



NEW ZEALAND  
ARCHAEOLOGICAL  
ASSOCIATION

**NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER**



This document is made available by The New Zealand Archaeological Association under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

To view a copy of this license, visit  
<http://creativecommons.org/licenses/by-nc-sa/4.0/>.

1972 ABSTRACTS FROM THESES AND RESEARCH ESSAYS AT  
THE UNIVERSITY OF AUCKLAND

R. C. Green,  
Professor of Prehistory.

Abstracts from a thesis and five research essays completed at the Department of Anthropology, University of Auckland, in the 1972 academic year are given below. This is in line with NZAA policy to encourage their publication in the Newsletter. The essays are held in the Department of Anthropology of the University of Auckland, where they may be consulted. Microfilm and xerox copies may be made available at cost on an individual basis, subject to the usual restrictions applying to theses, on the understanding that their use is for private research and not publication.

THESIS ABSTRACT

Aspects of Cranial Variation in the Maori by Robin J. Watt

Anthropology Department, Auckland University. One-page abstract, three appendices, literature cited, 18 plates, 29 figures, one map.

One of the major reasons for this study is the marked paucity of studies dealing with the Physical Anthropology of the Maori. An analysis of the cranial variability of the pre-European Maori population was carried out using a sample of 695 crania. The crania used formed a representative sample of the North Island, South Island and Chatham Islands of New Zealand, and were analysed using metrical and non-metrical data.

An extensive set of measurements and non-metrical features were recorded for each skull and the hypothesis of biological heterogeneity examined by a combination of multivariate and univariate analyses. The nature of biological variability was also examined and related to other Polynesian crania.

The conclusion of marked heterogeneity and the identification of distinct biological 'types' in the New Zealand Maori populations could not be substantiated by this study. Instead, multivariate and univariate analyses showed homogeneity within and between the three defined geographical groups. The New Zealand Maori was found to conform to the general morphological pattern of Polynesian crania.

It is hoped that at least two publications will result: one dealing with metrical characteristics of Maori crania, the other concerning non-metrical traits.

#### RESEARCH ESSAY ABSTRACTS

The Economic and Environmental Context of Earthwork Fortifications and Population Pressure in Prehistoric New Zealand by Gordon Maitland

Recent interest in population growth as an independent causal variable in archaeological interpretation, coupled with the inconclusive evidence for climatic change in New Zealand as the determining factor in agricultural development and deforestation, permits the presentation of a single hypothesis of population pressure to explain both:

- (1) increasing deforestation and the expansion of agricultural and fernland areas, as a response to population expansion,

and

- (2) the development of warfare and fortifications as a response to conflict caused by the population's pressing against its ecological limits.

The argument utilizes the present climatic situation as a rough indicator of prehistoric environmental conditions. The distribution of recorded remains of earthwork fortifications is compared with the areal distribution of certain basic geographic elements (topographic, biotic, edaphic, and climatic) significant to the subsistence economy.

The essay attempts to make explicit some of the basic assumptions involved in the relationship of earthwork fortifications to the prehistoric environment and human population. It serves partly as a review of some of the recent work in this field and provides a discussion of some of the problems involved. This essay includes ten maps to aid in the delineation of the prehistoric environment, and also a table of climatological observations for reference.

An examination of the Anthropological Value of the Graphic Records produced by the Artists who visited New Zealand with Captain Cook  
by Janice E. Maitland

In this essay I examine approaches to the study of the graphic records produced by the artists who visited New Zealand with Captain Cook. The artists with whom I am concerned primarily are Sydney Parkinson (first voyage), William Hodges (second voyage), and John Webber (third voyage). These men were employed as the official artists on each of the three voyages. I suggest criteria for determining the anthropological value of the New Zealand work produced by these three artists. It is shown that the anthropological value of their New Zealand work is not the same as that of their work in general, and this discrepancy is explained in the essay. Thirty-one photographic plates are included in the essay to provide illustration of works discussed in the text.

A Study of the Decorative System of the Lapita Potters in the Reef and Santa Cruz Islands by Lorna J. Donovan

Though the distinctive Lapita pottery was first discovered and reported in 1909-1910 by Father Otto Meyer, on Watom Island, it was not until subsequent finds and archaeological recovery in the decade between 1947-1957, that something of the importance to Polynesian prehistory was suggested by the presence of the Lapita people throughout Island Melanesia, Fiji and Tonga.

Theories of identity were postulated and several detailed surveys and studies were based upon the Lapita pottery component. Radiocarbon dating has now confidently established this early period as being 1000 B.C. - 500 B.C., but later sherd material from Tonga has suggested that this tradition, in altered form, lasted until the first few centuries A.D.

Little is known of the people who made the pottery, but it is assumed that they were a seafaring people throughout central and south-eastern Melanesia. Recent excavations at Watom Island, Ambitle Island, and Reefs-Santa Cruz Island, have furthered the need for detailed analytical studies of the pottery decoration and form, so that ultimately, movements of trade and origin can be established. One such study by S. M. Mead has analysed the Yanuca and Natunuku assemblages of Fiji.

Through the use of this system of analysis, and studies of the techniques of decoration, sherds from Nenumbo, Gnamanie and Nanguu of

the Reefs-Santa Cruz Island have been confidently established as belonging to the Lapita tradition. Many of their motifs and elements have been traced to other island groups and the suggestion of a greater time depth through the wealth of their decorative field has been made

Museums, Archaeology and Society by Sharon L. Leary

The general problem for the museum today is one of communication. That is to say, the ways and means by which the museum can "communicate", and to whom. The museum is not the only means of communicating to society, there are various other media: television, the cinema, and forms of printed matter and illustrations. But the museum possesses one unique difference in that it provides a direct contact with the object itself. It is this sense of immediacy between object and viewer that may be exploited through exhibition. However, certain considerations are important if exhibits are to communicate positively; these include research into sociology, anthropology, education, psychology, physiology, architecture and design principles.

For the archaeologist, the museum generally plays only a small part in his work, while for the museum, archaeology is usually only a minor aspect. However, if the archaeologist intends to communicate to society through museum channels, then many of the general principles of exhibiting are applicable.

The past, nevertheless, has left a legacy on a number of museological phenomenon, especially those of collecting and exhibiting. Therefore, an understanding of the historical development of the museum is valuable in order to understand and evaluate existing attitudes and methods of presentation in terms of the present and the future.

With these criteria in mind this study has been divided into three major parts: the History of Museums, Museums and Archaeology, and Museums and Society.

A Prehistoric Ornithology by Brigid Pike

There is an introductory discussion on the type of information that an assemblage of archaeological bird bones may be made to yield. With a knowledge of the ecology and behavioural patterns of the avifauna, the prehistoric environment of the site may be reconstructed, the season of occupation and the ecological orientation of the inhabitants inferred.

It is suggested that the relative value of various birds within a particular site's 'environment' may be assessed in terms of the "cost" of procurement versus returns, and the avifauna represented on the site may then be matched against these "values" and inferences drawn concerning the economic organisation of the settlement - how they apportioned their time, in which areas they concentrated their efforts.

Examination of the nature of use of the birds after procurement is seen to supply information on a variety of subjects and it is submitted that the results of such examination along with the preceding analyses will give an idea of the attitude and relationship of the people to their environment. In two studies of the relationship of New Guinea highland peoples to their local avifauna, the nature of their 'primitive ornithologies' reflected much concerning their way of life and attitude to their local environment, and so may a prehistoric ornithology.

After discussing methods and problems in the analysis of archaeological bird bone, in order to obtain a body of data from which information may be derived, analysis of the avifaunal assemblage from Mt Camel is begun.

Information concerning the environment, season of occupation, ecological orientation and the 'input-output' system in operation was obtained and some limited statements can be made concerning the relationship of the inhabitants to their environment. These statements are limited in that information concerning post-procurement uses is restricted to data from the limb bones only.

There is a concluding discussion on the interpretation of birds in New Zealand prehistory generally.