

ARCHAEOLOGY AT THE NORTHERN TERRITORY UNIVERSITY: AN INTRODUCTION

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Archaeology has been taught at the Northern Territory University (NTU) since the formation of the university two years ago. In 1987 Ian Walters was employed by the University College of the Northern Territory to initiate undergraduate courses in archaeology, based on the existing curricula of Queensland University. Peter Hiscock was hired in 1988 to increase the scope of archaeological offerings, and soon after the University College was converted into a small independent university. The first MA and PhD students in archaeology were enrolled in 1989 and in July 1990 archaeology staff and students moved into the newly constructed facilities. During 1989 and 1990 archaeology at NTU gathered momentum. This dynamism can be seen in the dramatic growth in student numbers. First year students increased from just over 50 in 1988 to more than 160 in early 1991. During the same period post-graduate students were enrolled for the first time, and in 1991 there are six post-graduate and four honours students researching degrees in archaeology/material culture. The purpose of this paper is to describe the teaching and researching of archaeology in Darwin.

Archaeology at NTU

Archaeology at NTU is taught within the Anthropology discipline, as one of three components of General Anthropology (socio-cultural anthropology, linguistic anthropology and archaeology). NTU offers archaeo-

logy within two undergraduate degrees. Archaeology, at both pass and honours levels, can be studied either for the Bachelor of Arts (BA) or for the Bachelor of Science (BSc).

Table 1 lists the undergraduate units in archaeology which are currently taught at NTU. Although students taking a double major (ie 12 units) in anthropology are required to undertake some study from the other two components of anthropology (socio-cultural anthropology and linguistic anthropology), there is abundant opportunity for specialized study in the sub-field of archaeology. Pass degrees normally take three years full-time study, and the double major opens the possibility for pursuing a fourth year in order to take a degree with Honours. In addition to a double major completed at appropriate academic standards and a suitable thesis proposal, Honours candidates must have six weeks fieldwork experience before beginning their Honours year.

Students who have completed a pass degree without fulfilling the requirements for Honours but who wish to pursue archaeology in higher degree study can undertake a Graduate Diploma in Anthropology. This involves both course-work and thesis, and aims to provide an Honours-level training. Successful completion of this degree will allow entry to the Master of Arts program.



Figure 1 Fiona Mowat and Scott Mitchell using microscopes in the Edmund Gill Room

ANY142 Evolution of humankind and culture

Introduction to human evolution, fossil hominids, origins and diversification of cultures from earliest prehistory through the rise of cities and states.

ANY242 Archaeological analysis

An introduction to the methods and theories of archaeological investigations. Illustrated by specific case studies from world prehistory.

ANY262 Australian prehistory

Cultural and biological origins and prehistoric development of Australian Aboriginal peoples, focusing on archaeological and ethnographic evidence.

ANY263 Prehistory of Southeast Asia and the Pacific

Cultural and biological origins and changes in the prehistoric human occupation of Southeast Asia and the Pacific, concentrating on archaeological evidence.

ANY265 Material culture studies

An introduction to the theory and methods of material culture studies. Prehistoric and contemporary material culture, artefact analyses, museums and their anthropological collections.

ANY266 Public archaeology

Examines aspects of cultural resource management and the role of archaeology within our society. Includes discussion of fieldwork strategies, site recording and management, significance assessment, and heritage concepts and legislation.

ANY267 Hunters and gatherers in prehistory

Examination of theoretical perspectives explaining prehistory of hunter-gatherer societies. Case studies are considered from all continents and time periods and analogies drawn from ethnographic hunter-gatherers.

ANY268 Problems in material culture

Critical consideration of selected problems in material culture studies, including method and theory of artefact analysis. Case studies are drawn from a wide range of societies.

ANY269 Hominid evolution

An examination of the principles of evolution as they apply to the human family, the tempo and mode of evolution, fossil evidence, morphological and chronological analysis.

ANY290 Human ecology

Human-environment relationships in cross-cultural interdisciplinary perspective: ecological systems; energetics; population; ethno-ecology; contemporary ecological issues.

ANY360 Problems in world prehistory

An examination of selected problems and case studies in world prehistory.

ANY362 Advanced Australian prehistory

Critical consideration of selected problems in Australian prehistory, focusing on the interpretation of archaeological data.

Table 1 Undergraduate units in archaeology offered at NTU

In addition to undergraduate degrees, NTU also offers two post-graduate research degrees in archaeology: Master of Arts (MA), and Doctor of Philosophy (PhD). Assessment for both of these degrees is entirely by thesis, and the research would normally involve extended periods of fieldwork. NTU has the capability to provide support with infrastructure for such field research. The university has a research commitment to the regions of northern Australia and Southeast Asia, although students are not restricted to localities in those regions.

NORTHERN TERRITORY ARCHAEOLOGICAL SERVICES

To facilitate research in the Northern Territory, and to fund post-graduate research, NTU Archaeological Services (NTUAS) has been established as the consulting arm of the NTU's Anthropology discipline. NTUAS focuses on archaeological work in northern Australia and Southeast Asia, and is involved in both large-scale research-based consultancies and small-scale assessment and mitigation studies. A major goal of NTUAS is to undertake consultancies which contribute to regional research projects, and to provide not only high quality site assessment and management advice, but also contribute to the archaeological understanding of Australian prehistory.

NTUAS is currently engaged in a number of large-scale consultancies which are providing funds and research opportunities for post-graduate students. To the south of Darwin NTU is undertaking the archaeological impact of the Katherine-Darwin optical fibre cable being constructed by Telecom, and to the east NTU has a three-year contract with ANPWS to survey the floodplains of Kakadu National Park.

ARCHAEOLOGY FACILITIES

Housed within the recently refurbished Anthropology Building are the following archaeology facilities:

- * **Vere Gordon Childe Room.** Teaching Laboratory, containing wide benches and shelving. Seats 12–15 students. Whiteboard, computer and microscope with video attachment and video screen;
- * **Raymond Dart Room.** Archaeology Staff Research Laboratory, containing wide benches and shelving, whiteboard, cupboards and drawers, microscopes and computer;
- * **Grafton Elliot Smith Room.** Archaeology Post-graduate Student Research Laboratory, containing wide benches and shelving, whiteboard, cupboards and drawers;
- * **Edmund Gill Room.** Instrument Room, specially air-conditioned and dedicated to housing sensitive balances, microscopes (eg metallurgical), Cue Computer Image Analyzer, and photomicroscopy;

- * **Elsie Bramell Room.** Archaeology Wet Laboratory, containing stainless steel benches and sinks, fume cabinet and gas outlets, emergency shower for chemical accidents, sediment shaker stack and drying cabinet;
- * **Scanning Electron Microscope Room.** Specially air-conditioned and serviced;
- * **Gas Chromatograph Room.** Also containing SEM preparation equipment such as splutter coater;
- * **Computer Room.** Containing computers, digitizers, printers, light-table, map cabinets, etc.

In addition to these laboratory facilities, post-graduate students in archaeology have the use of Arts Faculty Toyotas and boats.

RESEARCH PROJECTS

The facilities discussed above are being employed by staff and students in a number of research projects. As mentioned above NTU currently has two lecturers in archaeology: Dr Peter Hiscock and Dr Ian Walters. Two research assistants (Fiona Mowat and Warren Murgatroyd) are employed on Australian Research Council grants, and both are pursuing research degrees. There is also a number of MA and PhD students undertaking research in Australia and Southeast Asia. The field-based research projects in which staff and students of NTU are engaged can be summarized as follows:

Investigation of the Antiquity and Development of Prehistoric Trading Systems in Western Queensland

Peter Hiscock is engaged in archaeological surveys and excavations in the Mount Isa region of northwestern Queensland designed to describe and date the manufacture of stone artefacts for trade to other parts of Australia. The main focus of this study is the various meta-basalt quarries along the Leichhardt River. It is hoped that the development of trading networks can be identified, thereby allowing models to be formulated concerning the cause, timing and growth of complex social and economic systems possessed by prehistoric hunter-gatherers in central Australia. In 1987 Peter undertook detailed site recording and sample collecting from a large quarry near Mount Isa, and excavated a rockshelter near a second quarry to the north. In 1989 he carried out a wide-ranging reconnaissance to identify the research potential of quarries in the region. Further field surveys and excavations will be undertaken in 1991 and 1992.

Aboriginal/Macassan Interaction on the Coburg Peninsula

Scott Mitchell is undertaking PhD research into the Macassan archaeology of the Coburg Peninsula and northwestern Arnhem Land. His work is addressing two issues: the antiquity of Macassan visits to this part

of Australia, and the effect of the Macassan presence on Aboriginal settlement and subsistence. In 1990 he recorded and excavated a number of sites, including Macassan stonelines in northwestern Arnhem Land, shell mounds on Croker Island and a post-contact site on the Coburg Peninsula. Scott will return to the area in 1991 to undertake further site surveys and excavations.

Moreton Regional Archaeology Project – Stage II

J. Hall (University of Queensland) and Peter Hiscock are engaged in a systematic investigation of technological change in southeastern Queensland through the analysis of archaeological material. The objective is to employ an understanding of artefact manufacture to examine issues such as changes to prehistoric economy (by looking at foraging patterns revealed in stone procurement), social structure (by looking for stylistic and technological differences which indicate the development of discrete geo-political social groupings) and demography (by measuring the variation in site numbers and the intensity with which each site was used). This work is being funded by an ARC grant, which covers fieldwork expenses and salary of research assistants located both at the University of Queensland and the NTU.

Indonesian Rock Art

Mike Hermes is working on the prehistoric rock art of eastern Indonesia as part of his MA research. Through analysis of the paintings and engravings at a number of sites in the central Moluccas, principally on the islands of Ceram and Ambon, he is developing a model of motif distribution throughout the region. Comparing this model with data on the region's biogeography and linguistic history he will investigate the prehistory of this little known group of islands to the north of Australia.

Darwin Regional Archaeology Project

This project is designed to investigate the prehistory of Darwin's hinterland, and in doing so to assist cultural resource management in an area of intense development. The initial phase of the project, carried out jointly with the Northern Territory Museum of Arts and Sciences using a three year grant from the Northern Territory Conservation Commission, aims to characterize the distribution of archaeological sites through the survey of selected areas. With the aid of excavations it is hoped that this data will allow inference to be made concerning the prehistoric subsistence and settlement systems. Research thus far has focused on artefact scatters between the Adelaide and Mary Rivers, and a series of shell mounds along the Elizabeth River.

Sandstone Point Archaeology

In collaboration with J. Hall (University of Queensland), Ian Walters continues to investigate questions of fishing

intensity and seasonality at Sandstone Point, a midden complex in southeastern Queensland. Funding is currently being sought which will allow a research assistant to undertake further analysis on the vast quantities of excavated material which will be examined using, among other techniques, the Cue Image Analyzer.

Indonesian Hominids

Ian Walters is negotiating to establish a research project in Indonesia to look at various questions relating to human evolution in this region.

Kakadu Wetlands Survey

NTU has been engaged by the Australian National Parks and Wildlife Service to undertake a three-year-long archaeological survey of the Alligator Rivers floodplains within Kakadu National Park. This consultancy is being used as the basis of a long-term research project in the Kakadu region, building on previous research (eg Allen and Barton 1989; Jones 1985; Kamminga and Allen 1973; McCarthy and Setzler 1960; Meehan et al. 1985; Schrire 1982). In addition to management issues the initial objectives of the consultancy are twofold:

1. To produce a detailed record of site location, size and shape for sample units within the study area. This data will be analysed to provide information about settlement patterns on the flood plains. The information will then be compared to a land use model developed from ethnographic data.
2. To describe the stone artefact assemblages that exist on the flood plains and analyse this data to discuss the variation in material culture and human activities at a number of different scales: within sites, between sites, and between each of the flood plains regions. These data are expected to shed light on the existing models of assemblage variation within the Kakadu region (cf. Allen and Barton 1989; Meehan et al. 1985; Schrire 1982).

Although the consultancy only began this month several components of the research project are already underway. Peter Hiscock's investigation of the artefact assemblage has begun, aimed initially at characterizing variations in assemblage size, typological and technological traits, and patterns of stone procurement. Robin Hodgeson has begun work for her MA thesis on the contemporary and historic Aboriginal land-use patterns. Fiona Mowat is examining the shellfish component of several sub-regions for her MA, with the objective of identifying prehistoric shellfish procurement and processing strategies. Daryl Guse is testing

an ecological model of site location along the South Alligator River for his BA Honours thesis.

Within this project there are many other potential research issues that would make excellent honours and post-graduate topics. Anyone interested in opportunities for research in the Kakadu floodplains should contact Peter Hiscock (address below, phone 089 466865).

CONCLUSION

This paper provides readers with a general outline of the archaeological activities at the NTU. The establishment of archaeology at NTU has been exciting for those of us involved, and is significant in creating yet another Australian tertiary institution which actively supports archaeological teaching and research. We believe it is clear from the foregoing description of research and facilities here at NTU that archaeological research in northern Australia and Southeast Asia will be well served by this new department. Certainly there is much to be done. All who would join us are welcome.

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