

UNITED STATES GOVERNMENT

Memorandum

TO : Dr. Leonard Carmichael
Thru: ~~Rosenbloom~~ A. C. Smith
WR Wedel, TD Stewart

DATE: May 3, 1963

FROM : S. H. Riesenber

SUBJECT: Report on detail to fieldwork at Ponape, January 20 to March 14, 1963

Under terms of NSF Grant GS-37, for the study of the megalithic structures at Nan Madol, Ponape, the Smithsonian Institution party consisting of Drs. S. H. Riesenber, Clifford Evans, and Betty J. Meggers departed Washington on January 20 and commenced fieldwork at Ponape on January 28.

En route to Ponape, the party utilized its time in Honolulu while waiting for MATS transportation, to examine Micronesian collections at the Bishop Museum and to consult with professional colleagues at the Museum, the University of Hawaii, and the East-West Center.

Procedure:

Upon arrival on Ponape the three members of the scientific party established field headquarters at the Catholic Mission in Tamaroi, Metalanim District, at the invitation of Father Hugh Costigan. A contractual arrangement with the Metalanim Housing Cooperative provided the party with housekeeping services, transportation, laborers, cooks, informants, etc.

Through the cooperation of Mr. Maynard Neas, District Administrator, arrangements were made to facilitate the detailed gross mapping of some of the sites of Nan Madol by use of the services of the District Surveyor, Frank Castro, and his staff. Pensile Lawrence, Assistant District Anthropologist, was assigned by the District Administration to the project for its duration in order for him to acquire additional professional competence. He also acted as interpreter and translator for Dr. Riesenber when informants were interviewed.

The ruins of Nan Madol were only one-half hour by outrigger canoe from Father Costigan's mission, so a minimum of time was spent in going to and from the sites. The 25 laborers, foreman and cook hired by the Metalanim Housing Cooperative met Archeologists Evans and Meggers at the sites daily, Monday through Saturday; breakfast and lunch were eaten by all at the sites and thus a full eight hour work day was available.

Part of the time Ethnologist Riesenber with his principal informant, Kesner Hadley, and interpreter, Pensile Lawrence, went to the various sites under study by Archeologists Evans and Meggers to verify details pertaining to these sites obtained in the oral traditions or to examine details uncovered by the archeologists that might be amenable to explanation through such traditions. When not at the site interviews were conducted in a private room at the Catholic mission by Riesenber with informants. Archeologists Evans and Meggers worked eight hours a day, six days a week at eight different sites in the Nan Madol complex, returning nightly to base headquarters at the mission. Each evening was spent in comparative

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discussions between the day's archeological finds and the ethnologist's data, often with additional information received from Father Hugh Costigan based on his fifteen years of residence on Ponape and his excellent knowledge of the Ponapean language.

Results of Research:

1. Ethnological

The interpretation of Nan Madol, the cluster of artificial islets and their structures, was the principal objective of the ethnologist's interviews. The required information was obtained by two principal methods: (1) question and answer concerning specific features of the sites and the objects found; and, (2) the recording of legends which had to do with the sites, followed by detailed analysis of their content. Similar traditional materials recorded by Riesenbergl during field-work in 1947-48 and additional materials recorded and published by earlier ethnologists were subjected to the same kind of analysis and variant versions were discussed.

As part of the same work, a long handwritten document written by a Ponapean named Luelen some time before World War II, which contains a great deal of information of a similar nature and which had been partially translated during earlier field work, was studied with the aid of interpreter and informant and the translation was completed.

In addition, ethnological information of a broader nature was obtained in order to relate the ruins to their general ethnographic background of Micronesia and in order to obtain requisite details for the completion of a diorama of the site of Pan Kedira, for permanent exhibition in the newly opened Hall of Peoples of the Pacific in the Museum of Natural History.

2. Archeological

The archeological work was based on the following sites in the Nan Madol complex:

- a. Pan Kedira - complete and thorough clearing of site, even to removal of large hibiscus trees and all ground cover, but without removal of coconut and breadfruit trees. Detailed maps were made of all features of the complex of compounds. Excavations were made in all of the hearths to obtain charcoal for Carbon - 14 dating and to obtain a cross section of food habits of people. These materials from the hearths consisted of bones of turtle, fish, and dog, and a variety of shells. A detailed study and classification of the types of food will be made and a percentage analysis made of each 10 cm. level of hearth refuse to see if there was a change in food habits. European trade goods in some hearths suggest re-use of the site in recent times over the last 100-150 years. These materials do not appear to be related to the initial construction of the site. Tests were made in the fill to determine the depth of artificial construction of the site, depths of the soil in the agricultural areas of certain compounds and to understand the details of construction of

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site and the use of columnar basalt, coral, and waterworn basalt cobbles and boulders. Minute details of architectural construction were recorded in notes and hundreds of black-and-white and color photographs in order to present plans to the Exhibits Division of the U. S. National Museum to reconstruct a diorama of the site for the Hall of Peoples of the Pacific.

- b. Kalapwel - small site on southwest side of Pan Kedira figuring in all the ethnological data about Pan Kedira. Completely cleared, mapped and studied. Excavations were made, where possible, as in Pan Kedira.
- c. Idehd - small site southeast of Pan Kedira of importance in all the ethnological information about Pan Kedira. Site completely cleared except for removal of two large trees that are not damaging the site at the moment. Detailed archeological map made and excavation of mound consisting of burnt coral and ash, in search of charcoal for dating of the site. Mound trenched on back side to base. All excavations backfilled and mound restored to original contours.
- d. Paikapw - large site northeast of Pan Kedira mentioned in the ethnological information about Pan Kedira, especially with reference to a reflecting pool. This feature was found, cleared, mapped and photographed. The site had never been cleared in recent years, so the growth was tremendous, with some trees measuring several feet in diameter, and many walls and features had been badly disturbed by tree growth. All major walls and structures were cleared completely; all features were examined; low areas were inspected before trash was deposited in the site. This site was not completely cleaned; however, it was the last one worked and the previous four weeks of fieldwork made it possible to recognize features with a minimum of effort and clearing. Detailed maps were made of the entire site and photographic coverage made of all major features. Many structures were uncovered and revealed that had not been previously mentioned in the ethnographic lore about the site.
- e. Pein Mueik - small site between Pan Kedira and Kalapwel that was completely cleared and then mapped and photographed. This site, like both Wasau and Reitik, fit a consistent pattern of house platform structure inside a small islet with entrances in the wall.
- f. Wasau - large site on northwest side of Pan Kedira that was cleared and studied in detail in conjunction with the adjoining islet site to the west, called Reitik. This site revealed additional information on the settlement pattern of the habitation sites and has much in common with Pein Mueik and Reitik. Detailed maps and photographic record made of the site.

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- g. Reitik - small site on the northwest side of Pan Kedira west of Wasau completely cleared, mapped and photographed. This site, like Pein Mueik and Wasau, falls into the distinct pattern of habitation sites with house platforms inside an enclosure that has entrances in several of the walls.
- h. Nan Daues - this major site was cleared extensively in a manner similar to Pan Kedira and Kalapwel. An accurate archeological map was made of the site and a study made of the various features. Excavation of the central, inner burial chamber was made with fine screens to recover fragments left behind by the hundreds of people who have dug and looted this burial chamber beginning with the first Europeans on Ponape to the present-day tourists visiting the site. An effort was made to recover completely all these fragments in order that these few remaining artifacts could be preserved in museum collections. As at all sites, extensive photographs were made in both black and white and color of all features. Notes were made on those features of the sites that had been changed during Japanese occupation, such as pathways, and steps. Considerable time was spent in removal of several hibiscus trees that were growing out of the walls and threatening severe damage to the walls.

Evaluation:

The theoretical problem which underlay the fieldwork was the question of the historical validity of the traditions, transmitted by word of mouth from generation to generation. Most anthropologists have, in general, taken the point of view that oral literature is not to be trusted in any attempts to reconstruct unwritten history and has little, if any, value in archeology. Nevertheless, the legendary events recorded by Riesenberg in previous work at Ponape, once the magical elements are screened out, are so full of circumstantial detail and so specifically connected with the archeological sites, as to suggest that in the Pacific, or at least at Ponape, the same strictures do not apply with equal force. In recent years Pacific ethnologists and historians have tended to accept the view that, in this area, legend can be allowed to possess certain historical validity, and at Ponape, the team decided, a test could be made. We are now satisfied, as a result of our work, that oral tradition can be used, at least in the Pacific, to interpret and substantiate archeological data, and vice versa.

The folklore and traditions collected in the field will also provide a mass of material by means of which much of the contemporary culture, which Riesenberg is in process of describing in another manuscript, can be interpreted and by means of which certain features of the ethnography can be elucidated.

The archeological results can be summarized in two sections: (1) Intensive investigation has given a clear picture of the construction and function of the famous ruins of Nan Madol and eliminated the fanciful statements that have been made about these ruins, and (2) the ruins are indicative of a complex society (to use the term in an evolutionary sense as used by archeologists) with a highly developed socio-political system that permitted the planning of the structures, organization of manpower to build them and to raise food and feed the mass of labor necessary for construction. The ruins show no relationships to archeological

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remains in the New World, but certain features of construction and function suggest correlations with the Asia mainland or in Indonesia. Date on construction is unknown at this time but it is hoped the Carbon-14 samples will give some clue. The archeology supported the validity of some oral traditions, while the traditions explained or clarified certain of the puzzling archeological features demonstrating the value of cooperative field research between specialists of different disciplines.

It is anticipated that, when the results of this coordinated research are published, their reception by the public and by professionals will reflect credit on the Smithsonian Institution in supporting the project and in furthering its purpose in the increase and diffusion of knowledge. Research potentialities on Ponape and elsewhere in the Carolines remain considerable; it is hoped that the effects of our work will be to attract other researchers to this field, since many problems are still unsolved (e.g., the various megalithic structures, earth ramps, and cave deposits on the mainland of Ponape and their relationship culturally and historically to the sites at Nan Madol which we investigated; the relationships between Ponape and the similar structures at the island of Kusaie to the east; etc.). Riesenbergs expects to be able to continue work at Ponape and in Micronesia in general in the future. Evans and Meggers, while they do not plan to re-visit Ponape in the near future, will continue to study Pacific relationships with South America and Asia and to explore the problem of trans-Pacific contact.

As an outgrowth of the scientific work, a number of recommendations were made to the Trust Territory administration regarding a program for the care and preservation of these important monuments and a permanent method of maintenance. At Ponape the three members of the party gave two lectures on their work, one a public lecture and one to the junior high school. In Honolulu Evans and Meggers spoke to a group of faculty and advanced graduate students at the University of Hawaii.

Riesenbergs returned to Washington on March 14. Evans and Meggers accompanied him to Honolulu, thence went to Japan; the report on the Japanese project will be submitted by them separately.

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