

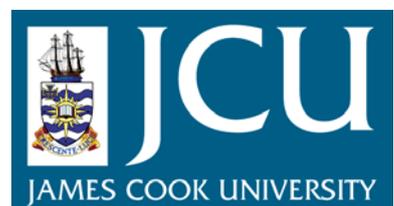
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Community specialisation, standardisation and exchange in a hunter-gatherer society: a case study from Kalkadoon country, northwest Queensland, Australia.

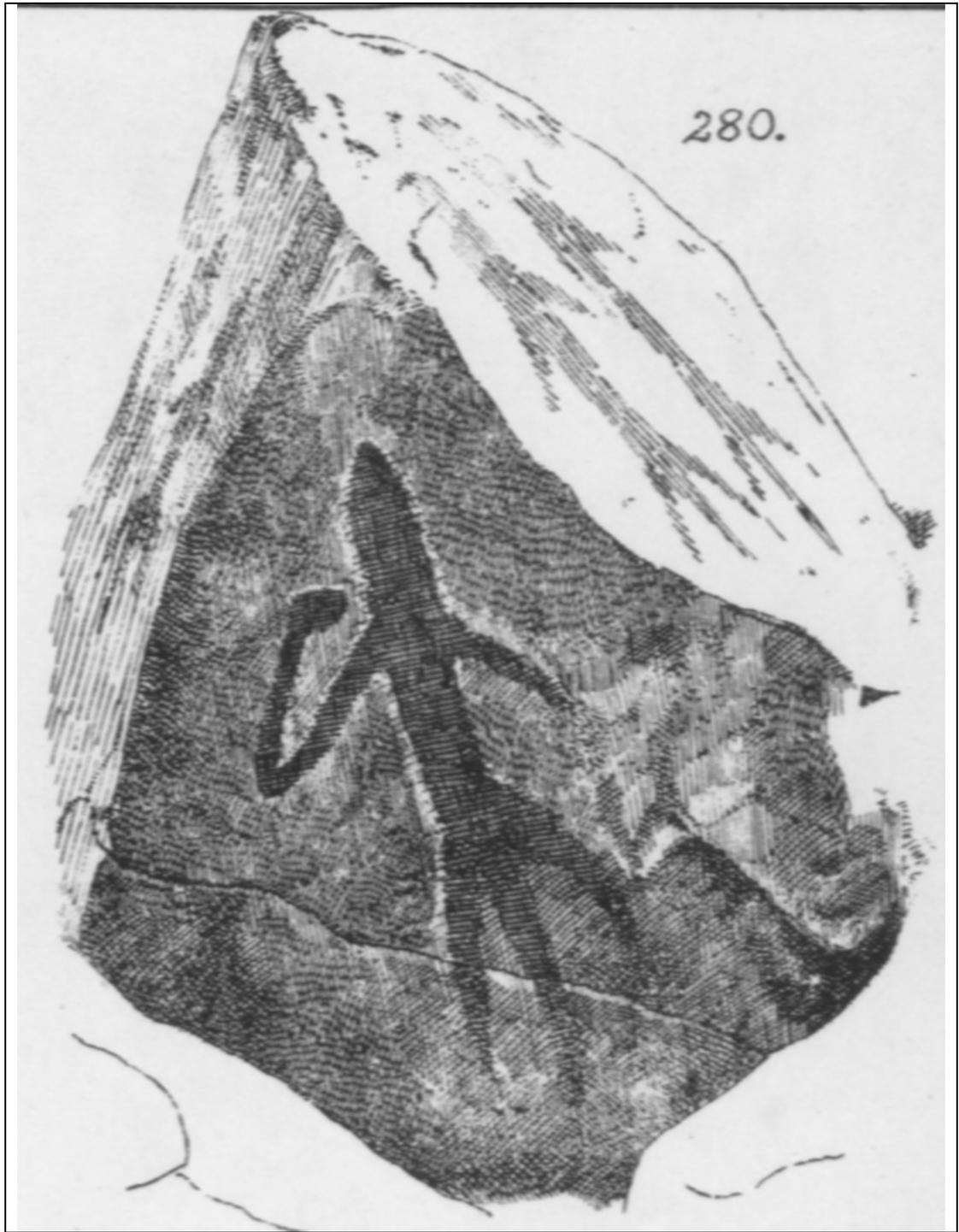
By

Kevin Tibbett

BSS (Hons)

Thesis submitted for the research degree of Doctor of Philosophy in the School of Anthropology, Archaeology and Sociology, Faculty of Arts, Education and Social Sciences, James Cook University.

September 2005



Kalkadoon figure with stone axe (from Roth 1904). This rock-painting is located on the border of Kalkadoon country near Cloncurry, northwest Queensland.

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Abstract

This thesis examines prehistoric Aboriginal production systems at Lake Moondarra, a major stone axe quarry in the semi-arid regions of northwest Queensland. At the time of contact with white settlers, the Kalkadoons, Aboriginal people from northwest Queensland participated in an expansive exchange network that spanned the continent from north to south (McCarthy 1939). When Roth (1896) was Superintendent of the Cloncurry and Boulia hospitals, his ethnographic studies left an excellent material record of northwest Queensland and he documented the presence of axe mining pits near the Bora Goldfield, present-day Lake Moondarra. Unfortunately, trade in stone axes had ceased by the time Roth recorded his observations.

Hiscock and Mitchell (1993:3) have suggested that contemporary researchers have neglected quarry studies due to the intrinsic difficulties involved in examining such sites. In addition, semi-arid regions present some difficulties for archaeologists as soil formation processes are minimal and increased erosion is caused by runoff during wet seasons. Nevertheless, the geology of Moondarra is unique and has left an indelible archaeological record that provides valuable insights into hunter-gatherer tool production, technology and society.

This thesis identifies the timing of the introduction of axe production for exchange at Moondarra as well as increases in axe production levels associated with the expansion of exchange networks in the region. Evidence for the standardisation of axe production is presented.

The thesis also challenges archaeological dogma that associates craft specialisation and standardisation with emergent complex societies, with the presentation of evidence that these also occur in hunter-gatherer societies.

The thesis also expands current archaeological distribution of large quartzite leiliras or macro-blades from Arnhem Land into northwest Queensland. Evidence suggests that

these may have been produced exclusively for exchange. Roth (1904) noted that ‘spear points’ (leiliras or macroblades) were obtained from Lawn Hill in northwest Queensland and exchanged at the Georgina River markets.

Current theory on the *organisation of technology* (Bamforth 1991, Binford 1979, Bleed 1986, Nelson 1991, Schott 1986, Torrence, 1989, 2002) is both critiqued and applied to explain stone tool procurement at Moondarra. The concept of *embeddedness* is confirmed in relation to subsistence tool-kits and rejected for axe and leilira blade production.

This thesis suggests that current theory of hunter-gatherer technology does not explain the full spectrum of hunter-gatherer behaviour in relation to artefact production. This may in part be explained by the specifics of ethnographic work in societies. (e.g. see Binford 1978, Lee 1976, Binford 1968, Gould 1968, Thompson 1949, Stanner 1933).

However, the arguments advanced here do not necessarily contradict previous studies. Rather, they are expanded by the suggestion that two models of production co-existed at Moondarra: an embedded production system for the subsistence tool-kit alongside a community-based specialised production system for the purpose of exchange. Both systems existed simultaneously. This alerts us to the simplicity of generalisations concerning Australian exchange systems and their relationship to ritual or ceremonial concerns. The extrapolation of anthropological and archaeological case studies to general interpretations by inferring similarities and ignoring differences in past Aboriginal behaviour can be misleading.

Acknowledgements

My first acknowledgement is to my academic supervisor Dr. Shelley Greer. She has provided me with continued support and encouragement, provided additional references to examine, commented on my field and theoretical approaches, read and advised on earlier drafts and was always willing to provide supervision. During the previous two years I was a remote student at James Cook University. Shelley's ability to continue effective supervision of my PhD in these circumstances and her willingness to provide intense periods of supervision on visits to the University are very much appreciated.

Dr. Peter Veth was originally one of my supervisors and despite making a career move from James Cook University to the Australian Institute of Aboriginal and Torres Strait Islander Studies, he has continued to support me as a colleague and commented on the general outline of my theoretical approach to this research. Peter has provided me with intellectual support particularly in relation to some of the more complex issues involving Australian, Aboriginal archaeology in the arid zone.

Two other people to whom I owe special thanks are Mr. Richard Percy, Kalkadoon Elder, and Mr. Andrew Border, Cultural Heritage Manager, Environmental Protection Agency (EPA), Townsville. Over the past four years they have both acted in the role of cultural advisors to me.

Richard Percy has continually supported my PhD in meetings with the Kalkadoon Aboriginal Council (KAC) and was instrumental in obtaining the group's permission to conduct research on the Lake Moondarra stone axe quarry. Richard has maintained this interest throughout my research was always willing to discuss how to approach issues and provided guidance in doing things the Aboriginal way. Andrew Border provided me with the opportunity to conduct a Conservation Plan for the Lake Moondarra site. This commission enabled the site to be surveyed and the impact of stock on the site to be comprehensively assessed. This introduction to practical Cultural Heritage Management and his subsequent advice on the roles of Archaeology and Cultural Heritage has

provided me with invaluable knowledge. Both Richard and Andrew have given me considerable support during the production of this PhD.

The Kalkadoon Aboriginal Council kindly gave permission for my research on Moondarra and participated in the Conservation Plan. In 2003, the National Trust, Queensland, recognized this collaborative approach to research between the KAC, the EPA and myself with the presentation of a Cultural Heritage gold award for excellence in works and actions.

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Clinton Percy and Roger Sullivan assisted during the site survey in preparation for mapping the site. This was extremely difficult work in hot conditions and to carry enough water for a summer's day when temperatures often reached over 40 degrees and remain focused was sometimes challenging. Until we established the location of four-wheel drive tracks and sites in the area, finishing a day's work with a two-hour walk back to the vehicle was always something we looked forward to.

Finally, my wife Susan supported my studies throughout the PhD. Her support and encouragement certainly enabled me to concentrate on the workload required in completing this research.

Publications, reports and conference papers associated with this thesis

Referred journals

- Tibbett, K. 2002. Lake Eyre Basin: models of exchange. *Tempus*, Vol. 7:213-219.
- Tibbett, K. 2002. Archaeological analysis of stone axe exchange networks in the Lake Eyre Basin during the mid- to late Holocene. *Australian Archaeology*, Vol 5: 22-29.
- Tibbett, K. 2003. Hammer Dressed Stone Hatchets in the Lake Eyre Basin. *Archaeology in Oceania*, Vol 3:37-40.
- Tibbett, K. 2003. Risk and economic reciprocity: three regional food-sharing systems. *Australian Archaeology*, Vol 57:7-10.
- Tibbett, K. 2005. (Submitted) When east is northwest: expanding the archaeological boundary for leilira blade production. *Australian Archaeology*.

Non-refereed publications

- Tibbett, K.E. and A. Border 2003. Lake Moondarra stone axe quarry. EQ Newsletter Issue 8 February 2003.

Unpublished Reports

- Tibbett, K. E. and the Kalkadoon Aboriginal Council 2001. Results of the desktop study describing the cultural heritage values of the Lake Moondarra Stone Axe Quarry and its significance. Unpublished report to the Environmental Protection Agency (Qld) and the Natural Heritage Trust.
- Tibbett, K. E. and the Kalkadoon Aboriginal Council 2001. Progress report: The Lake Moondarra Cultural Heritage Management Study. Unpublished report to the Environmental Protection Agency (Qld) and the Natural Heritage Trust.
- Tibbett, K. E. and the Kalkadoon Aboriginal Council 2001. Final report: The Lake Moondarra Stone Axe Quarry. Unpublished report to the Environmental Protection Agency (Qld) and the Natural Heritage Trust.

Presentations at Conferences

December 2001. The Australian Archaeological Association's annual conference in Townsville, Queensland. This paper argued for increasing social complexity in Aboriginal society during the mid- to late Holocene.

December 2002. *Looking Forward, Looking Back*. (Presented with Mr. Andrew Border) At the Australian Archaeological Association annual conference at Jyndabyne, NSW. This paper is concerned with the importance of research in cultural heritage management plans.

December 2003 *Dual Procurement Systems in a Hunter-Gatherer Society*. At the Australian Archaeological Association annual conference at the University of New England, Armidale, NSW.

The search for a 'forager technology' or any technology defined only by a society's food-getting habits, is unlikely to be fruitful, because material or tool manufacture is a resource in the same sense as are plants and animals: its nature and distribution fundamentally condition the ways in which it can be exploited. To understand technological organisation, we must examine these aspects of lithic resources in conjunction with the way in which humans are or were organised to satisfy their other needs. (D.B. Bamforth 1986:40)

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