The pattern and timing of prehistoric settlement in Central Australia.

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a thesis submitted for the degree of Doctor of Philosophy of the University of New England

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I certify that the substance of this thesis has not already be	en
submitted for any degree and is not being currently submitted f	or
any other degree. ,	
I certify that any help received in preparing this thesis, and a sources used, have been acknowledged in this thesis.	11

Signature

Our journey has been a very hard one, and we have suffered great privations; but they could not have been guarded against, because we did not know the nature of the country we had to cross.

Peter Egerton Warburton 1874.

#### PREFACE AND ACKNOWLEDGEMENTS

The opportunity for this project arose out of my appointment at the beginning of 1980 as a field archaeologist with the Museums and Art Galleries Board in Darwin. As originally conceived it was to have been part of a wider archaeological survey of the Northern Territory. However, it quickly became apparent that useful results would only be obtained by concentrating on a smaller region. Central Australia – the "Red Centre" – was one of a number of possibilities.

That the project has been possible in its present form is entirely due to the liberal attitude of Dr Colin Jack-Hinton, Director of the Northern Territory Museum. He generously allowed me to devote a substantial part of my time to this work and officially sanctioned the excavations in his administrative capacity under the <u>Native and Historical Objects and Areas Preservation Act</u>, The infrastructure for the project - a vehicle, office space, a radio-transceiver and interlibrary loan facilities - and most of the operational costs of the fieldwork - fuel, film, food, plastic bags and other consumables - were provided by the Museum and I wish to thank the board members and the director for their support.

By the end of September 1981 preparations for the opening of the new museum complex were complete and a second archaeologist -B. J. Cundy - had joined the staff. With these developments it became possible for me transfer to the Museum's annexe in Alice

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Springs and to begin more sustained fieldwork in the arid zone. This move substantially reduced the cost of the fieldwork and gave a certain essential flexibility in tracking down peripatetic traditional owners. However I was keenly aware of the professional isolation that it entailed. Throughout the project my nearest archaeological colleagues were at least 1500 km away. It is appropriate therefore that I acknowledge the help of the library staff of the Darwin museum - Delys Newman, Sandra Mann and Joanne Chin - who provided me with an essential interlibrary loans service. In Alice Springs, Dick Kimber and Marg Friedel helped a great deal by providing social occasions for meeting many of the scientific and anthropological visitors that passed through Alice Springs.

My decision in 1984 to enrol as an external PhD scholar at the University of New England was in part an attempt to impose an external deadline on this project. Given the special circumstances surrounding my candidature, I thank the head of the department, Professor Graham Connah, for taking me on. I am grateful for the encouragement and pragmatic advice provided by my academic supervisors, Dr. Mike Morwood (University of New England) and Dr. Rhys Jones (Australian National University). Here again I have a special debt to my employer for granting the periodic study leave that enabled me to meet with my supervisors in Armidale and Canberra. Mike Morwood made a point of visiting me in the field and I would like to thank him for his assistance with the excavation at <a href="Interregenente">Interregenente</a>. I also owe special thanks to Di Watson at the University of New England for the many small tasks she undertook on my behalf.

In 1976 fundamental social changes in the Northern Territory

were heralded by Federal legislation aimed at repatriating land to Aboriginal people. A number of organisations were subsequently established in Alice Springs to manage Aboriginal freehold land, to pursue further claims on land, and to protect important totemic and mythological sites. Given the present, somewhat volatile, political climate I set out to consult the appropriate Aboriginal people well in advance of any proposed archaeological excavation. For help in identifying the relevant people, as well as providing an independent check that informed consent had been given for the work, I wish to thank Jeff Stead, Wenten Rubuntja, Jane Lloyd, Mike Niblett, Alan Drover, Geoff Bagshaw and Michelle McGlasson of the Central Land Council; David Brooks of the Aboriginal Sacred Sites Protection Authority; Garry Stoll of the Finke River Mission; and also Nahasson Ungwanaka, Dick Kimber, Chip Morgan and George Breaden.

Initially the process of consultation - which involved identifying and then establishing the whereabouts of the appropriate Aboriginal people, organising a meeting and a visit to the site, follow up visits, and arranging for a third party to verify the outcome - took six months to run its course. As my local credentials and personal contacts with communities grew, this lead time fortunately decreased to a few weeks. I wish to thank the following Aboriginal people - both kirda and kurtangurlu - for permission to excavate at the sites discussed below: Bruce Breaden, George Breaden, Sid Coulthard, Alan (Yellowshirt) Drover, Eric, Benjamin, Cornelius and Dennis Ebaterinja, Bruce Hayes, Davey Hayes, Edward Johnson, Gregory Johnson, Henry Ross, Wenten Rubuntja, Joe Multa Tjakamarra, John Multa Tjakamarra, Allen Tjapenenka, Limpi Puntungka Tjapangati, Jack Coulthard Tjupurrula,

and Barney Raggatt Tjupurrula. I must also take this opportunity to thank several other people that I was able to travel with; William and Nahasson Ungwanaka, Ben Clyne and Leo Williams and family.

The sensibilities of a another group of people also had to be taken into account. The European lessees of pastoral properties often view proposed archaeological work with suspicion, fearing that it will precipitate more Aboriginal claims on land, or more government interference in the management of their properties. I wish to thank the following cattlemen who cooperated with my study despite the prevailing attitude towards such research; Chris Edwards of Tempe Downs station, Mr and Mrs W. Hayes of Deep Well station, Terry Karger of Orange Creek station and Andrew Smith of Allambi station. I should also like to acknowledge the ready cooperation that I received from the Conservation Commission of the Northern Territory with my work in Kings Canyon/Watarka National Park and in the Pine Gap/Kuyunba Conservation Reserve.

For the excavations my field teams were small, usually no more than four people, and were an ad-hoc combination of students, friends and interested museum staff. Although it was always difficult to find suitable people, logistic problems would have kept the numbers low in any case. In carrying out the various excavations I was pleased to have the assistance of Eve Chaloupka, Barry Cundy, Manik Datar, Pat Gaynor, Elizabeth Greathouse, Mike Gunn, Fiona Jack-Hinton, Jane Kaye, Chris McColl, Michelle McGlasson, Dr Mike Morwood, Professor Lewis Kyle Napton, Tony Peachey, Anne Robb, Karl Roth, Robbie Sim, Steve Sutton, and Jack Coulthard Tjupurrula. They shared the flies, the dust and

shortage of water. They also coped, with admirable stoicism, with the pan-damper and tea that graced the last week of most of the digs. Jack, used to a more spartan existence, did complain that I overfed him. I owe special thanks to Barry Cundy, who assisted with much of the reconnaissance in the crucial first half of the project and who is one of the few people to fully understand the range of obstacles faced.

The chronology for this project rests upon a series of 22 radiocarbon dates. Field projects generate an insatiable demand for such benchmarks and the aims of this project could not have been realized without the series of grants for radiocarbon dating that the following organisations provided; The Australian Institute of Aboriginal Studies, The University of New England, The Northern Territory University Planning Authority, the Northern Territory History Awards scheme, the Prof. D. R. Grey Foundation and the Northern Territory Museum.

In sorting the material from the excavations I had the welcome assistance – for a short period – of Linda Muller and of the late Annie Blackwell. The raw data from my excavations was stored and manipulated using MINARK, an archaeological database system developed by Dr. Ian Johnson. I am deeply indebted to Ian for supplying me with a copy of this software. The excavation recording methods that I used in this project were also closely modeled on the format developed by him and which have almost become an industry standard.

In outlining a regional sequence for Central Australia I have built upon previous field work at <u>Keringke</u> by E. D. Stockton; at <u>Intirtekwerle</u>, James Range NW and <u>Kwerlpe</u> by R. A. Gould; and at

Kweyunge 1 and 2 and Urwemwerne by L. K. Napton. Professors Gould and Napton generously gave access to unpublished material relating to their excavations and gave constructive comments on my interpretation of these sites. Father Eugene Stockton and I were able to revisit Keringke to discuss his bold, pioneering excavation and he graciously provided details of an unpublished date from the site. For access to the important comparative collections of Puntutjarpa and Newman I wish to thank Charlie Dortch and the Western Australian Museum. Charlie also generously provided some of his scarce research money to pay for a further radiocarbon date, SUA2553, from the Newman site.

I must also thank a number of people for their help during the writing of this thesis - in particular Dick Kimber, who shared his formidable knowledge of local history and ethnography. I am indebted to him for bringing to my attention many of the references cited - not to mention several of the subsequently excavated. Manik Datar openly opposed the project and the frequent absences from home that a prolonged field project entails - but her own passion for writing together with the constant stream of elegant literature that she brought into our household have lightened my writing style. John Henderson, at the Institute for Aboriginal Development in Alice Springs helped me to ensure that the Arrernte place-names I used were consistent with the current orthography. However, I was not able to check all the place-names with him and he cannot be held responsible for any I have immortalized in mistakes that the archaeological . literature. Mike Morwood, Rhys Jones, Ron Lampert and Manik Datar read various parts of this thesis in draft form and I thank them for their suggestions.

Ron Lampert alerted me to the importance of John Mulvaney's 1961 paper, as well as to aspects of Gould's <u>desert culture</u> model that I had otherwise overlooked. He also generously provided me with a copy of his unpublished paper - "The question of early human occupation in the arid centre of Australia" (prepared for the 1986 Australian Archaeological Association conference) - and allowed me to refer to a draft of his major report on the excavations at Hawker lagoon. I must also thank Harry Allen for providing a copy of his 1986 review of the pleistocene sequence in the Willandra lakes region.

Finally, I would like to acknowledge the help of the following people who provided ready answers to my various queries; Dr. Bob Wasson (CSIRO, Canberra), Dr. Mike Freeman (Northern Territory Geological Survey), Dr. Geoff Pickup, Dr. Steve Morton, Dr. Marg Friedel and Des Nelson (CSIRO, Central Australian Laboratory), Peter Latz and Dave Torlach (Arid Zone Research Institute), Bob Purvis (Atartinga station), Dr. Gerry Jacobson (Bureau of Mineral Resources, Canberra), Dr. Peter Patton (Wesleyan University, Connecticut, USA), Dr. Iain Davidson and D. Hobbs (University of New England), Dr. Harry Lourandos (University of Queensland), Dr. Scott Cane (ANUTECH, Canberra), Dr. Ron Lampert (Australian Museum, Sydney), Fran Erlick and J. P. M. Long.

The drawings, diagrams and photographs that illustrate this thesis are my own work except where I have otherwise indicated in the captions.

Alice Springs 30th November 1987

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APPENDIX 1: SUPPORTING PUBLICATIONS

### CONVENTIONS

### Place names.

Throughout the text I have used Aboriginal place names in preference to their European equivalents SO that the archaeological work can be married more effectively with the wealth of oral and written information about the cultural landscape in Central Australia. If a European equivalent exists I have shown it in square brackets when the Aboriginal place name is first used. Arrernte names are written using the orthography developed by the Institute for Aboriginal Development for the dictionary project. As this orthography has been continually refined some of the previously published names for the excavated sites are slightly different from the versions given here. For Matutjara and Kukatja place names I have simply chosen from the anthropological literature the rendering of a particular place name that seems most consistent with the orthography in Hansen and Hansen (1977).

### Site codes.

The following abbreviations are used for the excavated sites in labeling artefacts in the illustrations.

PJ RBV Urre (Rainbow valley) Purit;arra

TKP Tjungkupu IDK Intirtekwerle

Wanmara KYB MNM Kweyunpe TRT Therreyererte IL Ilarari

RMK Rrewurlpmurlpme kweke