

# Technical Reports of the Australian Museum, Online

a peer-reviewed, open-access, serial publication of the  
Australian Museum Research Institute  
1 William Street, Sydney NSW 2010

ISSN 1835-4211 (online)

<https://doi.org/10.3853/issn.1835-4211>

Number 27 · 19 December 2018



## Archaeology and Petroglyphs of Dampier (Western Australia) an Archaeological Investigation of Skew Valley and Gum Tree Valley

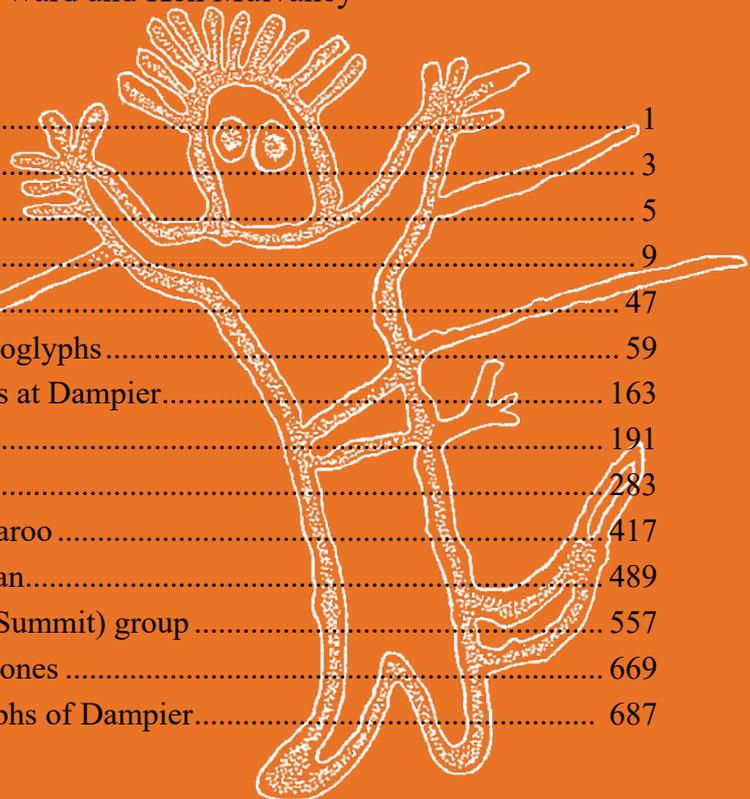
by

Michel Lorblanchet

edited by

Graeme K. Ward and Ken Mulvaney

Foreword (John Mulvaney).....	1
Foreword (Russell C. Taylor).....	3
Preface.....	5
Editors' Introduction .....	9
Chapter 1. Introduction .....	47
Chapter 2. Part I. Skew Valley Petroglyphs .....	59
Chapter 2. Part II. First excavations at Dampier.....	163
Chapter 3. Gum Tree Valley, Spirit.....	191
Chapter 4. Gum Tree Valley, Eagle.....	283
Chapter 5. Gum Tree Valley, Kangaroo .....	417
Chapter 6. Gum Tree Valley, Woman.....	489
Chapter 7. Gum Tree Valley, Top (Summit) group .....	557
Chapter 8. Comparisons between zones .....	669
Chapter 9. Conclusions—Petroglyphs of Dampier.....	687



PUBLISHED BY THE AUSTRALIAN MUSEUM, SYDNEY, AUSTRALIA.  
THE AUSTRALIAN MUSEUM IS A STATUTORY AUTHORITY OF,  
AND PRINCIPALLY FUNDED BY, THE NSW STATE GOVERNMENT.



Lorblanchet, Michel, 2018. *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney. *Technical Reports of the Australian Museum, Online 27*: 1–690.

[Published online-only by the Australian Museum, Sydney, as 14 PDF, the bibliographic details for which are listed below. A contents table at the beginning of each one of the 14 PDFs has DOI links inter-connecting all works in this volume.]

- 
- Mulvaney, Derek John, 2018. Petroglyphs of Dampier—foreword. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, pp. 1–2. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1684>
- Taylor, Russell C., 2018. Petroglyphs of Dampier—foreword. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, p. 3. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1685>
- Ward, Graeme K., 2018. Petroglyphs of Dampier—preface. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, pp. 5–8. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1686>
- Ward, Graeme K., and Ken Mulvaney, 2018. Archaeology and petroglyphs of Dampier—editors’ introduction. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, pp. 9–45. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1687>
- Lorblanchet, Michel, 2018a. General introduction to the research at Dampier. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 1, pp. 47–58. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1688>
- Lorblanchet, Michel, 2018b. The Petroglyphs of Skew Valley. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 2 (part I), pp. 59–161. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1689>
- Lorblanchet, Michel, and Rhys Jones, 2018. The first excavations at Dampier (Western Australia), and their place in Australian archaeology (with addendum on radiocarbon dating of Skew Valley midden). In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 2 (part II), pp. 163–190. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1690>
- Lorblanchet, Michel, 2018c. The Spirit Figure Group at Gum Tree Valley. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 3, pp. 191–282. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1691>
- Lorblanchet, Michel, 2018d. The Eagle Group at Gum Tree Valley. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 4, pp. 283–416. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1692>
- Lorblanchet, Michel, 2018e. The Kangaroo Group at Gum Tree Valley. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 5, pp. 417–488. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1693>
- Lorblanchet, Michel, 2018f. The Woman Group at Gum Tree Valley. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 6, pp. 489–555. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1694>
- Lorblanchet, Michel, 2018g. The Summit of Gum Tree Valley. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 7, pp. 557–668, with addenda by Jacques Evin and George Kendrick. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1695>
- Lorblanchet, Michel, 2018h. Comparisons between the six zones studied in Skew Valley and Gum Tree Valley. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 8, pp. 669–686. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1696>
- Lorblanchet, Michel, 2018i. Petroglyphs of Dampier—general conclusions. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, chapter 9, pp. 687–690. *Technical Reports of the Australian Museum, Online 27*: 1–690. <https://doi.org/10.3853/j.1835-4211.27.2018.1697>

## Author

**Michel Lorblanchet** joined the *Centre national de la recherche scientifique* (CNRS, France) in 1969 to study the Palaeolithic rock art of France. After graduating in 1972 from Université Sorbonne (Paris) with a doctorate in Prehistory, he was employed from 1974 to 1977 at the Australian Institute of Aboriginal Studies to conduct research into indigenous Australian rock art. From his base in Canberra, he participated in projects in Far North Queensland and in western Victoria. Between 1975 and 1976, he conducted the fieldwork at Dampier, Western Australia, on which this monograph is based, and made two further fieldtrips there in 1983 and 1984. He returned to France in 1977 to the *Centre de Préhistoire du Pech Merle* (Cabrerets). Lorblanchet was appointed *Directeur de recherches au CNRS* in 1995; he retired in 1999 and lives near Saint Sozy in the Lot Valley where he continues to research and publish about rock art. He is the author of many papers and several books on European Palaeolithic art (some are listed in the editors' introduction) as well as reports and this monograph on his Australian researches.

## Volume Editors

**Graeme K. Ward** has conducted archaeological and ethno-archaeological fieldwork in the island Pacific and Australia. He gained his doctorate from The Australian National University and was employed at the Australian Institute of Aboriginal Studies where he was involved with administration of research programs including the national Rock Art Protection Program. Subsequently, as Research Fellow and Senior Research Fellow at the Australian Institute of Aboriginal and Torres Strait Islanders Studies he undertook research into Indigenous cultural landscapes in northern Australia with traditional knowledge-holders of cultural heritage places. He is the author of various research papers, of three monographs and editor of many collections of archaeological papers; he served as the editor of the Institute's journal, *Australian Aboriginal Studies*, for several years. Currently he is a visitor at the Department of Archaeology and Natural History, School of Culture, History and Language, College of Asia and the Pacific, of The Australian National University.

**Ken Mulvaney** has lived and worked for the past ten years on the Burrup Peninsula, where he is the Principal Advisor Cultural Heritage for Rio Tinto Iron Ore. Prior to this, Ken spent many years in the Northern Territory working with Aboriginal traditional owners documenting their cultural heritage places and land affiliations. He first came to the Burrup in 1980 when employed by the Western Australian Museum as member of a team documenting archaeological sites in areas destined for construction of a petrochemical processing plant. His doctorate from the University of New England is the first such study on the prehistory of the Dampier Archipelago. He is author of many articles on rock art and Aboriginal culture, and is currently affiliated with the Centre for Rock Art Research and Management, University of Western Australia.

## Petroglyphs of Dampier—Preface

GRAEME K. WARD 

former Senior Research Fellow,  
Australian Institute of Aboriginal and Torres Strait Islanders Studies (AIATSIS);  
The Australian National University, Canberra, Australia

WARD, GRAEME K. 2018. Petroglyphs of Dampier—preface. In *Archaeology and Petroglyphs of Dampier (Western Australia), an Archaeological Investigation of Skew Valley and Gum Tree Valley*, ed. Graeme K. Ward and Ken Mulvaney, pp. 5–8. *Technical Reports of the Australian Museum, Online* 27, pp. 1–690.  
<https://doi.org/10.3853/j.1835-4211.27.2018.1686>

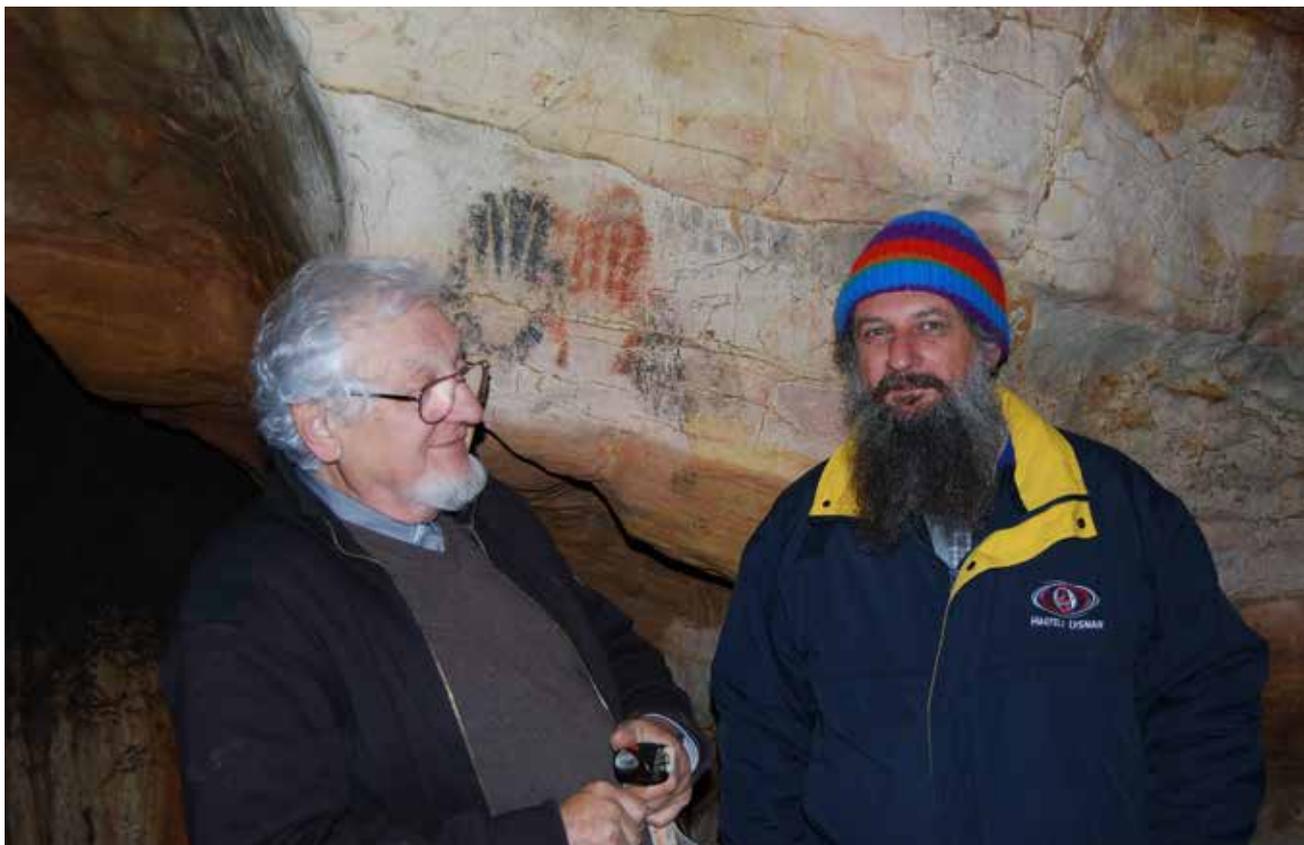
The multiple beginnings of this book are spread over nearly one half century, dating from only a few years after the initial archaeological and anthropological reconnaissances of the Pilbara region of Western Australia. Much earlier, of course, is the Indigenous Australians' habitation of the area now known as the Dampier Archipelago, Burrup Peninsula and Murujuga. There are good reasons why we think that this initial occupation happened during the Pleistocene period and to have endured for tens of thousands of years, with land use and subsistence patterns adapting to the progressive inundation of the western coastal shelf. The evidence of this occupation is multi-faceted but its most evident and indeed spectacular component—and the one that most concerns us here—is the presence of the Dampier petroglyphs. There are probably hundreds of thousands of decorated rocks and many more individual and group images; they bear witness to the artistic endeavours of many generations. These images catch the attention of the visitor because when they were carved the original light colour of the rusty-weathered rock-faces was exposed; and because their diverse subject matter reveals much about the cultures and societies of those who carved them. It has been argued that the Dampier petroglyphs represent the most extensive and intensive example of ancient rock art and that they have cultural values of World Heritage significance.

The second beginning was the clash of land-use interests in the area that became manifest in the 1960s with the development of the mining industry in the Pilbara. When the need for port facilities to export the iron ore from proposed inland mines was recognised, the statesmen of distant Perth were, of course, sufficiently enlightened to ensure that an archaeological survey of the first choice of location was conducted. Depuch Island was found to contain significant

rock art of sufficient heritage value to conclude that it should be preserved, and so the decision was made to develop ports at King Bay and at Finucane Island, Port Headland. Unfortunately, this age of enlightenment was but brief and no comparable evaluation was made of the second choice. The petroglyphs of Dampier are particularly numerous and extensive and demonstrably have immense cultural values. Regardless, in addition to a deep-water port, over the next half century development of an industrial park for sea salt extraction, iron ore loading and petrochemical processing has compromised severely indigenous heritage values of the region. There have been several attempts to mitigate the destruction of the indigenous, national and world heritage values of the archipelago. This book may be seen as one.

The third part might be due to a few persons and historical chance. A company engineer whose personal interest in the wonder of the petroglyphs translated into action to record and preserve elements of the 'archaeological resource' where he was working; a heritage professional contacted by the engineer who took action locally and into the national sphere; a new leader of a national organization who could access resources to provide for detailed research of some parts of the ancient cultural landscape of Dampier. The last, the then Principal of the Australian Institute of Aboriginal Studies, in 1975 directed a new researcher, a French archaeologist—recently arrived in Australia—to the study of the rock art of the archipelago that increasingly was under threat from the industrial development there.

The fourth was Michel Lorblanchet himself—until then a student of the European Pleistocene. Lorblanchet welcomed the opportunity to work in the Pilbara. He had the assistance of a small team and a series of volunteers and visitors—including members of the Roebourne Aboriginal



**Figure 1.** Black and red hands in the cold of Roucadour (April 2012). Photograph: Josseline Bournazel-Lorblanchet.

community. He concentrated his attention on two areas of Dampier Island, Skew Valley, where a midden had been exposed by road building adjacent to petroglyphs along a seasonal watercourse, and Gum Tree Valley, an extensive area with several concentrations of petroglyphs along a ridge and adjacent valleys. Lorblanchet brought to the task a dedication to systematic recording and excavation and an archaeological appreciation of rock art then rare in Australia. He spent nearly a year in the field during 1974 and 1975; then, after his relocation to France, returned to Dampier for further fieldwork in 1983–1984. Despite his considerable responsibilities in developing a new museum at the Pleistocene cave of Pech Merle, he analysed his Dampier recordings and wrote detailed reports. While the Institute’s initiative in supporting field research was formative in the development of Australian rock art studies, its orientation later changed, and Lorblanchet’s reports remained, unpublished except for some conference papers, and infrequently consulted, in the Institute’s library.

A fifth part commenced in 2007. In the middle of that year—after decades of attempts to have the area protected—360 km<sup>2</sup> of the Dampier Archipelago were entered onto a National Heritage List established under new Australian (federal) heritage legislation. Concurrently, the Rio Tinto company—with salt extraction and iron ore shipping interests in the immediate area—signed a Conservation Agreement with the Commonwealth Government that allowed it to continue its activities in the Dampier Archipelago, and formalized its commitment to protecting the rock art there. The preparation and publication of this book was financed from part of the company’s allocation of funds to “present and transmit information about the National Heritage Values” of the area. Mulvaney, Principal Advisor Cultural Heritage for Rio Tinto Iron Ore, initiated the work during a visit to Canberra. At the Institute’s Library, he and Ward viewed

the extensive and detailed materials that Lorblanchet had deposited and realized the potential of their publication to contribute to a better understanding of the heritage values of the Dampier cultural landscape; this appreciation was shared by the Institute’s Principal who encouraged the development of the project and its publication. After consultation with Lorblanchet, Ward undertook translation of the reports from the French, editing the work with the valued involvement of the author and Mulvaney.

### Texts and translation

This publication is based upon the series of major manuscript reports and the accompanying line drawings and photographs that Lorblanchet prepared during the period between 1985 and 1988 copies of which are held by author and the library of the Australian Institute of Aboriginal and Torres Strait Islander Studies. (Permission to access and cite related correspondence was provided by the then Principal, Russell Taylor, and extracts used with Lorblanchet’s concurrence.)

Translation from the French of documents such as the reports provided by Lorblanchet required not only a knowledge of the original language but also a good understanding of the subject matter. We have been fortunate in this regard in having the assistance of Kathleen Egerton who worked in collaboration with one of the editors (GKW) and was responsible for a major part of this task. Mme Marie-France Rousetty, then high commissioner of Mauritius to Australia, made an initial translation of part of the Skew Valley section. An earlier translation into English of the GTVT section was made by an unnamed French person employed by Lorblanchet for the purpose; this was improved by Peter Randolph, then of the Department of Aboriginal Sites of the Western Australian Museum, and—with some modifications—provides the basis used here of that section.



**Figure 2.** Ken Mulvaney and Graeme K. Ward inspecting petroglyphs at Skew Valley (August 2011). Photograph: KME.

Others' translations were revisited by GKW and approved by the author. At the same time, Lorblanchet made detailed changes, sent additional passages to expand and clarify the text, and added to the illustrations initially provided. KJM checked and commented on the content and interpretations of each section.

This endeavour was undertaken while GKW was a senior research fellow at AIATSIS, Canberra, and KJM was employed as Principal (Cultural Heritage) by Rio Tinto, Dampier; the editors acknowledge the generous assistance provided by their employers and their colleagues in completing this work.

### **A collaboration and a labour**

A work such as this monograph necessarily comprises much and sometimes intensive collaboration; it also involves copious detailed work and sometimes a degree of sacrifice by all parties. Lorblanchet had endeavoured to meet his obligations to the materials by providing reports to the Institute; it was unfortunate that the initiative for their publication was not pursued by the Institute in the 1980s. Twenty years later, not only was the need greater but also circumstances had intervened to support the translation and publication. Many and varied interests were involved in exploiting and attempting to protect the indigenous cultural values of the Dampier Archipelago, and Lorblanchet's results would be an invaluable contribution to the debate.

Following initial correspondence between Ward and Lorblanchet, Ward took the opportunity of travel in France to meet with Lorblanchet in Souillac (Lot) where the proposal

for publication was discussed. They meet at the twelfth century Abbey Sainte-Marie—Michel was immediately recognizable by his shock of white hair and his characteristic shoulder bag, familiar from earlier encounters in Canberra and Darwin; they discussed the matter over coffee, then over a meal that evening. There was accord. Lorblanchet wrote later (pers. comm. to GKW 29 May 2014): “I remember I was quite astonished to hear you saying that you were going to publish my work on Dampier! I didn't expect it.”

That meeting took place in 2008. In the several years since then, there have been hundreds of email and postal exchanges as translations and interpretations were honed, new items added and old materials brought to light. Opinions were exchanged, debates entered on a wide variety of (always relevant) topics. Further understandings were shared during a second meeting between Lorblanchet and Ward following the Foix IFRAO Congress in 2010, and between Lorblanchet and Mulvaney the following year. Michel and Josseline were generous in their hospitality and Michel honoured his visitors by conducting them around the Quercy cave sites where he had been researching for decades and they extended the opportunity for focussed and concerted discussions and clarifications. Lorblanchet wrote (pers. comm. to GKW 29 May 2014):

It was a true collaboration, a true communication between you and me ... and also with Ken, for example for the thylacine carving of GTV that I had noted in my first inventory (I had noted: “stripped animal”) and that you found again (thanks to the precision of the inventory of the motifs) and that you identified and traced—this was a magnificent link between an old work and today's research.

In 2011, Ward took the opportunity to visit with Mulvaney Skew and Gum Tree Valleys and several other sites on Dampier, an experience that considerably enhanced his understanding of the geography and cultural landscape and thus his comprehension of Lorblanchet's description and analyses.

While Ward sought to fit the increasing workload within his usual responsibilities at the Institute and fieldwork in northern Australia, for Lorblanchet, the preparation of the book required considerable involvement that impacted on his other endeavours—he received and sent mails every few days, had to excavate his archives, searching for original diagrams and photographs, "... constantly improving illustrations and texts, reading your translations, discussing with you to explain some parts of my productions, pulling myself back to all the details of my Dampier work ..." (pers. comm. to GKW 29 May 2014). Indeed ...

I did enjoy this long communication with you on a topic that we all know and enjoy and you did an incredible amount of good work for the edition and translation of the book, it also involved me in much work! ... To concentrate on the preparation of this huge book, I had to postpone several of my works in progress seven years ago, for example a book on my last study of the Palaeolithic painted cave at Roucadour (based on six years' fieldwork) ... My wife also noted that I spent too much time with my computer, and less with her ...

Nevertheless, "the preparation of my book with you was an exceptionally rewarding experience, the common joy for us all, of working together in this Australian-French collaboration on one of the first studies of the most important rock art site in the world".

GKW  
January 2015

### Note re publication

From the early stages of Michel Lorblanchet's fieldwork it was intended that the results of his research be published by AIAS. As an employee of the Institute (1974–1977), Lorblanchet expected this, and this expectation was shared by the then Principal, Peter Ucko; the Acting Principal, Warwick Dix, wrote in February 1984 (Ward & Mulvaney, 2018, this volume) to the then regional representative of the National Aboriginal Council and senior law man, Herbert Parker in Roebourne, that, when the results of Dr Lorblanchet's study were available, "... we hope to publish through this Institute". It was a realistic enough expectation; the Institute had been not only a major supporter of archaeological research over the previous two decades but also a major publisher of Australian archaeological research and discussion, starting with the radiocarbon dating manual prepared by Henry Polach and Jack Golson (1966), and monographs in the 'Prehistory and Material Culture Series' by, for early examples, Ian Sim, Bruce Wright, and Peter Coutts on, respectively, *Rock Engravings of the MacDonalld River district, NSW* (1966), *Rock Art of the Pilbara region, North-west Australia* (1968), and *The Archaeology of Wilsons Promontory* (1970); also from this time, there were John Mulvaney's influential *Guide to Field Methods and Laboratory Techniques* (1968) and McCarthy's edited papers from the 1968 Conference on Prehistoric Monuments and Antiquities in Australia (1970). Collection of papers from the 1974 major conference were in preparation for publication by the Institute, including *Stone Tools as Cultural Markers: Change, evolution and complexity* (edited by Richard Wright, 1977), and *Form in Indigenous Art: Schematisation in the art of Aboriginal Australia and prehistoric Europe* (edited by Ucko, 1977).

Accordingly, in late 1976, Lorblanchet had outlined to Ucko a monograph incorporating accounts of his excavation of the Skew Valley midden and discussions of the Skew and Gum Tree valleys petroglyphs. The detailed reports that Lorblanchet subsequently sent to the Institute were to provide the basis of this publication by AIAS. At the Institute, changes not only in staff but in direction of research emphasis and especially publication made this increasingly unlikely

as the years passed. Early in the current project, discussions between the Principal and Mulvaney and Ward reinforced the understanding that the Institute would publish the resulting monograph once translations and editing were completed. Later, in 2012 and 2013, despite firm advice from the then Principal, Russell Taylor, to the Press, insurmountable obstacles were found to exist. A review of recent Institute publications would reveal an emphasis on social history and native title for example, and especially works by Indigenous Australians. We sought publishers elsewhere, especially those with a strong on-line presence that would make the work widely and freely available in Australia so that it may fulfil the further aim of influencing discussion about the value and preservation of the Dampier petroglyphs. Lorblanchet would seek elsewhere to arrange publication of a French-language version.

This monograph first was submitted early in 2015 to ANU Press for publication in the *Terra Australis* series. Subsequently, (1) reviewers' comments on the editors' introduction were received and some minor changes made to the text; (2) Mulvaney's monograph *Murujuga Marni. Rock art of the macropod hunters and mollusc harvesters* appeared in print allowing references to the thesis on which it is based to be changed to the published version; and (3) references to some papers still in press at the beginning of that year were updated. By mid-year 2017, copy-editing was underway, but disagreement regarding changes made there led to us withdrawing the book. Soon after, the monograph was accepted by the current publisher. We are confident that the accuracy of data has been preserved and the authorial voice retained in this published version. We are pleased to acknowledge the guidance of Dr J Peter White and the invaluable assistance of the editor of the Australian Museum's Technical Reports series, Dr Shane McEvey, in guiding us to finalization of this publication and adding much to its value and accessibility.

GKW  
December 2017