the walls. In the midst of this area, there was a pillar consisting of a single stone, which represented a human figure to the waist, about twenty feet high, and upwards of five feet wide....On the top of the head a huge round cylinder of stone was placed upright, being above five feet in diameter and in height."

As the small group walked further and with difficulty over the rough stony ground (noting how easily the natives skipped from stone to stone!) Forster observed shrubbery and identified various plants common also in Tahiti: the paper mulberry, hibiscus, mimosa, and *solanum*. They had a closer look at the typical boat-shaped house: "The foundation consisted of stones about a foot long, laid level with the surface in two curved lines, converging at the extremities. These lines were about six feet asunder in the middle but not above one foot at the ends. In every stone of this foundation we observed one or two holes in each of which a stake was inserted. The middlemost stakes were six feet high, but the others gradually diminished to two

feet. On the top, the stakes all converged and were tied by strings....A kind of thatch, made of small sticks, and covered with neat mat-work of sugar cane leaves, leaned on each row of stakes, forming a very sharp ridge or angle at the top....A hole was left on one side, about 18 inches or two feet high over which the people had built a round projecting funnel to keep off the wet. We crept on all fours into this opening and found the inside of the hut perfectly naked and empty, there being not so much as a wisp of straw to lie down upon...."

Forster comments on the dearth of occupation houses and concluded that they must either be crammed full or they were used for chiefs with the commoners sleeping in the open. He also observed openings that led underground and thought it likely that people sought shelter underground in natural caverns; however, they were prevented by the natives from entering the caves.

Near the boat-shaped house, they observed a sugar cane plantation and one of bananas; the bananas were growing in holes one foot deep, which they accurately supposed was contrived for collecting rain. Forster was impressed by the sugar cane which was growing about nine or ten feet high and, as it was offered in place of water to drink, they concluded that the island lacked water. However, coming back to the landing place they met up with Cook: "...the natives had conducted [Cook] to a well very close to the sea which was cut deep into the rock, but full of impurities. When our people cleared it, they found the water in it rather brackish but the natives drank of it with much seeming satisfaction."

Cook had had little success trading for provisions, and concluded the people had very little to spare: "A few matted baskets full of sweet potatoes, some sugar-canes, bunches of bananas, and two or three small fowls ready dressed, were the whole purchase which he had made for a few iron tools, and some Taheitee cloth. He had presented the people with beads, but they always threw them away with contempt, as far as ever they could. Whatever else they saw about us, they were desirous of possessing, though they had nothing to give in return. Their number was now decreased nearly to one half, many of them having probably gone home to their dinners; however, the number of women was always remarkably small in proportion to the men, there not being above twelve or fifteen at our first landing, and about six or seven when we embarked again. They were neither reserved nor chaste, and for the trifling consideration of a small piece of cloth, some of our sailors obtained the gratification of their desires."

They returned to land again in the afternoon while one boat went to fetch water at the well, and encountered an islander who seemed to have some authority and who accompanied the Captain: "He was not so timorous as the rest of his countrymen, but walked boldly along with us, whilst the others were alarmed at the least motion which

appeared unusual to them. This disposition, however, did not prevent them from picking our pockets, or stealing anything which suited them. We had not been half an hour on shore when one of them came behind Mahine and very nimbly snatching a black cap from his head, ran off with the greatest velocity over the heaps of rugged stones....Mahine was so surprised that it was some time before he could find words to complain...and when he did, the thief was already at a great distance. About the same time...one of the natives ran off with [Mr. Hodges'] hat in the same manner. Mr. Wales was standing by him with a musket in his hand, but very justly reflected that so slight a crime did not deserve the punishment of a leaden bullet."

In their walk along the shore, noting plants and the dearth of animals, Forster again remarks upon the great correspondence between the features, customs, and languages with natives in other South Sea islands. They diligently searched for anything other than the common fowl--but in vain. But they did note "...two or three noddies, which were so tame as to settle on the shoulders of the natives, but from these individuals we could not conclude that they kept a regular breed of them."

At sun set, on their way back to the boat, they passed by the single statue, and asked questions about the nature of these stones: "...from what we could understand, we concluded that they were monuments erected to the memory of some of their *areekees*, or kings. This led us to believe that the pedestal was perhaps to be considered as burying place and on looking carefully around it, we found a number of human bones, which confirmed our conjecture....To the westward of the cove there was a range of three pillars standing on a very large elevated area or pedestal. This range the natives distinguished by the name of *hanga-roa*, and the single pillar they called *obeena*...."

The next morning, Cook appointed a party of marines and sailors under the command of Lieutenants Pickersgill and Edgecumbe, to reconnoiter the interior parts of the island to see if any other part was better cultivated or more heavily inhabited. With them went Hodges, Sparrman and Johann Forster. George went with Cook and several officers and upon landing found about 200 inhabitants assembled--but only 14 or 15 of them women. Walking into the countryside, they found the heat "violent" and bemoaned the lack of shade. Some had brought guns in the hope of shooting some game but found nothing. Wandering through fields they saw no evidence for garden enclosures of the type described by Roggeveen, and complained of the exhausting heat.

Returning to the landing place, they found Cook still occupied in trading: "The most valuable article of trade on our part were empty coconut shells, which we had received at the Society and Friendly Islands; but they were not

current, unless the hole in them was very small, or unless they had a cover. The Taheitian and European cloths were valued in the next degree, according to the size of the pieces; and iron-ware bore an inferior price. The greatest part of the natives who traded with us instantly ran off with the cloth, nut-shell, or the nail...as if they were apprehensive that we might repent of our bargain, even though they dealt honestly with us. Some of them were bold enough to run off with what they had received...before they had delivered up the goods for which we had bargained. From such circumstances the deplorable condition of the natives became more and more conspicuous. The scarcity of cloth among them was extremely great, most of the people being forced to go naked; but this did not prevent their selling what little cloth they had in exchange for that of Taheitee. The desire of possessing this cloth prompted them to expose to sale several articles which perhaps they would have not parted with so easily under other circumstances. Among these were their different caps or headdresses, their necklaces, ornaments for the ear, and several human figures, made of narrow pieces of wood about 18 inches or two feet long, and wrought in a much neater and more proportionate manner than we could have expected, after seeing the rude sculpture of the statues. They were made to represent persons of both sexes; the features were not very pleasing, and the whole figure was much too long to be natural; however, there was something characteristic in them, which shewed a taste for the arts. The wood of which they were made was finely polished, close-grained, and of a dark-brown, like that of the *casuarina*. But as we had not yet seen this tree growing here, we eagerly expected the return of our party, hoping they would make some discoveries to explain this circumstance. Mahine was most pleased with these carved human figures, the workman of which much excelled those of the *e Tees* in his country, and he purchased several of them assuring us they would be greatly valued at Taheitee. As he took great pains to collect these curiosities, he once met with a woman's hand, carved of yellowish wood, nearly of natural size....its fingers were all bent upwards, as they are in the action of dancing at Taheitee, and its nails were represented very long, extending at least $\frac{3}{4}$ of an inch beyond the fingers' end. The wood of which it was made was the rare perfume-wood of Taheitee....Mahine afterwards presented this piece to my father, who has in his turn made a present of it to the British Museum. "

Returning to the *Resolution*, George observed a few natives who had swum to the ship, although it was about $\frac{3}{4}$ of a mile off shore: "They expressed the most unbounded admiration at everything they saw, and every one of them measured the whole length of the vessel from head to stern, with his extended arms; such a great

quantity of timber of so stupendous a size being altogether incomprehensible to people whose canoes were patched of many small bits of wood. Among them was one woman who....carried on a particular traffic of her own."

George Forster's conclusion as the result of his interactions with the Easter Islanders was that: "Their behavior towards me was wholly inoffensive, agreeably to the general character of the nations of the South Seas. From the expressions of the historians of Roggewein's voyage, it should seem that the Dutch very wantonly fired upon the natives, who gave no provocation, and killed a considerable number of them, intimidating the rest to a great degree. It is probably that the terror with which they looked upon the destructive arms of Europeans at that time, and during the last visit of the Spaniards, was revived among them at our appearance, and had an influence on their general timid behavior towards us; but it is not to be doubted, at the same time, that there is a mildness, fellow-feeling and good nature in their disposition which naturally prompts them to treat their visitors kindly and even hospitably, as far as their wretched country will permit."

At this point in the narrative, George inserts notes made by his father, who had gone off in exploring another direction: "Immediately after landing, we walked directly inland or across the country, under the highest hill which lies toward the south, till we came to the other side of the island. About an hundred natives, and among them four or five women, accompanied us on our march, and sold us a quantity of potatoes and a few fowls.... We found the whole country strewn with stones of various sizes...which had indubitable marks of having been in a volcanic fire.... We reached the east side of the island, near a range of seven pillars or statues, of which only four remained standing, and one of them had lost its cap. They stood on a common pedestal, like those which we had seen on the other side, and its stones were square and fitted exactly in the same manner. Though the stone of which the statue itself is formed seems to be soft enough, being nothing but red tufa which covers the whole island, yet it was incomprehensible to me how such great masses could be formed by a set of people among whom we saw no tools; or raised and erected by them without machinery. The general appellation of this range was *Hanga Tebow*; *hanga* being the word which they prefix to every range. The names of the statues were *Ko-Tomoai*, *Ko-Tomoèree*, *Ko-hò-oo*, *Morahèena*, *Oomarèeva*, *Weenâboo*, *Weenapè*.

"From hence we continued our march to the northward along the sea, having a precipice on our right. The ground was the same ferruginous tufa...but after some time we came to a spot which was a single coherent rock or lump of black melted lava, which appeared to contain some iron. There was no soil, grass, or plant whatsoever upon it.

Beyond it we passed through a number of plantations of bananas, potatoes, and yams, and one of eddoes....

"The natives continued to offer some potatoes...and at a hut where we halted, they sold us some fish. Some of them carried arms, which were no other than the thin sticks we had seen before, and which were headed with a black vitreous lava, carefully wrapped in a small piece of cloth. Only one of them had a battle-axe resembling that of the New Zealanders, although much shorter. It had a head carved on each side, and a small round portion of the black glass...instead of eyes. They had likewise some small crooked human figures made of wood, of which we did not learn the use or signification....

"...we still advanced to the northward....Soon after the natives told us their *aree*, or *hareekee*, or king was coming toward us. Several men came on before him, and distributed sugar-canes to us all in sign of friendship, at the same time pronouncing the word *heeo*, which signifies friend. We now saw the king standing on a hill, and walked up to him, Mr. Pickersgill and myself making him some presents. We asked for his name, which he told us was Ko Toheetai, adding that he was *aree* or king. We were desirous of knowing whether he was the only chief of a district, or of the whole island; upon which he spread out his arms, as it were to include the whole island, and said *Waihu*. To shew that we understood him, we laid out hands on his breast, and calling him by name, added his title, king of *Waihu*, at which he expressed very great satisfaction, and conversed a great deal with his people on that subject. He was a middle age man, rather tall; his face and whole body strongly punctured. He wore a piece of cloth made of mulberry bark, quilted with threads of grass, and stained yellow with turmeric; and on his head he had a cap of long shining black feathers, which might be called a diadem.....

"When we wanted to continue our march he seemed to dislike it, and desired us to return, offering to accompany us; but seeing our officer determined to proceed...he desisted and went with us.

"We marched to an elevated spot, and stopped...to give Mr. Hodges time to draw some of the monuments, near one of which we found an entire skeleton of a man.....One of our sailors, who carried my plant bag, in which were a few nails, etc., being less careful of his bundle...a native snatched it up and ran off with it. None of us saw it, except Lieutenant Edgecumb, who immediately fired his musket, loaded with small shot, at the thief, and thus gave the alarm to us all. The native being wounded threw down the bag, which our people recovered, but he fell soon after; his countrymen took him up, and fled to a little distance, till we beckoned to them to return, which almost all of them did. Though this was the only instance of firing at a native during our stay at Easter Island, yet it is to be lamented

that Europeans too often assume the power of inflicting punishments on people who are utterly unacquainted with their laws.

"From this spot we continued our march a good way inland, and were conducted to a deep well, which appeared to have been formed by art, and contained good fresh water, though somewhat troubled. We all drank heartily of it, and then went on, passing by several large statues, which had been overturned, till we came in sight of the two hummocks, near which we had perceived the greatest number of pillars or statues, from the ship, on the 12th. We mounted on an eminence in the neighborhood, from whence we beheld the sea on both sides of the island, across a plain which we had likewise discovered from the ship at that time. We viewed the whole eastern coast, and its numerous pillars, and were convinced that there was no bay or harbor on that side of the island. With this information we returned back to a large statue, which the natives called *Mangototo*, and in the shade of which we dined. In its neighborhood we met with another huge statue, which lay overturned; it was 27 feet long, and 9 feet in diameter, exceeding in magnitude every other pillar which we had seen on the island.

"In returning, we stopped once more at the well, and quenched our thirst, which the raging heat of the sun, reverberated from barren rocks, had excited. From hence we directed our march something nearer the ridge of hills which run along the middle of the island, but found the path more rugged and fatiguing than ever, the country being strewn with volcanic cinders, and desolate all round us, though we found many remaining proofs of its having been formerly cultivated."

At this point the group divided, going along different paths. Johann, along with Dr. Sparrman, a sailor and two natives, climbed to the summit-- with some difficulty due to Johann's infirmities. From here they could see the sea to the west, and the ship at anchor: "The hill was covered with a shrubbery of the *mimosa*, which grew here to the height of eight or nine feet, and some of whose stems near the root, were about the thickness of a man's thigh. We found another well hereabouts, of which the water was infected with a putrid taste and the smell of *hepar sulphuris*, but of which we drank, notwithstanding its nauseousness. The sun set very soon after we had left this well; so that we continued our walk downwards, for more than two hours entirely in the dark, during which my Indian's assistance was particularly valuable to me...."

We now return to George Forster's comments, who notes that : "...the most diligent enquiries on our part have not been sufficient to throw a clear light on the surprising objects which struck our eyes on this island. We may however attempt to account for those gigantic monuments, of which great numbers exist in every part; for as they are

so disproportionate to the present strength of the nation, it is most reasonable to look upon them as the remains of better times. The nicest calculations...never brought the number of inhabitants in this island beyond 700, who, destitute of tools, of shelter, and clothing, are obliged to spend all their time in providing food to support their precarious existence.... Accordingly we did not see a single instrument among them on all our excursions, which could have been of the least use in masonry or sculpture: We neither met with any quarries, where they had recently dug the materials, nor with unfinished statues which we might have considered as the work of the present race. It is therefore probable that these people were formerly more numerous, more opulent and happy, when they could spare sufficient time to flatter the vanity of their princes....It is not in our power to determine by what various accidents a nation so flourishing, could be reduced in number, and degraded to its present indigence."

Their great disappointment in the island as a place of refreshment is clear; the only article of value was sweet potatoes, but even they were few in number. They collected less than fifty fowls, and found the water to be ill-tasting and in short supply. He expresses surprise that the islanders generously shared their food, when obviously they were in need themselves. And once again he reiterates on the resemblance of culture, language, and government to that of the rest of Polynesia: "...[the language] being a dialect which, in many respects, resembles that of New Zealand, especially in the harshness of pronunciation and the use of gutturals, and yet, in other instances, partakes of that of Taheitee."

"The religion of the Easter Islanders is still wholly unknown to us, because abstract ideas are not to be acquired in so short a time as our stay. The statues, which are erected in honour of their kings, have a great affinity to the wooden figures, called *Tee*, [tiki] on the chief's *marai's* or burying places at Taheitee.... We are unacquainted with the amusements of the people...The disposition of these people is far from being warlike; their numbers are too inconsiderable, and their poverty too general, to create civil disturbances amongst them. It is equally improbable that they have foreign wars....This being premised, it is extraordinary that they should have different kinds of offensive weapons, and especially such as resemble those of the New Zealanders; and we must add this circumstance to several others, which are inexplicable to us in their kind."

"Mahine frequently lamented their unhappy situation, and seemed to feel for them more than he had done for the New Zealanders, because he found them much more destitute. He added another stick to the bundle which composed his journal, and remembered Easter Island with this observation, *tata ma'itai, whennua èene*, that the people were good, but the island very bad...."

[Von Saher is a retired businessman from the Netherlands. He lived and worked for ten years in Indonesia, becoming a consultant for tropical agriculture in South America and Africa. He authored a book about the first Dutchman to ever set foot on the island of Bali in 1597. In 1989 he made his first visit to Easter Island. He is writing a book on the prehistoric migrations of Austronesian-speaking peoples through East Asia to Polynesia.]

He rongo ho'ou:

What's New In Hangaroa.....

* The rescue-patrol launch "Tokerau" is now on the island. This unique launch is propelled by two Volvo engines and can reach a speed of 30 knots. It is expected to be indispensable in case of accidents in Rapa Nui waters and is in answer to demands by international carriers so that the airport can be used for international flights.

The tug that carried the Tokerau to the island also brought part of the infrastructure for the Chilean Navy base including eighteen housing modules which will be placed near Hanga Piko. Workers from the continent will be brought over to set up the pre-fabs.

* The new Naval base on the island has caused some suspicion among islanders. The base will have a contingent of Marines and, among other worries, islanders are concerned that the environment will be modified in a negative manner. The new commander of the naval station, Ricardo Menzel, said the buildings are of wood and thus it will fit in with the "island's ambience".

Naval personnel is said to consist of 12 persons, 14 marines, and 4 crew men for the Tokelau, the minimum needed, according to Governor Hey. [However, village rumors say some 700 will be stationed here!] The Governor noted that islanders have been complaining for years of too many continentals already on the island, and added that the presence of the Armada will facilitate problems of supply and transport.

Local islanders refer to the base as Estación Naval de Isla de Pascua; *El Mercurio* reports that suspicion and the "rejection of ideas" is the usual tendency of the Rapanui. Another project viewed with suspicion, according to *El Mercurio*, is the restoration of Tongariki by the Japanese firm, Tadano. [See below]

* The Navy will install a modern radio station to assure good communication with the continent, and they also are talking of a new pier.

* A "monumental" lighthouse will be constructed this year at the top of Rano Kau, equal to the one at Cape Horn; its light will be seen for miles in all directions. This structure will, according to reports in *El Mercurio*, "mark an important step in Chile's national sovereignty of Isla de Pascua". [See Editorial, last page]

Among those islanders who have negative opinions is Juan Chavez of the Consejo de Ancianos who stated that there was no need to increase the Chilean Armada on the island--but he did favor increased supply ships. Alberto Hotus, President of the Consejo, is concerned for ecological reasons. And the island's assistant mayor, Salvador Atan, along with the Consejo de Ancianos, lamented these constructions saying that all these decisions are made unilaterally, ignoring the opinion of the island community. The naval commander, Menzel, rebutted this by saying that the Chilean Naval presence has been "well accepted" by the Rapanui since 1965.

* The Japanese project to restore Tongariki and raise twenty *moai* has been objected to by some islanders because they were not consulted about the project, and they also fear archaeological pieces will be removed from the island. Tadano of Tokyo has set aside \$1.5 million dollars and has sent a delegation to the island to work out the logistics for this project.

Tadano stated that they will study the salinity of the *moai* surfaces and give them a chemical treatment to prevent further erosion.

Alberto Hotus, speaking for the Consejo de Ancianos, has agreed to the project with conditions that the money is to be given to the Governor to ensure it is spent correctly, and an island representative is to watch over the work.

* In response to the Japanese project, the *London Times* (April 6, 1992) printed an article by Bernard Levin that skewers this expedition with great wit: "And what makes this invasion of the giant stone cemetery much worse is that the Chilean government...has given the Japanese nose-pokers permission and encouragement, instead of telling them to take their otiose and wicked proposal and drop it down the crater of Mount Fuji." And, "...do leave Easter Island and its mysteries alone." "If you must dig up something, gentlemen, go dig up the tombs of your ancestors. But if you dig up Easter Island, may Tutankhamun's curse fall upon you, together with one of the heaviest of the statues. Desist: and be awed."

* The annual visit of Intendente Juan Andueza resulted in the following report: Islanders are "optimistic" and hopeful in respect to the future; as for inequities, he states that they worry about students who cannot pass exams to attend universities on the continent, and there is concern about their linguistic legacy which is being lost due to impact from the continent.

The other preoccupation of the islanders is the lack of employment. The main sources for jobs is the tourism industry.

Andueza inspected government farms in Vaitea where tropical fruits are grown and the farms of Tuki Pate and Ernesto Tepano. He also announced that Policarpo Toro will be the next street to receive paving and noted that the

harbor at Hanga Piko will be deepened, and an extended pier constructed.

* Of the students in the island's school, 31% have Rapanui parents; 42% are mixed Rapanui and continental; and 27% are pure continental.

* A course has been given on the island to a group of thirty island businessmen to instruct them in the processing technology for extracting syrup from tropical fruits.

The course, under the auspices of SASIPA (Sociedad Agricola y Servicios, Isla de Pascua), the Institute of Technological Investigations and FAO, included basics of hygiene and sanitation in processing and quality control. It is hoped this project will become a base for economic development on a small scale.

The processing is to reduce the fruit to syrup so that it can be used as a basis for beverages. The syrup can be made without sugar and needs no refrigeration.

* Two 22 year old palm trees have been moved to the small plaza on Policarpo Toro; they had been scheduled to be cut down to make room for new construction.

* The Hogar (boarding home) in Valparaiso where young Rapanui students live while attending mainland schools has received furniture and other donated items which will be of much use to the islanders now in residence. Donations were made by Coca-Cola, Sociedad de Amigos de la Isla de Pascua, and the Easter Island Foundation.

Ten scholarships were awarded to the young people; the Easter Island Foundation donated \$500 worth of books to the student library.

Of the 37 young Rapanui, 9 are attending universities and 28 are studying at various other levels. The Hogar was founded 12 years ago.

* In July of this year LAN-Chile will retire their ancient passenger 707s and replace them with 767s. This is the biggest event since Roberto Parragué made the first flight to the island in 1951.

* The Rapa Nui mystique has invaded Nintendo! Flying *moai* are featured in the Nintendo Gameboy version of "Super Mario". As reported by Minnesota Rapanuiphiles, Ben and Marcia Baldanza, children all over the country are learning a bit about Rapa Nui without even realizing it.

What's New in Polynesia.....

* Pitcairn Islanders could all soon become millionaires, at least on paper. According to the *London Times* (3/13/92), British scientists who have been mapping the Pacific sea bed have discovered huge mineral deposits formed by submarine volcanos within the island's 200 mile economic "exclusion zone."

The volcanos, six of which have been located 50 miles southeast of Pitcairn, have deposits of manganese and iron

and it is believed that inside them are deposits of copper, zinc and perhaps gold and silver.

A marine geologist at Imperial College London who was a member of the research team said that there could be up to three million tons of the hydrothermal deposits; many are close to the surface, which would help extraction.

* The VIth Festival of Pacific Arts will be held in Rarotonga from 16 to 27 October 1992 in the Cook Islands and will feature a display from 22 delegations of the arts and crafts of Polynesia, including those of sailing. Further details can be had by contacting Mr. Tamarii Tutangata, Director; 6th Festival of Pacific Arts Office, Ministry of Cultural Development; PO Box 146, Rarotonga, Cook Islands.

PUBLICATIONS

Hather, Jon and P.V. Kirch. 1991. Prehistoric sweet potato (*Ipomoea batatas*) from Mangaia Island, Central Polynesia. *Antiquity* 65:887-93.

Mitchell, Andrew. 1991. *The Fragile South Pacific: An ecological Odyssey*. University of Texas Press, Corrie Herring Hooks Series, No. 16.

Rollet, Barry V. 1992. Faunal Extinctions and depletions linked with prehistory and environmental change in the Marquesas Islands. *Journal of the Polynesian Society*, Vol. 101(1):86-94.

Schuhmacher, W.W. 1992. En dansker paa Paaskeoeen [A Dane on Easter Island]. *Aarskrift, Roskildeegnens Selskab for Genealogi og Personhistorie* 5; 19-20. Roskilde, Denmark.

Weisler, M., T. G. Benton, M. de L. Brooke, P.J. Jones, T. Spencer, and G.Wragg. 1991 The Pitcairn Islands Scientific Expedition (1991-1992): First results, future goals. *Pacific Science Association Bulletin*, 43(3-4): 4-8.

This is the first publication of the Pitcairn Islands Scientific Expedition, outlining the goals of the project which encompassed a 15 month period, ending in March of this year. The major scientific projects included studies of the geology and geomorphology; marine biota and environment; land and sea birds; terrestrial flora; terrestrial invertebrates; entomology/arachnology; paleontology; archaeology and prehistory.

The object of the project is to provide a well-integrated multidisciplinary study of the Pitcairn Islands in order to better understand how to preserve and manage fragile resources in this part of the Pacific. Islands studied are Pitcairn, Henderson, Ducie and Oeno.

Primary objectives of the archaeological program, directed by Weisler, are to determine when Henderson was first colonized, how long a time the occupation continued, how the population subsisted, what effect human predation had on the island's biota, and how the

introduction of plants and animals affected the indigenous biota. More than 20 habitation rockshelters, caves and middens were recorded on Henderson; radiocarbon dates range from the late 8th to the early 17th centuries.

BOOK REVIEWS

Easter Island, Earth Island, by Paul Bahn and John Flenley. Thames and Hudson, London 1992. 240 pp., ill., 15 color plates. (\$24.95 U.S.)

Frank Bock, Ph.D.

American Rock Art Research Association

With all that has been written, why *another* book on Easter Island? After reading the text and being gripped by its abundant and dramatic photographs and illustrations, the answer is clear: because another book--specifically this publication--was needed!

While written in an almost casually narrative manner, *Easter Island, Earth Island* does not pander to the coffee-table crowd. It does not turn Rapa Nui into Fantasy Land, first inhabited by Peruvian rafters and later developing into an amalgam of mystic stone carvers (trained by extra-terrestrial astronauts), obsessed with cannibalism. Nor do we get a picture of shy, European-type natives, lounging about with La Perouse's crew, as so decorously portrayed by de Vancy. With constant emphasis on the questions that have beleaguered visitors as well as residents for centuries, the authors have unremittingly focused on thorough investigation coupled with provocative insight. The result is an excellent treatise that concentrates on the true goal of any archaeological/anthropological inquiry: the culture(s) that created a world out of an isolated rock rising above the waves, only to lose it centuries later.

The introduction is a Who, What, When, Where, Why of this work, and leaves the reader in a somewhat breathless state of anticipation of the answers promised in the succeeding chapters. This discussion begins with a brief account of the island's volcanic birth, then moves on to deal with the question, who were the first inhabitants?

The concise, objective analysis of Heyerdahl's theories (of people coming to Easter Island from South America) is succinct, outlining the bases of his argument. However, their rebuttal carefully and systematically reveals a series of flaws in his "evidence," leaving a strong impression that Heyerdahl's research terminated in the 1950s. A combination of earlier research (Routledge, Mulloy, etc.), the impossibility of east to west navigation, the preponderance of oral tradition, language, physical anthropology, and scrutiny of material culture, leaves but one conclusion. That scientific inquiry, especially

conducted in the intervening four decades since Heyerdahl's work, leaves little doubt as to the Polynesian heritage of Rapa Nui.

Step by step the authors, discussing options and alternatives, develop logical explanations of each "mystery" that has shrouded Easter Island for decades. And, lo and behold, there *are* no mysteries! Thus no need to romantically conclude that the "Easter Island mystery is solved", as recent popular writing and television programming by others imply--nay, *state*.

This means that they cover everything: the first settlers; the riddle of the *moai* (and how *did* they move them?); why they were destroyed, and by whom; the *rongorongo* tablets. And each aspect is carefully examined with attention paid to alternatives.

An extensive, well-researched segment on the pre-historic environment, by co-author Flenley, provides an in-depth study of an island that was once forested and far more lush than the barren landscape that currently greets islander and visitor alike. The authors drive home the lesson that must be learned from this; that no culture is immune from environmental exploitation, an exploitation evidenced by early Rapa Nui culture that resulted in ecological and social catastrophe. A prologue that must be heeded today, world-wide.

The book tends to be a bit pedantic at rare times (approximately half of Chapter 4, for instance), simply using an extended listing of material gleaned from various sources. This style of writing--a recounting of definitions and hypothetical phraseology--leans toward the academic. But this is not often, and in general the writing moves apace.

In fact, it is a bit difficult to write about Easter Island and not fall prey to hyperbole and romanticism. But even when Bahn (with little doubt the principle writer) succumbs to this lure, it still carries forward the thesis. Actually, Bahn, using admirable restraint, holds himself in check, using his eloquent command of the English language more to encourage reading than to emulate pop writing.

The reader must wait patiently until Part II, beginning on page 107, to meet the *moai*, those haunting statues of monolithic proportion, the visibly outstanding motif always connected with Easter Island. Here the discussion wends its way through a variety of interpretations about the purpose, even the gender of the statues. But this journey is not speculative. Rather it is laced with the uncertainty of absolute knowledge, but still proposing some credible hypotheses. The authors try valiantly to quash once and for all time the absurdity of extra-terrestrial stone masons. But I fear their efforts may be in vain, since so many people raised on science fiction, *want* to believe in von Däniken's fairy tales.

The explanations of the work at Rano Raraku quarry is straightforward, adhering to the most acceptable and plausible interpretations. Conclusions of the methods of *moving* those *gigantica* is not so easily come by, since a gamut of theories abound. The discussion on the sundry methods that have some plausibility provides good reading and leaves us with a solid solution: "...that no single explanation suffices for all the statues."

The section on *ahu* construction is excellent; needed since frequently this is a feature too often neglected in previous works.

Just a few "ideas" that the authors (they hope) lay to rest: the *hare moa* really are "chicken houses" built specifically to breed and protect this valuable food supply; the abandonment of work at Rano Raraku quarry was not a sudden event, but rather a gradual "winding down and disintegration of the system."

The authors give further credence to the generally accepted notion of a highly structured Rapa Nui society, with power vested in the highest echelon--the Miru--and status determined by clan and social ranking. The accounting of the Birdman cult (and ceremony) is concise, and their brief discussion on the rock art of Easter Island, particularly at Orongo, indicates a substantial link with what the authors call "...the one genuine mystery that remains from the island's past."

The title of Chapter 11 speaks quietly, but eloquently, for itself: "Conclusion: the Island that Self-Destructed." But that note of finality is not the last one sounded in this outstanding book. The work, while not being wasted, would surely be weakened should the reader not include the Epilogue: "The Lesson of Easter Island." Easter Island has become, in the words of the authors, "A microcosm which provides a model for the whole planet."

The chronological unwinding of the ecological clock that once was Rapa Nui--deforestation, famine, warfare, and collapse--was inevitable when that last tree was chopped down, and those watching *let* it be felled. The analogy is apt; Easter Island has become a symbol for the larger picture, Earth Island. And the authors have driven home their point with a rapier thrust.

The illustrations are truly great. The photography is splendid in black and white and color. The drawings, maps, tables and assorted sketches are excellent. The entire volume exudes quality. Do avail yourself of this fine publication.

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

Poisoned Reign

Bengt and Marie-Thérèse Danielsson. Penguin Books,
1986

When It Reigns, It Poors

Grant McCall, Ph.D.

For over two centuries, Europeans have suspected that in Polynesia there lies a dark secret, which they consistently fail to penetrate. Most of these visitors have been males, especially in the early days of exploration, conquest and exploitation and the image of the supine native maiden still dominates travel poster and brochure, with a few muscular gents for those females and males with other tastes.

Yet, when most visitors, more than just European (read Japanese), make their visits to Hawai'i and its clones in the region, they do so in a meeting world of super real "authentic" luxury hotels, where native huts feature air conditioning and cable television.

Apart from the much maligned Hawai'i, the other focus for Island tourism is the lushly polluted island of Tahiti.

The name itself, applied to cocktails and palm covered restaurants the world over, has had a very good press for over two hundred years. Whilst the phlegmatic Wallis, the first European contact agent, leaves us little, the more expressive Bougainville, of eponymous flower and island fame, rings in our ears: *la nouvelle cythère*.

Like the ancient "island of love", Cythere, Tahiti itself is the stuff of legends, of wishes to be fulfilled; of promises to be kept; longing and desire.

What do we know of the Nisiology¹ of the place?

Well, Europeans, either wayward Spaniards before or documented English and French antagonists later, "discovered" the place. Cook and his men loved it for a bit of R & R on their arduous and epic voyages, with Bligh's distaste for its charms making for himself a place in literary and cinematic history.

Missionaries and traders come, phoney monarchies on foreign models reign for a while, then collapse under Victorian drapery. History ceases and Tahiti rejoins legend as the quintessential exotic. A place, mysterious and too far away.

Then, Bligh's legend is to be re-made, its third, and Marlon Brando, beatnik turned superstar, comes to film, which is an instant success, viewed by millions, who suddenly want to go there.

The French, who reluctantly acquired the place under obscure circumstances in the last century, oblige and

construct a huge airport; tourism booms and the modern Tahiti of sophistication is born. Instead of commenting upon the beauty of the place, most tourists who have been there who I've met complain about the prices.

Tahiti joins Hawai'i as another place spoiled.

The ineffable dark secret behind both Hawai'i and Tahiti is that both places have active, but suppressed movements for independence. Their other main point of similarity is that both are military colonies, a major part of whose income derives from the deployment of some of the most destructive weapons known in the history of humanity.

Hawai'i may be the future of Tahiti, in that whilst military spending power is still very powerful, a transition to tourism has been achieved. In Hawai'i, the Polynesians are a minority in their own land by a large factor, whereas that is not the case yet in Tahiti. In both places, the indigenous peoples have lost their land, and must pay rent to usurpers.

The legend of Tahiti, that I recounted first above, is to be found in numerous books and articles; most visitors have the story in their minds in one form or another. But, how do you find out about the hidden history of Tahiti?

Bengt and Marie-Thérèse Danielsson have lived for more than three decades in Tahiti. They write together, numerous books in several languages, more recently television programmes. Bengt, trained originally in anthropology, came to Polynesia on the famous Heyerdahl Kon-Tiki expedition, and stayed. Marie-Thérèse, from France, joined Bengt in his adventure, herself active in local politics in Paea, the district where they have their home, looking over the strait to Mo'orea.

Their book, *Poisoned Reign*, is an authoritative and detailed study of the hidden story of Tahiti; of the suppression of its people's hopes for freedom and self-determination and of how military expenditure, particularly on the hazardous testing of nuclear weapons, has poisoned a people's minds and bodies.

Small, wafer-thin walled timber and tin houses sport huge colour televisions with the latest VCR; people are dependent upon food imported, often, from literally the other side of the world.

And, there are the deaths from fish poisoning and the very quiet treatments for radiation sickness, accommodated in hospitals in New Zealand and Australia and paid for by a guilty French government.

Poisoned Reign is not holiday reading, nor is it much of a guidebook for the visitor, although some place names may acquire their special and local significance. But, it does tell of a kind of future that can afflict subject peoples, ethnic minorities subdued within larger states. The price of development on Tahiti has been the loss of indigenous culture and its tangible form, language.

What does the experience of Tahiti show that Polynesian populations should do to guard against the fate of absorption, of becoming foreigners in their own land?

¹ Nisiology, the study of islands; one might equally use Nesiology.

They should not let their land become freehold; not permit unrestricted outsider migration; not allow to slip their (and their children's) sense of historic identity; not forget how to live on the resources of their own island; not cease to develop their own language (and don't fuss about loan words for necessary imports).

The peoples of the three points of the Polynesian triangle (New Zealand, Hawai'i and Rapanui) live under governments that are not their own and under systems that are not of their devising.

With the spectre of the poisoned Tahiti before them, the Maaori (that's the correct spelling) are stubbornly and successfully transforming New Zealand into Aotearoa, as they prosecute in court and public for their claims for legitimacy. Hawaiian nationalists pursue a moral campaign to obtain their rightful place, with causes lost, but increasing gains.

But what about Rapanui? Is Chileanization still the goal of the Santiago government, as it has been since Pedro Pablo Toro promised to open a small school on his newly acquired sheep ranch (Rapanui) in 1888? There are questions to be asked, which the Rapanui themselves must answer, as they face the future.

The Danielsson's study has much to teach by example other Polynesians. The future can be the military-driven subjugation of Tahiti, the perseverance of the Maaori or the uphill battle of the Hawaiian in a tourism-dominated economy.

Rapanui's dark secrets of self-determination have yet to be revealed.

Grant McCall is an anthropologist who has done field research in French Polynesia and on Rapa Nui. He is Director of the Centre for South Pacific Studies of The University of New South Wales, Kensington, Australia

An Uncommon Guide to Easter Island is a unique guide to Rapa Nui and its archaeological sites. Maps, drawings, 110 full color photos, references, glossary and index. By Georgia Lee, Ph.D. **International Resources**, P.O. Box 840, Arroyo Grande CA 93421-0840. \$18.95 plus postage; mention this ad for free shipping within the U.S. ISBN 0-937480-17-7.

CREATIVE GIFT GIVING!

Surprise a friend, lover—or *Rapanuiphile*! Give a subscription to *Rapa Nui Journal*. Only \$20 a year for US and Canada; \$30 foreign, airmail. *RNJ* is not your normal everyday gift; and, aside from giving a free airline ticket to the island, it is the next best thing to Being There. We'll enclose a gift card with the first issue; just let us know if it is a birthday or Christmas gift.

RNJ, P.O. Box 6774, Los Osos, CA 93412.

Editorial Comment

In regard to the lighthouse which is to be constructed on Rano Kau, several thoughts occurred to us: 1) why, when lighthouses in developed parts of the world are being dismantled and abandoned, is such a structure being built? The concept of lighthouse is "old-tech", having been replaced in many cases by modern devices such as radio beams, etc. 2) Exactly where on Rano Kau will this be placed? Rano Kau is, archaeologically speaking, a highly sensitive area and such construction will surely affect the cultural patrimony of the island; and 3) The article that appeared in *El Mercurio* states that such a structure will demonstrate sovereignty of Chile over the Rapanui. It seems to us that there may be more productive ways to "exhibit sovereignty" than to build an outmoded-type structure on an archaeologically sensitive landscape.

As construction projects proliferate without thought of destruction to the island's archaeological treasures, it is not surprising that many Rapanui look askance at the numerous ventures foisted on them and their island.

We invite comments from readers of *RNJ*.



RAPA NUI JOURNAL

P.O. Box 6774

LOS OSOS, CA 93412

Georgia Lee, Ph.D. Publisher and Editor

Frank Morin, Assistant Editor

RAPA NUI JOURNAL is an international journal of the Easter Island Foundation, published quarterly for the benefit of those interested in Easter Island and Polynesia. Papers reflect the views of the contributors and are not necessarily those of the editors. Correspondence, articles, photographs, reviews, 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 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