

Rapa Nui Notes

• Number 7 • Spring 1988 • • P.O. Box 6774 • Los Osos, CA 93412 USA • U. S. \$3.00 •

Georgia Lee, Ph.D. Publisher / General Editor

Alan Davis-Drake Co-Editor

Rapa Nui Notes, is an international newsletter published four times a year for the benefit of those interested in Easter Island.

Correspondence, brief articles, photographs, drawings, reviews of books and films, announcements of conferences and publications, and related materials are invited, but we cannot be responsible for unsolicited items or anything submitted without adequate return postage or International Reply Coupon.

Subscription rates for 4 issues: U.S. \$12 /Foreign Airmail \$20 US funds only, please.

> ISSN 0890-2097 © Georgia Lee 1988

Bill Mulloy A Rememberance

Patrick C. McCoy

THE REMEMBRANCE OF BILL MULLOY, who died ten years ago at the age of 61, stirs a lot of memories. A short obituary article that I wrote for the *Journal of the Polynesian Society* (1979, Vol.88 (4); pp.373-374) helped to clear my mind of the weight of bereaving a man I so admired. This special issue of Rapa Nui Notes indicates that William Thomas Mulloy is fondly remembered by many, and that for those who were close to him, he has not "silently gone out of mind," to borrow a phrase from the Irish poet Seamus Heaney.

Th ough the man may never be forgotten, I must admit to a growing fear that the importance of Mulloy's long-term research on Easter Island prehistory may never be fully appreciated. There are a couple of reasons for thinking so. First, at the time of his death much of his work was still unpublished, and what had appeared in print was largely either descriptive and/or preliminary. There is the related problem that his site reports are characteristically so packed

with detail that they are liable to be glossed over or even ignored by those who are only interested in the "Big Picture." Secondly, Mulloy was on the whole extremely cautious in his interpretations, refusing to generalize on the basis of sketchy or incomplete evidence. It is of interest to

continued on page 12....



William Mulloy on Orongo

Special Edition

This issue of Rapa Nui Notes is entirely dedicated to the memory of Dr. William T. Mulloy.

Many of our readers have never met him, but perhaps reading the words of those who did will help bring to life his vision of science and his love for the island.

Se VA, Se Va La Lancha Recuerdos de Rapa Nui

Emily Ross Mulloy

Se va, se va la lancha Se va la 'Christian Bjelland' En esta lancha que cruz el mar Se va también mi amor.

—From a song popular on Rapa Nui in 1960

IN EARLIER DAYS, when travel to and from Rapa Nui was only by ship and generally only once or twice a year, the day of departure was something like a wake. Everyone leaving the island was mourned for as though they were dying. The long drawn-out process of loading people and freight into lanchas and transporting them to the ship could take all day, so it gave plenty of time for multiple weepy farewells. The islanders really did not expect to see anyone who left, ever again. Fortunately, with the advent of air travel and more frequent arrivals and departures, this custom has fallen into disuse. So when Bill made what did turn out to be his final visit to the island, ten years ago this February, it turned out to be a happy, rather than a sad, occasion.

During the final trip he was able to meet with many of the people he had worked with in the past 23 years, as well as to "pass the torch to the next generation" of young anthropologists, Chilean and Rapanui, whom he had worked with and taught. Quite by chance the man who had been his foreman during most of the ahu restoration projects, and who was then living in Tahiti, returned home on a visit at the same time Bill was there. And one of his old friends from the Norwegian expedition, Carlyle Smith, was also on the island with a tour group and Bill was able to act as guest lecturer when the group visited one of the ahu he had restored.

Among other highlights of the trip were the chance to accompany the National Geographic photographer, James Blair, on a flight just at sunrise to photograph the whole island from the air (the result is an illustration for the NGS book, "Mysteries of the Ancient

continued on page 2..

...E.. R. Mulloy, continued from page 1.

World" for which Bill acted as a consultant). Best of all was the surprise at a ceremony in the school grounds when he was presented with a beautiful hand-lettered and decorated document proclaiming him as an "Illustrious Citizen of Easter Island."

Of all the honors Bill received in his lifetime, this was the one he prized most highly. From his first visit in 1955 he had always had a strong affinity for the island and its people.

Bill had made more than 20 trips to the island over the years between 1955 and 1978, spending a total of nearly five years there; he had been planning, before his illness was diagnosed, to take early retirement and move to the island permanently that same year (1978). During his last season of field work on the island, a year and a half earlier, Bill had flown back to Santiago briefly to attend a seminar at the University of Chile's Institute of International Studies. The paper which he gave on this occasion, and which proved to be the last thing he ever wrote for publication, is entitled "A Preliminary Culture-Historical Research Model for Easter Island."

This paper, which is exerpted below, outlines a number of areas in which, he believed, more work was needed. Some of these have been studied in the past decade but as Bill frequently said, much more research is needed. The titles of many of his publications contain the words "preliminary" or "speculative", reflecting his caution about too hasty conclusions.

In a letter to Bill written 30 years ago by Father Sebastian Englert, who had just received reports of the carbon 14 dates from the excavations done by the 1955-56 Norwegian expedition, I found the following remarks which could equally well express Bill's own philosophy of science: "The Carbon 14 dates upsets all my chronological guesses in my book. But I should not worry about, because human science is a permanent correcting of errors."





William Mulloy relaxing atop discovery at Vinapu

A Preliminary Culture-Historical Research Model for Easter Island

William Mulloy

The paper from which the following excerpts have been taken has never been published in the U.S., but it did appear in 1979 in Vol.1 of Las Islas Oceanicas de Chile, Instituto de Estudios Internacionales de la Universidad de Chile (pp. 105-151).

SINCE ITS DISCOVERY on Easter Sunday of 1722 by the Dutch navigator Jacob Roggeveen, the peculiar cultural characteristics of Easter Island have fired the imaginations of almost all who have had the opportunity to visit this tiny mote of land lost in the endless empty seas of the southeast Pacific. Much has been written about it both by visitors and those who knew it only from the accounts of others. From Roggeveen's day to this the compulsion to explain the unlikely presence of a spectacular and complex culture under such extreme conditions of isolation has been obsessive. Thousands of titles exist in the literature ranging from accounts by casual visitors of a few days or by those who had not seen the island at all to the works of serious scholars who systematically collected as many solid facts as they could and brought to bear on the problem the most reasonable theoretical interpretations that could be derived from these.

This disproportionate intensity of interest in such a tiny part of the world is readily understandable. It is one of the most basic canons of history that complex cultures and civilizations, when certain other conditions are met, are the product of relatively large populations living in localities where cultural contacts with many other peoples are easy. Cultural complexity almost everywhere appears to be closely related to the intensity of opportunities to exchange ideas with neighbors and to formulate new ones with the aid of these. Conversely, when such opportunities are lacking, one normally expects the simplest of cultural adaptations. The apparent violation of this basic principle on Easter Island has quite reasonably attracted the interest of many scholars and casual visitors as well.

It is probably not reasonable to characterize the culture of Easter Island as a civilization, though it has often been so described. Nevertheless, a culture with a written language (an undeciphered hieroglyphic script that cannot be demonstrated to be related to any other in the world and thus, in the present state of knowledge at least, must be presumed to be a local development) possessed one of the most characteristic hallmarks of civilization. A class organized society with enough coercive power to bring large work crews together and maintain them in systematic operation long enough to produce the remarkable amount of religious architecture and sculpture present on the island certainly possessed a considerable degree of political organization. The presence of solar ranging devices and the practice of orienting the facades of some structure to the azimuths of the rising and setting sun at the solstices and equinox indicate awareness of solar movements. These and other traits suggest a level of cultural advancement amply sufficient, under such unusual conditions of isolation, to have attracted the unusual attention which has been directed toward the island.

An understanding of these developments and other peculiarities is of considerable theoretical importance and clearly requires much knowledge of the origin of the culture, of its pattern of development on the island, of the relationship of its people to its tiny environment of 413 square kilometers and other kinds of information as well. Unfortunately, unequivocal data are difficult to come by. Interpretations of presently known facts suggest that the culture underwent

Continued on following page...

an extended period of development toward greater complexity and eventually reached a climax which was followed by a period of population decrease, disorganization and decadence. All of this happened before the time of the first European contact. Thus, unlike the situation on many other Pacific islands where the classic form of the local culture was still a going concern at the time of the arrival of the first Europeans and where much information bearing on its nonmaterial characteristics and the significance of material items could be recorded by eye-witnesses or recovered from informants who clearly remembered the events of a recent past, it appears that on Easter Island the events which terminated the period of climax were violent enough nearly to erase from the minds of the relatively few survivors much of the detail of the classic form of the culture and prevent its survival in legendary form.

Drastic reductions of population in the 19th Century due to devastating slave raids and a smallpox epidemic further reduced population and memories of the past before many systematic observers were present. In 1877 the total population of the island is said to be only 111 people. Such a small number could have retained only a fragment of the former cultural inventory and apparently most of the collective culture-historical memory was lost. Thus only a demoralized and to a considerable extent deculturated remnant population has been available as culture-historical informants and a proportionately much greater reliance has had to be placed on archaeological evidence for an understanding of what went on here than has been true on many other Pacific islands. This lack of opportunity for direct observation of the classic form of the local culture has given peculiar emphasis to the emerging picture of the past of Easter Island.

The presently available body of archaeological evidence is far from adequate to permit a reliable and detailed general reconstruction of the local prehistory. Information about a "Settlement Period," embodying the earliest phase of the local development, is as yet entirely lacking. Though we have some information about domestic architecture, a coherent knowledge of it in a time perspective is lacking. Land-use patterns have been studied, though we have little understanding of the course of their development. Information about modifications of the environment due to human exploitation is sketchy though of central importance to an understanding of developments. Studies of artifacts through time and suitable for comparison with those of other islands are little developed. Best known are the large statues and the religious architecture. Here a temporal sequence in some detail is beginning to emerge. As a whole it is reasonable to say that, while presently available archaeological information is scanty and spotty, the potential for acquiring much more with continued investigation is good.

Because of the above circumstances it is impossible to provide a thoroughly reliable and detailed culture-historical summary. It is, however, possible to outline a sort of tentative model, not in the sense of a foreign historical sequence which local developments might be expected to parallel, but in the sense of a scenario which fits the scanty and incomplete local collection of information presently commonly taken to be fact. Such a model can be no more than one possible historical appreciation of the facts and would be expected continuously to be modified as new information became available. With such modifications it would be expected to approach progressively more closely an historical reality. Its principle value, beyond being a preliminary ordering of the materials, is as a research tool. It can serve to emphasize those areas where additional information is most badly needed and to suggest avenues and orientations for future work...

At this point Dr. Mulloy briefly discusses Métraux's and Englert's models, among others, and their "excessive attention to the problem of

origin as a primary force in establishing the characteristics of the distinctive local developments..."

Written in the present state of knowledge, the above essay makes no pretense of conveying any precise or ultimate historical appreciation. It represents one reasonable interpretation of the scanty and incomplete collection of facts now available. Its principle value is as a research tool suggesting a variety of hypotheses that may be formulated and tested.

Among these is the notion that the environment has been progressively depleted by man since human occupation. Some evidence for this has already been accumulated but more detailed research by palaeobotanists is required. The extremely important studies of the pollen samples collected by the Heyerdahl expedition and made by Selling have not been published and perhaps should be repeated and extended.

Better and more detailed information is needed leading to an understanding of population development and the extent to which the carrying capacity of the island was approached. Central to this purpose is the completion of the ongoing archaeological survey especially with view to determining the actual number of domestic establishments present and their chronological provenience. Related to this is a determination of the intensity and probable productivity of former cultivation, especially in the interior of the island and the extent to which it was pushed into marginal areas. The archaeological survey will provide considerable additional information to this point from the recording of surface indications while paleobotanical and soil studies should also be useful. The analysis of a part of the survey evidence by Patrick McCoy represents a most useful approach and must be extended to other parts of the island. Studies of the amount and kind of potential marine resources such as those begun by...the Cousteau Society are especially important in determining the significance of this food source.

An attempt to find evidence of a "Settlement Period," to date entirely unknown, is especially important. The hypothesis that the first immigrants came as a very small group with a limited cultural inventory can only be tested here. The study recently completed by William Ayers of stratigraphic sections in a series of caves is a step in this direction. The fact that the lowest levels of these caves, which might reasonably have been expected to have attracted early immigrants, consistently produced dates significantly later than some of the developed ceremonial architecture is a significant though somewhat surprising datum suggesting that "Settlement Period" evidence is not to be sought in these contexts. The writer is inclined to interpret this evidence to mean that these caves, typically somewhat damp even under relatively dry conditions of today, were, under earlier conditions of much heavier vegetation, probably so filled with water, vegetation and dampness as not to be suitable for human habitation. This suggests that "Settlement Period" evidence is to be sought in open sites in particularly favorable shore areas such as Anakena, Ovahe, Hanga Hoonu, Hanga Nui, Akahanga and elsewhere. This poses a serious problem in that it is in precisely these areas that later ceremonial and other construction as well as other modifications of the terrain through land use have been extensive. It may be that discovery of a "Settlement Period" will come about accidently as a by-product of investigation of later architecture in these areas. Such investigations must be carried out with this facet of the problem sharply in mind. Nevertheless, direct searches for this kind of evidence must be carried out with all the ingenuity that can be brought to bear on the problem.

The testing of the hypothesis that the ceremonial architecture, from its beginning to the time of the destruction of the *ahu* and the statues, represents a continuous sequence of local development

Continued on following page...

... continued from previous page.

unmodified by sharp changes caused by outside influence needs more evidence though the nature of the picture is beginning to emerge. A recent comparative study of eleven dated *ahu* chronologically spread widely over the sequence has supported the hypothesis (Mulloy and Figueroa).

The late period of internal violence remains relatively unstudied in detail. Badly needed is a number of detailed descriptions of so-called semipyramidal ahu, rectangular ahu and ahu poepoe with an extensive series of dates from these. Especially important are stratigraphic studies of semipyramidal ahu built over earlier image ahu. More studies aimed at determining the exact pattern of destruction of earlier image ahu are needed to test the hypothesis that these were destroyed by elements of the societies of their owners rather than by enemy groups from other localities. Important here are additional detailed descriptions of the practice of deliberately breaking statues, the burying of them in ahu ramps, and patterns of modification apparently designed to facilitate their concealment by building semipyramidal ahu over them or covering them with amorphous mantles of stones.

Studies of the domestic establishments both in caves and in the open of this period are important to provide the details of their characteristics, dates of their construction, and to isolate the features that differentiate them from earlier ones. It is important to determine whether or not the elliptical, thatched houses with dressed stone foundations (hare paenga) of the earlier period continued to be made or whether, as seems likely, only those already present continued in use. The chronological position of stone chicken houses (hare moa) and protective agricultural enclosures (manavai) must be more precisely determined. Were these a distinctive characteristic of this period or were they also in use in earlier times?

The hypothesis that there was a change in burial customs beginning with this period from cremation to inhumation requires further testing. It has often been remarked that analogy with other Polynesian practice suggests the possibility that the large amounts of burned human remains found in the crematoria behind the image ahu represent, not the characteristic mortuary practice of the image ahu period but the remains of human sacrifice or cannibalistic meals. The best way to validate this notion would be to find evidence of just what the alternative mortuary practice of the earlier period was. To date the writer knows of no conclusive evidence of tomb building or other inhumation in image ahu that can be demonstrated to date before the toppling of the statues and the destruction of the architecture. Also, no evidence has been found of any alternative mortuary practice other than the ahu crematoria which can be demonstrated to date from the time of image ahu building. Further evidence on these points must be carefully sought.

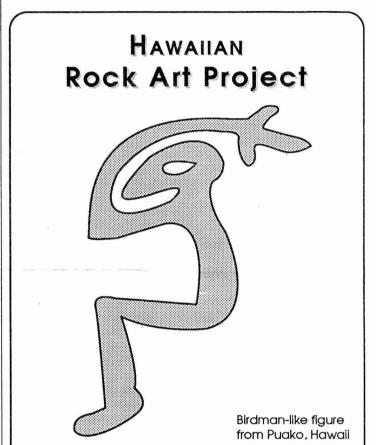
Much greater attention needs to be given soon to the development of a collection of dated and context-established skeletal material for physical anthropological studies. The present rapidity with which tombs are being opened and bones removed or scattered by islanders and by tourists makes this an important priority. If measures are not taken soon, most of this evidence will be lost. A permanently stationed physical anthropologist is badly needed. Such an individual could devote part of his time to collecting the easily available material, recording its context, and preparing it for study in a central repository.

To further test the hypothesis of essential cultural continuity, a much larger collection of precisely dated and context established portable artifacts must be made available. Some of this evidence is now present but much more is needed. The past emphasis on investigation and restoration of ceremonial architecture, where artifacts are usually found in secondarily deposited fill, has retarded the

development of this body of evidence. More artifacts need to be collected; particularly from dated caves and open domestic establishment contexts and from stratified middens.

The above are only a few examples of hypotheses that may be formulated and tested.. There are many others. Studies aimed at testing this framework will surely modify the model and may eventually demonstrate that it should be discarded.





As a complement to her six year study of the petroglyphs of Rapa Nui, Georgia Lee will begin a comparative investigation of Hawaiian petroglyphs in August-September 1988. This field season will concentrate on the island of Lana'i, which has numerous examples of figures with bird attributes. It is of interest to note that the Big Island of Hawaii has a few petroglyphs that are very close in style to the famous birdmen of Easter Island, and a boulder from Oahu, now in the Bishop Museum of Honolulu, has two bas relief figures that are astonishing close to the birdman motif. This is not to suggest that there was prehistoric contact, but is more likely an outgrowth of common ancestral backgrounds and shared myths, cosmology and religious concepts.

For information on how to participate in the project, contact University Research Expeditions Program (UREP), University of California, Berkeley, California 94720.

With Bill Mulloy: 1955-56

Carlyle S. Smith, Ph.D.

IT WAS ON APRIL 6TH, 1956, when Bill Mulloy said, "Let's go back to Pascua. All you have to do is turn the ship around." We were headed west to Pitcairn on the expedition ship Christian Bjelland after five months of intensive archaeological work on Easter Island and a relaxing social life with our friends, the native Easter Islanders. Someone had left a light burning on shore and we watched sadly as it became dimmer. Leaving a Polynesian island is much like attending your own funeral and there were few dry eyes among the expedition members as we recalled the emotional farewells. Some of us gathered on the fantail and sing the song our island friends had adapted for our departure: "Se va, se va la lancha. Se va el Cristian Belan. En esta lancha que cruza el mar, se va también mi amor."

Bill had chosen to work at Vinapu, Ed Ferdon at Orongo, Arne Skjölsvold at Rano Raraku, and I to make intensive tests at a wide variety of sites accessible from Anakena. Initially lodged with Ferdon at the governor's residence at Mataveri, Bill moved in with the Martin Rapu family at Hanga Roa where things were less formal and he could freely participate in Rapa Nui society as a friend and interested anthropologist. By living in the camp at Anakena my associations were divided between the Norwegian members of the expedition and Easter Islanders living at Vaitea, with occasional social contacts in Hanga Roa.

Bill was the only member of the Norwegian Expedition whom I had known before joining it in Panama in October of 1955. We had had a long association in connection with the Plains Archaeological Conference which met annually at Lincoln, Nebraska, and also shared the hobby of collecting antique firearms. Apart from constantly conferring with each other on archaeological problems in our work on Easter Island, we always had these things to talk about. Further, we shared a mutual liking for the people of the island and had been trained in holistic anthropology.

I recall that Bill was intrigued by the fact that the finely fitted seawall at Vinapu seemed to disappear downward into the soil and that a moai standing in front of the wall was buried up to the neck. He hypothesized that the original ground surface must have been at least a meter below the present surface and that there was an excellent chance for significant stratigraphy in the accumulated soil. Soon after starting work there he was surprised to find that the fine wall ended on thin foundation stones at about the level of the roots of the grass. Shifting to the moai he found it had been placed in a hole dug to receive it. In discussions we both expressed consternation at this and joked about the possibility of glee among the long dead abuelos who might have done this just to frustrate archaeological investigators.

Bill recognized the abilities of Martin Rapu, taught him the duties of an archaeological assistant and schooled him in the basic techniques of mapping. Later he convinced Heyerdahl that Martin should accompany us to assist in work on other islands to the west. His additional ability to shift from Rapa Nui to other variations of Polynesian speech were of help during the intensive work at the Morongouta site on the island of Rapa.

When Bill and I arrived at Papeete for the first time in May of 1956 we had been consuming food largely derived from the supplies on board the expedition ship for some seven months. All was quite wholesome, but it had taken on the monotonous character of "institutional" fare. We saw a French restaurant and each ordered a steak, frites, bread and red wine. It tasted so good we ordered another round. This brought the chef out of the kitchen. He turned out to have been one of the cooks at Jack Dempsey's on Times Square and

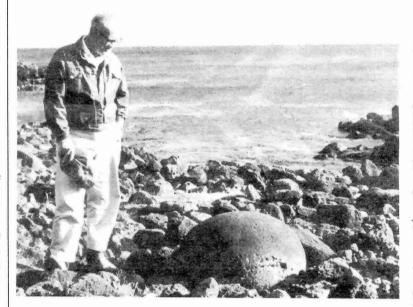
was flattered at our liking for his menu. Thus fortified we headed for Quinn's and "danced the night away" with Tahitian vahine nehenehe.

While Bill and I enjoyed our stay on Easter Island and would have liked to do more archaeological work there, I do not think that either of us really thought we would ever see the place again. Bill was persistent, however, and, despite his lack of resistance to motion sickness throughout the previous voyage, managed to get back to the island a number of times by sea before air service began. I was pleasantly surprised in 1967 when he informed me that Lindblad Travel was instituting archaeological tours of the island and had asked him to serve as lecturer and guide. I was invited to take turns at this and enjoyed thirteen return visits ranging in duration from one day to two weeks.

My first return was fraught with emotion. I was practically carried from the plane across the tarmac by jubilant Easter Island friends. My wife, Judy, was with me on three occasions. My last visit coincided with a sad event. Emily Mulloy brought Bill's ashes for burial at Tahai and my long association with Bill was over.

Carlyle S. Smith, Ph.D. Department of Anthropology University of Kansas





Mulloy contemplates the navel of the world, the spheroidal stone at Te Pito te Kura. Photo by Herb Pownall

Announcing the Rapa Nui Journal

This will be your last issue of Rapa Nui Notes.

But fear not, as before, we will still faithfully come your way four times a year.

With the increase in scholarly papers being submitted, the focus of this publication has shifted. We are changing our name to *Rapa Nui Journal*, to reflect the seriousness of these articles.

With Mulloy on Orongo

Robert Koll

THIS PAPER IS DEDICATED TO the memory of William T. Mulloy, who will be renowned in academic history as one of Rapa Nui's most knowledgeable archaeologists. But in a broader sense, his dedicated service in helping the islanders make their transition into the Twentieth Century may well be his greatest achievement.

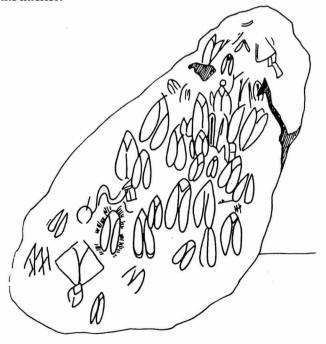
I was an amateur-volunteer working for Mulloy during the July-December field seasons in 1974 and 1976. Our work encompassed the restoration of the ceremonial center of Orongo, and as we lived with the same native family, I was provided with a rare opportunity to absorb some of his vast knowledge about the island.

We first met at Teocopan in Sinaloa, Mexico, where Bill had come to observe the investigations of a multi-disciplinary group of scientists with an expedition headed by Stuart Scott. Some months later, Bill invited me to join him on his Easter Island expedition. Our project was to restore Orongo village.

The site of this ceremonial center is on the edge of Rano Kau's extinct crater. On the seaward side is a sheer drop of 1000 feet to the ocean below; the other side of the caldera slopes down about 800 feet to the reed covered lake. The site is exposed to the buffeting offshore winds, some of which reach gale force and are met by strong gusts that sweep up from the crater. There is no protection from the wind but the stone houses of Orongo provide shelter from violent rain squalls.

The 1974 field season ended just before Christmas. We went on our separate ways, Bill to Laramie and the University of Wyoming while I returned to Mexico. If I had contributed anything to the expedition, it was the many hours of holding the end of a steel tape. But in the spring of 1976, Bill again invited me to join him, and the completion of Orongo's restoration began.

At first I started off by working with a group of students who were mapping the houses. This included recording each stone at ground level of the exterior, interior, and entrance passageway walls of each house. Also, the ceiling of these inverted canoe shaped stone houses was recorded to show a cross section of both the length and breadth of the interior.



Petroglyphs at Hanga Tee

It was during those days spent swatting flies while crouching or kneeling inside the small, dark, damp man-made caves, that I became aware of incised petroglyphs on the basalt slabs that formed the house interiors. Our only illumination was candlelight but it was enough to reveal the faintly scratched lines.

While mapping the houses, I made notes about the most interesting petroglyphs as well as some of the large concentrations of *komari*, vulva-form/fertility symbols. A plan to record all of these interior petroglyphs was made and I discussed it with Bill who readily accepted the idea. He claimed that these petroglyphs had never been recorded and to do so would be a contribution to the knowledge of Easter Island. The project was begun on August 19 and finished on September 10, 1976.

The Orongo restoration was completed by mid-August and work had began on the restoration of an *ahu* and re-erection of its *moai* in Hanga Roa. Then I began the daily, early morning hike up the slope of Rano Kau from Hanga Roa to the now deserted Orongo village. My most cherished memories of Rapa Nui are not those lonely days, hunched in fly-filled, cramped houses, recording petroglyphs.

In order to accurately record the designs and properly locate them within the houses, various techniques were used. First, of course, they had to be located. This is best achieved by scanning each stone by candlelight which provides the necessary side light to discern the figures.

The types of petroglyphs included bas relief, pecked grooves, pecked and abraded grooves, intaglio, and incising.

The designs were reproduced by rubbings, tracing, and two improvised techniques: "fingernail engraving" and dabbing on cloth. I found fingernail engraving to be the most accurate means of reproducing incised line petroglyphs. I would place a piece of tracing paper over the figure and secure it with tape. Using my fingernail like a stylus, I gently pressed the paper into the groove. The result was an accurate impression of the motif. Dabbing on cloth was useful in reproducing relief and pecked groove petroglyphs that were carved on rough surfaces. The figure was covered with cloth and secured; then a dabber made of a pencil-sized stick with a cloth knob was dipped in paint and then lightly touched repeatedly on the cloth covered petroglyph. Care was taken that very little pigment was used so that it would not seep through onto the stone.

An attempt was made to replicate the making of petroglyphs in order to determine the amount of time required to produce them. This was done by using a sharp piece of obsidian to make an incised line, and a jagged piece of dense basalt as a hand adze to make pecked grooves. The results of these primitive experiments demonstrated that the production time was considerably less than had previously been estimated. One hour produced the following results: an incised line $10 \text{ cm} \times 1 \text{ mm}$; a pecked groove $28 \times 1.5 \text{ cm} \times 1 \text{ cm}$; and relief material removed $10 \times 3 \times 1 \text{ cm}$. While not precise, the results of these improvised experiments answered the basic questions.

The analysis of the petroglyph information from the Orongo houses raised some not readily answered questions. Of the 173 petroglyphs recorded, 130 are vulva-form symbols. Only five are birdman figures. This is in comparison with petroglyphs on Orongo's exterior boulders as reported by Lee (1986), who documented 199 vulva-forms and 395 birdmen. Together these total 329 komari and 400 birdmen at this one locus.*

The komari is one of the preponderant subjects of the island's petroglyphs, and has the widest dispersion; it is found at sites all around the island and is probably the most frequently superimposed motif, often placed on top of other petroglyphs.

In spite of its numerical superiority, there is no recorded counterpart on the island of a petroglyph of the male sex organ. However,

Continued on next page...

Hommage a William Mulloy

Docteur Peter J. Van Wiechen

Le Hr. Ms Groningen à l'île de Pâques en 1960

Le commémoratif dédié à Bill Mulloy, est une bonne occasion, pour se rappeler la visite à l'île de Pâques du batiment de guerre néerlandais le Hr. Ms. Groningen. Cette visite dont Bill à profité s'est faite le 6 novembre 1960.

Cinq ans plus tôt avait accosté à l'île de Pâques la frégate Van Zijll et il n'était pas prévu qu'elle y retourne après une aussi courte période. D'ailleurs l'idée d'organiser cette visite vînt du médecin de marine Wessel Wermeer. En sa qualité de médicin sur le porteavions Karel Doorman et ayant ainsi ses entrées aupres des hautes sphères des services de la marine, sa suggestion vînt bien à-propos.

De Groningen faisait partie d'un équipage faisant le tour du monde, mais eut la malchance de patrouiller durant un mois dans les eaux de la nouvelle guinée pendant que l'autre navire (soeur) devait se rendre à Hong Kong en tour de dock.

Pour l'équipage, en guise d'emplâtre sur la plaie, une visite à l'île de Pâques fut inscrite sur la feuille de route. Wessel Vermeer demanda une mutation temporaire et elle lui fut accordée pour faire ce voyage. Ce fut pour lui le sommet de sa carriere. A l'instant ou le Hr. Ms Groningen mouillait en rade de Hanga Roa, montait à bord l'officier marin chilien Arentsen accompagné du pere capucin Sebastian Englert, Bill Mulloy et Gonzalo Figueroa. Arentsen étant gouverneur de l'île pour une période de deux ans.

Les officiers furent invités en "Bolchevique" par le père Englert et Bill pour une tounée dans l'île. Le père appelait ainsi la jeep rouge qui lui fut donnée entre-temps par Thor Heyerdahl. Cette équipe néerlandaise fut très impressionnée, sourtout par l'étonnante vitalité, à 72 ans, du père Englert, provocant l'admiration de tous.

Les sous officiers et matelots, tels que leurs collègues en 1955, s'amusaient à galoper sur l'île, quelques heures sur un cheval qu'ils avaient loué au prix d'un paquet de cigarettes. Il n'y eut pas

...Koll, continued from previous page.

this is not true of the wood carvings which are often phallic.

If sheer numbers of petroglyphs can be used as a criterion of importance, the vulva-form symbol can be ranked with other recognized symbols such as the bird cult's birdman, the ancestor cult's statues (moai), and the skull-like petroglyph that represented the god Makemake.

At the completion of the field season, a preliminary report was submitted to Bill along with field notes and copies of the petroglyphs. It was intended to be a part of the International Fund for Monuments' publication, "Investigation and Restoration of the Ceremonial Center of Orongo, Part Two." Unfortunately, this was not to be; Bill died in March, 1978.

Reference: Georgia Lee, Easter Island Rock Art: Ideological Symbols as Evidence of Socio-Political Change. 1986, Ph.D. Dissertation, University of California, Los Angeles.

Robert R. Koll Apdo Postal 158 Ajijic, Jalisco, Mexico

* Editor's note: Of the total number of petroglyphs recorded to date (4037 island-wide) we have 473 birdman, and 554 komari—respectively 11.7% and 13.7% of total. These figures include those of Koll's sites but do not reflect the numerous small stones, poro, with komari that have been collected over the years, or the petroglyphs now in museum collections around the world. Many of these also have both types of motifs.

d'accident ce qui permis à Wessel Wermeer de demeurer tranquillement en conversation avec Englert et Mulloy.

L'ile etait alors encore complètement coupée de monde extérieur. Un navire plein de gars Hollandais offrait pour cela des possibilités, et le premier officier, ainsi que plus tard le vice amiral Velkamp se souvenait de l'insistance du père Englert, de prolonger d'une nuit le séjour. Toutes les suites seraient pour son compte. Les ordres ne permirent pas cet étât de choses. Ce fut quand même du gout du pere Englert de distinguer le matin, les effluves odorantes d'une succulante choucroute. Le depart fut reporté de quelques heures, Englert et Mulloy étant les principaux hôtes de cette réception. Chargés d'un tonnelet de choucroute et de la bière indispensable, Père et archéologue quittèrent le navire de la meilleure humeur qui soit.

Le De Groningen arriva sur l'ile au moment ou Bill Mulloy terminait la restauration de l'ahu Akivi. Ayant débuté celle-ci le 4 mars il fut officiellement terminé le 18 octobre. Une lettre datee de Wessel Vermeer datée du 10 juillet 1961 et venant de Santiago nous avisait de cela.

L'île de Pâques avait insisté auprès de lui pour que la fin des travaux se fassent le 12 octobre.

Cette date coincidait avec la fête nationale "de dia de la raza" commémorant l'arrivée de *Christophe Colomb* dans le nouveau monde. Autour de l'ahu Akivi une grande fête fut donnée et l'on cru revivre le temps des anciennes religions, mais les passions se calmerent et finalement tout revint dans l'ordre!

Bill Mulloy regrettait que la visite du De Groningen, fut de si courte durée. Il y avait toujours plus à voir. Il y fut sensible et remémora son temps de service, il écrivait dans la lettre: brief: "But as I remember very well from my own army experience, the military is always in a hurry. One hurries and then one waits."

Le de Groningen s'en allâ la tombée de la nuit, acclamé par toute la population qui s'était rassemblée a Hanga Piko.

English Summary: This commemoration honoring Bill Mulloy is a good occasion to recall the visit of the Dutch warship Her Majesty's Groningen to Easter Island on November 6, 1960, a visit profitable to Mulloy. Another Dutch ship, the frigate Van Zijll had visted five years earlier. In 1960 the Groningen and her sister ship were making a voyage around the world, but ended up patrolling the waters around New Guinea for a month while the sister ship was in dry dock in Hong Kong. The experienced marine doctor Wessel Wermeer, being on board, suggested a side trip to Easter Island to lift the crew's spirits. For Wermeer, this was the apex of his career. The Groningen was met, when it anchored at Hanga Roa, by the Chilean marine officer Arentsen (then governor of the island), Father Sebastian Englert, Bill Mulloy, and Gonzalo Figueroa.

While the ship officers toured the island in a red jeep "Bolshevik," given to Englert by Heyerdahl (they were impressed with the Father's vitality at 72 years of age), the non-commissioned officers and sailors rode around the island on horses they hired for the price of a pack of cigarettes. In the evening, at Father Englert's insistence, the ship did not depart, but stayed to host a feast for Englert and Mulloy of sauerkraut and beer. Full of quite a bit of sauerkraut and beer, the Father and the archaeologist left the ship in the best possible humor.

The Groningen had arrived just as Mulloy was finishing the restoration of Ahu Akivi—begun on March 4, it was officially finished on October 18. Easter Islanders had wanted the work to be finished by October 12, their national holiday—"Columbus Day." A big festival was given at Ahu Akivi and for a while it seemed like the days of the ancient religious ceremonies, but eventually passions calmed and order was restored.

Bill Mulloy, in remembering the shortness of the *Groningen's* visit wrote: "But, as I remember very well from my own army experience, the military is always in a hurry. One hurries and then one waits."

The Groningen departed at nightfall, cheered by the whole population which had assembled at Hanga Piko.

Dr. Peter J. Van Wiechen Netherlands



Concerning William Mulloy's Archaeoastronomy

William Liller

ONE OF THE MORE PLEASANT ASPECTS of my involvement in the archaeoastronomy of Rapa Nui has been the warm and lively correspondence that I have had with Dr. Mulloy's widow and collaborator on many things, Mrs. Emily Ross Mulloy, and a most agreeable and as yet all too brief acquaintance with their charmer of a daughter, Brigid Robinson.

It all began after I had accumulated some questions regarding an extensive and carefully executed set of Mulloy's field notes that Brigid sent to Georgia Lee who in turn gave a copy to me. This weighty and important volume contained the results of a 69 day circuit of the island that Mulloy made with two assistants, Daniel Ika and Jocobo Riroriko, in late 1965. Among other things, they took with them an alidade, a table of rising azimuths of the sun, and a map of the 243 coastal *ahu* catalogued by his friend and long-time island Padre, Sebastian Englert.

Mulloy's goal was to measure as precisely as possible the orientations of these ceremonial platforms. Clearly, the underlying purpose of the study was to find out which ahu were oriented astronomically since at several other sites, Mulloy had noticed that several of the relatively few ahu surveyed up until that time seemed to be oriented such that perpendiculars to their facades pointed towards the rising (or setting) sun at the time of a solstice or an equinox. However, many of the earlier measurements had been made with magnetic compasses, and it was well known then that strong magnetic anomalies exist on many parts of the island.

In a letter that Mrs. Mulloy wrote to Georgia and me, she said that "Bill never published this study...because he hoped to find an astronomer who could help him check the data." She added, "Too bad Dr. Liller and he could not have met back then." I couldn't agree more.

At the present time Georgia and I are preparing a paper that will present Mulloy's results and include our analysis and discussion. Here follow a few preliminary results that well illustrate the care and meticulousness that Mulloy took.

To establish the accuracy of Mulloy's observations, I compared them with the orientations of 27 ahu that I had measured with a theodolite or alidade, using each time the rising or setting sun, moon, or stars to establish an astronomical reference frame. One of the first difficulties that quickly became apparent to me was that a platform constructed of crudely cut (or uncut) stones and left to the elements and a variety of human whims for several hundred years does not usually present a well-defined facade to measure. Consequently, an ahu 57 meters long whose end-point locations are indeterminate by 1 meter can not be measured to an accuracy of better than one degree. A similar ahu only one-tenth as long will, of course, have a measured orientation ten times more uncertain. And many semi-pyramidal ahu, often semi-destroyed as well, have only the vaguest outlines.

Nonetheless, when one considers the ten best defined ahu that we measured in common, one finds that on the average the difference in our measurements is 0.93 degrees when signs are disregarded, and -0.15 (+1.15) degrees taking signs into consideration. These results not only indicated to what extent we can rely on Mulloy's orientation measurements, but they also demonstrate that

there was no detectable systematic error in his measurements. The latter point is important because during one stretch of 42 days, Mulloy referred all measurements, 304 of them, back to a single observation of the setting sun, normally a risky procedure but not when carried out with caution and attention to details.

Somewhat larger differences are found when one compares Mulloy's orientation values with those derived from aerial photographs; the corresponding values for 54 ahu seen distinctly on the prints are 1.94 degrees and +0.96 (+2.26) degrees. These larger values suggest either that one measures a different quantity on the photos—an axis rather than a facade, for example—or simply that the photographs are not sufficiently clear for precise measurements.

Although nothing in his notes indicates it, Mulloy must have felt at least a little disappointed with the results since the number of costal ahu that were astronomically oriented was hardly greater than what would be expected statistically from a set of randomly oriented structures. The great majority were constructed to have their long axes parallel to the adjacent coast.

However, two inland ahu, Huri A Urenga and A Kivi (or Atio), were not measured by Mulloy during his sojourn, but earlier he and his close friend and colleague Gonzalo Figueroa had suggested that A Kivi, together with another ahu to the west, Vai Teka, had been purposely oriented with the rising equinoctial sun. And later, working with his protege and student Sergio Rapu, Mulloy found good reasons to believe that Huri A Urenga was intentionally oriented solstitially.

This later site, Huri A Urenga, now well-established as a true astronomical observatory (see *RNN* No.6, p.5), stands as my own private monument to the wisdom and perspicacity of William Thomas Mulloy in whose footsteps I respectfully tread.

William Liller Instituto Isaac Newton Ministerio de Educacion de Chile



The William Mulloy Memorial Library

It was William Mulloy's desire, and so stipulated in his will, that his collection of books be placed on Rapa Nui. Today some 2000 volumes are in Chile, awaiting a proper repository for them

Last November, Don Sergio Rapu, Georgia Lee, and William Liller met informally on several occasions to discuss the possibility of creating a William Mulloy Memorial Library on the island. Subsequently, letters describing the project were sent out for comments and suggestions and we soon hope to establish a small steering committee to explore possibilities for raising funds to make Mulloy's library a reality.

The official announcement of the project's existence will be made on May 3rd, which would have been Mulloy's 71st birthday.

William Mulloy

and the Beginnings of Wyoming Osteological Research on Easter Island

George W. Gill, Ph.D.

AS I SIT HERE AT MY FIELD DESK under the palm trees on Easter Island (January 1988), it becomes easy to reflect back over the nine years of my Rapa Nui osteological field research. Like so many of us involved in different aspects of Easter Island research today, my first encouragement and help came from William Mulloy.

Soon after I joined the University of Wyoming faculty in 1971 as their physical anthropologist, Bill began working on me. He told me of the rich deposits of human remains in caves and ahu on the island that were desperately in need of archaeological salvage, curation and study. I was heavily involved in a large project in West Mexico in those days, and put Bill's ideas to the back of my mind for a time.

I was not without an interest in (and some knowledge of) Easter Island, however, since Carlyle Smith (Bill's friend and colleague from the days of the Norwegian Expedition, '55-'56) was my first anthropology instructor during my undergraduate years at the University of Kansas. Carlyle was only three years away from the expedition when I sat there in that introductory class and viewed slides of Pitcairn and Easter Island. These made a vivid and lasting impression.

Bill and I did not seriously talk of getting the osteological work started, however, until 1973 when we were briefly in the field together in West Mexico. That year was my last season of full excavations on the burial mounds of that project and Bill asked to ride along with me to visit excavations for a couple of weeks (and in retrospect, I think, to size me up as a field osteologist).

There at Venadillo Site, southern Sinaloa, Bill and I made serious plans for Easter Island. Another man working with us at Venadillo Site, Bob Koll, was also inspired by Bill's stories of Rapa Nui, and he got there before I did (to do petroglyph studies). About this time a young man from Rapa Nui, Sergio Rapu H. (yes, the present Governor of Easter Island), came to the University of Wyoming to study archaeology with Bill and took my human osteology course. He not only did excellently in the course and came to develop an appreciation of skeletal research, but joined Bill in urging me to go soon to the island to recover bones.

Bill then put me in touch with Gonzalo Figueroa of the Pacific Foundation in Santiago (another friend and colleague of his from the Norwegian Expedition). This man of unusual ability and dedication to Easter Island research, has probably at one time or another helped most of you, and has certainly been the central person many times for me in the facilitation of my osteological work at all levels in the Chilean government.

By 1978, following Sergio Rapu's work at Ahu Nau Nau (where almost 100 human skeletons were recovered), plans were nearly in place. With so many bones out of the ground, the osteology work needed to start.

Tragedy struck that year, however, as Bill's lung cancer ended his life. Practically on his death bed,he was still able to meet with me often and help enthusiastically with the field plans.

We never reached Easter Island together, but by the following June, thanks to Bill's efforts, I was there and working on the Ahu Nau Nau collection. At that time I was also able to join Sergio Rapu in some South Coast excavations and lay groundwork for the 1981 Easter Island Anthropological Expedition. The latter was a very successful field effort which spanned the first half of 1981 and was oriented toward burial archaeology and human osteology. By the

end of that season, we had exhumed and curated over 300 skeletons and had collected full osteological data on many of these. The coprincipal investigators on this project were Sergio Rapu (Easter Island Museum), Claudio Cristino (University of Chile) and myself (University of Wyoming). We had the good fortune of additional grant support from National Geographic Society, Center of Field Research-Earthwatch, and the Pacific Foundation. Significant amounts were also provided by the government of Chile which allowed the full-time support of Andrea Seelenfreund as a field archaeologist. Another archaeologist, Leslie Shaw, and two osteologists, Scott J. Baker and Suzanne M. Bennett, all from Wyoming, were supported by my own National Geographic and Earthwatch funds. So each of the three principal investigators maintained a staff of trained anthropologists in addition to a small work force, and throughout the duration of the field season 32 Earthwatch volunteers participated (four teams of eight individuals each).

At an organizational meeting on Easter Island in the early weeks of the expedition, coordinated by Gonzalo Figueroa, I was designated scientific leader for our team, and specific goals and plans were established. Field excavations were run concurrently with field osteology laboratory processing and data collection. The main purposes of this research (then and now) have been to excavate and analyze a large, well-documented sample of human remains from Easter Island in order to accomplish a full osteological study, and to record cultural information in order to better understand practices of burial (and other cultural behaviors) of the early inhabitants. During the 1981 field phase a total of 19 burial sites were excavated which represented nearly all regions of the island and various burial contexts (caves, ahu, avanga, poe poe, etc.) University of Chile personnel were not available to assist in the field as much as originally planned, but their useful survey records were made available to other expedition personnel throughout the field season.

Statistical and computer analysis of skeletal data, to include coding of osteometric and other skeletal information, has been under the supervision of another co-investigator, Douglas Owsley, Smithsonian Institution, Department of Anthropology. This year Doug and his assistant, Bob Mann, have joined me in the field lab for continued analysis of the skeletons (Doug and Bob's first trip to Rapa Nui). Right now they are finishing a detailed inventory of skeletal components present on each skeleton and evaluating pathologies in detail. This will soon allow some very detailed information of disease and injury during the Late Prehistoric and Protohistoric Periods.

As they are conducting this important evaluation, I am (with the assistance of Sonia Haoa C.) completing final osteological data collection on the last skeletons (not completed in 1981). Funds for this year's laboratory trip have been provided to us by the Kon-Tiki Museum, Oslo; the Dunn Estate Fund of the University of Wyoming Department of Anthropology; and the Smithsonian Institution. The analysis of Easter Island skeletons has been directed along three main lines of inquiry: 1) pathology, injury and mortality; 2) intraisland skeletal variation, lineage boundaries and marriage patterns, and 3) cranio-metric and anthroposcopic analysis of skeletons, with an eventual goal of population distance calculations and determinations regarding Easter Island origins.

Regarding the pathology work, we have so far published only on dental pathology. The caries frequency among all adult teeth was 27.1 on Easter Island, the highest rate known among prehistoric peoples. Limited dietary opportunities (high carbohydrate) is the most likely explanation.

Concerning intra-island variation, two separate studies (a discriminant function utilizing 32 discrete traits of the skull, and an

Continued on page 13...

Letters from the Island

Brigid Mulloy Robinson

IN JANUARY 1956, Bill Mulloy wrote to his friend and colleague, Dr. Marie Wormington

For the first time in my life I find myself among a group of people who really know the meaning of life and how to live it....I shall be sorry to leave this island and I...carry away memories that I shall never forget.

Bill Mulloy's technical reports and published papers are tightly written and scientific; it is in his letters home that we catch glimpses of him as a person. What comes through is his genuine love for the island and for the Rapanui themselves. The following exerpts are taken from letters he sent to his wife, Emily Ross Mulloy.

When Bill first arrived on the island he lived in Mataveri at the home of the governor. Arising around 4 o'clock in the morning, he and his crew were off early for Vinapu. Around 8 a.m. they had a meal in the field. Bill writes:

The first time we worked out here I was shocked to find at 8:00 that [Martin Rapu] had rigged up a table with a white table cloth and silverware...so I could eat. I told him I didn't want that and went and squatted on my heels with the men [who] were quite surprised and he told me later that he didn't think I could eat like they did but that he had now decided that the Chilenos were mas delicado than the Americanos. Anyway, the story got all over the island in 24 hours or less and I now find that I am a much sought after guest in every native house on the island. Life could be just one long hula party if I had time. I am beginning to wish I were an ethnologist instead of an archaeologist. Believe it or not, I am getting to be an expert at dancing...the sau-sau....These people have some of the most beautiful songs I have ever heard.

The 20 men on the dig are a bunch of characters. All good Polynesian types and not a pair of shoes in the lot. They drive a shovel in with their bare feet in a manner that is shocking.... Pay is a little under 40 cents a day and we are paying the highest wages ever paid on the island. In addition...these men get 10 cigarettes and a cup of rice every day.... Everybody on the island is wild to work for us. They are a good bunch and it is a shame to see such fine people in such shape. They do get enough to eat...but no clothes and little of anything else.

As work continued, Bill's ability to deal politically with the islanders was put to the test:

I've just been through a strike of the native laborers of our crew. It was one of the most interesting and funniest things that has happened to me recently. This morning when I went out to get my horse I found my whole crew of 20 men lined up and in much of a holiday mood and saying that they would not work any more unless in addition to their regular wages of 30 cents a day they were given a [weekly] ration of cloth from our supply of trade cloth....I had been expecting this...so I had my speech all ready....I think this speech was the best I have ever made or ever will make in my entire career. I first told them how they were all my brothers and how deeply I loved them and how pained I was that they would not be working for me anymore... my heart was bleeding that they were unhappy but that we just couldn't pay them any more. But above all, I wanted them to be happy so we would just dismiss the whole crew so that they could go home to their families. Pure

corn...but they loved it and there were tears in all our eyes. I then went around and shook each man's hand and gave him a big abrazo and told him what a wonderful worker he had been and how we would always be life-long friends and how sorry I was to see him go and how heavy my heart was...All this was returned in kind and they told me how they loved me and my horse too and how sorry they were that they couldn't afford to work without the extra cloth and that if it were not for having to support their families they would come to work for me for nothing as they had never had a patron like me...I then picked up my saddle bags and walked back into the house leaving a completely astounded crew. Apparently this strike business is standard procedure and from their experience with the Chilenos they expected me to get mad and rant around and eventually give them the cloth. This would have been the signal for another strike for something else in a few days. The new approach apparently caught them off guard and they loved it. About an hour later one of the men came in and said that because they loved me so much they would come back to work if I gave them a raise of 10 pesos a month (about 9 cents). The amount was so small as to be meaningless even here on Rapa Nui and was just a face saver...So I told them that I knew they would be unhappy without their cloth and I couldn't bear to see my good friends unhappy so I wouldn't take them back for such a pittance. Also that I was going into town to try and get another crew but I was sure I could never get another as good .. and my heart was very heavy. He said that he understood perfectly how I felt and he felt so sorry for me that he could hardly stand it and would have to go home before he broke up completely, but there was one other thing: the men hadn't yet received their cigaret ration for next week and could they please have it now? I explained that while I would like to give them the cigarets, I knew that as they were not working for me anymore they couldn't accept them as salary and I was afraid that some of them would think I was trying to bribe them to work for me and I knew they would be unhappy if that were the case. He said that the thing the men loved about me the most was the deep sensitivity of my feelings for them and that they had never come across anyone who understood so well how they felt. All this sounds very corney...except...the Rapa Nui were all perfectly sincere in everything they said—there was no sarcasm here. And-this is even harder to explain-I think that I am now enough of a Rapa Nui to have been sincere in everything I said. It's a funny world. To make a long story short, the men were all back at 2:00 to tell me that their wives...really didn't need any cloth anyway, and they had all rushed back to tell me that they could go back to work under the old terms.... All the protestations of mutual satisfaction were repeated. I passed out the cigaret ration and everybody was happy. Later on I got a pig and we all went down to the beach and roasted it in a curanto and had a party-pinas, camotes, grapes, taro, plaintain, and God knows what all. If I can get up to go to work tomorrow it will be a miracle. I think I'll go on a strike

Bill had moved into the Martin Rapu household in the village, and learned to savor the rhythm of life and the warmth of the Rapanui. When it became time to leave he described the farewell parties and emotional goodbyes which stretched on for days as their time of departure was postponed again and again:

The last week has been the gosh awfullest collection of good bys that I ever lived through. The Polynesians are a very emotional people and the family with which I have been living considers me as much a member...as any other member. To add

Continued on next page...

to it, Martin...is going with us...so two members of the family are leaving. It is hard to understand from our cultural point of view how these people react to a leave taking but the fact is that Pascua is so isolated that nobody ever leaves, or if he does, he never comes back. Leaving Pascua is exactly like making a trip to Mars.... when we first planned to leave, the Rapu family gave a big leave-taking party It lasted all day and most of the following night. Practically all of the people in the village were there at one time or another and it was the occasion for great festivities. The dancing started in the afternoon and lasted far into the night. People cried on our shoulders until I could hardly stand it anymore. And cried very sincerely too. I have to admit that I cried some myself. Martin's mother, Filomena Pua, who considers herself my mother too, was practically hysterical. She would be singing for the dancing and suddenly throw her arms around one or the other of us and cry her heart out. Then she would start to sing again and later repeat. I have told her many times that Martin would only be gone for about nine months...but she cannot understand. Going away means going away for good.

The party was one of very mixed emotions. Having a lot of fun and being very sad at the same time. These people have fun with everything they do. They even have fun being sad. As you might expect, I was a wreck when the party was over. Morning came and we find that the ship is going to stay another day. The next afternoon the same thing started again with only slightly dimished intensity....[and] it went on until we left. I must admit though that even the Rapa Nui finally began to show some signs of emotional exhaustion. Me, I was absolutely out on my feet.

I...too am very sad to leave here. I have been extremely close to these people for six months and they have taught me more about living than I have learned in all my previous life. There is a rapport among individuals, a kind of thinking about the other fellow, a selflessness that European culture lost many thousands of years ago. These people live every minute of their lives. Every smallest act is rewarding in producing a feeling that every member of the group is on your side no matter what happens. It is true that these people have nothing in the way of material goods but they have something no American has. They know how to extract the last drop of happiness from every minute and let the future take care of itself. In the United States we have forgotten how to live for the moment. We live in the future and as a result, the moment passes us by. Our culture demands this of us ...and it is too bad. I am a bit amused...for what I am talking about is the mechanical solidarity of the folk society about which I have been yakking in my clases for years. I only knew the words [but] didn't know what I was talking about. I think maybe I know a little now; not much, for this is a way of life one must learn from the cradle.

Bill's scientific and archaeological contributions are obvious to any student of Rapa Nui as well as the casual visitor. His motivation is more subtle. That emergent love affair so apparent in his initial letters home grew into an enduring, mutually enriching relationship that was to span the remainder of his personal and professional life, and forever change the face of Rapa Nui.

> Brigid M. Robinson 1366 11th St. Los Osos CA 93402



At the Beginning

Dr. H. Marie Wormington

THERE ARE MANY TYPES OF TREASURES, but none more important than close friendships which go on for many years. My late husband, George (Pete) Volk and I were extraordinarily fortunate in having such a friendship with Emily and Bill Mulloy. Emily continues to be one of my dearest friends, and I have a keen interest in the Mulloy children and grandchildren.

In 1955 I was asked by the Director of the Glenbow Foundation of Calgary, Alberta, to consider a study of the archaeological potentialities of the area. A brief trip in May, and visits with owners of major surface collections, indicated that such a project would be well worth undertaking. I immediately thought of Bill Mulloy, a professor at the University of Wyoming, who had already done remarkable studies in the Northern Plains of the United States. In July we began a joint two month survey of sites and collections in southern and central Alberta, and Bill undertook test excavations of some sites with Paleo-Indian artifacts. We studied and photographed many thousands of artifacts from private collections. Each night we developed the negatives of pictures taken during the day, to insure that we had an adequate record before moving on. No dark rooms were available, and we had to improvise in motels and private homes.

Toward the end of the field season, I received a letter from Thor Heyerdahl asking if I could recommend an archaeologist who would participate in the Norwegian archaeological expedition to Easter Island and the east Pacific. Bill was fascinated by the project, and I wrote immediately to Heyerdahl with a strong recommendation. A few days later, a letter arrived saying that an archaeologist, Carlyle Smith, had been hired, and there was no longer an opening. Bill was disappointed, but was happy for his friend, Carlyle's, sake. Shortly after came another letter from Thor saying that, after receiving my letter, he had decided to include Bill as well.

Bill was delighted, but he began to worry about the fact that he had reservations about Heyerdahl's theory concerning the source of the Easter Island population and he wanted to be sure that he was not accepting the job under false pretenses.

Time was short and mail deliveries uncertain, so the best solution was to speak to Thor in Norway. We were in an area with only a few small towns where a long-distance call to a town a few hundred miles was a major project. It took almost a whole night and involved our taking over a switchboard but, at last, contact was established and Bill was able to express his reservations. Thor replied that he was not seeking someone who would necessarily agree with him, but someone who would evaluate the evidence in a fair and unbiased manner. Bill was overjoyed.

Time was running short and Bill had to return immediately to the United States to obtain travel documents, take shots, and do all the things involved in preparing for such a journey. It was not a great pleasure for me to close the camp along, return vehicles, and take care of the other end of the season matters in the midst of an early snowstorm, but I was truly delighted by the reason.



...McCoy... continued from page 1.

for example, that in his later work he refrained (wisely in my view) from fitting or forcing his data into rigid developmental stage sequences, including the Norwegian Archaeological Expedition three-period sequence to which he had contributed.

In Mulloy's brand of archaeology, with its focus on contextual details and particulars, there were no shortcuts to interpretation and understanding. His experience at Vinapu, in 1955-56, was enough to convince him that Easter Island prehistory was more complex than it might first appear. His adherence to this conviction is evident in his steadfast view on periods and phases, which meant that he purposefully avoided confounding variability and change.

An exception to his usual reluctance to engage in conjectural history is a paper titled "A Preliminary Culture-Historical Research Model for Easter Island" that unfortunately appears to be little known outside of Chile where it was published in 1977 by the Instituto de Estudios Internacionales de la Universidad de Chile in a collection of seminar papers, Las Islas Oceanicas de Chile, edited by Gloria Echeverria Duco and Patricio Arana Espina. [Ed.Note: Exerpts from this paper are included in this issue].

In this paper Mulloy presents a number of stimulating hypotheses concerning, for example, ahu destruction where he speaks of class conflict as an alternative to the orthodox view of internecine warfare. Mulloy was clearly interested in matters other than cultural origins and chronology, and herein lies the great tragedy of his early death. Here in this paper is an inkling of the potential, indeed promise, of a book on Easter Island prehistory with lasting value. One wishes that he had left us more threads on which to build our own tales or models. So not only was much of his work left unpublished, but there is also good reason to believe that many of his most important ideas had never even been voiced.

One thing that I am certain about and that is that the likes of him will not be seen again in Easter Island archaeology. I am referring to his dedication, and more particularly, to his long-term commitment to the archaeology and inhabitants of the island. Mulloy was the quintessential "Islandman", who though never attaining the dream of becoming a permanent resident after retirement, in the course of

what amounted to repeated pilgrimages over a period of years developed a sense of place and the deep understanding that only comes with long-term attachments.

In the history of Easter Island archaeology, Bill Mulloy is exemplary of what Matthew Arnold called "touchstones" ('those recollections which are our standards and our beacons'). Though I promised myself to keep sentimentality at bay, I can think of no finer parting words to express lingering feelings of absence and vacancy than those of Seamus Heaney from a poem he wrote concerning his mother's death.

The space we stood around has been emptied Into us to keep, it penetrated Clearances that suddenly stood open

Seamus Heaney, The Haw Lantern

000

In preparing this short piece I have drawn freely from "The Sense of Place" in Seamus Heaney's book, *Preoccupations: Selected Prose 1968-1978* (Farrar, Staus and Giroux 1980) and a review article of his latest collection of poems, *The Haw Lantern* (Faber and Faber 1987) by George Watson that appeared in the *Irish Literary Supplement* (Vol.6 (2), p.35 1987). The wording, "...the likes of him will not be seen again...," is a paraphrase of the prophetically haunting words of Tomas O Crohan, the author of *The Islandman* (translated from the Irish by Robin Flower and originally published in 1937 by the Talbot Press, Dublin), in reference to the character of the people and the old lifestyle in the now abandoned Blasket Islands.

Patrick C. McCoy, Ph.D. Aiea, Hawaii



Selected Mulloy Bibliography

- 1961 The Ceremonial Center of Vinapu. In *Archaeology of Easter Island*, (Heyerdahl and Ferdon, eds.), Mon. Sch. Amer. Res. and Mus. New Mexico, no 24, pt. 1, pp. 93-181.
- 1964 Easter Island: Reply to Barthel's Review. (W. Mulloy, A Skjölsvold, C. Smith) American Anthrolpologist, vol. 66.
- 1966 The Archaeological Heritage of Rapa Nui. Gonzalo Figueroa, coauthor. Museums and Monuments Division, UNESCO, Paris.
- 1967 Easter Island. *Natural History*, vol. LXXVI, no 10, Dec. 1967, pp. 74-81.
- 1968 Preliminary Report of Archaeological Field Work, February-July, 1963 (Easter Island). International Fund for Monuments. Bulletin 1 of the Easter Island Committee. Amplified and republished 1975.
- 1969 Review: Mysteries of Easter Island by Francis Mazière. Natural History. Nov. 1969.
- 1969 Father Sebastian Englert, 1888-1969. Oceania, vol. XL, no. 2, December, 1969.
- 1970 Preliminary Report of the Restoration of Ahu Vai Uri—Easter Island. International Fund for Monuments. *Bulletin 2*.

- 1970 Island at the Center of the World, by Father Sebastian Englert. Translated and edited by William Mulloy. Charles Scribner's Sons, New York.
- 1970 A Speculative Reconstruction of Techniques of Carving and Erecting Easter Island Statues. *Archaeology and Physical Anthropology in Oceania*, vol. 5, no. 1, pp. 1-23.
- 1973 Preliminary Report of the Resoration of Ahu Huri A Urenga and Two Unnamed Ahu at Hanga Kio'e—Easter Island. International Fund for Monuments, Bulletin 3.
- 1974 Contemplate the Navel of the World. *Americas*, General Secretariat, Organization of American States, Washington, vol. 26, no. 4, April, pp. 25-33.
- 1975 A Solstice Oriented Ahu on Easter Island. Archaeology and Physical Anthropology in Oceania, vol. 10, no. 1, pp. 1-39.
- 1975 Investigation and Restoration of the Ceremonial Center of Orongo—Easter Island, Part One. International Fund for Monuments. Bulletin 4.
- 1975 Double Canoes on Easter Island? Archaeology and Physical Anthropology in Oceania, vol. 10, no. 3, pp. 181-184.
- 1978 The A Kivi-Vai Teka Complex and its Relationship to Easter Island Architectural Prehistory. Gonzalo Figueroa, coauthor. Asian and Pacific Archaeology Series, No. 8, Social Science Research Institute, University of Hawaii at Manoa.

...Gill... continued from page 9.

evaluation of unusual patterns in post-cranial anomalies) show significant difference around the island in prehistoric times. One of these studies will soon be published. They both strongly suggest not only that the ahu burial chambers and caves do, in fact, represent places of family or lineage burial, but also strongly support the previous hypothesis of Late Period tribal endogamy. One of the post-cranial anomalies (family peculiarities) that is most obvious is a deformed patella, or kneecap, called "bipartite" patella. This was very common at Ahu Nau Nau in ancient times. Another is a sacroiliac fusion (ankylosis) that was very common on the south coast (Oroi caves area), but quite rare elsewhere. The boundary between the North Coast population at Ahu Nau Nau and their neighbors at Ahu Mahatua was obviously an important one with no sign of gene flow across the boundary. Some marriage between both these groups and the South Coast population(s) is suggested, however. Our evidence also suggests that the Ahu Nau Nau population (assumed Miru, or royal lineage) was highly endogamous. Even though they tolerated out-marriage with departure from the lineage area, marriage into the group was apparently not permitted.

Preliminary analysis of 50 of our skull measurements has already begun to shed new light on the biological relationships of Easter Island's prehistoric inhabitants. This, plus a re-evaluation of Rupert Merrill's earlier work (on the bones from the Norwegian Expedition), has led to some reinterpretations of earlier findings, suggesting closer ties between Easter Island and the Marquesas islands. Much more osteological analysis lies ahead before a definitive statement can be made regarding a possible genetic contribution from South America.

The unfortunate statement by Jim Wheeler (one of our 1981 Earthwatch volunteers) in Archaeoastronomy (1982, Vol.V(3); 8) that... "Some of the skeletons were found to be of American Indians..." is worse than a misquote, since no statement of any kind has ever been made by us on this controversial topic. We have scarcely begun our evaluation of possible Amerindian traits (and yet the Wheeler quote has made it around the world in at least three languages).

So, even through we are not prepared to say much yet regarding the origins of Easter Islanders (until comparative samples are compiled) we do know that the Easter Island skeletons are clearly those of Polynesians; and if we do eventually detect any Amerindian genetic contribution, it is going to be a small one. We do, at this time, have a strong start into the human osteology of Easter Island.

And who do we thank for getting us started? William Mulloy.

George W. Gill, Ph.D. Department of Anthropology University of Wyoming Laramie, WY 82071





Bill Mulloy and George Gill in West Mexico in 1973

Meeting of the World Monuments Fund

A meeting, sponsored by the World Monuments Fund, was held in Santiago from March 5 to 8 to study ways to conserve and protect the archaeological heritage of Rapa Nui. Attending the meeting were members of the Direccion de Bibliotecas, Archivos y Museos; Corporation Nacional Forestal (CONAF); Centro Nacional de Restauracion; Universidad de Chile; ICCROM; Museo Nacional de Historia Natural; Consejo de Monumentos Nacional; Museo Sociedad Fonck; Don Sergio Rapu, Gobernador Provincial; and Georgia Lee, Institute of Archaeology, UCLA. The meeting was coordinated by Dra. A. Elena Charola, representing the World Monuments Fund and ICCROM.

A coordinating committee was established to assist the Consejo de Monumentos in reviewing submitted projects, preventing damage to sites, and setting standards for future research projects. In particular, points that were discussed include stone conservation, natural resources, the Archaeological Museum on the island, the William Mulloy Memorial Library, and preservation of petroglyphs and rock paintings.

In the next issue of *Rapa Nui Journal*, we will include a summary of the final report of this important meeting.

The Mulloy Plaque

Readers may be interested to know that the Memorial Plaque near Tahai actually has three different readings:

English: "By restoring the past of his beloved island, he

also changed its future."

Spanish: "Grande fue—como sus obras—su amor y en-

trega a Rapa Nui." ["His love and dedication

to Rapa Nui—like his work—were great."]

Rapanui: "Hai Hapi—Hai Haka Tutu'u te Aringa Ora

To'ona Here Rahi Mo Rapa Nui: "I Haka Tikea Mai Ai." ["By researching and restoring the living faces, he showed his love for Rapa

Nui."]

William Thomas Mulloy 1917-1978

May 1917	Born in Salt Lake City, Utah, USA
1936-37	Field work in Utah with John Gillin
1937-41	Field work in New Mexico
1938-39	Field Archaeologist for the Louisiana State Archaeological Survey at the Crooks site
1939	BA U. of Utah
1940	Field work in Tennessee
1940-42	Field work in Montana
1942	His first monograph, "The Hagen Site," (Which was eventually reprinted in 1976 as Volume 4 of Reprints in Anthropology)
1942-46	US Army, progressing to the rank of Captain
	while serving as Japanese Language Instructor. He continued in the Reserves and attained the rank of Major
1948	MA U. of Chicago
1948-78	Professor of Anthropology at the University of Wyoming
1950-52	Field work in Wyoming
1953	Ph.D. U. of Chicago. Dissertation: "A Preliminary Historical Outline for the Northwestern Plains"
1954	Selected Chairman of the 12th Plains Conference held in Lincoln, Nebraska
1955	Field work in Alberta
1955-56	Member of Norwegian Archaeological Expedition to Eastern Polynesia, with 5 months of Rapa Nui. Worked on the ceremonial center at Vinapu
1957-58	Field work in Wyoming
1959-61	As a visiting Fulbright scholar, taught at the U.
	of Chile, Santiago. Visited Rapa Nui for 13 months, excavating and restoring Ahu Akivi- Vai Teka complex
1960	Establishment of the William Mulloy Commemorative Scholarship by the Wyoming Archaeological Society
1964	Received the George Duke Humphry Distin-
1065	guished Faculty Award
1965	Four month survey of coastal <i>ahu</i> to determine possible solar orientations

1966	Study for UNESCO on the conservation and restoration of monuments. This was the year work began on an airstrip to accommodate commercial jets.
April 1967	Linblad tours begin with first scheduled LAN- Chile flights. Mulloy, as well as Carlyle Smith, lead several tours during this and following years
Dec 1967	The statue at Ko te Riku (Tahai) is re-erected by a team headed by Gonzalo Figueroa, leading to the choice of this ahu for restoration beginning the following year
Feb-July 1968	Heads a team including Patrick McCoy, William Ayres, Herbert Pownall from the U. of Wyoming, and Gonzalo Figueroa from the U. of Chile, to complete the restorations of Ahu Ko te Riku and Tahai. The archaeological survey of the entire island of Rapa Nui was begun during this year, under McCoy's direction
Aug 69-Jan 70	Works on the excavation and restoration of Ahu Vai Uri
Summer 1970	Works on the completion of the restoration of Vai Uri, as well as a number of associated structures in the Tahai area
lune-Dec 1972	Works on the investigation and restoration of Ahu Huri a Urenga and two ahu at Hanga Kio'e
une-Dec 1973	Works on the restoration of Orongo
une-Dec 1974	Restoration of Orongo completed. Restoration of Ahu Okava completed—except for the re- erection of a single statue
1976	U. Wyoming awards him the LL.D (honoris causa)
Feb 1978	His last visit to Rapa Nui.
24 Feb 1978	He is awarded as "Illustrious Citizen of Easter Island for his distinguished and unselfish work on behalf of our community," by Mayor of Hangaroa, Juan Edmonds Rapahango.
25 Mar 1978	He dies after his return home
20 May 1978	Posthumously named Distinguished Professor of Anthropology by the U. of Wyoming
13 Aug 1978	William Mulloy's ashes are returned to Rapa Nui and are interred near the Tahai complex,
	with the whole island population participating.

The editors wish to thank Emily Mulloy for her invaluable assistance in compiling this chronology as well as the selected bibliography of Dr. Mulloy's published works on page 12.

Page 14

Rapa Nui Notes

P.O. Box 6774 Los Osos CA 93412



Spring 1988