NEW ZEALAND
ARCHAEOLOGICAL
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ARCHAEOLOGY IN NEW ZEALAND

Thesis Abstracts, University of Auckland

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Sarah Louise Forgesson, BA Hons Dissertation 2015
Assessing Stone Artefact Variability in Early New Zealand Sites.

While there is a growing body of literature in stone artefact analysis that is dedicated to a wider exploration of technological organisation, few studies engage in examining all artefact types and continue to give preference to final form. Tools, for example, are believed to contain more information than flakes, flake fragments or cores. This is reflective of the assumption that all information can be found in the artefact itself. Previous research in New Zealand has made similar general conclusions and shown continued interest in lithic studies with focus predominantly on formal tool types such as adzes or specialised raw material.

This dissertation will examine chert assemblages from early prehistoric sites on Great Mercury Island, New Zealand and apply an alternative approach that aims to recognize and evaluate the complex relationship between humans and the artefacts found in the archaeological record. It will use a method of stone artefact analysis that will utilise all elements of the assemblage to document assemblage variability. The utility of the cortex and volume ratio in particular has proven useful to quantify missing stone artefacts where cores and flakes have been removed through human intervention. A hypothesis is suggested that an examination of both assemblages would show similar and consistent results of assemblage composition and utilisation. This is following the traditional economic reconstructions of expedient and curated ideals in assemblages. With both areas in such close access to raw material, similar rational economic choices are expected to be reflected in the archaeological record.

Results that are contradictory to this hypothesis suggest that the value of stone artefacts is more historically contingent than traditionally expected. Often those conditions relate back to a wider network of environmental, social and economic factors. The significance of these observations of assemblage variability is considered in the wider New Zealand context of logistical mobility.

Brooke Jamieson, MA Thesis 2015
"Bless This House" The Archaeology of 19th Century Domestic Dwellings in Northland and Auckland, New Zealand

This research examines the ideological, social and cultural world viewpoints of people within the Auckland and Northland regions of New Zealand during the 19th and early 20th century as expressed in rural homesteads and urban domestic dwellings. The Georgian Order Theory, as applied to the study of the design of domestic housing by historical archaeologists is a theoretical perspective that assumes a dominant structural order emanating from a cultural schema or ideology. However, there are many more factors arising from historical contingency and human agency, both conscious and unconscious, that also affect this ideology and how it is materially represented in domestic dwellings. This thesis examines 10 dwellings which were investigated using buildings archaeology in a critical appraisal of the Georgian Order theory with a focus on how these other factors are expressed in the design of these domestic dwellings.

Lisa McKendry, MA Thesis 2015
Archaeological Textiles: An Investigation of Maori Fibre Fragments from the Waitakere Ranges, Auckland, Aotearoa New Zealand.

Archaeological textile research provides valuable information for understanding past human activities and fibreworking practices. The aims of a technical and analytical study of archaeological textiles were three-fold: 1) to contribute to over-all interpretations of variation in site functions and 2) to document fibreworking practices among Māori groups who resided in the Waitakere Ranges region; and 3) to briefly compare the Waitakere findings with some of the more common fibreworking practices found in other areas of Aotearoa New Zealand. The production of a wide variety of fibre objects such as fishing equipment, clothing, general purpose baskets and cordage were essential for survival for pre-contact Māori. However, systematic in-depth technical analyses of pre-contact Māori textiles are rare in Aotearoa New Zealand. The analysis of archaeological textiles from the Waitakere Ranges have provided new information pertaining to the types of activities at the sites and increased our understanding of Māori fibreworking practices in past communities.

Archaeological textiles are the product of a diverse industry, with netting, plaiting, twining and weaving techniques used to create a range of utilitarian and aesthetically pleasing objects. In this study five separate categories were considered based on distinct structural attributes and used to investigate a

range of textiles. The presence of utilitarian baskets and cloaks, and fishing nets at all sites, and, complex mats, bags and cloaks only at extended stay domestic sites, was as expected. The findings confirmed the importance of marine resources, the value of expedient textiles for daily activities and the importance of aesthetically pleasing textiles at the longer settled sites. The techniques used to manufacture a net, and also some of the cloaks, provided new information as they differed from known ethnographic forms. In addition, the distinct technical differences in the cloaks between some sites suggest they were occupied by different groups of people or at different time periods. Further, the human hair remains confirm the Māori custom of safely depositing hair at all the sites, with variations in how this was done suggesting particular *hapū* or *iwi* customs.

The textile assemblage from the Waitakere Ranges demonstrate an extensive knowledge of plant materials, the mastery of a range of fibreworking techniques and represent the fulfilment of utilitarian and aesthetic requirements.

Joe Mills, MA Thesis 2015
Novel Approaches: remote sensing and evolutionary archaeology in the Samoan archipelago.

This research portfolio contains three components covering the topics of evolutionary archaeology, remote sensing In the first component, the role of evolutionary theory in archaeology is explored. The place of archaeology as a science is discussed, and it is argued that if archaeologists are concerned with generating robust and testable explanations, a scientific position must be adopted with Darwinian evolution providing a unifying theory. A case is made for Darwinian cultural evolution, including an exposition of the basic mechanisms and operation of evolution, as well as an in-depth discussion of cultural transmission theory. Two case studies are presented in order to demonstrate that Pacific archaeology in particular can structural remains and rates of selection; the second exploring the role of different cultural transmission modes in the manufacture of Hawai'ian fishhooks.

The second component of this research portfolio investigates the use of remote sensing in Pacific contexts. It provides a background on remote sensing and its application in the Pacific and advocates for wider adoption of remote sensing techniques using a case study comparing LIDAR data from Tutuila, American Samoa, with pedestrian survey data on archaeological super-structures, in a qualitative comparative analysis. The case study finds that the LIDAR data compares well with existing data from pedestrian

surveys, but also reveals significant differences. The results of the comparative analysis allowed for the evaluation of a number of existing arguments about the distribution of archaeological material in the interior of Tutuila, such as the extent and density of inland features, and the isolation of fortified sites.

The final component is a research proposal designed around testing the expectations of the Ideal Free Distribution (IFD) for explaining the spatial and temporal methodology for classification, digital and physical survey and reconnaissance, and excavation and data generation. It proposes that significant data generation would prove beneficial for generating explanations of the distribution of archaeological deposits in like the IFD, and for filling knowledge gaps.

Anne Margaret O'Hagan, MA Dissertation 2015
An Analysis of Chert Adzes and Debitage from Ulawa, Solomon Islands.

This dissertation investigates an assemblage of chert adzes from Ulawa, a small island in the south-eastern region of the Solomon Island arc. These artefacts are an anomaly – theoretically, chert is a brittle material that is not ideal for manufacturing adzes. Although chert artefacts have been reported on in past studies, there has been only one study which has systematically recorded and reported a chert adze assemblage. Chert adzes and debitage from two excavated and 15 surface collected sites were analysed to build on the pre-existing knowledge of how these artefacts were manufactured. This data was compared to data from Uki to understand variation present in this artefact type. Adzes from Ulawa exhibited variation in reduction and manufacturing techniques compared to the assemblage from Uki; suggesting that proximity to raw material sources encourages 'wasteful' lithic production and early artefact abandonment.

Gareth Walter, BA Hons Dissertation 2015
An Example of the Application of Formational Approaches from Great Mercury Island (Ahuahu), New Zealand.

Abstract: In New Zealand studies of stone artefacts have generally focused on the small number of identified formal tool types, most frequently adzes. Few of these studies have included applications of formational approaches. The result is an emphasis on settlement patterns and behaviour in interpretations of the creation of assemblages. However, such interpretations may be underestimating the role of geomorphological processes in shaping the record. The aim of this dissertation was to operationalise the concepts of Hodder's

(2012) entanglements with a focus on the formational aspects which shape the record. Approaches such as Time Perspectivism and Time Averaging were used in this study to investigate the formation of four flake assemblages from Great Mercury Island (Ahuahu), New Zealand. The analogy of an electrical circuit was applied to illustrate the circular nature of assemblage formation within the framework of an entanglement. The analysis of the flakes measured the utility remaining in the assemblages. Comparison between the assemblages showed a difference between the utility remaining. This was explained with reference to the unique depositional context of each assemblage citing the impact of geomorphological processes on visibility and accessibility. It was concluded that geomorphological processes require further investigation to identify how these affect the patterns identified in New Zealand prehistory.