

Special collection of selected papers presented at the 2018 IFRAO Congress in Valcamonica, Italy,

ROCK ART AND ETHNOGRAPHY

By Guest Editors Claire Smith, Sally K. May and Ines Domingo

PART 1

We are delighted to have the privilege of editing this double issue of *Rock Art Research* (issues 1 and 2 of Volume 38). The articles that are published in these issues derive from a session at the 20th International Rock Art Congress of the International Federation of Rock Art Organisations (IFRAO), which was held in Darfo Boario Terme, Valcamonica, Italy, 29th August to 2nd September 2018. The conference was co-chaired by the Centro Camuno di Studi Preistorici and the Società Cooperativa Archeologica Le Orme dell'Uomo, and was attended by more than 800 participants. We are most grateful to the organisers of this wonderful conference, especially the IFRAO 2018 General Secretary, Angelo Eugenio Fossati; the Scientific Coordinators, Mila Simões de Abreu and Andrea Arcà; Local Coordinator, Tiziana Cittadini; IFRAO President, Hipolito Collado Giraldo; and IFRAO Convener, Robert Bednarik. Writing during the time of COVID-19 restrictions, the freedom of movement and comradeship that we experienced at the conference seems somewhat idyllic.

The theme of the IFRAO conference was 'Standing on the Shoulders of Giants / Sulle Spalle dei Giganti'. Accordingly, our session built on the ethnography symposium convened by Mike Morwood at the first Australian Rock Art Research Association Congress, held in Darwin, Australia, in 1988. Mike Morwood and Douglas Hobbs' resulting publication, *Rock Art and Ethnography: Proceedings of the Ethnography Symposium (H)*, Australian Rock Art Research Association Congress, Darwin 1988, was published in 1992 as Volume 5 of Occasional Publications by the Australian Rock Art Research Association. It is no coincidence that Robert Bednarik is the commissioning editor for the book series as well as the editor of *Rock Art Research*. We acknowledge his leadership and substantial individual contributions to rock art research in Australia and internationally.

The papers in these special issues reflect on the use of ethnography to advance knowledge in the study of rock art. We thank the reviewers of these papers. Considered together, these articles address the question: what constitutes good ethnographic practice in rock art research in the 21st century? The authors reflect on the capacity of ethnography to advance knowledge in the study of rock art, ponder the limitations of this form of analysis and consider the ethics of conducting ethnographic research with living peoples. The value of ethnography for the interpretation of rock art has been a matter of debate for over 100 years. Ethnography is much more than the study of the present to understand the past. It is a tool to observe and analyse material culture in a living context. It allows us

to observe daily interactions between humans and objects, as inert materials are transformed into active agents of social, economic and/or cultural practices. Done well, ethnographic studies can produce new understandings of rock art from the recent as well as the distant past. They can reveal the role of rock art as visual communication in a complex world of human interaction, demonstrate the archaeological invisibility of many aspects of human cultures and engender new theories for understanding territory, landscape, society, culture and rules of behaviour. Done poorly, ethnographic studies can produce suppositions that are simply waiting to be disproved, grounded in an elision of temporal and cultural distances between groups of people and denying the history and modernity of contemporary peoples. The articles in these special issues provide new insights to these topics.

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Jimmy Wesan (Kotjok) at Jerraewun rock art site, north-east of Beswick, Northern Territory. 24th July 2005.

Photo by Claire Smith. Published with the consent of Jimmy Wesan's family.



KEYWORDS: *Nawarla Gabarnmang – Site context – Jawoyn – Arnhem Land – Australia*

BEYOND THE SHELTER: THE CULTURAL CONTEXT OF NAWARLA GABARNMANG, ARNHEM LAND, NORTHERN AUSTRALIA

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Abstract. Nawarla Gabarnmang, a large rockshelter in the Jawoyn Lands of the Arnhem Land Plateau, is one of Australia's richest and most well-publicised Aboriginal sites. The site is of high cultural significance to Aboriginal and non-Aboriginal people alike as it has historical significance to both peoples; a popular stop-over camp for Aboriginal people; an extensive, well-dated archaeological deposit; a history of human modification; and one of Australia's most extensive and well-preserved rock art galleries. As a background to these facets, we present an overview of the shelter's setting within the cultural and temporal landscape of the Arnhem Land Plateau. While an archaeological survey of the site complex in which the Nawarla Gabarnmang shelter lies exposed additional aspects of the significance of the place, discussions with local senior Aboriginal people and reading of earlier ethnographic work revealed non-physical aspects pertaining to the site; details that could not be achieved by archaeological investigation of the Nawarla Gabarnmang shelter alone. The archaeological survey documented additional art styles and ceremonial activities that were practised at some time during the 50 000 years of Nawarla Gabarnmang's occupation. As the recent 'Jawoyn' rock art has been dated to the past 500 years, the interpretation of motif and site classes by Jawoyn and other knowledgeable elders has enabled a social context to be overlain onto the landscape of Nawarla Gabarnmang at least for this recent time period.

Introduction

The archaeological context in which a site sits provides a basis for our understanding of its place and significance in a cultural landscape that has developed over time (cf. David and Thomas 2008; Strang 2008). As Wilson and David note: 'place markings are not

found randomly across the landscape, but rather are an ordered component of socially constructed space' (2002: 7). An understanding of the values of a particular archaeological site needs to be derived from its social and archaeological context: the site complex in which it occurs (Vinnicombe 1984; Mulvaney 1996; Gunn 1997, 2017). Given the research and publicity that Nawarla Gabarnmang has received to date (Dean and Butler 2009; Geneste et al. 2010, 2012; David et al. 2011, 2017; Delannoy et al. 2013), an examination of its local archaeological context is timely.

For the past 250 000 years, the Arnhem Land Plateau in northern Australia has been relatively stable with erosion generally confined to the weaknesses of the structural lines rather than the flat-lying surfaces (Nott and Roberts 1996: 884). The quartzitic sandstone of the plateau's rock outcrops, and



Figure 1. Location of the Jawoyn Lands and Nawarla Gabarnmang



Figure 2. Nawarla Gabarnmang from the north-west (photograph: LCD).



Figure 3. One of the 42 rock art panels on the ceiling. Larger fish at left 2.6 m long (photograph: RGG).

most of their rockshelters, stabilised more than a million years ago (Galloway 1976: 54); well before initial human occupation of the region (Clarkson et al. 2017; Delannoy et al. 2017). The stability of the rocks has also contributed to the longevity of applied rock art images. Consequently, the rock art provides a framework for looking at sequential, and in part temporal, use of rock art sites throughout the landscape over time.

The rockshelter of Nawarla Gabarnmang lies within the traditional Buyhmi estate near the centre of the Arnhem Land Plateau in northern Australia (Fig. 1), at the apex of the watersheds of the Katherine, East Alligator, South Alligator and Mann Rivers. The region is within the Jawoyn Lands, an area of Land Trusts managed

by the Jawoyn Association Aboriginal Corporation, Katherine. The Jawoyn people view the site, like many across the lands of the plateau, as a favoured temporary campsite of the old people with an extensive visual record of their ancestors' beliefs and concerns, and, until recently, an overnight stop for people walking across the plateau (Gunn 2018; see below).

Nawarla Gabarnmang is both visually outstanding (Fig. 2) and one of the most significant archaeological sites in Australia, having a record of over 50000 years of occupation (David et al. 2011; Delannoy et al. 2017: 217). It has a spectacular rock art corpus of over 1300 motifs (Fig. 3; Gunn 2018), and is the first site in Australia where extensive human modification of a



Figure 4. Nawarla Gabarnmang, interior of the shelter showing manually enlarged areas (photograph: RGG).



Figure 5. The rock outcrop housing the Nawarla Gabarnmang Site Complex (photograph: RGG).

rockshelter's structure was demonstrated (Delannoy et al. 2013, 2017). In this case, pillars were selectively removed to enlarge the interior living space (Fig. 4).

While working for the Jawoyn Association recording their rock art (Gunn et al. 2008), with the permission of the site's senior traditional owner (MK), we took the opportunity to study the cultural and environmental landscape within which Nawarla Gabarnmang is situated. An archaeological survey was undertaken of the

rock outcrop in which the shelter occurs and, with MK, noted important environmental aspect in the site locale.

Initial reconnaissance was carried out by helicopter, followed by systematic pedestrian survey involving 2–3 people and covering an area of approximately three square kilometres (Fig. 5 and 6).

The rock outcrop housing Nawarla Gabarnmang is roughly triangular in shape, measuring 1 km north-south by 2 km east-west; it sits at an elevation of

around 385 m above sea level but rising to no more than 15 m above the surrounding sandy plain. An ephemeral creek runs around the northern side of the outcrop, providing a small pandanus soak and several small waterholes close to the Nawarla Gabarnmang shelter (Fig. 7). The creek continues west to join the permanent waters of the Katherine River five kilometres distant. A smaller stream runs along the southern side of the outcrop but this lacks any substantial dry-season water reserve. No specific flora or fauna surveys have been undertaken, but it is apparent that the immediate environments around Nawarla Gabarnmang are diverse and seasonally variable.

As described elsewhere (Gunn et al. 2017), rock art sites on the Arnhem Land Plateau occur as discrete clusters within isolated rock outcrops that contain a major rock art site and a surrounding suite of smaller art sites and a range of other archaeological site types. The outcrop housing Nawarla Gabarnmang is one of the largest in area recorded on the plateau and contains one of the densest concentrations of satellite sites (Gunn and Douglas 2010).

Archaeological perspectives

The Nawarla Gabarnmang shelter was recorded in 2006 during fieldwork for the Jawoyn Rock Art and Heritage Project (JRAHP) (Gunn and Whear 2007; Gunn 2010). The large shelter (some 25 × 15 × 2 m) contains an outstanding array of rock art and an extensive charcoal- and artefact-rich archaeological deposit. In addition, it includes a wide range of surface artefacts, despite the surface of the floor being badly disturbed by feral buffalo. The artefacts include a wooden spear-thrower, clapsticks, message stick, uniserial barbed spear points, and dillybag-hooks wedged into the ceiling; and several ground axe-heads, grinding stones, and a range of flaked stone pieces; and a flattened tin piece (Gunn 2018; Gunn et al. 2017b, 2017c; and cf. Jones and Johnson 1985). The shelter is now known to contain over 1300 rock art motifs (the original field recording counted 956); many have been dated directly, others by interpretation or superimposition sequencing (Gunn et al. 2012; Gunn 2018). The tin sheet and a large painting of a horse indicate the use of the shelter during the contact period (post 1845 CE).

Following Berndt and Berndt (1970: 108), Allen and Barton (1989) proposed, on the basis of an exceptionally large quantity of archaeological deposit, that

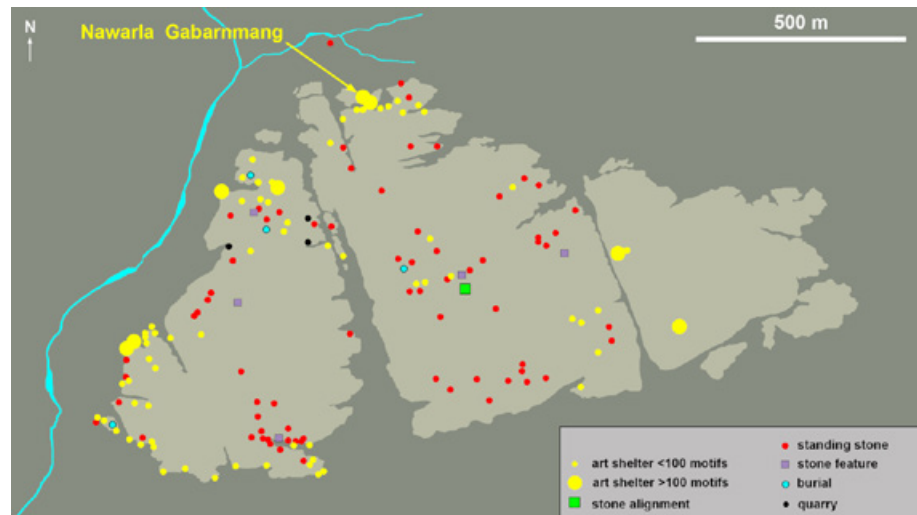


Figure 6. Archaeological site across the site complex.

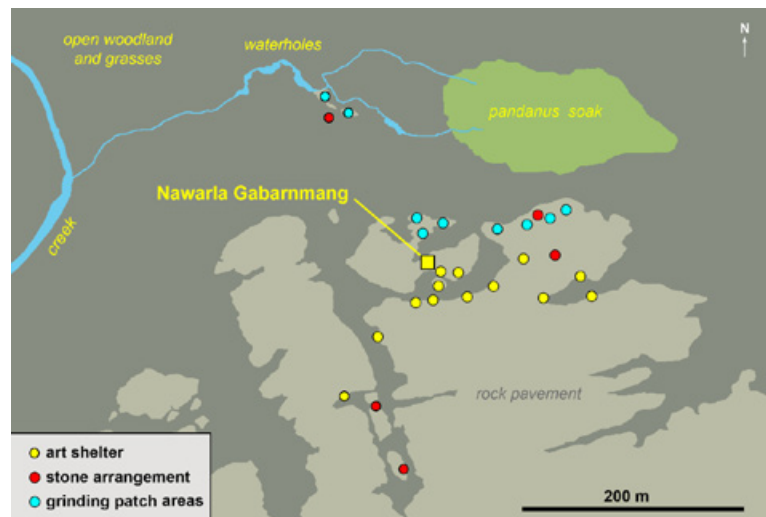


Figure 7. Archaeological and environmental context of Nawarla Gabarnmang.

the shelter of Narradj Warde Djokkeng was possibly a popular base-camp — a common meeting place of pathways. Nawarla Gabarnmang has a similarly large archaeological deposit and its central location on the Arnhem Land Plateau, being at the headwaters of the northerly flowing East Alligator River, the southerly flowing Katherine River, and the north-easterly flowing Mann River. Nawarla Gabarnmang gives credence to this model, as Jawoyn oral history records the site as being a prominent base-camp and popular overnight camp for people passing through the area.

The next most decorated Jawoyn art site recorded on the plateau, ARN-029/37b (60 km to the south), contains just over 600 motifs. Hence, Nawarla Gabarnmang with its 1300 motifs stands out as the most ornate, as well as being one of the best-preserved, rock art sites within the Jawoyn Lands.

The survey of the outcrop housing Nawarla Gabarnmang recorded 160 archaeological sites (Table 1; Fig. 6). Of these, Nawarla Gabarnmang shelter has the greatest array of archaeological facets, but a

Primary Site Type*	No.	
Rock art site	72	
Standing stones	69	
Other stone features	Cairns	4
	Store house	2
	Other	1
Burials	4	
Grinding areas	3	
Quarry	3	
Abraded stone	1	
Stone alignment	1	
Total	160	

* may or may not include other archaeological facets

Table 1. Site type numbers within the site complex.

number of other well-decorated sites occur around the outcrop, each of which is surrounded by a suite of smaller satellite sites. The sites occur in all areas of the outcrop, with the exception of the far eastern margin, an area that lacks rockshelters and has little topographic relief. Only three sites are located off the main rock outcrop; three bedrock pavements with grinding patches on low rock pavements immediately in front of the Nawarla Gabarnmang shelter. The full suite of sites on and around the outcrop is termed the Nawarla Gabarnmang Site Complex. The Site Complex is unusually large compared to other site complexes recorded within the Jawoyn Lands; the next largest, ARN-102 (20 km to the east), has a land area about half that of the Site Complex, with 60 archaeological sites, of which 23 are rock art shelters.

The most common site types recorded in the Site Complex are rockshelters with rock art (with or without other archaeological expressions; n=72) and standing stones (n=69). All other site types had less than five examples each.

Site cluster	No. of rock art shelters	No. of motifs	Primary shelter motif Nos	Secondary shelter motif Nos
BB	13	956	686	159
BG	38	736	268	111
BW	15	549	216	174
BS	8	248	143	102
BC	4	52	29	20
Isolate	1	3	-	-
Total	79	2580		

Table 2. Rock art shelter clusters. Motif numbers from 2005–2012 field recording.

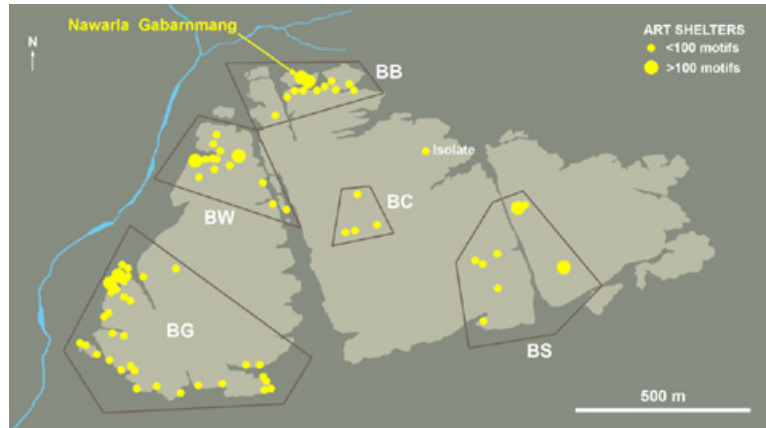


Figure 8. Art site clusters within the Site Complex.

Rock art shelters

Within the Site Complex, 72 rock art sites were located, of which seven are composed of twin alcoves within the dripline of a larger overhang, each of which contains rock art (giving a total of 79 rock art alcoves). On the basis of geographic separation, these rock art sites cluster into five groups and a single isolated shelter (Fig. 8). The clusters are of different sizes, both in area and in the number of art sites they contain (Table 2). Initially recorded as separate site complexes, they are now each seen as being components of an unusually large Site Complex, reflecting the remarkably high quantity of rock art and occupation at the Nawarla Gabarnmang shelter. Apart from a few small overhangs, all rockshelters across the outcrop contain rock art. This suggests that the number of art shelters is simply a reflection of the number of rock shelters available within the Site Complex.

Each of the five clusters contains two shelters with notably larger motif numbers than the other shelters within their respective cluster, with one of these containing an exceptionally high number of motifs (the primary art shelter of the cluster). In the larger site complexes a secondary art shelter may exist with fewer motifs than the primary shelter but notably more than other shelters within the site complex.

The 79 rock art alcoves range from 2 to 25 m in length (width), with a median width of 6 m. The shelters vary greatly in height and/or depth irrespective of length (Fig. 9). While Nawarla Gabarnmang is the largest shelter and has the greatest number of motifs by far, elsewhere shelter size, taken for comparative purposes as its theoretical volume (maximum width × depth × height), is unrelated to the number of motifs it contains (Fig. 10). The eight largest art shelters all lie along the northern margin of the outcrop where the elevation of the

outcrop is highest and the potential for large shelters is greatest. Art shelter orientation is mostly towards the north (46%, reflecting the southerly dip of the outcrop), but south and west-facing shelters are also common (26% and 24% respectively).

Consequently, neither shelter size nor orientation is seen as having been a significant factor in rock art shelter selection. Shelters with greater than 50 motifs, however, tend to have a northerly orientation (five north, two south and one west), most being along the taller northern face of the outcrop (Fig. 6). In contrast, of the 15 shelters over 15 m long, eight have southerly orientations and only five open to the north.

The distinctive pillar structure of the Nawarla Gabarnmang shelter is not unique; with 17 other shelters across the Site Complex exhibiting the formation (such structural features also occur at several other outcrops across the plateau). Of these, all but Nawarla Gabarnmang and one other (ARN-120/1) have low ceilings and limited floor areas for occupation, as the pillars occupy most of the interior space with only narrow access corridors between them (Fig. 11). Shelter ARN-120/1, 250 m west of Nawarla Gabarnmang is the second largest of the pillar shelters within the Site Complex, with both a high number of motifs (126) and a potentially large floor deposit. In addition, this shelter has an open

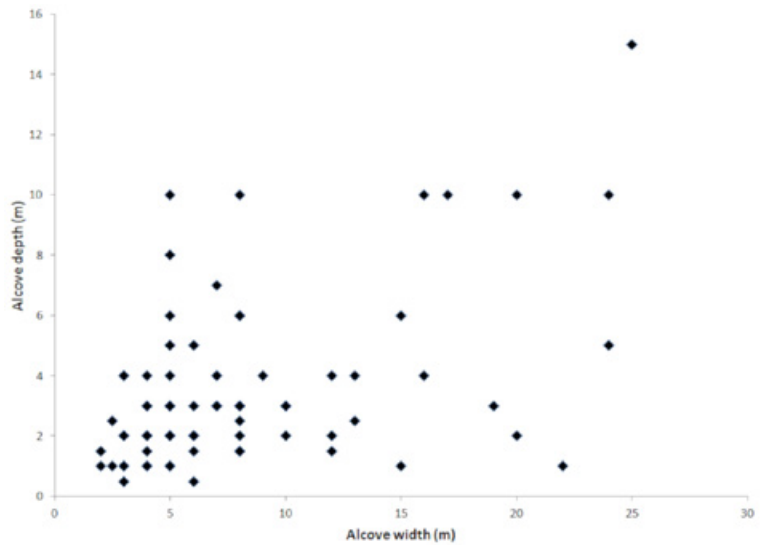


Figure 9. Rockshelter alcove depth by length (m) (including Nawarla Gabarnmang).

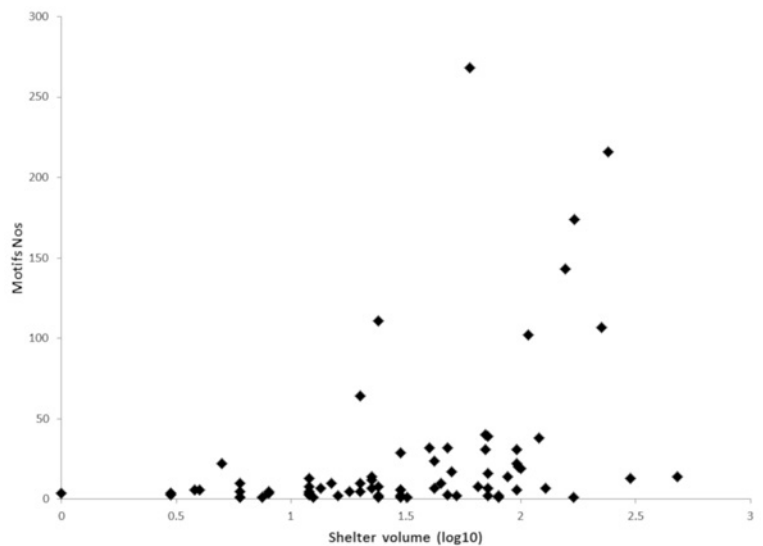


Figure 10 (right). Motif numbers \times shelter volume (m^3) (excluding Nawarla Gabarnmang with its 686 motifs).



Figure 11. Examples of pillar formation shelters across the outcrop. A: ARN-074/10 B: ARN-021/4 C: A074/53 (photos A and B: RGG, C: LCD).

Shelter form	No.
Slab	19
Undercut	14
Pillar	17
Stepped	8
Capped Wall	7
Mushroom	3
Fallen	3
Total	71

Table 3. Frequencies of shelter form types (see Gunn et al. 2020 for definitions).

interior area suggestive of artificial enlargement similar to that at Nawarla Gabarnmang.

Elsewhere on the outcrop, a wide range of shelter forms was utilised (Gunn et al. 2020), with the most common being slab, pillar and undercut (Table 3). The few rockshelters lacking any archaeological evidence of use tend to be those too small for human occupation. Hence, shelter form does not seem to have been a particular consideration in shelter selection for rock art production.

Standing stones

Standing stones are small slabs of unmodified sandstone, most commonly placed at an acute angle against a rock wall or natural rock step (see Gunn et al. 2012). Sixty-nine standing stone sites were recorded from across the Site Complex (Fig. 6). Most of these consist of a single isolated stone, but a small number combine two or three stones in close proximity. The only concentration of standing stone sites consists of eight individuals around an ephemeral rockhole located within a tight gully at the southern edge of the outcrop. The wide distribution of standing stones across the outcrop contrasts to the clustering patterns of the rock art shelters, suggesting there is no direct correlation between the two site types.

The sizes and varied locations of these standing stones are generally consistent with those found at other site complexes across the Arnhem Land Plateau, although their density here is greater than in any other Jawoyn site complex (cf. Gunn et al. 2012: 41). The most common site association of standing stones is with other arranged stone sites (see below).

Stone alignments

A single stone alignment (Jawoyn site ARN-074/50) was recorded in the centre of the outcrop in site cluster BC (Figs 6 and 8). It is associated with four small rock art shelters and a disparate collection of 12 standing

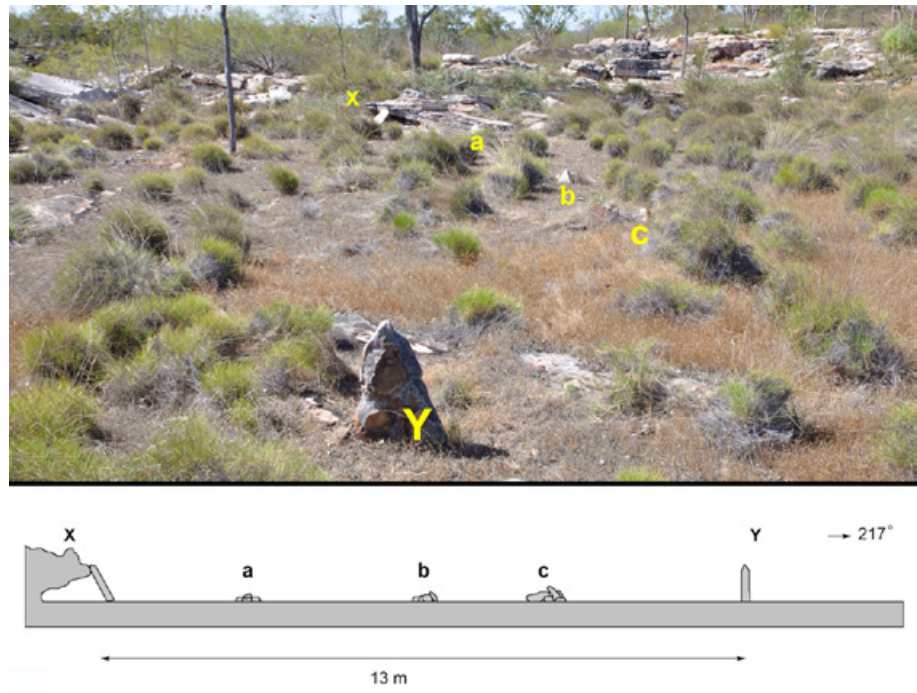


Figure 12. Stone alignment ARN-074/70 (photograph: RGG).

stone sites. The alignment consists of a row of three small cairns with a supported standing stone at one end and a free-standing standing stone at the other (Fig. 12). Overall, the alignment is 13 m long, slightly crescent shaped, and orientated roughly NE-SW (217°). The three cairns consist of low stone piles up to 100 cm in diameter and 20 cm in height. The two standing stones are around 50 cm tall. Similar simple stone alignments occur at many locations within Jawoyn Lands, either in conjunction with site complexes or as isolated features in the landscape.

Larger and more complex alignments, such as large circles or other enclosed shapes have been recorded at a number of other site complexes within the Jawoyn Lands of the plateau, but these do not occur on the Nawarla Gabarnmang outcrop or in the immediate vicinity; the nearest being some 20 km to the east.

Cairns and 'storehouses'

Other stone features include four rock cairns and two constructed storehouses (Fig. 11). The cairns are represented by five individual rock piles from four sites: two along the northern rim, and two central to the outcrop. All are less than a metre in diameter and <20 cm tall, and are constructed from five to twelve sandstone slabs, most likely gathered from their immediate surroundings. Two of the cairns are small piles of stones placed on top of a larger block, while the other three are built directly on rock pavements. Their varied locations do not suggest an association with any particular site type (Fig. 6). In addition, three small cairns occur within the stone alignment described above.

'Storehouses' consist of erected slabs walling (and protecting) an enclosed space (Fig. 13). Two examples were recorded here; one towards the centre of the

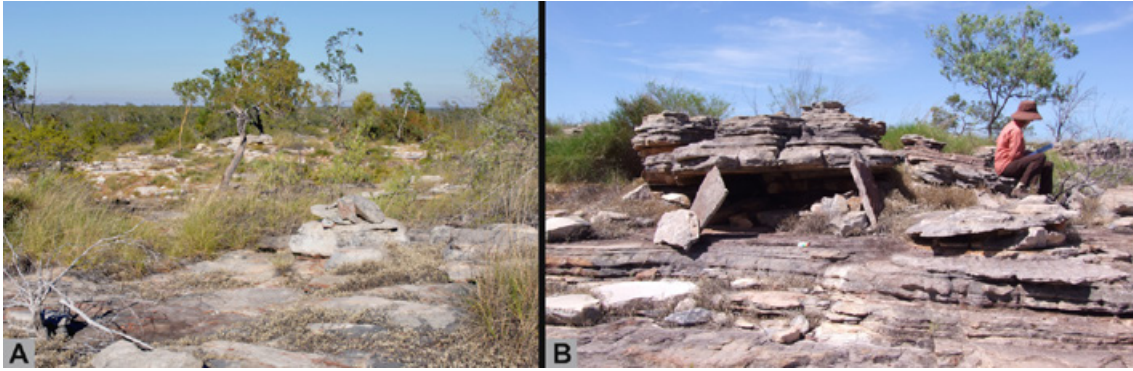


Figure 13. Stone cairn (A) and stone 'storehouse' (B) (photographs: RGG).

outcrop and the other at its southern end. Both are around two metres long by a metre deep and half a metre high. The term 'storehouse' is not a Jawoyn term or interpretation. The structures, however, are similar in size and shape to others documented by us in various parts of Australia that were used either in shelters to protect food stuffs from animals or, in open areas, as a temporary place to keep ritual paraphernalia during ceremonies, after which the accoutrements would be returned to more secure places for prolonged storage. Consequently, the term seems appropriate here pending further information.

Other arranged stone sites

Two other arrangements of stones were recorded. One is a two metre wide natural table-rock that has a standing stone at one end, a central small cairn and, at the other end, a natural pocket in the rock filled with small stones (manuports). The filling of natural pockets on large rocks is not uncommon elsewhere in Jawoyn Lands and in all cases they are associated with standing stones and/or small cairns.

The other arrangement is a pair of small stacked stone slabs wedged tightly into a narrow rock ledge 2 m above the ground. On another ledge, a metre above these, there is a prominent standing stone. At one of the art shelters there is a small pocket in the shelter wall which has also been wedged with stones.

Burial crypts

Four burial crypts were located: all were the remains of bundle burials (bones bound within paperbark sheets) placed in clefts and sealed with stone walling. Two are within narrow ledges some two metres above the ground, while the other two are within narrow solution tubes. The four sites do not exhibit any other evidence of use. The ledge burials are widely separated, being in the BG and BC site clusters. The two solution tube sites are within the BW site cluster. Other archaeological sites within similar ledges and solution



Figure 14. Wall flaking (quarrying) at Jawoyn site ARN-120/25 (photographs: RGG).

tube formations, such as rock art shelters, had no signs of burials, suggesting that burials were intentionally kept apart from other archaeological site types.

Grinding patches

Three clusters of open grinding patches were recorded, all within the immediate vicinity of the Nawarla Gabarnmang shelter. Ten grinding patches occur on a low rock outcrop in front of the shelter, seven on a large rock pavement to the east of the shelter, and six on horizontal rock slabs adjacent to the creek-line 100 m north of the shelter (Fig. 7). Although similarly exposed rock pavements occur elsewhere around the outcrop, no other open grinding patches were located.

Grinding patches are also located on several large fallen slabs within the Nawarla Gabarnmang shelter, in addition to portable grindstones. Traces of red ochre occur on both the grinding patches and on the grindstones indicating, at least, their common use for pigment preparation.

Shelter flaking (quarries)

The quartzite rock in which many of the shelters occur is suitable for stone artefact production. While flaking of interior ledges in shelters (wall flaking) is common in many of the art shelters throughout Arnhem Land, in three rockshelters in the Site Complex it forms the only evidence of Aboriginal use (Fig. 14).



Figure 15. The late Margaret Katherine at Nawarla Gabarnmang in 2010. Without her permission and full support this project would not have been possible (photograph: LCD).

All occur within the BW site cluster and in each the amount of flaking is comparable to that present in many of the rock art shelters. In a small number of shelters elsewhere on the plateau, such wall flaking is extensive, leaving massive deposits of stone flakes over the shelter floor.

Abraded stone

A free-standing conical stone of non-local sandstone is located within a flat grassy



Figure 16. The late Bardayal Nadjamerrek and Peter Bolgay: senior men who added greatly to the interpretation of Nawarla Gabarnmang (photograph: RGG).

area some 100 m north-west of Nawarla Gabarnmang. Although weathered, the cap and sides of the stone are abraded. Similar abraded stones are known from other areas of Arnhem Land (see below) and elsewhere throughout much of northern and central Australia, where they are commonly associated with small-scale ritual performances and specific mythologies or Dreaming Beings (e.g. Mountford 1976: 142; and see below).

Jawoyn perspectives

Nawarla Gabarnmang is a highly significant Jawoyn site. It lies within the traditional estate of the Buyhmi clan, of whom the late Margaret Katherine, an elder and respected storyteller, was acknowledged by the Jawoyn people as the senior Traditional Owner (Fig. 15). Margaret considered the site to be a record of her ancestors, a place where she could both see their works and feel their presence (Dean and Butler 2009). As a result of Jawoyn people being removed from the Arnhem Land Plateau during the Second World War (1942–45), little oral history relating to the features and places within the plateau landscape has survived (Merlan 1998; Smith 2004). Interpretations pertaining to the site, however, have come from a number of senior people from neighbouring groups

with a close association with Jawoyn culture and knowledge of Jawoyn lands (Fig. 16).

On visiting the site with senior Aboriginal men and women in 2008–2010, some of whom had camped at the site in the 1930s when young, and again in the 1950s when walking across the plateau, RW was told that the site was:

- called *Nawarla Gabarnmang*; meaning ‘hole through the rock’;
- not restricted to any particular social class; a general camping place
- and on at least one



Figure 17. Examples of Mimi art from around Nawarla Gabarnmang. A: early hand stencils; B: early large naturalistic; C: dynamic; D: undefined class (rows of stick figures) (photographs: RGG).



Figure 18. *Jawoyn Bim* overlying *Mimi Bim* at Nawarla Gabarnmang (photograph: RGG).

walking route across the plateau (from the north-east corner of the plateau, south-west to the tin mines of Maranboy on its southern margin. This route was known to be in use from the 1930s to the 1950s); and

- not decorated with additional rock art after c. 1930.

Mimi Bim

In common with people from the north of the plateau (Mountford 1956; Berndt 1964; Carrol 1977; Chaloupka 1993), all of the Jawoyn people we have worked with over the years (both elders and younger family members) considered the monochrome red and yellow paintings, the majority of which are greatly weathered, to be the work (*Bim*) of Mimi Spirits (Fig. 17). The Mimi are very thin spirits who live within the rocks of the plateau. They are very shy and enter the rocks through cracks whenever people arrive. They are also, however, very mischievous and may come out at

night to steal items around the camp or, in daytime, call out to confuse hunters.

Jawoyn Bim

White and polychrome paintings, in contrast, are said to be the work of Jawoyn people; that is Margaret's ancestors (Fig. 18). These images consist mainly of large animals (macropods, emus etc.) and spirit figures – both good and malevolent (Fig. 19). None of the paintings within Nawarla Gabarnmang are considered to be shades of Dreaming Beings (ancestral characters who placed their own images on the rocks of sacred sites; cf. Gunn 1992).

The large and imposing polychrome paintings of fish, particularly barramundi, on the ceiling of Nawarla Gabarnmang, however, are in a style different to that of Jawoyn artists (Fig. 20). On first seeing these paintings Peter Bolgay, a Mayali elder (closely associated with

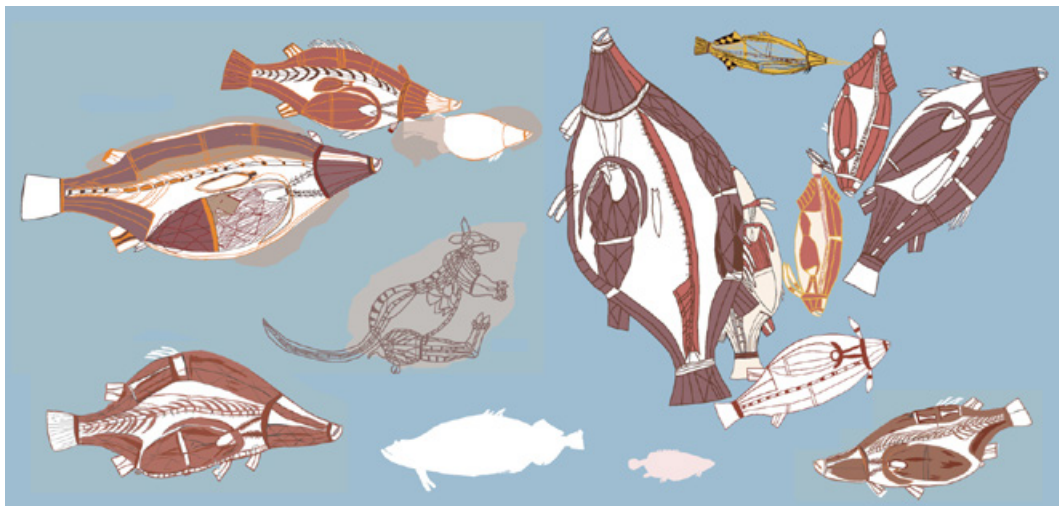


Figure 19. Motifs interpreted at Nawarla Gabarnmang. A: Wuwarr macropods; B and C: Namarrkan, the Lightning Man.

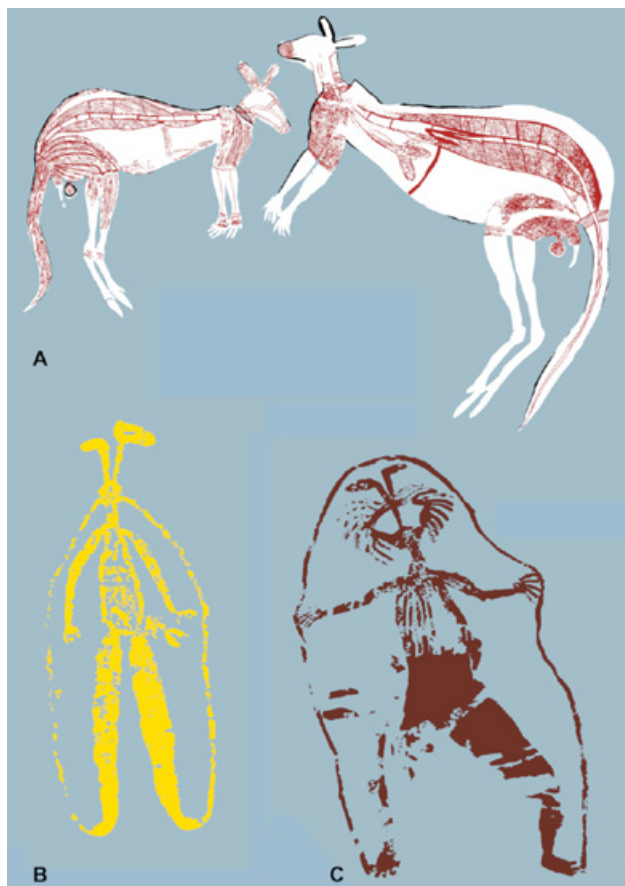


Figure 20. Non-Jawoyn style paintings from Nawarla Gabarnmang.

the Jawoyn lands and culture) recognised that they were painted in the x-ray style of people from around Oenpelli on the northern fringe of the plateau. He concluded that these recent images were most probably painted by 'Oenpelli' people and that Nawarla Gabarnmang was, therefore, a place where they camped (and painted) when visiting Jawoyn country for ceremonies and trade (Gunn 2018). He suggested



Figure 21. Margaret Katherine discussing the Dreaming stone outside Nawarla Gabarnmang (photograph: LCD).

that such ceremonies would have usually occurred within a short distance from the shelter. The location of where such large gatherings would take place in the vicinity of Nawarla Gabarnmang is unknown, but the most likely places would have been either on the flat central surfaces of the outcrop, on the sand plains either to the immediate north of the shelter, or by the Katherine River 5 km to the west. Peter's interpretation therefore expands the role of Nawarla Gabarnmang to include a significant place for interaction with their northern neighbours.

In addition, several individual motifs at Nawarla Gabarnmang were interpreted for us. These included:

- non-sacred representations of the principal characters of the Wuwarr ritual (one of the main Jawoyn initiation rituals) (Fig. 19A),
- two images of Namarrkan, the Lightning man, who is responsible for the bringing of the wet season and the revitalisation of the country (Figs 19B and C; cf. Chaloupka 1993: 56–59), and
- images of malevolent spirits recognised by their anthropomorphous shape but with animal characteristics (head or feet) or exaggerated features (fingers, toes or penis).

Margaret also interpreted a standing stone in front of Nawarla Gabarnmang as a ritual Dreaming stone. The conical stone is located on the flat area 100 m in front of the shelter and has been abraded over and around its upper tip. Although the particular Dreaming of this stone was unknown to her, she based her interpretation on its close resemblance to a King Brown Snake Dreaming stone she was familiar with at another site to the south (Fig. 21). She said that such stones were the focus of small-scale ceremonies, most likely by the local group whilst camping at Nawarla Gabarnmang; although they probably camped on the sandy flat in front of the shelter rather than in the shelter itself if the weather was fine. It is unlikely that this small scale ceremony was the sort of ceremony that the northern 'Oenpelli' people would have come up to attend.

In contrast, extensive and complex-design stone alignments are said by Jawoyn elders to be associated with myth and large-scale ceremonies (cf. Arndt 1962), similar to those reported elsewhere in Australia (e.g. Palmer 1977; Edwards 1969; Mulvaney in prep.). The smaller alignments such as occur in the Site Complex are said to most likely relate to smaller scale ceremonies.

The burials located in clefts around the outcrop are seen by Margaret and other elders as being part of the landscape. While extensive ceremonies are

performed after a death (Elkin 1972, 1979), after the ceremonies and the placing of the bundle burial within a rockshelter or elsewhere, the burials do not present any form of restriction on the use of the area, as these were people from this country and it is right for them to be here amongst the living. The elder Jawoyn see the degradation of burials by natural forces as part of the cycle of all life.

Discussion

Nawarla Gabarnmang is the largest rock art site so far recorded within the Jawoyn Lands of the Arnhem Land Plateau. Its extensive archaeological deposit documents some 50000 years of Aboriginal occupation, and its art corpus includes some of what are considered to be amongst the earliest rock art styles of western Arnhem Land. It also includes some large and visually spectacular rock art from the past 150 years. As a single site, these facts are indeed significant. However, the shelter sits within a site complex of 158 other archaeological sites, to which some aspects of Aboriginal interpretation have been proffered (see above). These sites present a range of activities and additional art styles not represented at Nawarla Gabarnmang (see below). Although no dates can be assigned to many of the archaeological features within these satellite sites, they doubtless were utilised over the time when Nawarla Gabarnmang was occupied; although whether they relate to the early period of the Mimi Bim or the later Jawoyn Bim has yet to be determined.

Rock art of the Nawarla Gabarnmang Site Complex

The rock art in the Jawoyn Lands of the Arnhem Land Plateau is largely consistent with that well-documented in rockshelters around the northern and western margins of the plateau and within Kakadu National Park (e.g. Edwards 1979; Lewis 1988; Chaloupka 1993; Wesley et al. 2017; May et al. 2020). For the JRAHP surveys, the rock art was grouped into three broad periods:

- *Mimi Bim*: rock art said by custodians to have been painted by Mimi spirits. These images are generally taken by researchers to be the various pre-estuarine styles proposed by Chaloupka (1993: 91-152), and Lewis' (1988) periods pre-dating his long spearthrower period (see also Chip-

- pindale and Taçon 1998; Gunn et al. 2013);
- *Jawoyn Bim*: where the art form is dominated by the use of white pigment and is recognised by custodians as being mostly produced by their Jawoyn ancestors or their ancestral Dreaming Beings; and
- *Contact art*, which includes motifs that can be readily recognised as indicating communication with non-Aboriginal cultures, occurs contemporaneously with Jawoyn Bim, and hence does not represent a temporally distinct group forming a sub-set of Jawoyn Bim.

From the 2005-2012 field recording data, the number of motifs per art alcove within the Site Complex ranges from 1 to 686, with a mean of 31 and a median of seven. Eight shelters stand out as having exceptionally high motif numbers, with Nawarla Gabarnmang clearly being the major art shelter of the outcrop: the next highest number of motifs in an art shelter is just 268. Subsequent detailed recordings of a number of Jawoyn art shelters suggest that the greatest discrepancies between the field and detailed totals will occur in those shelters with higher motif tallies, largely due to the presence of very faint and superimposed motifs easily overlooked in a superficial field recording. For example, the revised motif tally for Nawarla Gabarnmang is now over 1300 motifs; it is expected that motif numbers in other shelters with high motif numbers will increase substantially with detailed recording, while totals within shelters with <20 motifs will remain largely the same. The discrepancy between the larger and smaller sites is therefore expected to increase, while the ranking of sites will remain essentially as suggested by the field recordings.

Of the three art periods mentioned above, Mimi Bim is by far the most numerous and widely occurring (Table 4), with Jawoyn Bim present in only 11 of the 78 art alcoves (18%).

MIMI BIM classes		No. of Sites (n=71)	JAWOYN BIM classes		No. of Sites (n=11)
Hand stencil		19	Monochrome		10
Large naturalistic	x	9	Other polychrome		9
Dynamic		9	Stencils		5
Stick figures	x	8	Bichrome x-ray		3
Post-dynamic	x	3	Beeswax		2
Yam		3	Polychrome x-ray		1
Ngar-Mimi		3	Prints	xx	0
Beehive headdress	x	3			
3MF stencil		2			
Other SFB	x	1			
Hand print	xx	0			
Other	x	62			

x = Rock art classes not represented at Nawarla Gabarnmang
 xx = Rock art classes not represented within the Site Complex

Table 4. Rock art class site frequency.

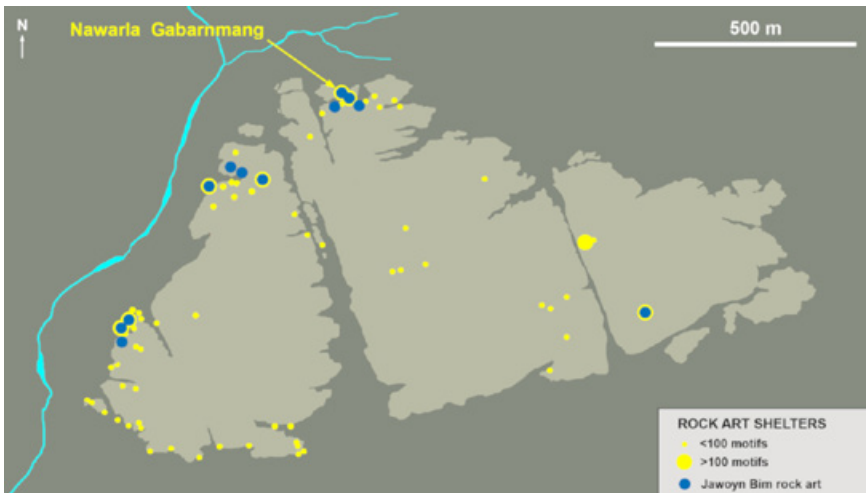


Figure 22. Distribution of early hand stencils period rock art.

Art site cluster	Mimi Bim	Jawoyn Bim	(n)
BB	645	311	956
BG	656	80	736
BW	433	116	549
BS	282	2	284
BC	52		52
Isolate	3		3
Total Motifs	2071	509	2580

Table 5. Motif period numbers by site cluster.

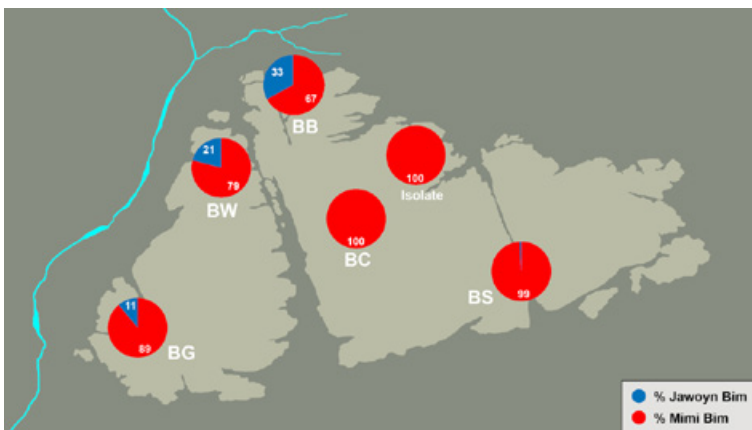


Figure 23. Distribution Jawoyn Bim period rock art.

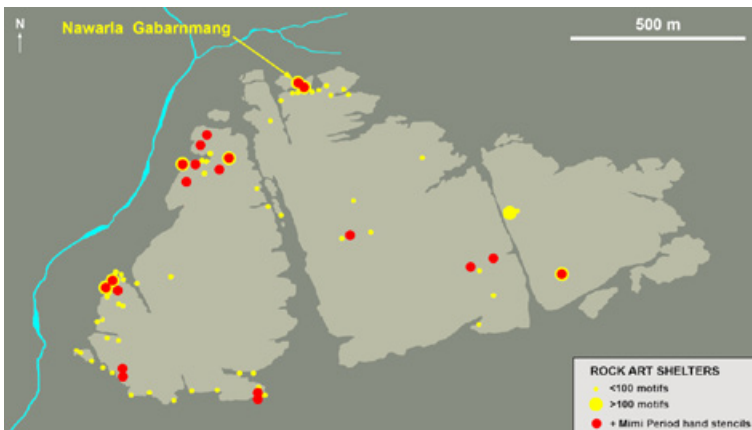


Figure 24. Percentage of Jawoyn and Mimi Bim by site cluster.

Of the recognised classes of the Mimi Bim, early hand stencils are the most widespread (27%: Table 5). The early large naturalistic (13%), dynamic figures (13%) and stick figures (11%) are the only other classes well represented (Fig. 17). Interestingly, the class ‘other-Mimi’ is represented at 62 sites (87%), indicating that there is a wide range of currently unrecognised motif classes within the gamut of Mimi Bim. Early

hand stencils are generally considered to be amongst the earliest surviving rock art in Arnhem Land (Chaloupka 1984, 1993; Lewis 1988; Chippindale and Taçon 1998), and less than 14 000 years old (cf. Barker et al. 2017). Their distribution (Fig. 22), then, indicates that the entire Nawarla Gabarnmang outcrop was used for rock art production from at least this time.

The archaeological survey revealed that shelter use within the Site Complex changed notably over time. All 79 alcoves recorded contain rock art from the Mimi Bim period, whereas only 12 (17%) contain rock art from the Jawoyn Bim period. This is reiterated in the differences in the amount of rock art present, with 2071 Mimi Bim motifs and 509 Jawoyn Bim motifs: 80% vs 20% (Table 5). While the Mimi Bim motifs were produced over a period of around 12 500 years, those of the Jawoyn Bim were all produced within the past 500 years (Barker et al. 2017; Gunn 2018). This suggests that, even taking into account the deleterious effects of preservation and overpainting, rock art production was a far more common activity during the Jawoyn Bim period (in the order of six times the rate than that of the Mimi Bim period).

The art from the Jawoyn Bim period is predominantly restricted to those larger shelters and their immediate neighbours along the northern rim of the outcrop (Fig. 23). The exceptions are two motifs from this period (a child’s hand stencil and a painted fragment in white) that occur in a shelter at the south of the outcrop. The percentage of Jawoyn Bim varies within each site cluster, with the highest proportion being in the BB cluster (31%) and decreasing with distance to the south-west (Fig. 24). In all site clusters Mimi Bim are in the majority. This decrease in Jawoyn Bim proportions and overall motif numbers highlights the

preferred use of the BB cluster, and Nawarla Gabarnmang particularly, during the more recent years of the Jawoyn Bim period. During both periods (Mimi Bim and Jawoyn Bim) occupation and art production has been concentrated along the northern rim of the outcrop where the shelters are larger and surface water more readily available. At this stage, the reason for this restriction in shelter use during the Jawoyn Bim period remains an enigma.

The Jawoyn Bim contains a range of paintings, stencils and beeswax applique figures (Fig. 18). The monochrome motifs are almost exclusively in white, while polychrome motifs are primarily white silhouette images with red outline and infill. Hand stencils, also predominantly in white, were recorded from just under half of the Jawoyn Bim sites, all of which also contain red hand stencils from the Mimi Bim. Bichrome x-ray motifs occur in the two largest art shelters and an adjacent site, while polychrome x-ray images occur only in one site: Nawarla Gabarnmang. The single polychrome Contact period motif recorded, a horse, also occurs within Nawarla Gabarnmang and hence this period need not be discussed further here.

Overall, in both the Mimi Bim and Jawoyn Bim, there is a trend for those art shelters with the highest motif numbers to also have the greatest range of motif classes. Consequently, with its exceptionally high motif numbers, Nawarla Gabarnmang has more than twice the number of both Mimi Bim and Jawoyn Bim motif classes than any other rock art site from this outcrop. This further supports the exceptional nature of Nawarla Gabarnmang as a favoured shelter for art production over the full period represented by the rock art periods.

Although specific counts have not been undertaken, anthropomorphic figures are well represented within both the Mimi Bim and Jawoyn Bim periods across the outcrop. The principal difference in the motif types between the two periods is a focus on terrestrial fauna in Mimi Bim (principally macropods, small quadrupeds and emu), while in the Jawoyn Bim aquatic fauna (fish, crocodiles and water birds) are predominant, although macropods and emu continue to be well represented. Also, although full measurements have not been analysed, large motifs (>100 cm) appear much more common in Jawoyn Bim than Mimi Bim.

Conclusion

An archaeological survey of the rock outcrop in which the Nawarla Gabarnmang shelter occurs has shown that the shelter is not an isolated feature in the Jawoyn landscape, occurring as it does within a background pervaded with a range of ritual and mundane archaeological site types. These include rock art, burial, ceremony, food preparation, and stone and wood working. The range of rock art styles present in the surrounding shelters includes a number not displayed at Nawarla Gabarnmang. This finding indicates that the area, and most likely Nawarla Gabarnmang itself, was being used at the time of these other art styles; a

finding that is not gleaned from reference to the single Nawarla Gabarnmang shelter.

The survey also suggests that in the more recent times of Jawoyn Bim, shelter use within the Site Complex was more limited than in the earlier Mimi Bim periods. Further, during this more recent period, the focus of shelter use was concentrated on the largest and most commodious shelter within the Site Complex, Nawarla Gabarnmang.

By fusing the results of the archaeological survey with the accounts of the Jawoyn elders, the Site Complex begins to come alive not just with people in rockshelters, but with people doing particular things in and around these shelters, and providing us with a glimpse of their beliefs and rituals.

Reinforcing the proposals of previous researchers elsewhere in Australia, this exercise emphasises that the interpretation of the significance of an Aboriginal archaeological site must be undertaken within the framework of both its cultural and archaeological context.

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