



KEYWORDS: *Torres Strait - Computer enhancement - Digital technology - Rock painting*

ROCK PAINTINGS OF MUA ISLAND: INITIAL RESULTS FROM WESTERN TORRES STRAIT

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Abstract. Rock art studies in Torres Strait have received little attention. The Mua Island rock art project, a joint research endeavour between university archaeologists and the indigenous Islander community, aims to document known and previously unknown rock art sites on Mualgal traditional lands. This paper presents data obtained from systematic documentation of five rock art sites on the island using digital technology and computer enhancement techniques. It is part of a larger Torres Strait regional study, which seeks to examine long-term inter-regional interactions and social processes between southern Papua, Torres Strait and Cape York through temporal and spatial analyses of artistic conventions.

Torres Strait's islands, cays and coral reefs dot a 150 km-wide stretch of shallow waters extending north from the tip of Cape York to the southern Papuan coastline (Fig. 1). During the Last Glacial Maximum the islands were elevated ranges and hilltops, part of the land bridge that then connected the Australian and Papuan mainlands. As sea levels began to rise this link was eventually breached—sometime around 8000 years BP—triggering the emergence of Torres Strait as an island-riddled sea world. Yet the Strait did not reach its present form until close to 3000 years BP (Harris 1977; Woodroffe et al. 2000), and to this day island formation is ongoing (Barham 2000).

Geographically, Torres Strait can be divided into four main island groups: the Western, Top Western, Central and Eastern Islands. The geologic makeup of the islands is high acid volcanic and granitic rocks in the western and central islands (Von Gnielinski et al. 1997). The Top Western Islands, within sight of the southern Papuan coastline, are flat and muddy, devoid of any rock—the exception is the granitic island of Dauan. The Eastern Islands, Dauar, Waier, Murray, Erub and Ugar are made up of acid volcanic rocks. Sandy cays occur across the Strait, particularly in the Central Island Group.

Torres Strait's strategic position between two cultural realms, Aboriginal Australia and mainland Melanesia, has prompted many debates, most notably about the role of Torres Strait as a bridge or barrier to cultural, genetic and linguistic diffusion between Australia and New Guinea (e.g. Walker 1972). Although Torres Strait occupies an intermediate geographical position between Australia and New Guinea, Melanesians, Islanders and Aboriginal peoples in the Strait are not, and have probably never been entirely isolated from each other. Rather, while Torres Strait Islanders possess their own distinctive cultural traits—and in this capacity represent a cultural disjuncture between Australian

Aborigines to the south and Papuans to the north—through them indirect cultural connections became possible between both mainland regions.

Different forms of inter-regional interaction between Cape York Peninsula, southern Papua and Torres Strait have been much discussed in the ethnographic literature. Alfred C. Haddon, leader of the historic 'Cambridge Anthropological Expedition to Torres Straits' in 1898, was one of the first to highlight the extensive trade networks of the region (Haddon 1904: 293–7). The Cambridge Expedition spent six months in the Strait collecting artefacts and recording Islander, Aboriginal and Papuan cultural practices, producing one of the most detailed anthropological studies undertaken of indigenous peoples at that time (e.g. Haddon 1904, 1912, 1935). Largely as a result of these documents, key elements of inter-regional interactions across Torres Strait can be characterised for the late 19th century (see also Lawrence 1989 and McNiven 1998), along with the essential features of what Barham (2000) has coined 'the Torres Strait Cultural Complex'. This cultural complex is founded on established social and cultural linkages between islands and the two mainlands. These linkages are manifest in everyday life through warfare, trade, shared ceremonies, intermarriage and maritime voyaging. Barham also notes that this cultural complex is characterised by a focus on the sea, a strong maritime orientation of subsistence practices and cosmological beliefs, and marine craft and skill specialisation (Barham 2000: 227).

Yet while these features of Torres Strait Islander cultural practice are reasonably well understood for the period since the late 1800s, Islander history before that time—and before the period of European contact generally—is less well known. Oral traditions offer rich details concerning some aspects of culture (e.g. see David

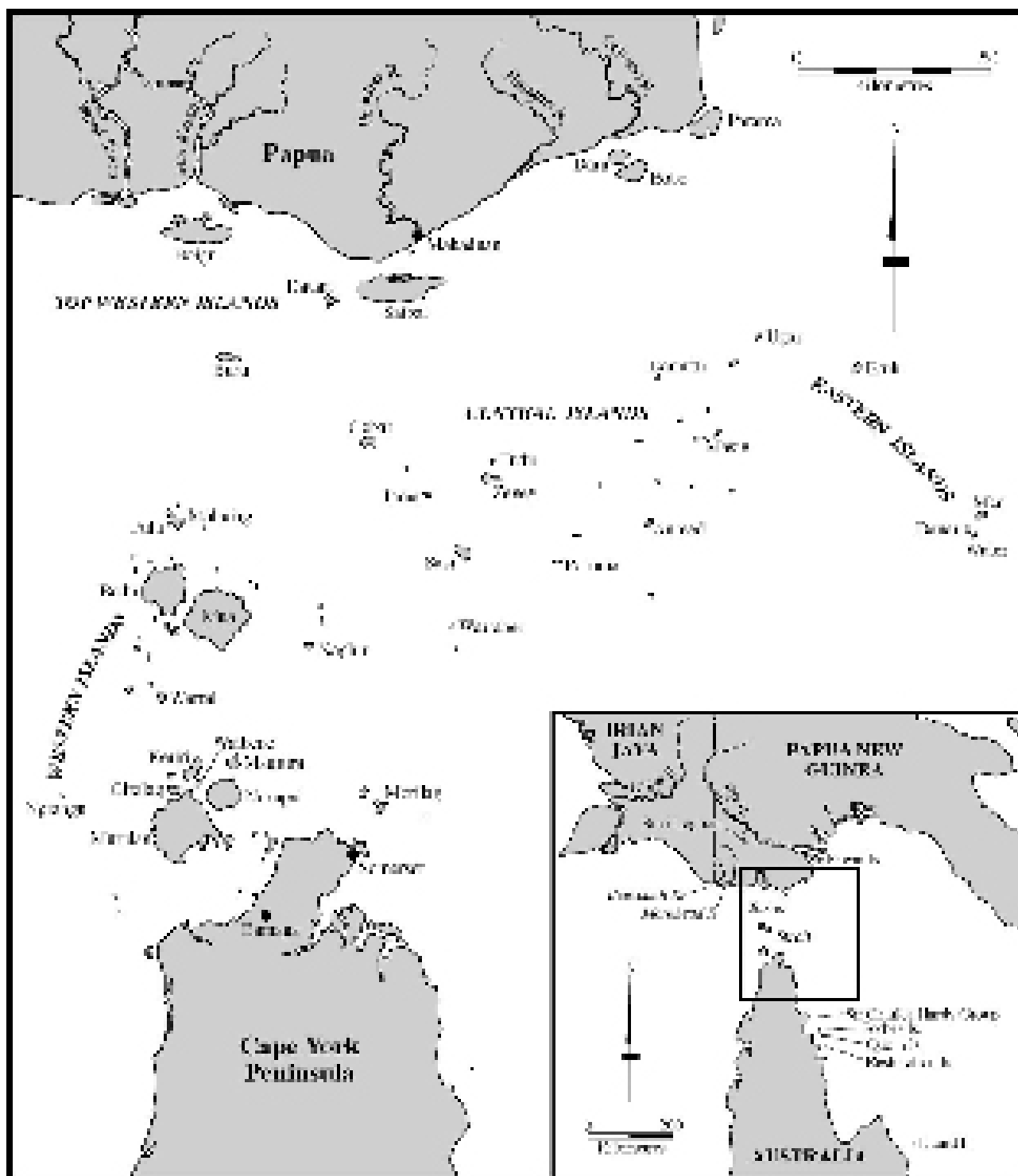


Figure 1. Map of Torres Strait.

et al. in press; Haddon 1935; Laade 1967, 1968; Lawrie 1970) — including named individuals — with other dimensions of cultural life remaining virtually unknown for the distant past. In particular, what are we to make of the history of those cultural practices that are today characteristically Torres Strait Islander in character? One way of investigating this question is by researching its pictorial expression in rock art. In this spirit, this paper signals the first steps of a long-term research program aimed at addressing the history of what makes Islander culture what it is today.

Rock art research in Torres Strait

Torres Strait rock art has received only passing attention in the ethnographic literature (see McNiven and David in press for overview) and has only recently become the focus of community-oriented archaeological research (e.g. David et al. 2001, in press; McNiven et al. 2002). Until recently only thirty-five Torres Strait rock art sites had been documented in the literature, many of which were poorly recorded or reported by amateurs (McNiven and David in press). The earliest rock art recordings in the Strait come from Haddon's sketches of rock paintings and stencils from Pulu Islet off

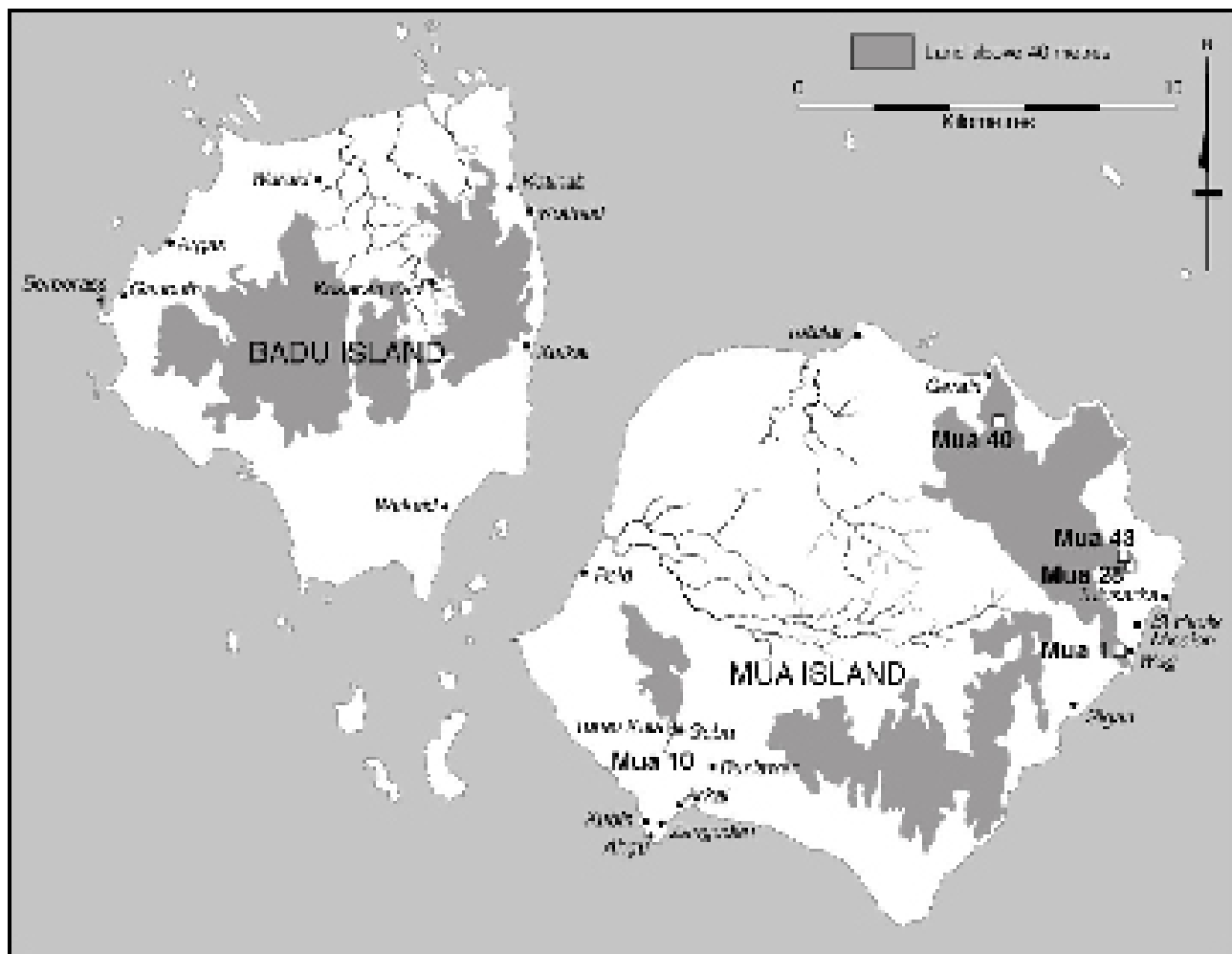


Figure 2. Map of Mua Island (right) showing location of rock art sites.

the coast of Mabuiag, and Kirriri Island (1904: 357–60). Other sporadic references to rock art in Torres Strait have been made by Tennant (1959), Beckett (1963), Laade (1971), Vanderwal (1973), Harris et al. (1985), Teske (1986), Coleman (n.d.) and Singe (n.d.). However, none of these are systematic recordings. Recently, McNiven et al. (2000, 2002, in press) undertook detailed recordings incorporating digital technology and computer enhancements at Kabadul Kula on Dauan Island. However, there still remains a lack of systematic rock art surveying and recording on other islands in the Strait. This paper initiates such a program by detailing the rock paintings of Mua.

Mua Island

Mua, situated next to Badu Island in the mid-western chain of Torres Strait, is the second-largest island in the Strait (Fig. 2). It is home to the indigenous Mualgal Islander community, who today reside largely at Kubin village on the south-western side of the island. Inter-island alliances were common during the early European contact period, and historically Mua Island was allied with the Kaurareg Aboriginal peoples of southern Torres Strait. Conversely, Mua's closest neighbours — the Badulgal from Badu with their allies from Mabuiag Island to the north-west — were feared enemies, helping create a shifting political, social and economic atmosphere of amity and enmity between island

neighbours (Haddon 1904, 1935; McNiven 1998).

Site recording

The authors undertook systematic recording of all known rock art sites on Mua, plus surveys for new sites, with various members of the Mualgal community since 2001. On-site recording involved documenting rock paintings and information on site context. Each site's rock art was sketched onto graph paper and each painting numbered, measured and annotated. Digital photographs (using Nikon Coolpix 995 cameras) were taken of each individual rock painting and rock art panel (with and without flash) using IFRAO Standard Scales attached to hand-held extensions. In each case the camera was positioned as close to parallel as possible to the rock art.

Site location was recorded using a handheld GPS unit. Orientation was established for each rock art panel with a compass. Each site's width, depth and height were measured (relative to dripline) and cross section diagrams and plan views were drafted. Notes were made of the presence of any cultural materials nearby, the integrity of the art (including degree of deterioration) and general site context.

Computer enhancement

Computer enhancement techniques are relatively new to rock art research. They have been used with varying success



Figure 3. *Mua 1: rock art site.*

in many different contexts and are continually being refined with advancements in computer imaging software and digital technology (e.g. Clogg et al. 2000; Hender-son 1995; Mark and Billo 2002; Rip 1989).

The coastal environment of Torres Strait does not present a favourable context for the preservation of rock art. Many of the paintings have experienced heavy deterioration from coastal processes such as salt and water damage (see David et al. 2001 for definitions of fading). Nevertheless, in this region digital technology and computer enhancement are allowing for the recovery of faded rock paintings that would otherwise go unnoticed (see David et al. 2001 for details of enhancement techniques). We briefly note here key steps we have employed to digitally enhance *Mua's* rock paintings.

Digital images of faded paintings were firstly downloaded into the computer and opened in Adobe Photoshop 5.5. Enhancement began by adjusting the colours until the image became easily discernable to the naked eye. This was done through *saturation* adjustments, which increase or decrease selected colour intensities; *hue rotation* allows targeted colours to be transformed into colours better capable of being differentiated with the human eye; *selective colour* corrects imbalances in image colours (e.g. darkens a red painting by increasing the amount of black in the painting); *curves* adjust the tonal levels in the image (an additional tool to darken or lighten a rock painting); *levels (auto)* is a further adjustment used to slightly darken the rock art and lighten the background. The painting can be further adjusted using the *brightness* and *contrast* commands.

The *channel mixer* command is also used to change the background colour of the image while maintaining the

enhanced rock painting. This allows the rock painting to stand out considerably against the new background colour (green was often used in *Mua's* enhancements). Rock paintings are then converted to high contrast black and white images using the *magic wand* tool. A small sample of the enhanced rock painting is selected and the program selects and displays all of the same colours in the figure. The tolerance level of the sample selection colour can be altered to choose differently contrasting shades from the selected area. The selected colours are changed over to black while the background is changed to white thus creating a black and white drawing of the rock painting. Each enhancement step, including colour categories, percentages of adjustment and locations of *magic wand* targets, were at all times systematically recorded during the enhancement process for each image.

The *Mua* rock art sites

Mua 1 (Bera Hill)

Mua 1 is a large weathered granite boulder sitting on an extensive granite platform. The boulder, approximately 3.5 m in height, features red figurative and non-figurative motifs (Fig. 3). Ten paintings adorn the single panel, consisting of anthropomorphs, geometrics, indeterminates and a linear non-figurative painting (Fig. 4, Table 1). The only reference to this site in the literature is Teske (1986) in his popular schoolbook series on the Torres Strait islands. However, only one painting was reproduced in this publication. The exposed nature of the site and its proximity to the sea (approximately 200 m) makes it vulnerable to coastal processes such as salt deterioration, yet the orientation of the site's painted rock panel (facing away from the sea) appears to have protected the paintings from any substantial deterioration. Granular

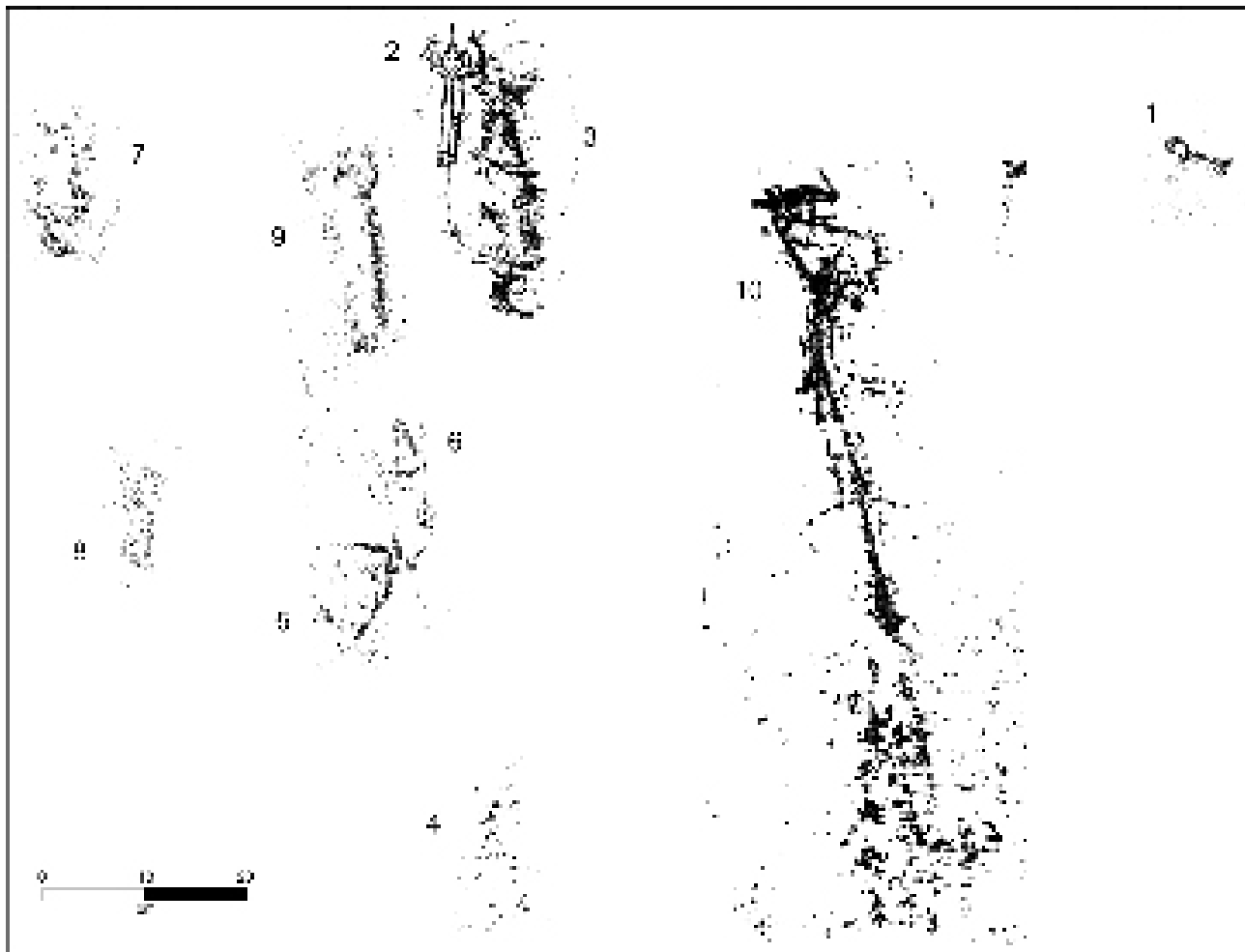


Figure 4. *Mua 1*: rock art panel (collation from a series of separate photos).

Painting #	Motif form
1	Geometric
2	Anthropomorph
3	Indeterminate
4	Indeterminate
5	Geometric
6	Geometric
7	Indeterminate
8	Indeterminate
9	Anthropomorph
10	Linear non-figurative

Table 1. *Mua 1* panel painting numbers and form.

disintegration is also apparent at the site. While no other rock art sites have been found in the immediate vicinity, shallow shell midden deposits (with stone artefacts) are widespread on the hill-slope around the site. A single, near-surface radiocarbon determination at Bera Hill was obtained from the midden by Tony Barham, revealing a modern date (Barham 2000: 272).

The largest painting featured on the panel is a linear non-figurative (painting 10 on Fig. 4) consisting of a near-vertical line with a triangular motif on the upper

portion. Although this site was known among members of the Mualgal community, no further interpretations concerning the motifs were provided.

Mua 10 (Turao Kula associated with Goba, near Uma)

A heavily weathered granite boulder, located amongst several other granite boulders of similar size, is located approximately 35 m upslope of a woodland plain (Fig. 5). It contains a total of forty-four red paintings, many poorly preserved (seventeen other poorly preserved indeterminate traces of paint across the boulder are not shown in the panel pictures (Table 2). The Main Panel (paintings 1–8 on Fig. 6a) is enclosed on two sides by small adjacent boulders; according to Mualgal elders, the art comprises four palm trees, a bird-like image, a rock, and an anthropomorph climbing one of the palm trees (see David et al. in press for a plan of the site). This site has recently been the focus of archaeological investigations linking this panel of rock art with Mualgal oral tradition (see David et al. in press for details). The oral tradition tells of a boy, Goba—here represented by the painted anthropomorph—whose father was beheaded by Badu warriors following a fishing expedition. When Goba's father first realised he and his son were going to be attacked, Goba climbed a tree and hid. From this vantage point Goba watched as his father was killed and his head taken away before he climbed down to tell his co-villagers



Figure 5. *Mua 10*: rock art site.

Painting #	Form	Identification by Mualgal Elders
Panel 1 (Main Panel)		
1	Geometric	Bird
2	Geometric	Rock
3	Palm tree	Palm tree
4	Palm tree	Palm tree
5	Anthropomorph	Goba
6	Palm tree	Palm tree
7	Line	Palm tree
Panel 2		
8	Linear non-figurative	
9	Canoe	Canoe
10	Palm tree	Palm tree
11	Geometric	
12	Linear non-figurative	
13	Linear non-figurative	
14	Linear non-figurative	
15	Indeterminate	
Panel 3		
16	Indeterminate	
17	Indeterminate	
18	Indeterminate	
19	Circle variant	
20	Indeterminate	
21	Indeterminate	
Panel 4		
22	Linear non-figurative	
23	Linear non-figurative	
24	Geometric	
25	Linear non-figurative	
26	Indeterminate	

what had happened (see Lawrie 1970: 45–46 for details of the Goba story). These events took place historically near *Mua 10*. This rock art panel was deeply faded and unknown to the Mualgal community until it was digitally enhanced and shown to elders. The only previous reference to this site was by Tennant, who described the art she saw there during her early 1940s visit: ‘[t]here was a new thing — a long nosed man climbing a coconut tree. There was a row of coconut trees gracefully drawn and true, not just indications, but verifiable coconut trees’ (1959: 193). This indicates that the rock paintings have deteriorated considerably since Tennant’s observation.

Other paintings identified by Mualgal elders from this site include a canoe next to another palm tree (paintings 10, 11 on Fig. 6b), while complex linear non-figurative (see Fig. 6c for a close-up and computer enhancement), geometric and indeterminate (i.e. faded or otherwise damaged) motifs dominate the rest of the site (Fig. 6d, e). Many paintings were not distinguishable with the naked eye, and it was only when traces of paint were photographed and systematically enhanced that the paintings became visible again. Damage at this site includes heavy algae, lichen and fungus growth over some of the paintings and a small amount of water damage. Various cultural materials were found on the site, including items from the European contact period. Excavations at this site indicate that occupation began sometime between A.D. 750 and 1400 (at 95.4% confidence level). In situ ochre powder beneath the paintings also indicates that at least some, if not all, of the rock art was likely created sometime after A.D. 1400, and likely considerably more recently (David et al. in press).

Mua 28 (Lady Hill)

This large weathered granite boulder, approximately 4.5 m in height, is located on the flat grassy plain near the base of Lady Hill close to the northern end of *Mua Island* (Fig. 7).

Table 2. *Mua 10* panel painting numbers, form and identification by Mualgal elders.

Painting #	Form
Panel 1a	
1	Linear non-figurative
2	Indeterminate
3	Geometric
4	Indeterminate
5	Indeterminate
6	Geometric
7	Geometric
8	Line
9	Line
10	Canoe
11	Linear non-figurative
12	Indeterminate
13	Indeterminate
14	Indeterminate
15	Face
16	Linear non-figurative
17	Indeterminate
Panel 1b	
18	Geometric (cross)
19	Anthropomorph with bow
20	Geometric (circle)
21	Canoe
22	Canoe
23	Canoe
24	Canoe
25	Indeterminate
26	Canoe
27	Canoe
28	Canoe
29	Canoe
30	Linear non-figurative
31	Indeterminate
Panel 2	
32	Linear non-figurative
33	Geometric
34	Fish headdress
35	Palm Tree
36	Geometric
37	Geometric
38	Canoe
39	Linear non-figurative
40	Indeterminate
41	Indeterminate
Panel 4	
42	Concentric circles
43	Geometric

Painting #	Form
44	Linear non-figurative
45	Face
46	Canoe?
47	Geometric (triangles)
48	Linear non-figurative
49	Geometric (Triangle)
50	Indeterminate
51	Circle

Table 3. Mua 28 panel painting numbers and form.

Painting #	Form	Identification by Mualgal Elders
Panel 1		
1	Geometric (triangles)	
2	Anthropomorph	
3	Linear non-figurative	
4	Line	
5	Indeterminate	
6	Linear non-figurative	
7	Linear non-figurative	
8	Line	
9	Snake	
10	Linear non-figurative	
11	Line	
12	Zoomorph (turtle)	
13	Linear non-figurative	
Panel 2		
14	Indeterminate	
15	Zoomorph	Shovel-nosed shark
16	Zoomorph	Turtle
17	Geometric	
18	Geometric (triangles)	
19	Indeterminate	
20	Linear non-figurative	
21	Linear non-figurative	
22	Anthropomorph	
23	Indeterminate	
Panel 3		
24	Geometric	
25	Geometric	
26	Linear non-figurative	
Panel 4 (crevice panel)		
27	Geometric	
28	Linear non-figurative	
29	Line	
30	Indeterminate	

Table 4. Mua 40 panel painting numbers, forms and identification by Mualgal elders.

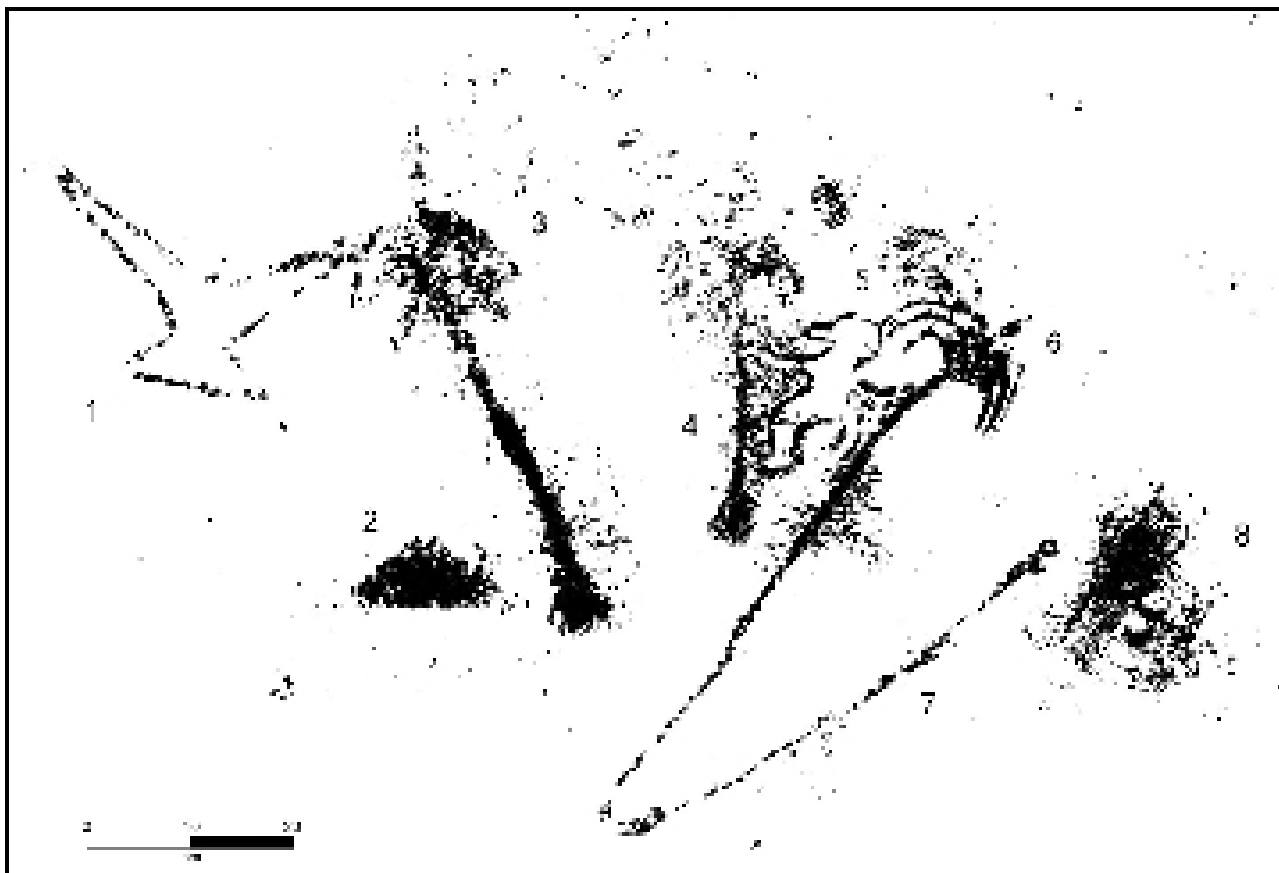


Figure 6a. *Mua 10: main rock art panel depicting the Goba story from Mualgal oral tradition (collation from a series of separate photos).*

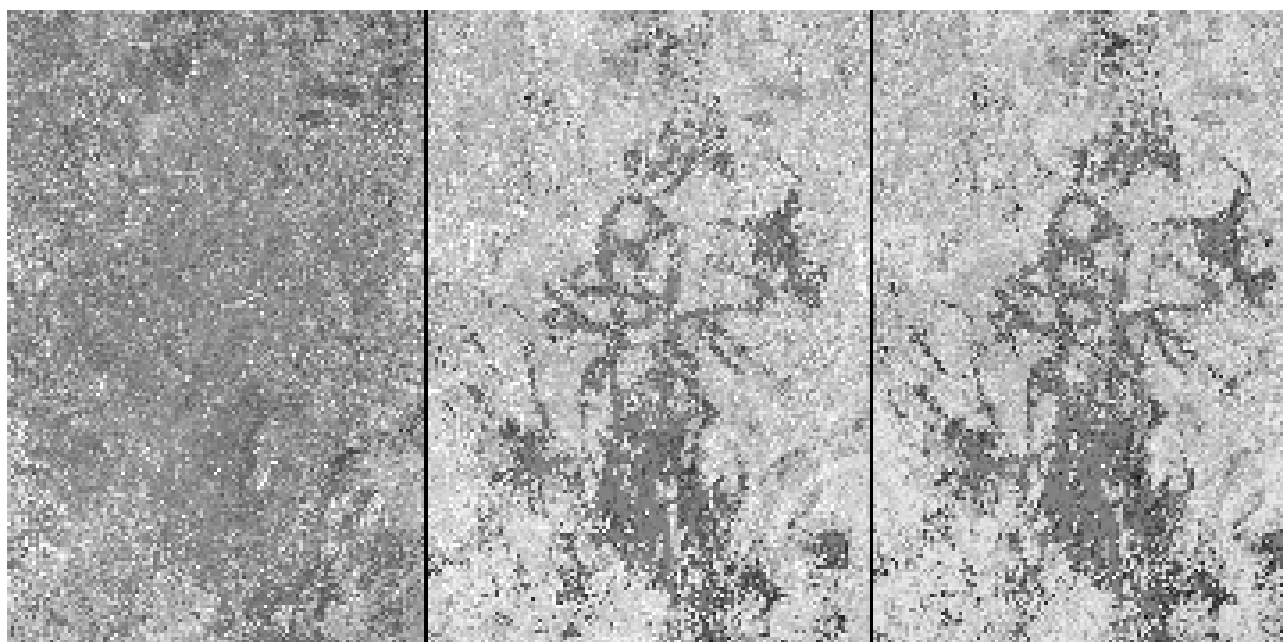


Figure 6c. *Computer enhancement of complex linear non-figurative painting (Mua 10: panel 2).*

Enhancement steps:

Saturation: [Master] +77

Selective Colour: [Red][Black] +26

Selective Colour: [Neutral][Black] -14

Selective Colour: [Red][Black] +30

Curves: [Input] +123, [Output] +152

Selective Colour: [Red][Black] +100

Hue: [Master] +7

Selective Colour: [Red][Black] +70

Channel Mixer: [Green] -72 (red channel output)

Brightness: +8

Contrast: +14

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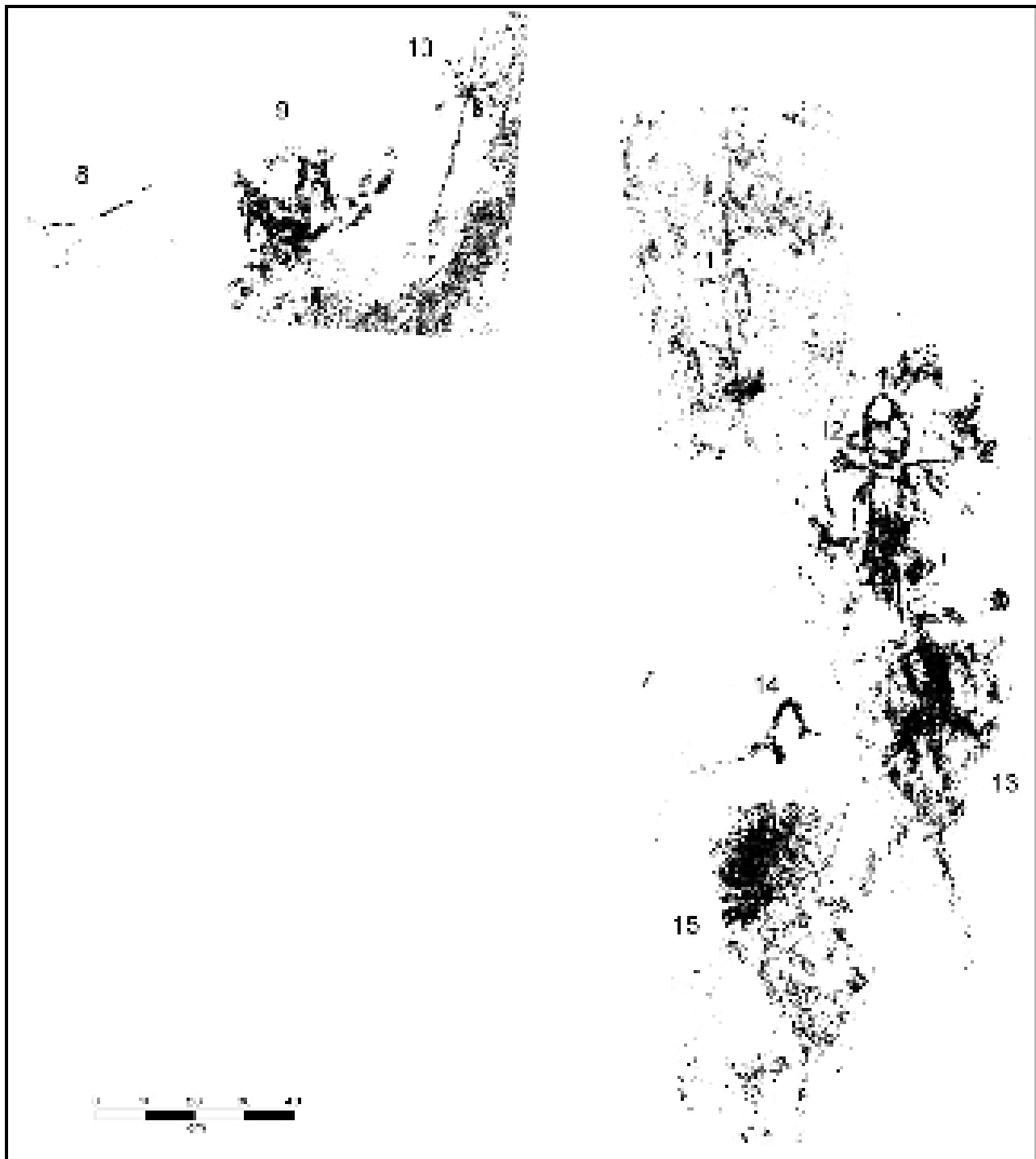


Figure 6b. *Mua 10: panel 2 rock art depicting canoe, palm tree, linear non-figurative, geometric and indeterminate motifs (collation from a series of separate photos).*

It features fifty-three faded red figurative and non-figurative paintings (Table 3) on three neighbouring panels (Figs 8a, b, c, d). The most striking paintings are eleven red infilled canoes (paintings 10, 21-24, 26-29, 40, 48), eight of which are painted largely one under the other, from the middle of the boulder to the base on Panel One (on the boulder surface facing Lady Hill) (Fig. 8a, b). Tennant (1959: 164-71) and Barham (2000: 277-8) are the only other known published sources for these paintings. The right-facing portion on some painted canoes are f-shaped, while a series of vertical lines are shown projecting from the middle of the hulls, which

have been interpreted by Tennant (1959: 171) as representing decorative flags and also by Haddon in other depictions of Torres Strait canoes (see Haddon 1904: 357, 1912: 205-17). These paintings also bear a striking resemblance to other Torres Strait canoes documented in the ethnographic literature (e.g. Haddon and Hornell 1937; Moore 1979).

Other paintings include an anthropomorph with a bow(?) (painting 19 on Fig. 8b), a geometric picture consisting of a set of triangles (painting 49 on Fig. 8d), three concentric circles painted over a small protrusion in the boulder (painting 44 on Fig. 8d), and a face enclosed by a

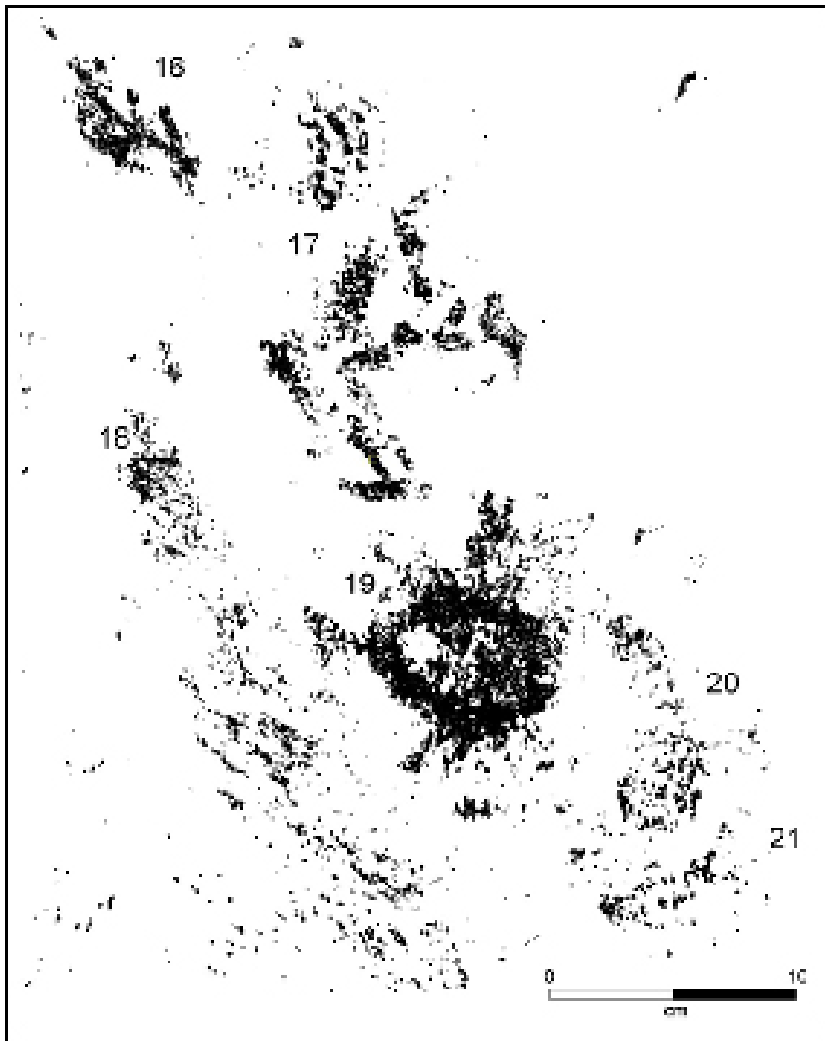


Figure 6d. *Mua 10: panel 3 rock art.*

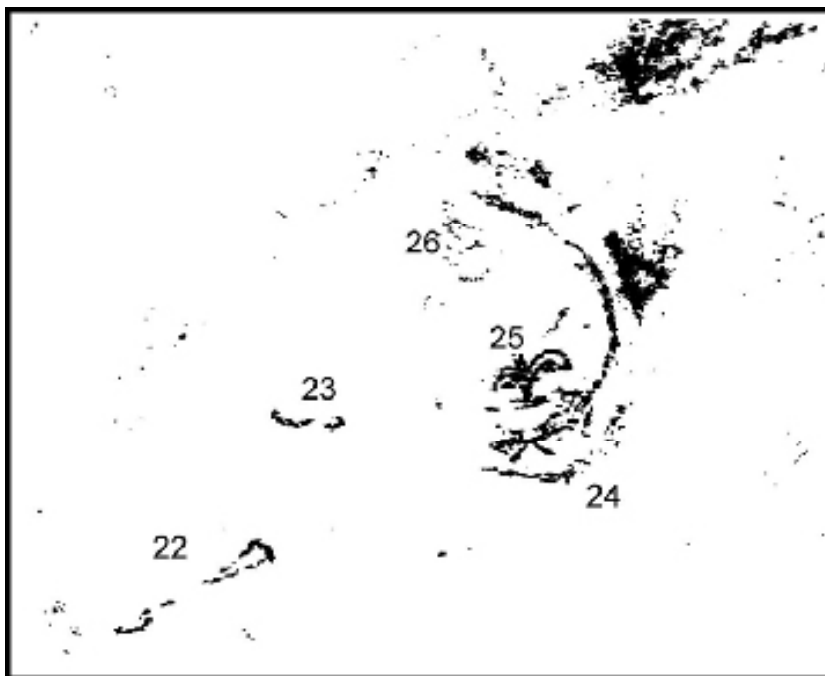


Figure 6e. *Mua 10: panel 4 rock art.*

diamond-shaped motif (painting 47 on Fig. 8d). Another interesting painting found on Panel Two is that of a palm tree with a fish-headress in juxtaposition (see Fig. 9 for close-up and computer enhancement). Fish headresses are characteristically Torres Strait Islander ceremonial paraphernalia and are well known from 17th to early 20th century travel and ethnographic literature (e.g. Haddon 1893, 1904); a similar rock painting is also known from the site of Kabadul Kula on Dauan Island (McNiven et al. in press). The *Mua 28* fish headress has a left-facing open mouth, and possesses a vertical line protruding from its base; a geometric motif extends upwards from the middle of the headress. The details from this headress are notably similar to the ethnographic examples documented by Haddon (1893, 1904) and the Dauan rock painting recorded by McNiven et al. (in press) (see also David et al. in prep.).

Damage at *Mua 28* has resulted from some block collapse, animal disturbance through rubbing, and fire damage near the base of Panel One where some paintings are now only barely recognisable. A fence has recently been erected approximately 35 cm from Panel Two — a property boundary line — which does not appear to pose any danger to the paintings at this time. Water damage is a problem on Panel Three and a small amount of lichen damage is also apparent across the site.

Mua 40

This is a large granite boulder surrounded by vine thicket (Fig. 10). It is located approximately 50 m upslope from a woodland plain. This site was rediscovered during archaeological surveys in late 2002. *Mua 40* features twenty-six red figurative and non-figurative paintings on a Main Panel (Figs 11, 12a, b, c) and four paintings in a small Crevice Panel (Fig. 12d) near the base of the boulder (Table 4). This is the first site on *Mua* to possess a substantial number of zoomorphic motifs, including a 'snake' (painting 9 on Fig. 12a), 'turtle' (*waru*) (paintings 12, 16 on Fig. 12a, b), and a 'shovel-nosed shark' (*kaigas*) (painting 15 on Fig. 12b). The snake, turtle and shovel-nosed shark are clan totems on the island today, as in the

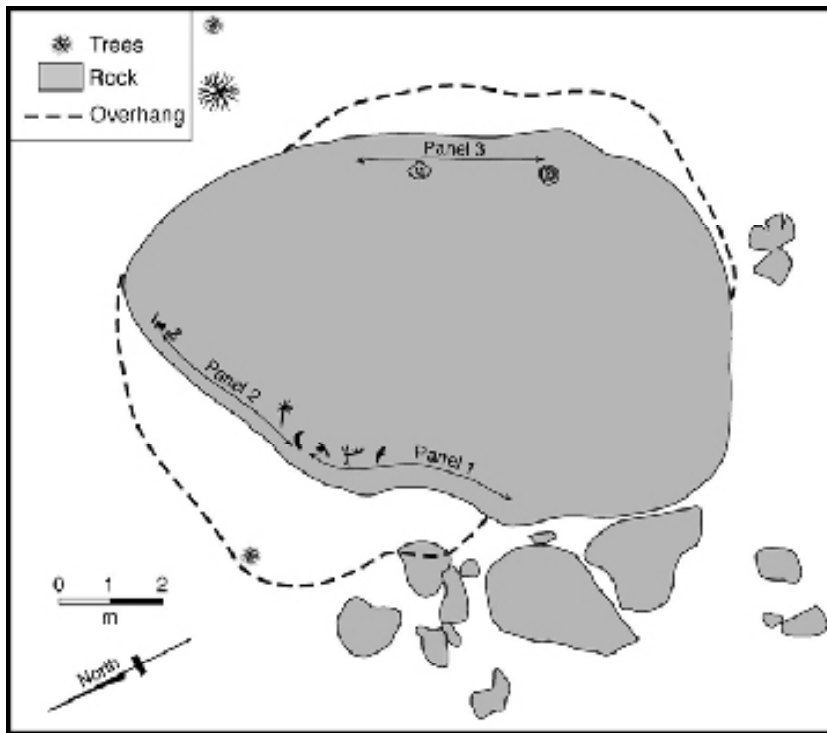
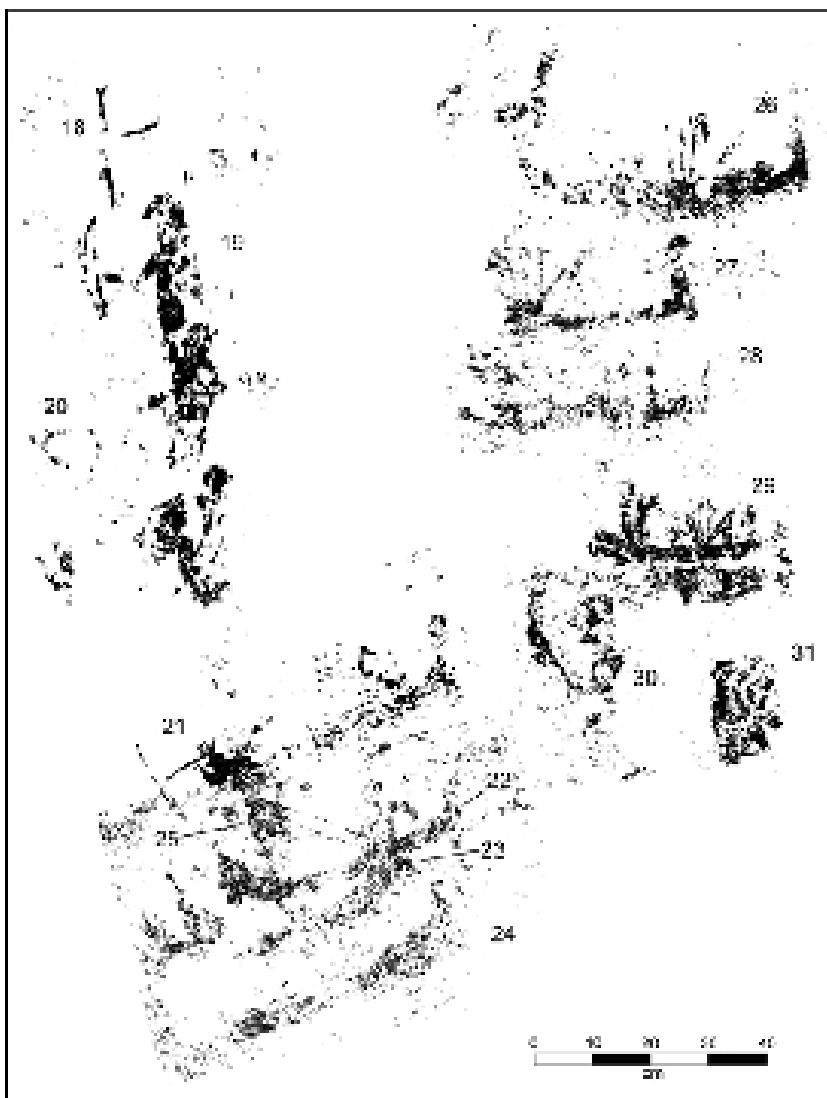


Figure 7. Plan view Mua 28 rock art site.



recent past, and local elders (initially Father John Manas, later others) have interpreted these paintings as totemic representations. The site also features two geometric motifs consisting each of a set of four infilled and laterally linked triangles (paintings 1, 18 on Fig. 12a, b); these were thickly outlined and lightly filled with red ochre. A small anthropomorph (see Fig. 13 for computer enhancement) and numerous geometric and linear non-figurative motifs are also found across the 6-m-long panel. This is the first site recorded on Mua to exhibit distinct superimpositioning of differentially faded images, indicating that this site was likely decorated and used on more than one occasion. The 'snake' (least faded painting) is superimposed on a zoomorph ('turtle') in different shades of red, and computer enhancements show a third (most faded) painting episode involving two vertical lines near the faded zoomorph ('turtle'). That three phases of painting took place is indicated by a correspondence between levels of superimpositioning and degrees of fading. That these images lie in direct superimposition with an important totemic representation above them all may be significant. Elsewhere on the Main Panel, one of the sets of four infilled triangles has been placed over a faded geometric motif.

A red infilled anthropomorph on the Main Panel is reminiscent of imagery used in ethnographically documented carved wooden tobacco charms or garden effigies. Haddon collected tobacco charms during his late 19th century fieldwork; the Mua 40 painting is the first instance of such a motif yet found in Torres Strait rock art (Fig. 14). The paintings in the Crevice Panel (Fig. 12d) are associated with skeletal remains. They are faded, and consist mostly of linear motifs.

The paintings are generally in good condition, although computer enhancement has allowed us to gain clearer views of Mua 40's paintings. Lichen, algal and fungal growth obscure the art at the western portion of the Main Panel, while rainfall and runoff have

Figure 8b. Mua 28: panel 1 rock art section (collation from a series of separate photos).

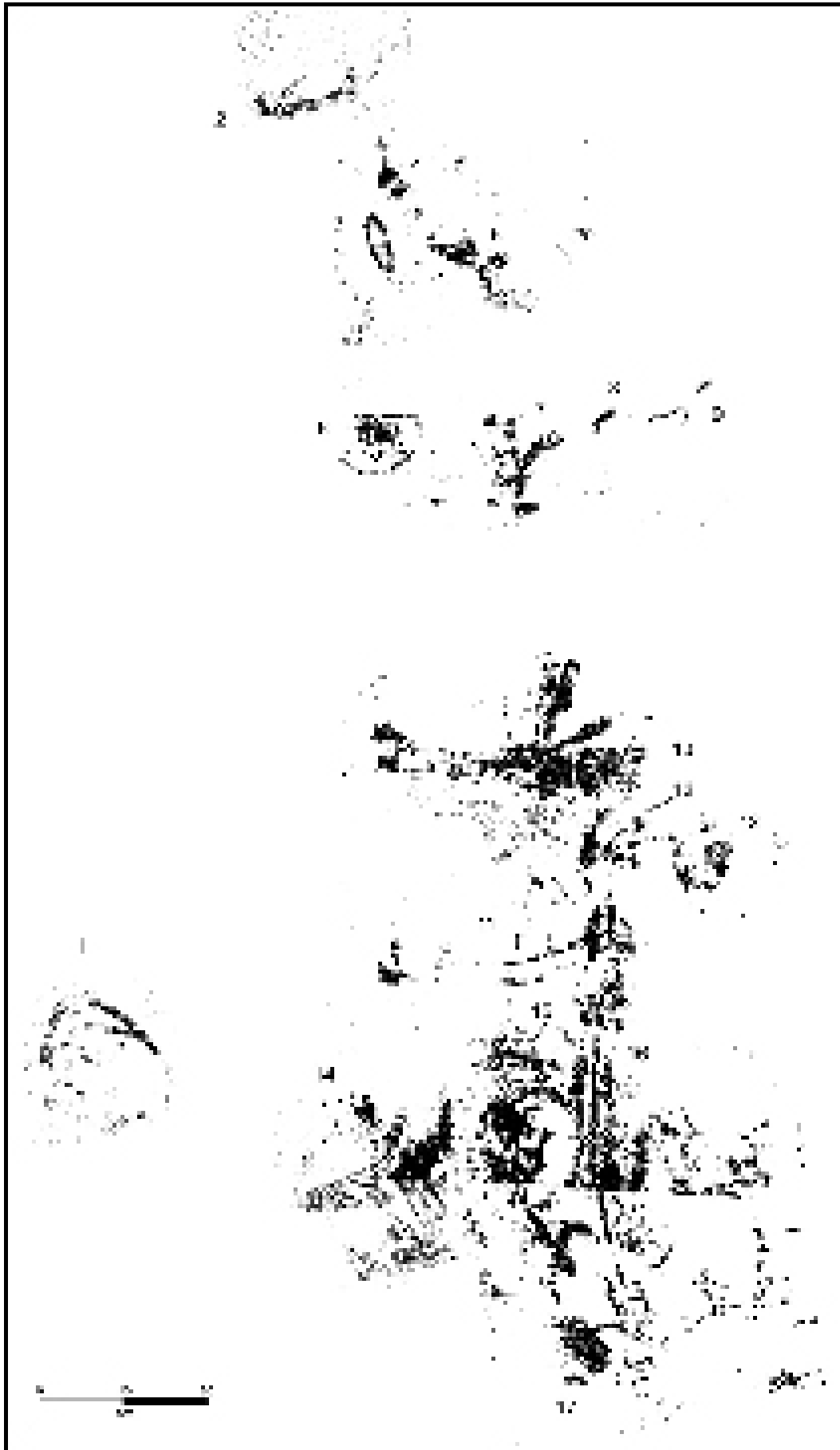


Figure 8a. Mua 28: panel 1 rock art section (collation from a series of separate photos).

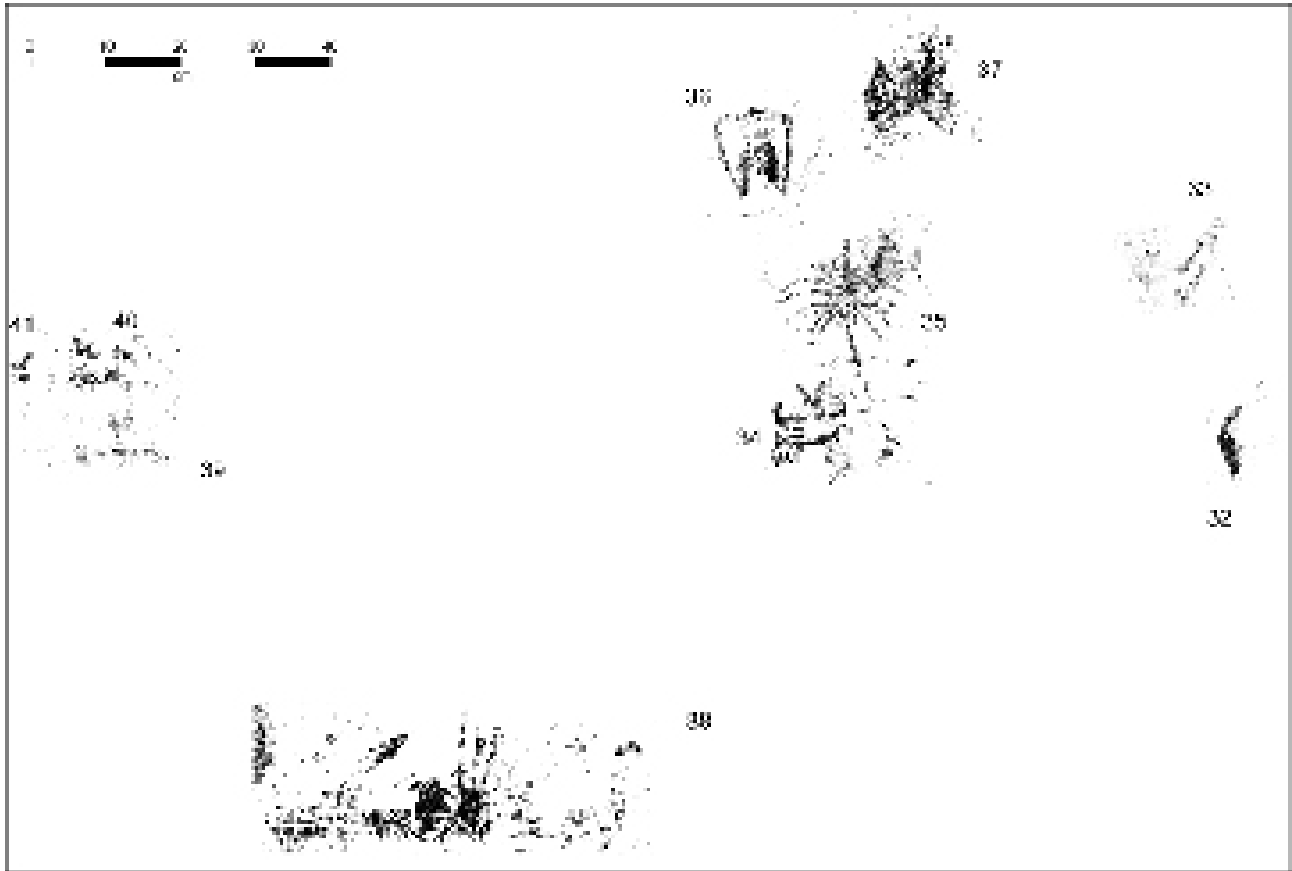


Figure 8c. Mua 28: panel 2 rock art (collation from a series of separate photos).

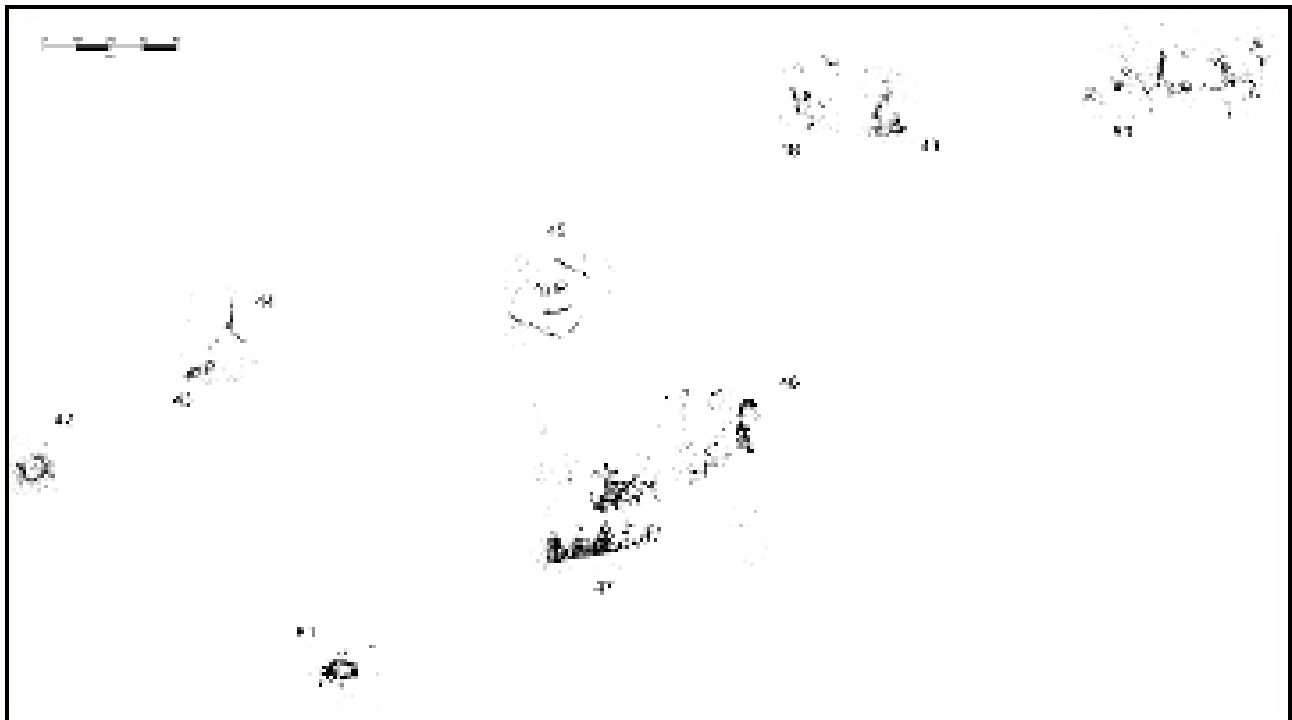


Figure 8d. Mua 28: panel 3 rock art (collation from a series of separate photos).

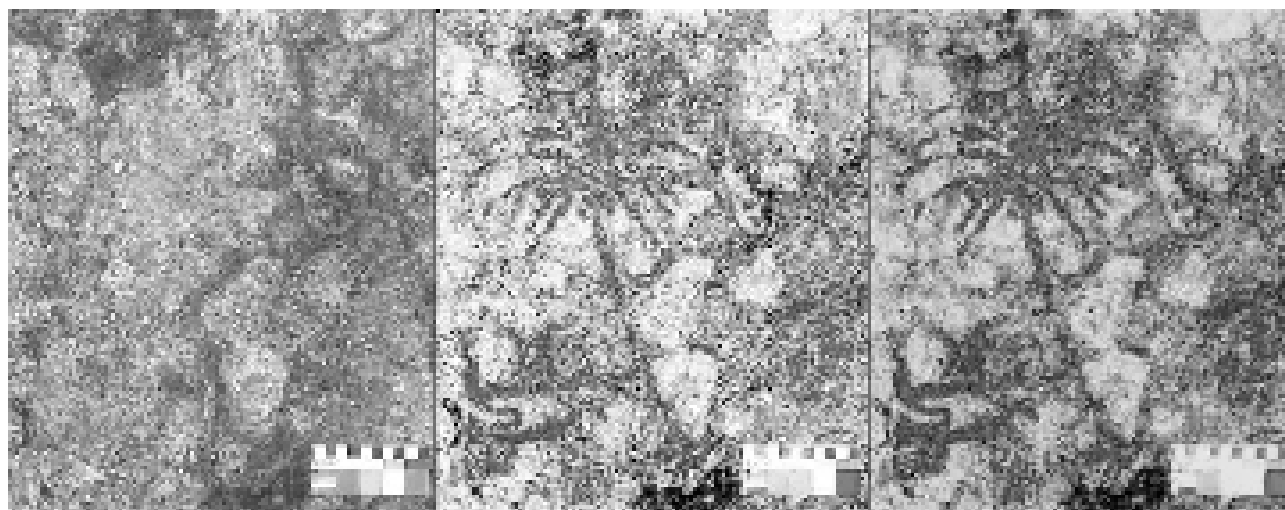


Figure 9. Computer enhancement of fish headdress and palm tree (Mua 28: panel 2).

Enhancement steps:

Auto Levels

Saturation: [Master] +54

Selective Colour: [Neutral][Black] -52

Selective Colour: [Red][Black] +100

Curves: [Input] +99, [Output] +166

Selective Colour: [Red][Black] +100

Selective Colour: [Red][Black] +93

Selective Colour: [Red][Black] +17

Channel Mixer: [Green] -136 (red channel output) Contrast: +9

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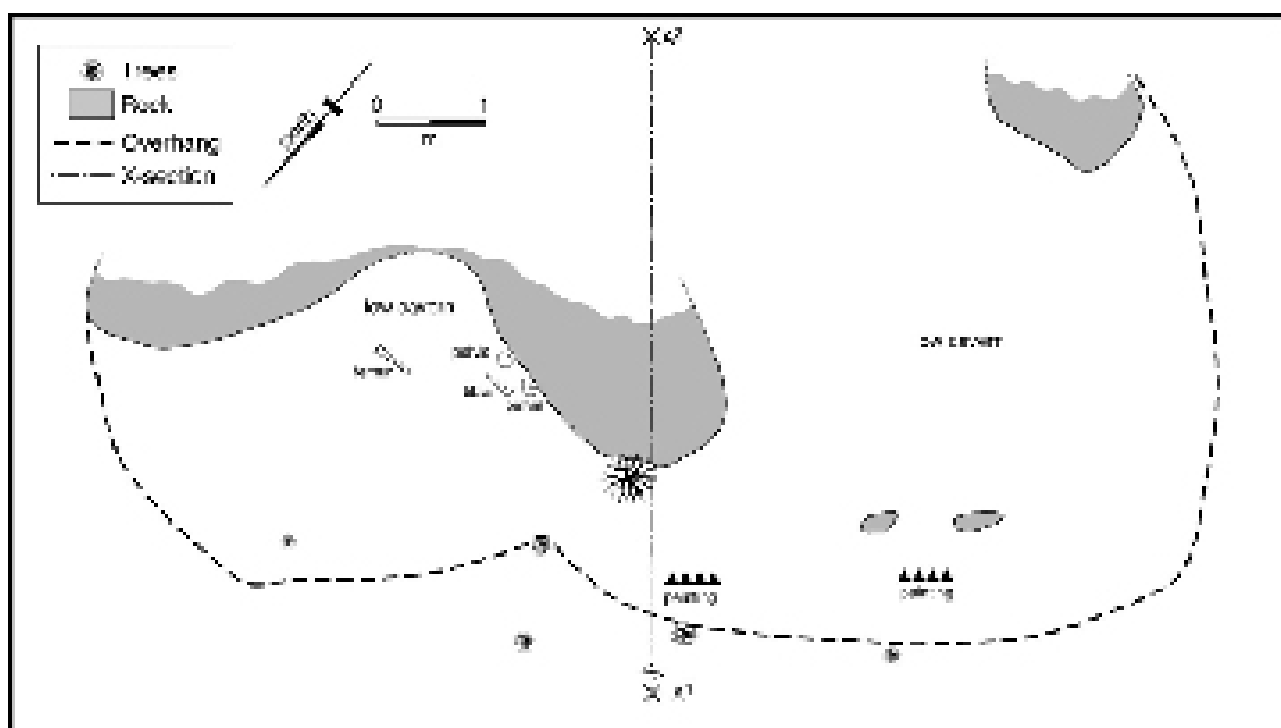


Figure 10. Plan view Mua 40 rock art site.

contributed to the fading of some of the paintings in the middle of this panel.

Mua 43 (Lady Hill burial site)

Mua 43 is a small rockshelter, approximately 50 m upslope on Lady Hill, created by two granite boulders leaning against one another (Fig. 15). This rockshelter is within sight of Mua 28 and contains three faded red linear and geometric paintings (Fig. 16, Table 5). The entrance is

a maximum 1.8 m high, and the shelter is approximately 4 m deep, sloping noticeably upwards towards the back. The rock paintings are located on the roof near the back of the shelter, approximately 60 cm above the floor. The clearest painting is an M-shaped geometric motif (painting 2 on Fig. 16). There is a small quantity of human skeletal material in the rockshelter. Some lichen growth is evident, although the main source of damage appears to come from animals (feral pigs) rubbing against the roof.

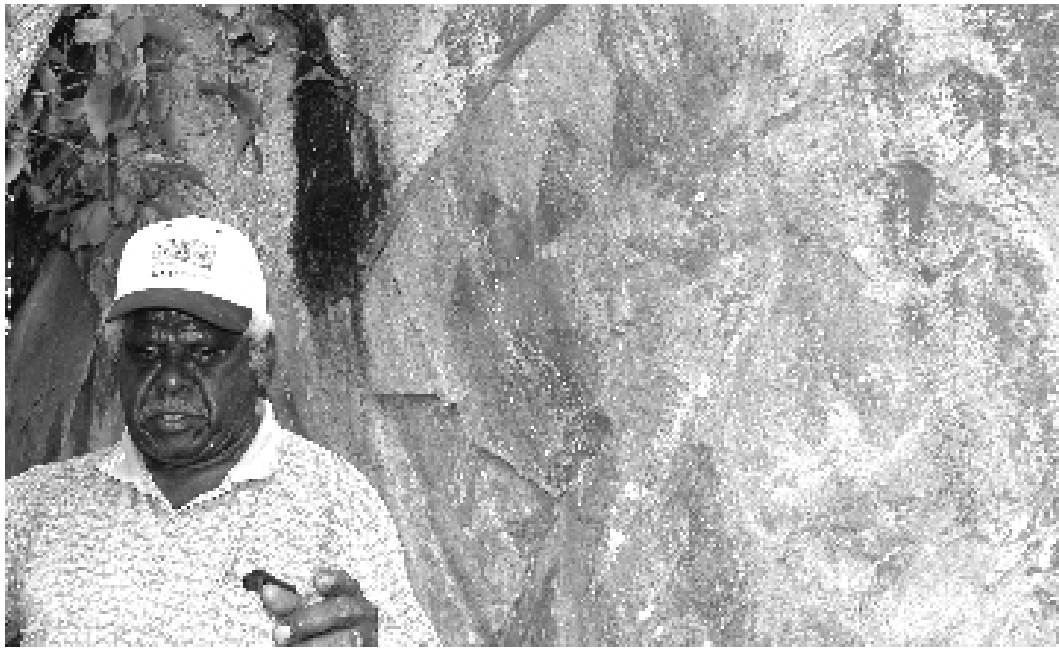


Figure 11. Father John Manas visiting Mua 40 rock art site.

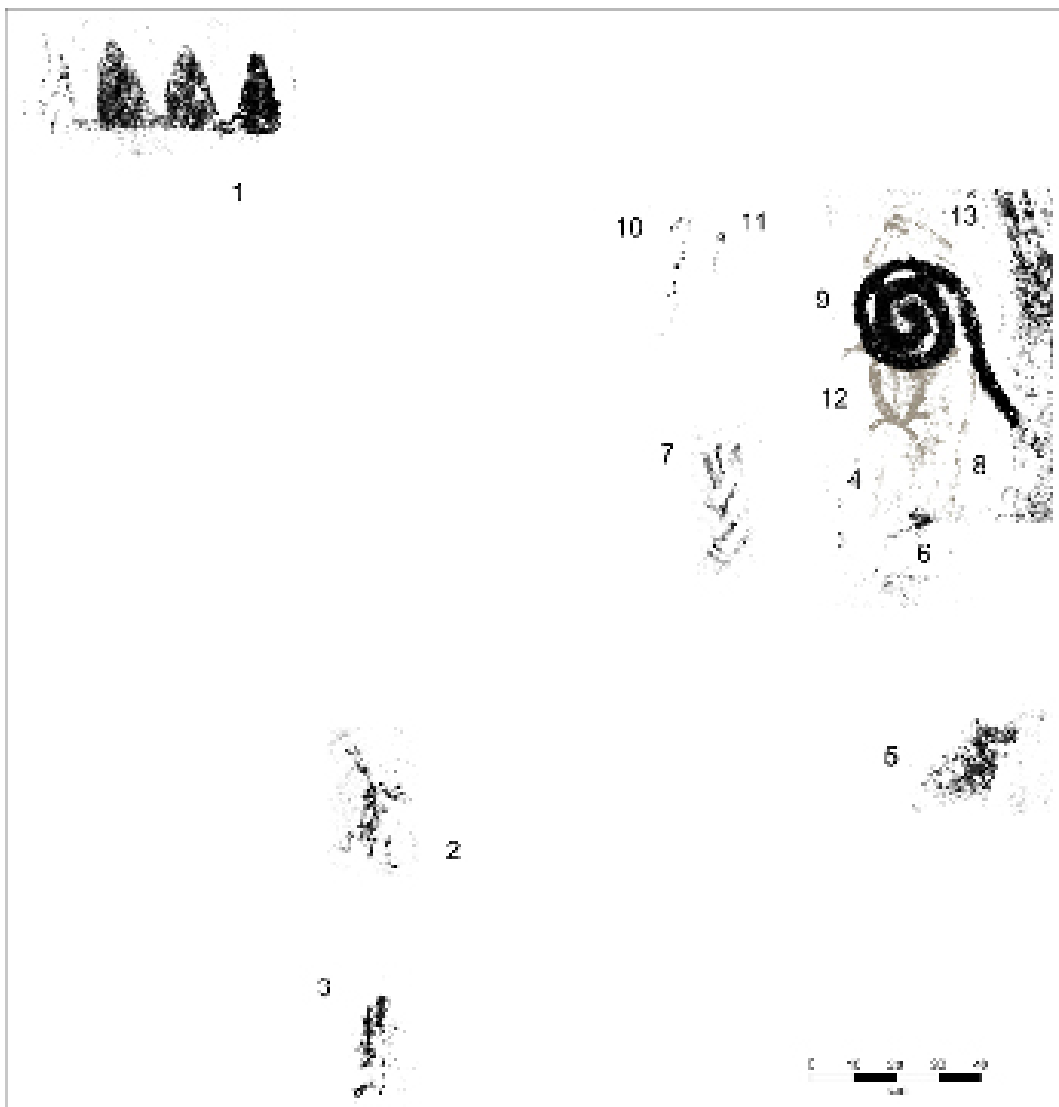


Figure 12a. Mua 40: main panel rock art section (collation from a series of separate photos).



Figure 12b. *Mua 40: main panel rock art section (collation from a series of separate photos).*

Painting #	Form
1	Linear non-figurative
2	Geometric
3	Indeterminate

Table 5. *Mua 43 panel painting numbers and forms.*

Discussion

All of Mua's rock paintings were done in red ochre on granite surfaces. The most notable correlation between art and site context occurs in burial sites. Mua 43 (painting 2 on Fig. 16) and Mua 40's Crevice Panel (paintings 1, 2 on Fig. 12d) possess geometric and linear non-figurative paintings (M-shaped) found in association with a small amount of skeletal material. Other motifs repeated between sites are canoes (Mua 10 and 28), while geometric motifs consisting of a series of laterally linked triangles are found at Mua 28 and 40. Additionally, some sites have impressive views of the surrounding land or seascape, being on hill-slopes (Mua 10 and 40) or near the water (Mua 1). Mualgal elders have referred to Mua 10 as being a 'Turao Kula', which, in Kala Lagaw Ya means 'Spy/Lookout Rock' because of its view of the surrounding landscape and sea. With the exception of Mua 40 and Mua 10's bird-like motif, there is a near-total lack of faunal motifs in Mua rock art.

The systematic documentation of Mua Island's rock art through digital technology and computer enhancement has revealed many paintings (e.g. the Goba panel paintings) that would have gone unnoticed in conventional recording processes. Twelve per cent of the determinate pictures documented here were indeterminate prior to digital enhancement. The detailed documentation of these rock art sites has helped reveal new dimensions of past Mualgal visual culture.

Mua's recorded rock paintings form the first systematically recorded set of rock art sites for any island in the Strait. Similar endeavours are now being undertaken by one of us (LMB) on other islands including Dauan, Badu, Muralag and Pulu. The Torres Strait rock art project involves temporal and spatial research in rock art conventions across this part of the western Pacific and beyond. Rock art motifs from Torres Strait are also being compared with motifs found on material culture items from southern Papua (where there is an almost total absence of rocks upon which art can be created) and Cape York as part of LMB's doctoral research.

Mua's rock paintings have already revealed endemic motif forms (e.g. palm

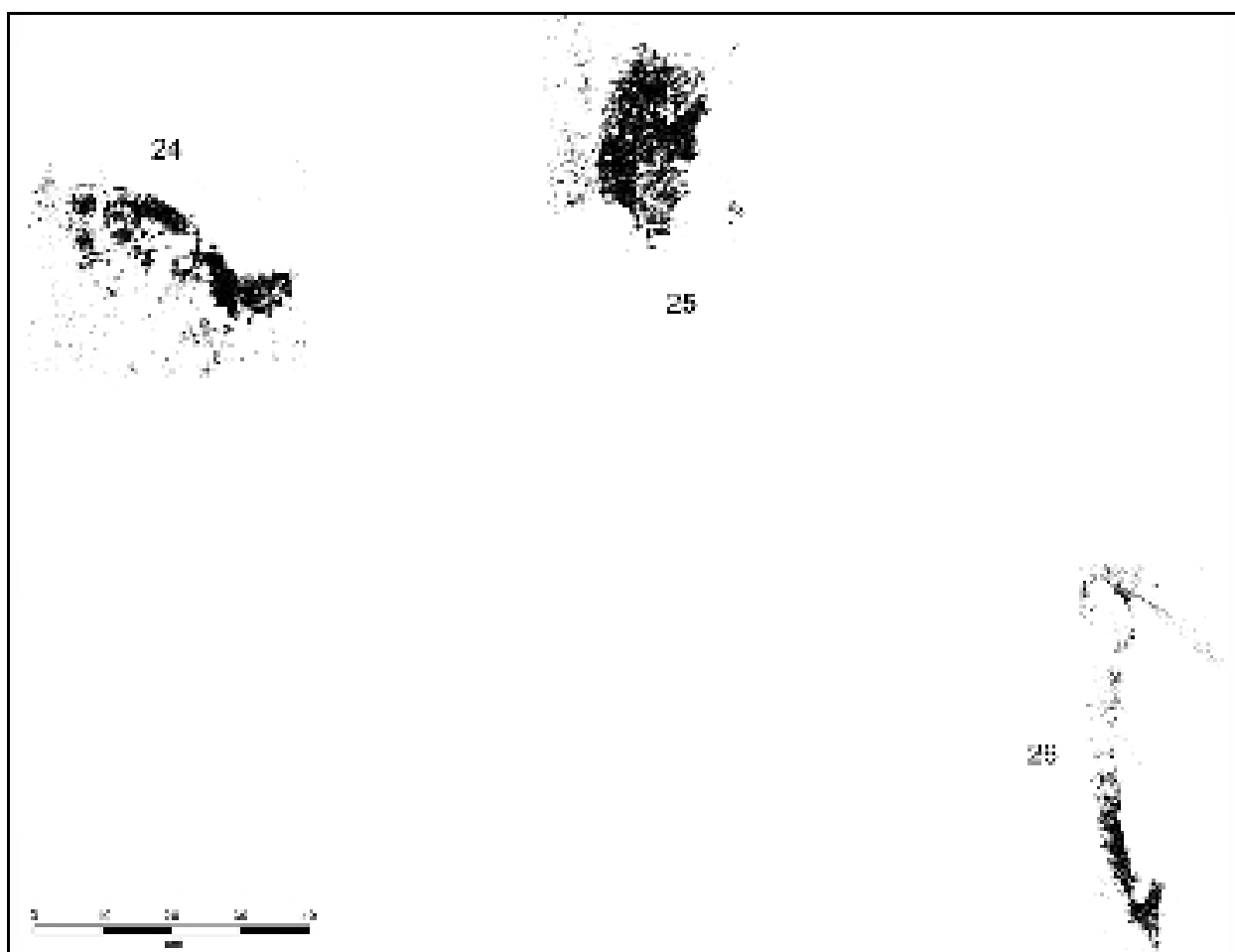


Figure 12c. Mua 40: main panel rock art section (collation from a series of separate photos).

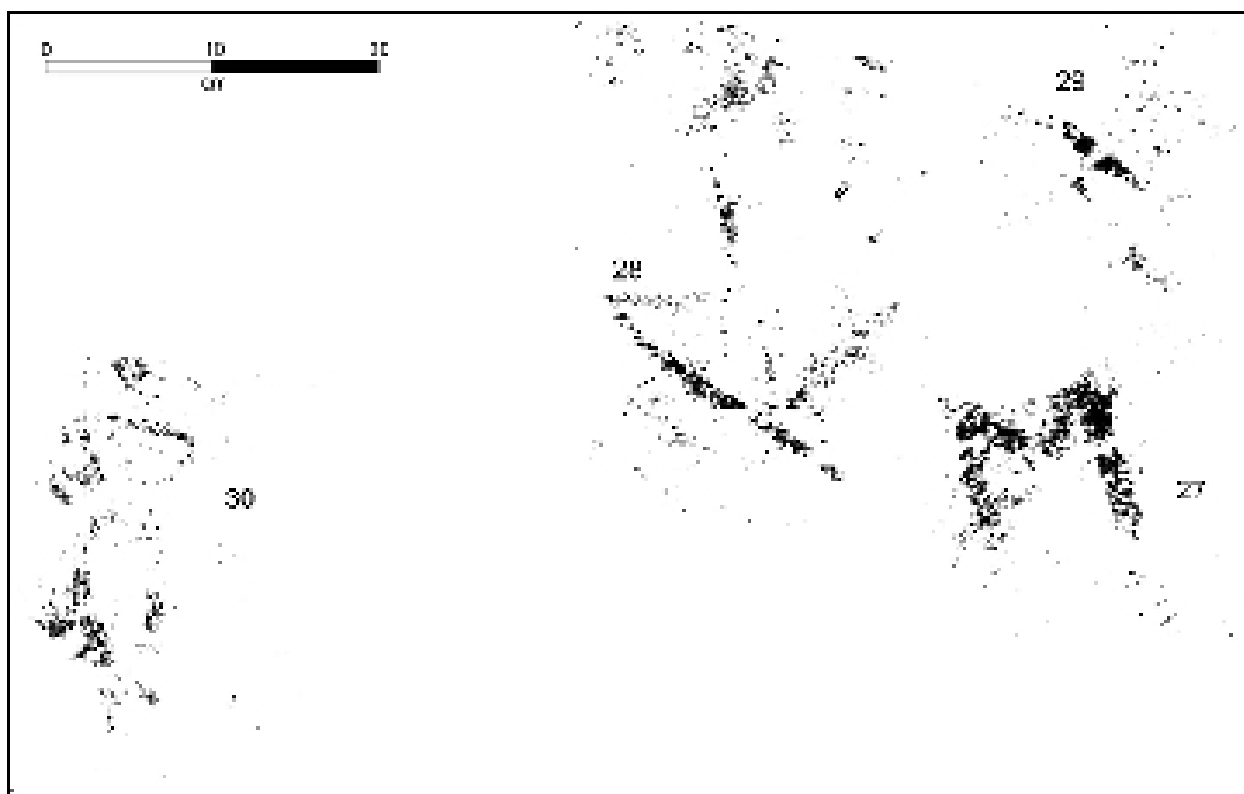


Figure 12d. Mua 40: crevice panel rock art (collation from a series of separate photos).

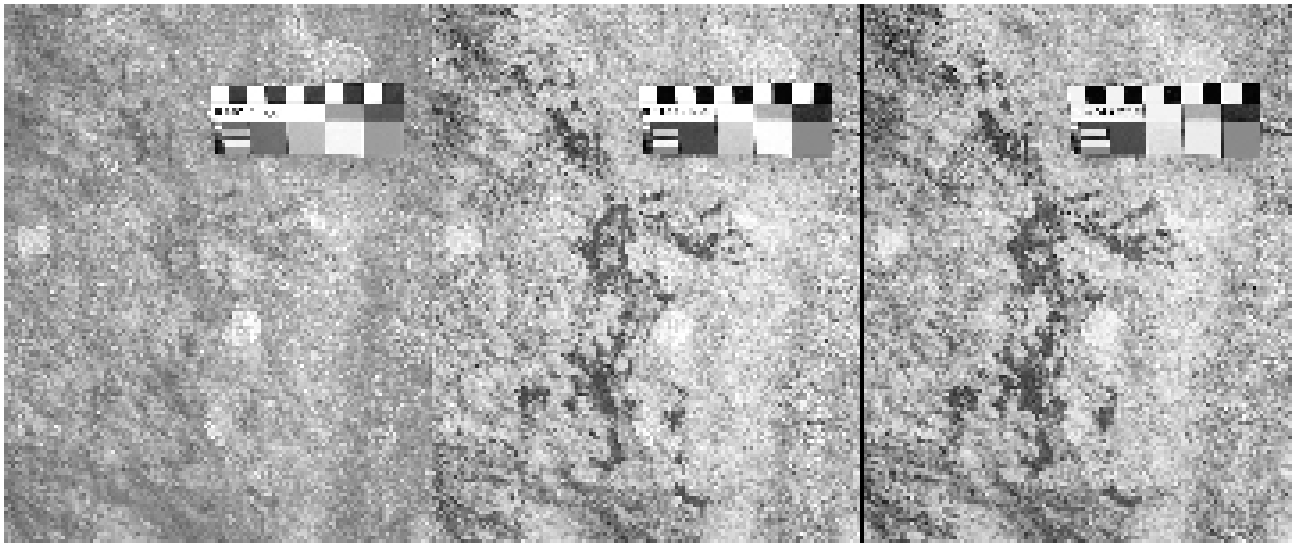


Figure 13. Computer enhancement of anthropomorph (Mua 40: main panel).

Enhancement steps:

Auto Levels

Saturation: [Master] +54

Selective Colour: [Red][Black] +36

Selective Colour: [Neutral][Black] -13

Selective Colour: [Red][Black] +27

Curves: [Input] +120, [Output] +164

Selective Colour: [Red][Black] +37

Channel Mixer: [Green] -70 (red channel output)

Brightness: +6

Contrast: +14

See back cover for colour version of this image.



Figure 14. Mua 40: anthropomorph (left) in similar style to those represented in carved wooden tobacco charms (comparative illustrations from Haddon 1904: 345, 209).

trees) not seen on the Australian mainland, but which have been documented on material culture items from southern Papuan collections in Australian museums. These similar motifs highlight the presence of artistic connections between mid-western Torres Strait and the southern Papuan mainland. Furthermore, Mua's maritime rock art themes — such as canoes, turtles and shovel-nosed sharks—are consistent with Barham's (2000) and Sharp's (2002) characterisations



Figure 15. Mua 43: rock art site.

of the 'Torres Strait Cultural Complex'. Elsewhere, in the rock art we have documented items of material culture and artistic conventions that expand inter-regional connections considerably beyond ethnographically documented links. At the same time, there is a paucity — somewhat consistent with the linguistic evidence — although perhaps not complete absence on other islands of western Torres Strait, of rock art images reminiscent of 'Austronesian' (not necessarily early) art as documented for instance by Röder (1959), Ballard (1992) and most recently and most systematically by Wilson (2002). Our aims are now to document in detail the rock art of other islands in Torres Strait so as to be in a position to further characterise geographic links across space and to systematically histori-cise these patterns.

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	Mua 1	Mua 10	Mua 28	Mua 40	Mua 43
Geometrics	3	4	12	6	1
Linear non-figuratives	1	7	8	9	1
Canoes		1	11		
Zoomorphs				3	
Palm trees		3	1		
Anthropomorphs	2	1		2	
Indeterminates	3	8	12	5	1
Circle variant		1			
Line	1	1	2	4	
Face			2		
Anthropomorph with bow			1		
Snake				1	
Concentric circles			1		
Fish headdress			1		
TOTALS	10	26	51	30	3

Table 6. Painting type numbers and site frequency.

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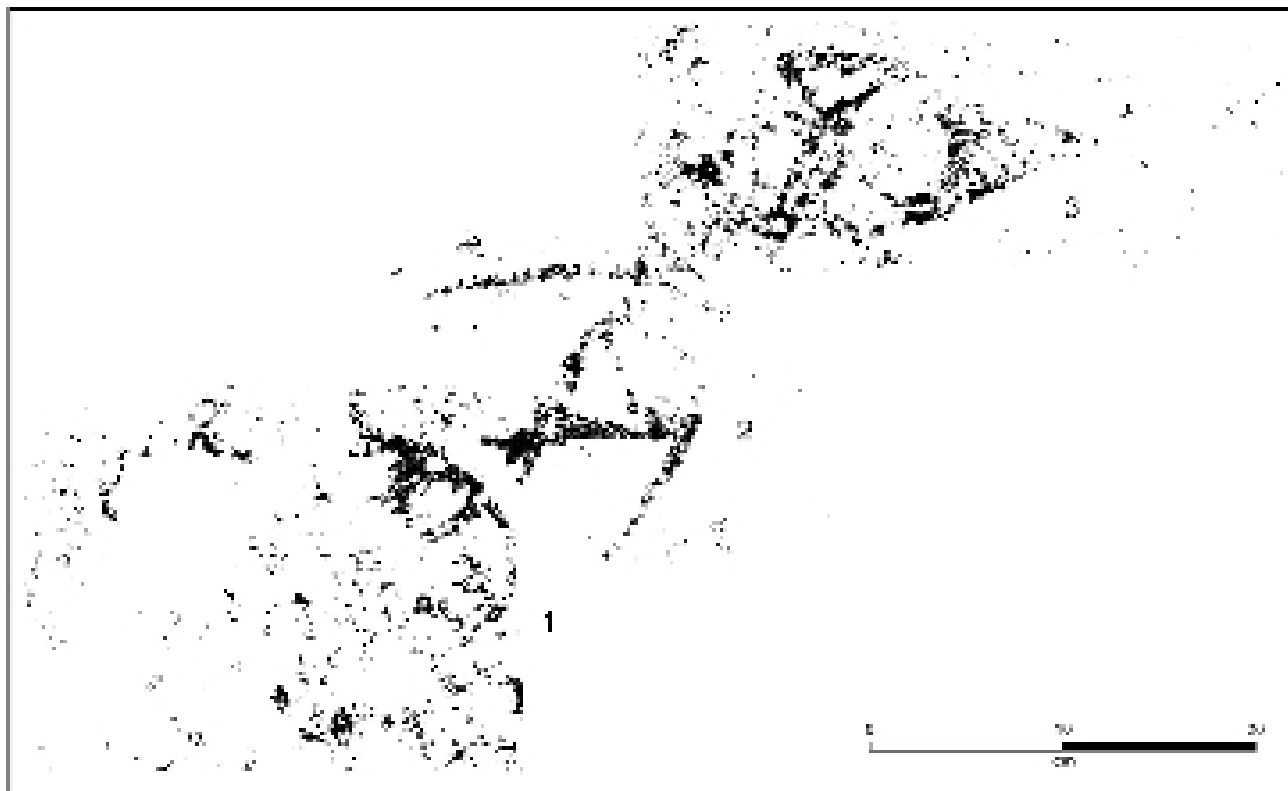


Figure 16. Mua 43: rock art panel.

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