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

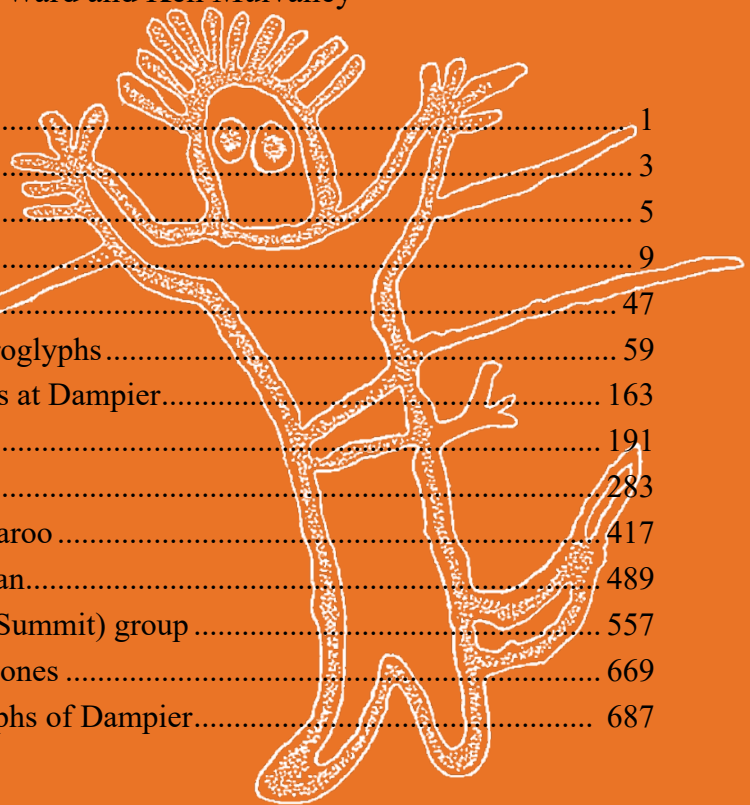
by

Michel Lorblanchet

edited by

Graeme K. Ward and Ken Mulvaney

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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.

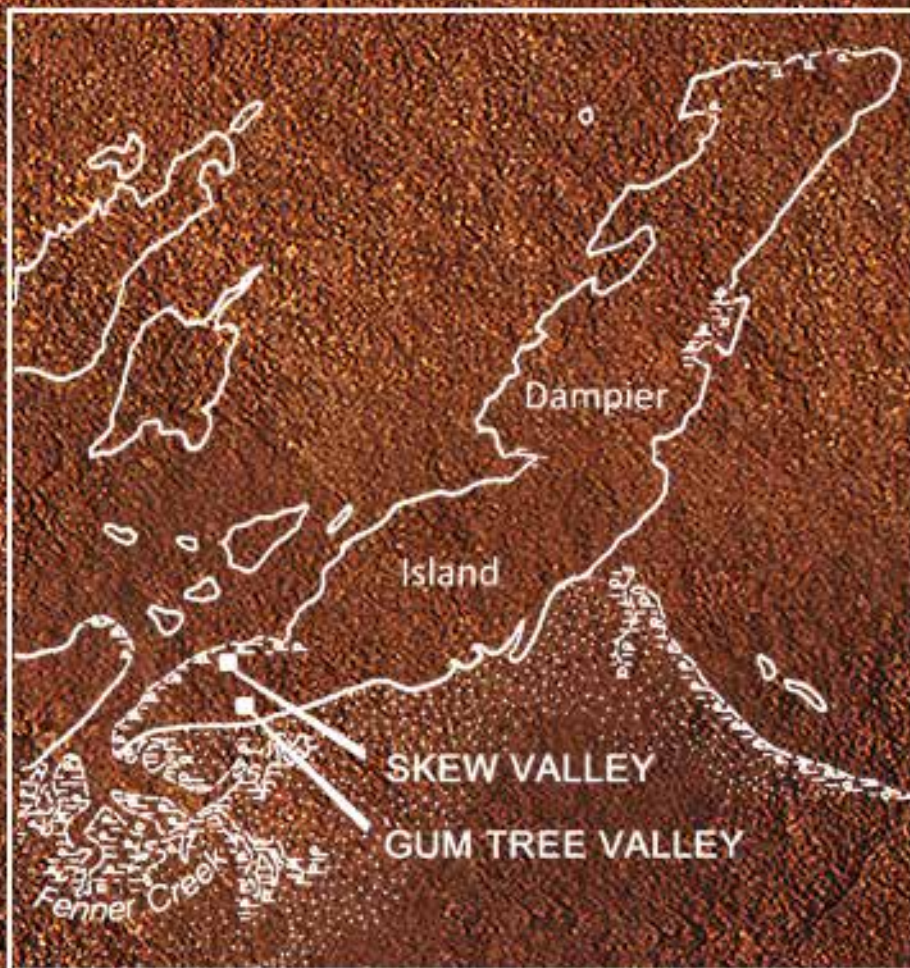
Volume Editors

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.

Chapter 1

Introduction



General Introduction to the Research at Dampier

MICHEL LORBLANCHET

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Australian Institute of Aboriginal Studies, Canberra, Australia (1974–1977)

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The Dampier Archipelago

My research area is Dampier Island on the coast of Western Australia, 8 km southwest of the township of Dampier built in 1965. It is part of the Dampier archipelago, and is also known as ‘Dampier Peninsula’ or ‘Burrup Peninsula’ (Fig. 1.1). Dampier Island is the largest island in the Dampier archipelago; it is a rugged, hilly and rocky stretch of land. The northern part faces the open sea and East Middle and West Middle Intercourse islands. The southern part is orientated towards the wide mudflats of Fenner Creek, Click Creek and Lewis Creek. In 1968, these mudflats were transformed into solar salt fields by the Dampier Salt Company. Today causeways cross these salt fields to link Dampier Island to the mainland. Most of Dampier Island is surrounded by a narrow belt of mangroves.

Four geographical-geological provinces are evident in the Dampier region:

- 1 To the south, the rough granitic edge of the continent borders a swampy depression;
- 2 The marshy depression (20 × 7 km) occupied by mangrove and Fenner Creek mud flat in the centre. These stretches of mud flats are uncovered at low tide (once they were areas where turtles laid their eggs);
- 3 The rocky spine of Dampier Island (20 × 4 km), where the two valleys studied are located, is formed of chains of rocky hills. These hills provide a dark brown panorama with contrasting areas of spinifex and sparse stands of eucalyptus (*Eucalyptus patillaris*) bordering the streams; there is a variety of shrubs and a spinifex-like grass (*Triodia pungens*) that provided an occasional food source. In historical times, the

inhabitants of this area collected and ground its seeds to make damper (a traditional Australian bread baked in the coals of a campfire). The rocky areas are formed of Archaean Age intrusive materials, mainly gabbro and granophyre. Both are hard rocks, often convenient for stone knapping (especially the granophyre), and they weather to a dull red; when freshly exposed their surfaces are nearly white. Despite the hardness of the rock, this remarkable visual contrast has been used to produce petroglyphs. We will see further, however, that gabbro and granophyre—at the various sites—offered very different conditions to the carvers; and

- 4 To the northwest, the archipelago extends to many large rocky basaltic islands.

Archaeological sites are numerous in the four regions because the variety of the natural environments provided a great diversity of food resources; it is likely that the presence of dark rocks available for making petroglyphs made this area even more attractive. On Dampier Island, petroglyphs line the more than 20 km of its rock shoreline. Their number may exceed 100 000. There is a close association between potable water sources and groups of carvings. There are also middens containing a variety of shellfish along with various other archaeological sites including stone tools quarries. Everywhere, shell middens associated with petroglyphs are scattered along the coast and in small adjacent valleys.

The availability of drinking water raises an important issue since the region receives only 200–300 mm of rain each year, almost exclusively from cyclonic rains in summer (November–March), and winter is particularly dry. Summer temperatures can reach 50°C.

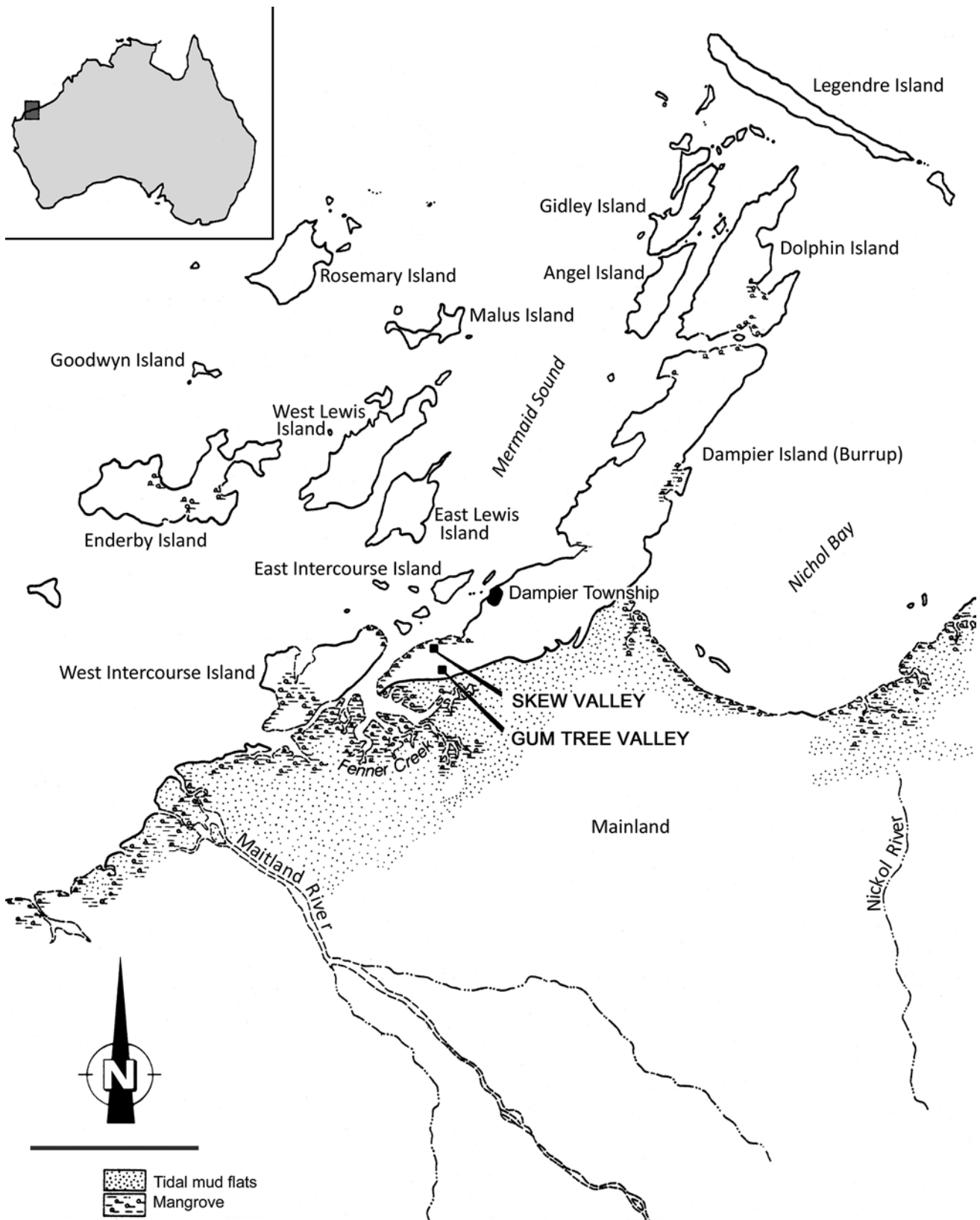


Figure 1.1. Dampier Archipelago showing streams and hilly areas, mudflats and mangrove habitats, and location of Skew Valley midden. Scale: 10 km. Inset: Regional location on map of Australia. Source: Adapted from original map by W. Mumford, ANU.

Skew and Gum Tree Valleys

My study on Dampier Island concentrated on two of the small valleys drained by semi-permanent creeks: Skew Valley, 1 km long, orientated south-north, and opening to the ocean, and Gum Tree Valley, 1.5 km long, orientated east-west, then north-south and leading to the Fenner Creek mud flats (Fig.

1.2). Both valleys are on the Dampier salt lease. They were given these names by Dampier Salt workers because the first is Skewed from the direction of the haulage road and the second because it is lightly timbered with Gum Trees.

I excavated a shell midden located halfway along Skew Valley in its narrower and well sheltered part, about 500 m from the ocean and 14 m above the mangrove level. The

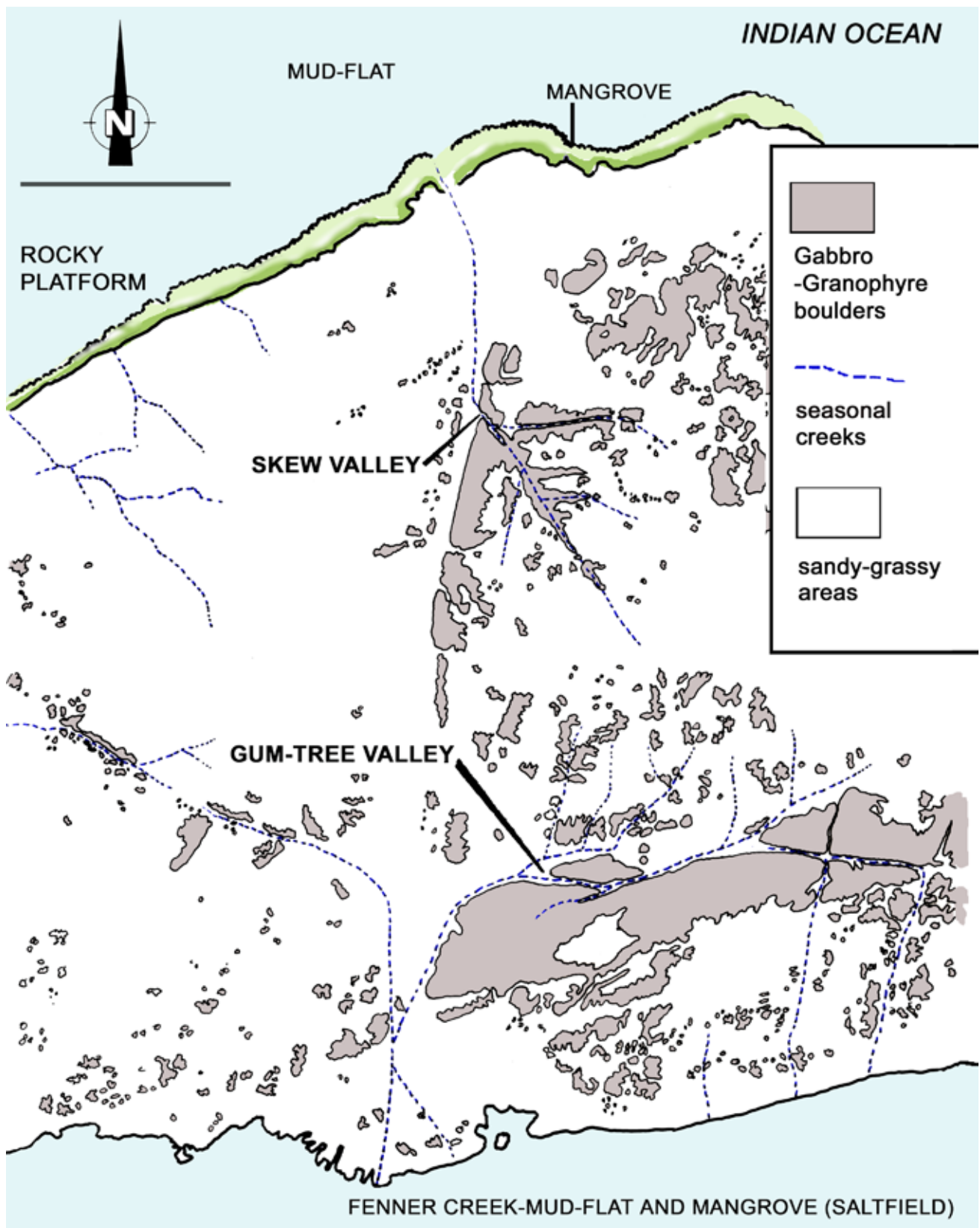


Figure 1.2. General map showing features in the vicinities of Skew Valley and Gum Tree Valley. Scale: 500 m.

bottom of the valley, about 35 m wide, is occupied by a small seasonal creek. The slopes are bare and are steep or vertical in parts. They are covered with massive brown granophyre boulders, most of them bearing petroglyphs.

The excavated shell midden abuts the eastern slope of the valley at the junction of the main creek and a smaller creek with a steeper gradient coming from the southeast. The latter creek, whose bed consists of a maze of rocks, flows out of

a small, narrow gorge. The creek contains seven seasonal pools of fresh water, one above the other, joined by small waterfalls. The location of the midden can be explained by the proximity of the pools as well as the presence of the two creeks (Fig. 1.3).

The midden is about 60 m from the pools, and a walking track between them is still visible along the creek bed (it is an animal track as well).

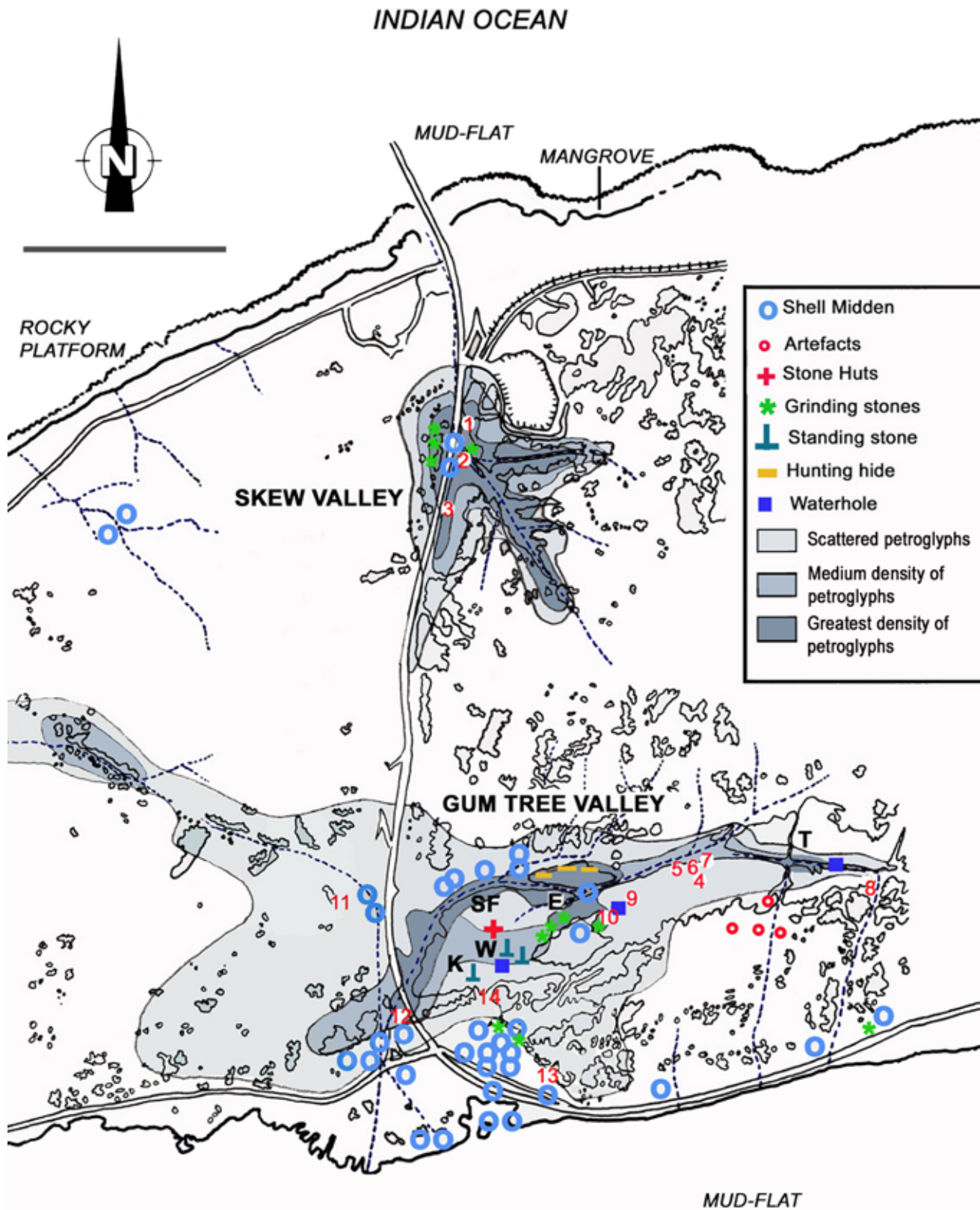


Figure 1.3. Southern part of Dampier Island showing the archaeological characteristics of Skew Valley and Gum Tree Valley sites. Scale 500 m. **Significant petroglyphs:** (1) 'Waterbird', 'snake', 'crab and eggs' (Skew Valley); (2) Oldest patinated figure (Skew Valley); (3) The 'Sitting Man' (Skew Valley); (4) 'Kangaroo' (Gum Tree Valley Eagle, GTVE); (5) 'Turtle' (Gum Tree Valley Eagle, GTVE); (6) 'Kangaroo' (Gum Tree Valley Eagle, GTVE); (7) 'Emu' (Gum Tree Valley Eagle, GTVE); (8) 'Fish' (Gum Tree Valley Top, GTVT); (9) Large 'snake' (Gum Tree Valley Woman, GTVW); (10) 'Man' with renovated 'hand' (Gum Tree Valley Woman, GTVW); (11) Scratched motif (west of Gum Tree Valley Spirit Figure GTVS); (12) Group of small 'turtles' (west of Gum Tree Valley Spirit Figure GTVS); (13) Large 'Emu' (south of Gum Tree Valley); and (14) 'Men' holding 'hooked boomerangs' (near GTVK). **Sampling zones in Gum Tree Valley:** (E) Eagle Group (GTVE); (K) Kangaroo Group (GTVK); (SF) Spirit Figure Group (GTVS); (T) Top of Gum Tree Valley (GTVT); and (W) Woman Group (GTVW).

It is most likely that the midden dwellers would have stayed on the bare, clean and even rocks around the pools since this is the only cool and shady place in the vicinity. During the excavation, we had our lunch there to avoid the heat. Moreover, the granophyre outcrops by the pools provided good material for artefact manufacture. These outcrops all show clear evidence of having been extensively chipped in the past.

In 1971 a haulage road was built between the salt field and the new harbour on Mistaken Island. This road crosses the island from south to north and follows Skew Valley along its whole length. From the evidence of remains in the road ditch, there was probably another shell midden 80 m upstream from the excavated one, but it was almost totally destroyed by the construction of the road, whereas only one third of the excavated shell mound was destroyed, revealing an interesting section and facilitating the development of an archaeological project.

The goal of my work there was threefold: to make use of a partially destroyed deposit; to effect an archaeological salvage; and to develop a method applicable to a thorough excavation of other shell middens in the region and to discover *in situ* carved slabs able to be dated using the radiocarbon technique.

The wide and shady entrance to Gum Tree Valley is about 800 m southeast of the Skew Valley excavated midden. Eucalyptus trees are more abundant here than in Skew Valley. There are at least half a dozen shell middens, and the southern slope of the valley is covered with gabbro boulders almost all bearing petroglyphs. Several other middens are scattered along the edge of the mud flat where the Gum Tree Valley creek joins Fenner Creek.

Upstream in Gum Tree Valley, that is, towards the east, there is a series of semi-permanent fresh-water pools in a narrower section of the valley. The two steep slopes are covered with carved gabbro boulders. The valley widens and its bottom is almost entirely occupied by a large circular intact midden 22 m in diameter. This is the part of the valley where the petroglyphs are the most numerous. One of them depicts an impressive eagle with a headdress.

Further east, the valley narrows again up to about 10 m in width. Here the ground is gently sloping; the two low slopes are covered with deeply patinated petroglyphs. The whole of the hill, commanding the south of Gum Tree valley, shows several rich groups of petroglyphs that I studied also.

History of the research

The first archaeological exploration of the Dampier area began with the recording of petroglyphs at Happy Valley, King Bay and East Intercourse Island by Ian Crawford and Bruce Wright in 1966 (Wright, 1968),¹ followed by Robert Bednarik in 1969 (petroglyphs on Dampier Archipelago as far as Boat Passage—Bednarik, 2002), Warwick Dix and Bruce Wright in 1970 (petroglyphs in Skew Valley, Gum Tree Valley and Hunter Valley—Warwick Dix, Deputy Principal, AIAS, pers. comm. 10 June 1974). Between 1970 and 1974, Enzo Virili, Dix, Peter Randolph, Robert Bevacqua (1974) and Kingsley Palmer (1975) developed their respective explorations and research.²

The subsequent industrial development of the area would result in the destruction of part of this then little known and unrecorded archaeological heritage, but would also at the same time promote its discovery and encourage its study.

Mr FL (Enzo) Virili, an engineer-manager for the Dampier Salt company, mapped and photographed the petroglyphs near his workplace and drew them to the notice of not only archaeologists but also the local population. With the assistance of the Western Australian Museum in Perth (WAM), he contributed to the protection of these sites in a region where industrial development potentially could have been more devastating than it initially was. In 1974 he requested assistance from the Australian Institute of Aboriginal Studies (AIAS) (Virili, 1977; Dix & Virili, 1977) where recently I had been appointed as research consultant³. Dr Peter Ucko, Principal of AIAS, sent me to Dampier in August and September 1975 and from April to August 1976. During these periods, with assistance of others, I started to study and record the 600 petroglyphs in Skew Valley and Gum Tree Valley, and excavated the Skew Valley shell midden (Lorblanchet, 1977). This excavation is discussed further in a subsequent section (Chapter 2, Part II).

After these first two visits, I returned to Dampier in 1983 and 1984 for three months during which I complemented our earlier work by studying mainly the sites on the hill above the south of Gum Tree Valley: the petroglyph groups of the Kangaroo (GTVK), the group of the Woman (GTVW) and the group of the summit of Gum Tree Valley (GTVT).



Figure 1.4. Mr Ben, field assistant, inspecting the waterhole at GTVK, June 1984.



Figure 1.5. Visiting members of the Roebourne Aboriginal community, Messrs David Daniel and Ernie Smith, recording a petroglyph (GTVS-10) at the entrance to Gum Tree Valley in April 1976.



Figure 1.6. Mr Bundabarr Williams and Dr Frank Wordick examining Motif-143, the ‘kangaroo-man’, during a visit to the Eagle Group in 1984.

Acknowledgments

My work at Dampier has benefitted from constant help and assistance from AIAS, and from the Western Australian Museum and Dampier Salt Ltd., which always welcomed us and allowed us very kindly to work on the lease held by the company.

In 1983, I received a grant from AIAS to complete the work I had begun in 1975. Travel from Europe to Australia was financed by the French National Research Centre (CRNS). The AIAS grant also permitted the employment of assistants, one of them was ‘Ben’, a young Aboriginal man (identified from the Institute files as Mr Kevin James Stagg, who preferred to be known by his nickname—Fig. 1.4). In 1984, before recommencing study of the Dampier sites, I discussed the project at length with Mr Herbert Parker of Onslow who was Chairman of the Pilbara Aboriginal Bush Meeting; no objection to the project was raised during this meeting. Later, during my 1984 fieldwork season at the Gum Tree Valley sites, I was pleased to be visited by Mr Parker and some of his associates on several occasions (Fig. 1.5).

During all my fieldwork from the beginning, the main field crew comprised Enzo Virili (logistic assistance and occasional surveying), and during the excavation, Maguy Lorblanchet, Rainer and Ulricka Sackic, plus several helpers for a few days: Ken Lyon, the AIAS cartographer, Ted Wilkes and Cyril Peck (WAM trainees), students from the University of Western Australia, Toni Barker, Myra Stanbury, and Wendy Wolfe-Okongwu, and also teachers from Karratha High School, and Louis Genot, a visiting French archaeologist. Kingsley Palmer, WAM’s Pilbara research officer, participated in the excavation for three days. For most of the recording and mapping of the petroglyphs, Maguy Lorblanchet, Rainer and Ulricka Sackic and Jacques Ferry assisted during a part of the last stay.

I also had the assistance at various times of Warwick Dix (AIAS), Peter Randolph and Bruce Wright (Aboriginal Sites Department, WAM), Dr Nathan Sammy (Dampier Salt biologist), Keith Hamilton and John MacArthur (Dampier Salt Ltd), Charles Nicholson (WA Department of Conservation and Environment) (Fig. 1.7). Peter Bindon and Dr Patricia Vinnicombe (WAM), and John Patterson (Woodstock ranger) kindly visited. Another frequent visitor was Dr Frank Wordick, a linguist based at AIAS and working at Roebourne; he visited me several times in Gum Tree valley, usually bringing with him an Aboriginal colleague (Fig. 1.6), and we had some discussions in front of various petroglyphs.

Finally, this book would not have been published without the constant help (translation and editing) in many different ways, from Drs Graeme Ward (AIATSIS) and Ken Mulvaney (Rio Tinto, Dampier).



Figure 1.7. Bruce Wright demonstrating his method of rubbing on a little slab of GTVS in June 1976.

Methodology

Sampling the petroglyphs

After excavating the Skew Valley midden (the principal aim was to obtain radiocarbon dates for some buried petroglyphs), I carried out a general study of the petroglyphs in Skew Valley and Gum Tree valley.

As there was a great number of carved rocks, I decided to study the petroglyphs using a sampling method. In the heart of the densest and richest groups of petroglyphs in Skew Valley and Gum Tree Valley, systematic recording was concentrated within a rectangular area of about 50×20 m (Fig. 1.8). The aim of this work on the smaller number of block surfaces (which is comparable to test excavations) was to check the influence of the coast and the midden on the distribution of the petroglyphs and their motifs with the hope of identifying site-characteristics—and perhaps sites-specific functions—within the general area covered with petroglyphs.

In all my recordings, photography and tracing were combined. Direct tracing sometimes could be used because the hardness of the rock meant that its surface would not be damaged by this procedure (Fig. 1.9). However, there were difficulties in applying this direct method: The tracing material tended to hide the designs, which always are more visible when the surfaces are bare; the reflection of the sun on large shiny sheets of cellulose acetate complicated the identification of designs and sometimes made it impossible to record them accurately; and another problem that I had on the coast was that the wind would sometimes lift or even tear away the tracing paper.



Figure 1.8. Use of an aluminium ladder at GTVS (risky!). The author is photographing GTVS-10 spirit figure from the same height as the petroglyph in order to avoid distortion that would result from a photograph not taken from directly in front of the petroglyph. Source: Photograph by Maguy Lorblanchet.

Given the general lack of depth of the carving in Skew Valley, the contrast in colour was useful to identify the motifs, and this contrast was better seen under a weak and filtered lighting. For these reasons also, recording by night with an artificial light proved less useful in Skew Valley than in Gum Tree Valley.

As elsewhere, the lighting conditions were critical to recording. An overcast sky (unfortunately too rare during winter in these latitudes) and the dim light of dawn or evening offered the best conditions for work. The details of most of the designs were difficult to see in the middle of the day under vertical rays of a dazzling sun that accentuates—with few shady areas—the natural roughness of the rock, and consequently causes the designs nearly to disappear from view. Given the general lack of depth of the carving, the contrast in colour was useful to identify the motifs, and this contrast was better seen under weak and filtered lighting. For these reasons also, recording by night with an artificial light proved less useful in Skew Valley than in Gum Tree Valley.

The limited time for recording, the great number of designs, and the financial cost of such an operation prompted me to seek a more reliable and economical method. Photographic reduction of the tracings from their natural size for publication also caused problems.

Finally, I decided to trace images onto photographs held in front of the actual carved surfaces. This work required the following process:

- 1 Photography of the petroglyphs (in black and white, and colour) in the best possible lighting conditions. The motifs generally being of medium size (0.20–0.80 m), it was easy to photograph them at right angles to the block surface and with a standard lens⁴ so as to avoid any risk of distorting the image. High-contrast films or special filters could be used to emphasize the contrast. Sometimes I also made some close-up photographs to record complex details of the carvings;
- 2 Every evening the films were developed and printed;⁵
- 3 The next day, the tracing was made on acetate using a base photograph of 180×240 or 240×300 mm. Sometimes I also made tracings on photographic enlargements of complex details of the motifs. Precise identification was assisted by the fact that the details of the motif clearly showed up against a plain surface when not covered with the paper.



Figure 1.9. Maguy Lorblanchet recording by direct tracing the large complex human figure, GTVS-9, at the Spirit Group in June 1976. Note the reflection of sunlight on the tracing film; this could be a problem with this unusual method of recording, which was used mainly for difficult large panels.

(When covered, the carved motif can become more difficult to see due to the disruptions due to wind and reflections on the paper; in this case it was better to avoid attempting a direct tracing.) During the tracing operation, the details of the design were constantly checked against the petroglyph. This method produced a design that was of a suitable dimension for publication. Each punctuation of the whole pecked area of the design was represented by a black point (this process is very lengthy when it is applied to a real-size representation). Sometimes, for the more faded motifs, tracing (and photography) was done at night with artificial light to amplify the details of the motifs;

- 4 Written observations were made for each carved block during the recording process; and
- 5 Photography was also used to facilitate numbering of the carved surfaces. A photographic mosaic of each site was also made, and on this photograph a number was written on the image of each carved rock. Thus, no mark was left on the rocks themselves; during subsequent fieldwork, it was very easy for us to identify each rock by standing in front of the site at the very place where the photo had been taken.

The carved slabs and the various levels of the slopes and the sites were mapped with the help of a simple theodolite.

Approximately 80% of all numbered and studied Skew Valley and Gum Tree Valley carved surfaces were reproduced by tracing. A higher proportion was photographed. The petroglyphs that were not traced were those with undetermined or undecipherable ('indeterminate') motifs.

In total, during three main field seasons in Skew Valley and Gum Tree Valley, 400 person-days, about 3200 hours of work, were needed to record 2075 petroglyphs, out of which 1700 were fully traced. I photographed about 3000 motifs in the two valleys.

Study of the associations of the motifs and computerization of data

To the study of Skew Valley and Gum Tree Valley petroglyphs, I applied Sauvets' (Sauvet & Sauvet, 1979) method for defining the relationships of the figures on the same panels and on different blocks, defining an 'Index of Association' for each theme represented.

Moreover, I entered into computer files all SKV and GTV motif inventories (with particular descriptors to designate the different subjects (e.g., H, Hs, etc.), so that I could compare, on a statistically objective basis, the various petroglyph groups sampled (SKV, GTVS, etc.). The differences between the sites in the thematic assemblages revealed a very old human occupation of the area with an evolution of techniques, subjects and styles of depiction, and other changes in site function.

Study of patination of the motifs

As part of the mapping of the carvings, I recorded degrees of patination, their orientations on the blocks, and their proximity to the water sources and the middens. Information on these factors was recorded to check the relationship between topography and the use of space by the midden dwellers and by the rock-carvers.

The states of patination of the figures, that is the more-or-less important sharpness with which the image stands out from its support, was determined by observing the *colour contrast* (by evaluating the difference between the colour-density of the figure itself and the colour-density of the rock-support). Three different states of patination of the carvings were visually distinguished easily in the field; I recorded them as 'very faded', 'faded' and 'fresh'.

As well as the visual evaluation, I used a Mastersix light meter equipped with its 'Profi-flex' accessory to make independent measurements of density.⁶ Multiple measurements were taken of colour densities, sometimes directly from petroglyphs in the field, but more often from photographic slides projected onto a frosted glass screen. The photographs were taken at the same time of the day with the same film, developed by the same laboratory. On the frosted screen, measurements were made on multiple points of the figures and of the support to provide objective values for the figure contrasts. My contrast measurements showed that the states of patination of the figures are trustworthy indicators of the ages of the figures.

Then, for each site, I studied the relationship between the states of patination and the subjects of the petroglyphs and the distribution of the states of patination within each site. Objective comparisons of the contrasts of the figures between different sites also were possible.

Study of orientation of the motifs

Comparison between the distributions of motif orientations and those of the patination states showed that the degree of patination is not directly related to the orientation, but depended mainly on the age of the petroglyphs.

Further, the mapping of the distribution of the carved boulders together with the records of the orientations of the carved surfaces (each boulder often bears several carved panels with different orientations) showed that most of the petroglyphs were located on vertical or very sloped surfaces of the bigger rocks, mainly facing north and northwest, sometimes west. That is, the petroglyphs faced toward the bottom of the valley and the middens. Upper surfaces of boulders were carved more rarely. The result of this mapping exercise stressed the link between middens and petroglyphs.

I studied the orientations for all carved panels with the intention of trying to distinguish two types of representations: those that catch the eyes of visitors and are visible from afar (that is, from several metres away), and those that seem to hide and are visible only from a short distance away (that is, when the observer is immediately in front of the panel). I found that the subjects of those motifs that are visible from afar were generally human and animal figures, and were often close to habitations (middens). On the other hand, petroglyphs placed horizontally on top of the carved blocks were often geometric patterns and were often located on the tops of the slopes.

The distribution of orientations of carved surfaces (as shown in the various maps to follow) confirmed the close relationship of many petroglyphs with the shell middens: these motifs faced toward the centre of the habitation.




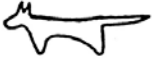

















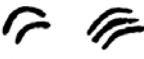







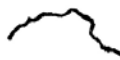
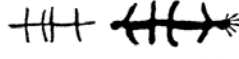













1. Hp: 'Human foot' ⁷		25. AP: 'Fish'	
2. Hm: 'Human hand' ⁷		26. AA: Other animal	
3. H: 'Undifferentiated human'		27. AA(HO): 'Bird-man'	
4. Hf: 'Woman'		28. AA(HK): 'Kangaroo-man'	
5. Hv: 'Man with exaggerated penis'		29. AOF: 'Eggs' (bird or turtle)	
6. Hc: 'Human figure in profile'		30. EK: 'Kangaroo track'	
7. Hcv: 'Man in profile with exaggerated penis'		31. EO: 'Bird track'	
8. Hs: Stick figure		32. ET: 'Turtle track'	
9. Hsc: Stick figure in profile		33. GC: Circle	
10. Hsv: Stick figure with exaggerated penis		34. GCC: Concentric circles	
11. Hsf: Female stick figure		35. GCR: Circle with radial lines	
12. Hscv: Stick figure in profile with exaggerated penis		36. GAR: Arcs	
13. Hfa: Ghost-like human figure		37. GT: Triangle	
14. Hfac: Ghost-like human in profile		38. BG: Bi-lobed designs	
15. Hfav: Ghost-like human with exaggerated penis		39. GO: Oval	
16. HfaSex: Ghost-like figures in sexual intercourse		40. GL: Linear motif	
17. Hsex: 'Humans in sexual intercourse'		41. GE: Maze of lines	
18. Har: Tree-like human		42. GP: Punctures or dots	
19. Hpm: 'Human with exaggerated hands and feet'		43. GA: Other geometric	
20. Hfc: 'Woman in profile'		44. GH: Dumbbell-like motif	
21. AK: 'Kangaroo'		45. BO: 'Boomerang'	
22. AO: 'Bird'		46. Ft: 'Fruit'	
23. AS: 'Snake'		47. MA: Other motif	
24. AT: 'Turtle' (saltwater)			

Figure 1.10. Typology of Skew Valley and Gum Tree Valley petroglyphs.⁷

Recording

Numbering of carved slabs and motifs

In the field recording, as in the following descriptions, a convention was used to identify a carved block (or ‘slab’) and individual motifs (or a ‘panel’, that is, a collection of motifs in one location on one slab).

An initial letter sequence refers to group (site) name, and the subsequent number denotes a record in the sequence; the lowercase letters (sometimes accompanied by a number) refer to different rocks immediately adjacent to one another; the capital letters forming a suffix to a number (or a number and a letter combination) describe the orientation of the motif on each rock. In summary:

- 1 Letter prefix refers to site name: e.g., **SKV** = Skew Valley;
- 2 Initial number refers to a recorded carved slab: e.g., **SKV-79**;
- 3 Upper-case letters immediately following the slab number refer to different carved panels on the same block where there is more than one panel: e.g., **GTVS-17A**;
- 4 A number separated by a hyphen from the upper-case letter refers to a particular motif where there is more than one motif on a panel: e.g., **GTVS-17A-2**;
- 5 Lower-case letters refer to different blocks under the same number where those blocks were clustered closely together: e.g., **SKV-79a**; and
- 6 Capital letters refer to orientation of the carved surface: e.g., **SKV-79a-SE** where ‘SE’ = orientation towards the southeast, etc. ‘T’ = top, and ‘TM’ = main panel on top of the boulder.

Cataloguing and mapping

A contour map of every zone was drawn and on it were plotted all the petroglyphs, grinding stones, artefacts, shells scatters, and structures, including mounds, huts and hunting hides. In the general mapping, over 30 shell middens were plotted in Gum Tree Valley and Skew Valley areas.

The several thousand stone tools, flakes, shells and bones found scattered among the petroglyphs were plotted on these maps. They were left undisturbed on the ground where they were found, and a descriptive list of these was made; in addition, many were drawn and photographed. A few samples of shells from a hut at GTVK and from among the petroglyphs of GTVT were collected for radiocarbon dating.

Typology of carved motifs

The typology of the subjects of the Skew Valley and Gum Tree Valley petroglyphs includes 47 items (Fig. 1.10).⁸ Of this list, 20 are various depictions of ‘human figures’, six are of ‘animals’, and two are of ‘composite creatures’ (for example, ‘animal-men’). The category ‘other animals’ groups together the animals that cannot be identified as ‘kangaroo’, as ‘bird’, ‘turtle’, ‘snake’ or ‘fish’. The examples of the ‘other animals’ category are a probable dingo (GTVE-361) and two Thylacine-like figures (GTVE-42) in the group of The Eagle in Gum Tree Valley.

Another category represents *eggs* (of birds or turtles), three others depict ‘animal tracks’ (of kangaroo, birds, turtles), 12 are *geometric motifs*, one is *boomerang-shaped*, one probably represents *fruit*, and the last category (number 47) brings together any sort of *other motif*.

Some further comments will be useful: I use the term ‘stick figure’ as has been defined by Brandl (1978: 238) on the basis of its dominant trait, namely the stick-like shape of ‘body’ and ‘limbs’. ‘Undifferentiated or diverse humans’ lack any particular character and details: they illustrate in a conventional manner a very general and abstract concept of ‘human’.

The term ‘*exaggerated*’ means ‘larger than in nature’. Of course, the simple schematization of a figure implies an inevitable non-significant graphic exaggeration of certain features at the extremities of the ‘body’, for example ‘genitalia’, ‘hands’ and ‘feet’. Every time a draftsman depicts gender, for example on a simple human schema, it is almost necessarily out of proportion simply to become visible: it just means ‘male’ or ‘female’, in which case there is no true ‘*exaggeration*’. But some organs, like hands, appear intentionally ‘*exaggerated*’ when their length⁹ is at least equivalent to that of the arms. Similarly, ‘genitals’ and ‘feet’ are obviously ‘*exaggerated*’ when they are as long as the ‘legs’ of the figure.

I call ‘*geometric*’ those simple motifs that do not allow immediate identification as a figurative depiction, and whose shape is close to a geometric form derived from the point, the line or from a closed pattern such as circle, triangle, quadrilateral, etc. In some way, a ‘kangaroo track’ is a geometric motif but it is not classified as ‘*geometric*’ because what it represents is clear. On the other hand, a ‘*bi-lobed figure*’ that could depict either a fish liver or a vulva is classified with the ‘*geometrics*’ because its identification is problematic and I prefer to stick carefully to a simple description of their shape. The ‘*round pecked dots*’ (or ‘*punctations*’) can be distinguished from the ‘*eggs*’ by their small size (diameter less than 40 mm) and by their scattered distribution (whereas ‘eggs’ are bigger and clustered).

The category ‘*other motif*’ gathers together three different forms: unstructured motifs, such as simple rubbed or hammered patches (sometimes made to erase a pre-existing figure), sometimes unintentional ‘*ritual marks*’, that is, marks left on a carved slab during a ceremony; the poorly-conserved, incomplete, images that are difficult to see; and the clearly figurative motif that it is impossible to identify.¹⁰

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Endnotes

- 1 Ian Crawford pers. comm. to Ken Mulvaney June 2008—Editors.
- 2 Detailed below and in subsequent chapters; also in Editors' Introduction—Editors.
- 3 After gaining my doctorate in Prehistory from the Sorbonne University in Paris, I had been appointed in 1968 as a researcher (specialising in rock art studies) in CNRS.
- 4 That is, a non-distorting lens—a lens of 50 mm focal length for 24 × 36 mm ('35 mm') film camera, and 80 mm Zeiss planar with 120 mm film in a Rolleiflex SL66.
- 5 By me in a darkroom built at our field accommodation—but occasionally, to be confident of a good product, processed on the site with a developing tank and changing bag.
- 6 For example, <https://gossen-photo.de/en/previous-devices-photo/>, and http://camera-wiki.org/wiki/Gossen_Mastersix. Profi-flex has been described as being "particularly suitable for macro-photography, for ground glass measurements for cameras and inaccessible area". Gossen Mastersix Instructions for Use—Part 2 Attachments—Editors
- 7 Qualification of use of the term 'human prints': (a) These are not 'hand prints' comparable to the ubiquitous pictograms found throughout Australia (and widespread throughout the world) that are produced by blowing pigment across a hand (also done with other items such as a boomerang), or made by pressing a hand wet with pigment onto a shelter or cave wall. (b) Rather, in the context of this discussion of Dampier petroglyphs, 'human hand print' and 'human foot print' are shorthand terms for representations of the hand/s or foot/feet of a 'human'. (c) Since they are most often the depiction of part of the integral anatomy of a being, they are qualitatively different from the 'animal prints' discussed subsequently in each chapter, the 'kangaroo track', 'bird print' and 'turtle track', which represent simply the 'footprint' left in the soft ground by a passing animal—Editors.
- 8 There is further discussion of typology in Chapter 8—Editors.
- 9 I tend to use the term 'length' rather than 'height' or 'width' because a longest dimension can be a more objective statement than the others, which require—necessarily etc.—interpretation of the orientation of the motif.
- 10 In case this last appears ambiguous to the reader, I extend the use of 'motif' to refer to an organized 'drawing' that apparently was meaningful to the maker, but whose meaning, without further information, is obscure to the archaeologist.