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THE LITTLE-KNOWN FITZMAURICE REGION ‘WINE-RED’ PICTOGRAMS

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Abstract. The region of northwest Australia from the Daly River to the Fitzmaurice and Victoria Rivers is relatively poorly understood in rock art terms especially compared to the two well-known rock art provinces of Arnhem Land (Northern Territory) and the Kimberley plateau of northern Western Australia. It has been argued that the Mimi and/or Dynamic figures of the former and Gwion figures of the latter must be related because of a series of shared characteristics, but the lack of information from the region between the two has been seen as problematic. During a project to record rock-markings at Indigenous Australian cultural heritage places near the major settlement of Wadeye and along the Fitzmaurice River, we found instances of pictograms with similarities to those reported for Arnhem Land, the Keep River area to the immediate southwest, and the Kimberley plateau. Here we detail some of the distinctively hued anthropomorphs recorded at shelters located on both sides of the Fitzmaurice River and explore their similarities with those from other regions. Among the shared characteristics are anthropomorphous figures with slender ‘limbs’ and large ‘headdresses’; apparent absence of or limited surface pigmentation; and ‘wine-red’ hues ranging from dark purple to light red. Following discussions of dating and terminology we evaluate a model proposed to account for the similarities of these figures across the northwest of Australia.

Observations of apparent similarity between aspects of the rock art of the Kimberley and Arnhem Land regions of northern Australia have been reported by many writers; inevitably there have been suggestions of cultural connections between the two (Fig. 1). Some have pointed to the problem of lack of evidence of geographical continuity in the intervening country.

In his 1988 monograph, Darrell Lewis included

a detailed analysis of the similarities between some elements of Arnhem Land and Kimberley pictograms. He advanced the idea that both regions ‘... were once part of a single late Pleistocene/early Holocene information network which led to the styles in each region sharing many similar attributes, though having a regionally distinctive character’ (1988: 84–84). Lewis centred his analysis in the relatively well-researched Arnhem Land region and his own extensive field studies there; he had to work with a more limited suite of information from the Kimberley.

A few years later, the publication of Grahame Walsh’s illustrated book of Kimberley pictograms (1994) provided Lewis with an opportunity to revisit the matter of a connection in the rock art of the two regions. He noted that Walsh had addressed only cursorily the matter of a possible link and that he appeared to think that the two had developed independently. Lewis thought that the new data strengthened the case for a direct link between the two regions, and set out to examine Walsh’s complex Kimberley sequence, to compare it to that of Arnhem Land and to explore systematically



Figure 1. Satellite image showing location of Fitzmaurice River in relation to Kimberley and Arnhem Land regions.

the similarities and differences (Lewis 1997). Lewis became sceptical of Walsh's relative chronology based on superimpositions, and noted many problems and inconsistencies (1997: 4):

How he was able to determine which apparent superimpositions were correct and which were wrong is not adequately explained ... many of the different styles and sub-styles he identifies and places in consecutive order may have been contemporary or near contemporary. Superimpositions of paintings in a single style occur in other art regions, so if more than one style was being produced at one time, these too could be found superimposed, with no meaningful time difference between them ... Third, it is difficult to accept some figures as belonging in the period Walsh places them in ... Walsh appears to be sceptical of this sequence himself ...

Nevertheless, despite inconsistencies and numerous instances of self-contradiction in the definition of Walsh's descriptions and chronology (1997: 5), Lewis found that some '... periods are marked by the appearance or disappearance of technological items and ... it is this level of classification which provides the best basis for a comparison of Kimberley art with Arnhem Land art'. It was these technological attributes of the imagery that he considered the most secure basis for his 1988 re-delineation of the Arnhem Land sequence.

Lewis concluded (1988: 84) that, '... stylistically, "classic" Bradshaws [Kimberley] are quite different from Dynamics [Arnhem Land] — no one could mistake one for the other — but there are nevertheless too many common elements to be considered mere coincidence'. As well as both being characterised by depictions of relatively small (usually < 1m), finely executed monochrome red figures, among the common characteristics are that 'Both sets of figures carry boomerangs, but do not have spearthrowers' (1997: 9). The images that Walsh called 'Clothes Peg Figures' Lewis emphasised as being marked by distinctive weaponry, style and colours, and painting techniques: 'Foremost is the appearance of a 'hooked stick' artefact ... Virtually identical weapons first appear in the Arnhem Land sequence in the "Hooked Stick Period" '; other common items are the boomerang and multi-barbed spear (1997: 10–11). In summary, Lewis wrote (1997: 13–14),

Parallels between early rock art in the Kimberley and in Arnhem Land are striking, both for resemblances in styles, subject matter, and themes, and for the parallel changes that took place. Briefly, in both regions there was a period when relatively small beautifully drawn red figures depicted with boomerangs, complex ceremonial decoration and (possibly) hand thrown spears are found throughout each art province. In both regions these figures were replaced by a series of quite varied new styles marked by the addition of a 'hooked stick' to the old tool kit, by a decline in the complexity of ceremonial decoration, by figures with gaps in the red pigment where another colour or colours once existed, and by an increase in apparent 'aggression'. In one art body, and possibly both, some of these styles are of localised distribution. ... Finally, in each region there is a fourth and final period characterised by the

appearance of large polychrome paintings which are sometimes placed on a prepared white background.

While impressed with some of the parallels, Lewis questioned whether '... it is reasonable to assume, as Walsh appears to, that the art in the two regions developed virtually independently and that the earlier periods in Kimberley art are considerably older than the earlier periods in Arnhem Land art', and whether the Kimberley rock art sequence extended over such a long period as Walsh claimed — '... his arguments in this direction are largely speculative'; rejecting Walsh's 'mystery origin' claims, Lewis called for '... serious attention [to] be given to the much more compelling issue of the regional links and differences between the two art bodies' (1997: 14–15). Lewis' view on the longevity of the sequence is supported by Watchman's age estimates (below) that suggest dates for the Kimberley motifs towards the mid-Holocene.

Subsequent to his Arnhem Land researches, Lewis sought to fill the gap between Kimberley and Arnhem Land 'rock art provinces' through field research in the Northern Territory's Victoria River region — an area bounded by the Victoria and Fitzmaurice Rivers. In 1984 he reported recording monochrome red pictograms on silicified sandstone at nine shelters that showed '... an affinity with certain styles and motifs found within the Mimi art complex of western Arnhem Land' of which he emphasised the changes in the cultural materials depicted: 'Earlier figures commonly wear large headdresses, 'dancing skirts', and hair belts; they carry boomerangs and multi-barbed single-piece spears. Later figures rarely have ceremonial attire and no longer have boomerangs; they carry a range of spear types and the spearthrower'. The motifs of Mimi-type included small anthropomorphs with headdresses and boomerangs, stencils of boomerangs, and human hand and fibre prints. 'None of these paintings would appear out of place if found in Arnhem Land'. While he did not find paintings of humans '... directly equivalent to either the 'early' Mimi figures of Arnhem Land, or the Bradshaw figures of the north-west Kimberley', he considered that the presence of fibre prints and boomerang stencils that are associated with 'early' Mimi art in Arnhem Land that early motifs were likely to exist in the region (Lewis 1984: 58–60).

Lewis suggested that '... because the geological configuration of the country west of the lower Victoria River and north of the lower Fitzmaurice River is similar to that on [the stations visited], an even greater extension of the Mimi art area may be anticipated (1984: 60).

In anticipation ...

Among the few earlier European visitors to the region between the Fitzmaurice and north to the Daly River there are few reports of observation of rock art, with those of members of Augustus Gregory's North Australia Expedition (1855–1857) a rare example. After making their landing at Treachery Bay in September

1855, expedition members moved inland, then south to the Victoria River region. Here Gregory noted 'several native paintings on the sandstone rocks; they consisted of rude outlines of fish and snakes, some in red ochre and others in white clay' (Gregory and Gregory 1884: 14 April 1856). During the period February to April, Thomas Baines wrote of finding three sets of cave paintings near their base at Depot Creek on a tributary of the Victoria River and further afield (Braddon 1986: 49). One illustration (1986: 59) appears to show depictions in white of a snake and dancing human figures — one possibly a sorcery figure; at other sites 'fish' were depicted and there were '... rock paintings in red, white, black and yellow, representing a snake with two horns and two forelegs' (1986: 64–65). This area, however, is well to the south of the Fitzmaurice — although not without cultural connections in at least historical times — and the images appear to be of a recent type.

W. E. H. (Bill) Stanner conducted anthropological research in the Daly–Fitzmaurice River region in the 1930s and on several subsequent occasions over the next forty years. He recorded pictograms in several areas and carried out an excavation at one site; his descriptions of the rock art were reported in a popular account in 1960. His route across country between the Fitzmaurice and Victoria Rivers was limited to the 'Serpent Range' and he reported only the major site of Kirindjingin, and the pictographs within this cave appear to relate predominantly to white-with-red-infill depictions of the Rainbow Serpent (Stanner 1960: 18, 1979: Plates facing pp. 36, 117, 139). The lack of any imagery that might be related to the Kimberley and Arnhem Land motifs of interest is true also for the sites that he recorded north of the Fitzmaurice River.

In 1984 George Chaloupka conducted a site survey in the Fitzmaurice River catchment, using a helicopter to access the length of the river from near its headwaters (towards Pine Creek); often it was necessary to land on the plateau and climb to shelters below the rim of the cliff because of difficult access across scree slopes extending to the river. Chaloupka and his team recorded four major and sixteen minor sites along the southern border of the Wingate Plateau (upstream of the Kimul Gorge on the Fitzmaurice River); the imagery appears to have been exclusively white-outline-red-silhouette pictograms of a variety of anthropomorphs, animals and plants with some boomerangs and geometric motifs (Chaloupka 1984).

Ten years later, over a period of four days, Rhys Jones and a small team approached the Fitzmaurice from both its upper reaches and from near the river mouth. In the upper gorge they recorded four shelters, one of which ('FITZ 1') had depictions of 'human figures; purple red, white outline'; in the river mouth area they found several sites with pictograms and occupation evidence, but it is not clear from the field notes whether these shelters contained the types of motifs recognisable from Arnhem Land and Kimberley

contexts (Jones n.d.).

Lewis revisited the region in the late 1980s and again in 1991 on an AIATSIS grant when he focused on Bradshaw Station between the mouths of the Victoria and Fitzmaurice Rivers; here he found silicified sandstone shelters but, apart from the major Kirindjingin shelter recorded by Stanner, few pictograms (Lewis 1992). Howard McNickle reported a 'Bradshaw style' painting in an area north of the Keep River (pers. comm. 1989), and Walsh (1991: 132) claimed to have found anthropomorphous figures showing 'links to the Kimberley mid-late Bradshaw Period art' in the Pentecost Range border area and 'further east in the Fitzmaurice River area', but provided no further detail.

Paul Taçon and others reported '... five more locations at which Bradshaw paintings were recorded. ... in the eastern portion of the Weaber Range ...' and argued for 'an eastern province of Bradshaw and related figures within the Keep River area' (Taçon et al. 1999: 127).

During the late 1990s, Andrew McWilliam (1999, 2005) conducted field research along the Fitzmaurice River recording places of significance, their geographical settings and histories but did not report on any rock art sites. As part of an environmental impact assessment in 2003 along the route of a proposed gas pipeline from Black Tip Point (west of Port Keats) to the northeast, Christine Crassweller (2004) recorded the presence of more than 120 sites, mainly artefact scatters; despite the existence of several rockshelters, she noted no paintings.

With the impending use of the previous Bradshaw Station as a military training ground, its more than ten thousand square kilometres were subject to several heritage studies. The survey by Ray Reser was focused on particular alignments and he did not record pictograms, but advised — on the basis of his review of previous reports — that there were '... galleries in nearly all suitable shelters and on rock surface locations along with intact song-cycles' (2005: 46, 62). During 2004 and 2005, Reser (2006) conducted doctoral fieldwork at twelve site complexes further to the east in the Victoria River Gorge area; he designated an early 'dark red' phase, depicting mainly anthropomorphs that were '... fine-lined, simple stick-figure images executed with a brush or similar applicator, or applied as dry ochre, with a maximum line width below 10 mm ...' (Reser 2009: 83, 119); images were generally small (20 × 20cm); the colour was 'dark red, maroon (mulberry) and black'; pigment was very weathered and appeared 'bonded to rock surface' and there was 'significant mineral salt or silica crust accretion'; almost all 'early red' figures were executed in dynamic/moving postures; radiocarbon age estimates from wasp-nest pollen for 'early red' images and lack of dingos among the motifs, suggested minimum dates within the last three to four millennia (2009: 168, Table 8.A, p. 233, Table 10.C).

In 2002 an AIATSIS-supported project was begun to build upon site surveys conducted with Traditional

Owners through the Kanamkek–Yile Ngala Museum by its honorary curator, Mark Crocombe. The research area extended from the Daly to the Fitzmaurice River, with the Macadam Range forming a notional boundary to the southeast. The team's report detailed the seven major sites recorded (Crocombe et al. 2003). Most motifs were of geometric or hand-stencil form; there were smaller proportions of anthropomorphic, zoomorphic and track motifs. It recorded no images of the forms recognisable as typical of the Kimberley and Arnhem Land figures discussed above. However, during field trips conducted with TOs in the subsequent two years, Crocombe and Ward with the assistance of Alan Watchman found such pictograms in rockshelters on both sides of the Fitzmaurice River catchment: at Ngagara in the lower reaches of the Fitzmaurice, and others further upstream in the Kimul Gorge area. Crocombe is continuing exploration of the area with Traditional Owners and Ranger teams and considers that there is likely to be found further instances of these 'wine-red' (below) figures.¹

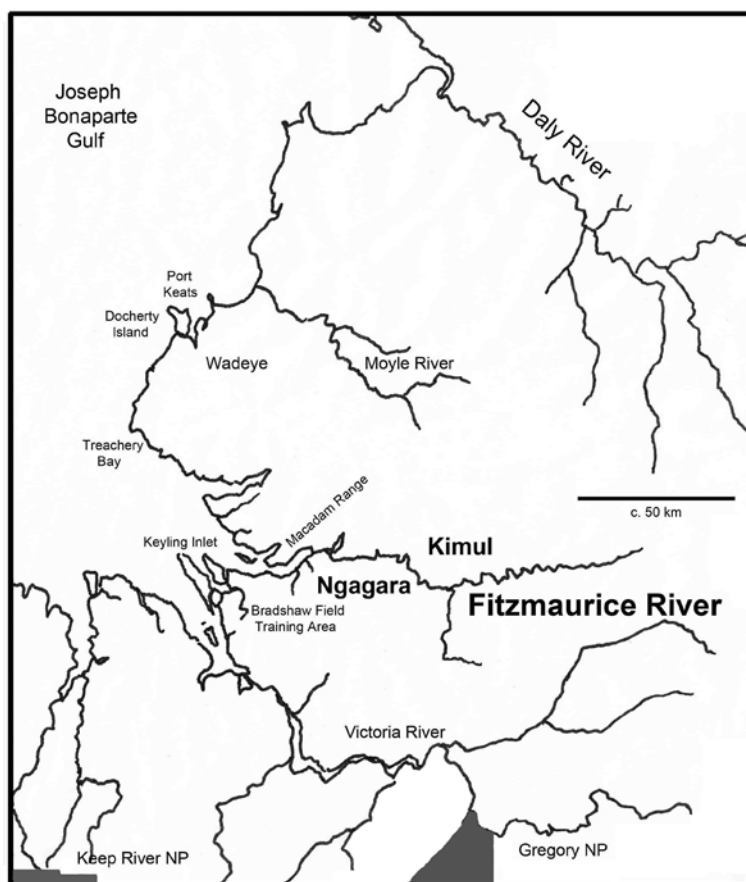


Figure 2. Locations of Kimul and Ngagara site complexes along the Fitzmaurice River.

The Ngagara and Kimul site complexes along the Fitzmaurice River

The Ngagara area is known to be on the southern border of the Country of Ngarinyari who guided Stanner on his 1957–58 fieldtrips in this area; however they did not visit the Ngagara site complex (Fig. 2).

The Kimul Gorge is the location of a large stone arrangement and several shelters with pictograms of significance to members of a clan now usually resident in Wadeye. In some small shelters away from these other sites we recorded many predominantly

monochrome red paintings. A small proportion of motifs were anthropomorphs reminiscent of Kimberley Gwion figures.² A brief description of the shelters follows and examples of the Kimul 'wine-red' figures are provided.

Kimul Shelter 2, the 'stingray' shelter (Fig. 3), is located towards the river from the Kimul stone

¹ Ngarinyin (Kimberley) knowledge-holders would expect Gwion or Gwion-like images to be found in regions north of their Country, since their Wunan (cultural links) extend to the Daly–Fitzmaurice (Ngarjino et al 2000).

² Increasingly the Ngarinyin term 'Gwion Gwion' or 'Gwion' is recognised as being appropriate and preferable to 'Bradshaw', a decision reaffirmed during discussions at the Adelaide AURA Inter-Congress Symposium in September 2012 (also Doring 2014).



Figure 3. Kimul 2 'stingray' shelter entrance, October 2003. Alan Watchman at centre-right. Photograph: M. Crocombe.



Figure 4. Kimul Shelter 2. Wine-red anthropomorphs superimposed by a white anthropomorph and large 'stingray'. Photograph: Mark Crocombe.



Figure 5. Kimul Shelter 2. Wine-red anthropomorphs. Photograph: Mark Crocombe.



Figure 6. Kimul Shelter 5 showing blocky form, roof fall and dark organic material covering ceiling. Photograph: Mark Crocombe.

arrangement, down-slope from it and approximately ten metres above the river in a low outcrop. The shelter varies in depth from four to less than one metre; its mouth is about fifteen metres wide and 2.5 to 1.5 metres high. The most conspicuous painting on the ceiling of

Kimul 2 looks like a large stingray; underlying this and other nearby red- and white-infill pictograms are several examples of slender wine-red motifs. Most are less than one metre in length (Fig. 4 and 5).

Some Kimul Shelter 2 wine-red motifs appear to be accompanied by large 'headdresses' but, given the superimposition of other pictograms, it was difficult to be sure of the relationships of different parts of the images. In Fig. 5, if the various extra elements were meant to comprise a 'headdress', then its form is bivalent with the upper part resembling a fan palm, and the lower part an extended feathery plume forming a comet's tail apparently of more than half of the individual's body length.

Kimul Shelters 3 to 5

Further east from Kimul Shelter 2 were three other shelters containing wine-red motifs. All were less extensive than Kimul 2, for while they some were long, their ceilings were lower and floors narrower. All were formed from a particularly blocky support rock, and there were considerable areas of roof fall, the main ceilings of some were covered in a dark lichen-like growth (Fig. 6), and many of the painted surfaces in all three shelters were adversely affected by calcareous or saline deposits.

In the smallest, Kimul Shelter 3, the lower walls and some fallen blocks were painted with what even appeared to be imitations of the wine-red figures recorded earlier (Fig. 7). The shelter designated 'Kimul



Figure 7. Kimul Shelter 3 detached wall block with wine-red figures. Photograph: MC



Figure 8. Kimul Shelter 4 detached slab with faint wine-red figures. Photograph: Mark Crocombe.



Figure 9. (a) Kimul Shelter 4 wall with deposit-affected wine-red figures. Photograph: Mark Crocombe. (b) DStretch by R. G. Gunn.

4', has experienced major disruption from fallen ceilings. Wine-red figures were recorded on fallen slabs and walls (Figs. 8, 9), and barely discerned on parts of the ceiling almost totally covered in a white crust (Fig. 10), but in other parts the typical forms were largely

exposed or readily visible though a translucent deposit (Fig. 11).

Some of the images reproduced here have been modified better to show the form of the original figures: the form and arrangement of the slender

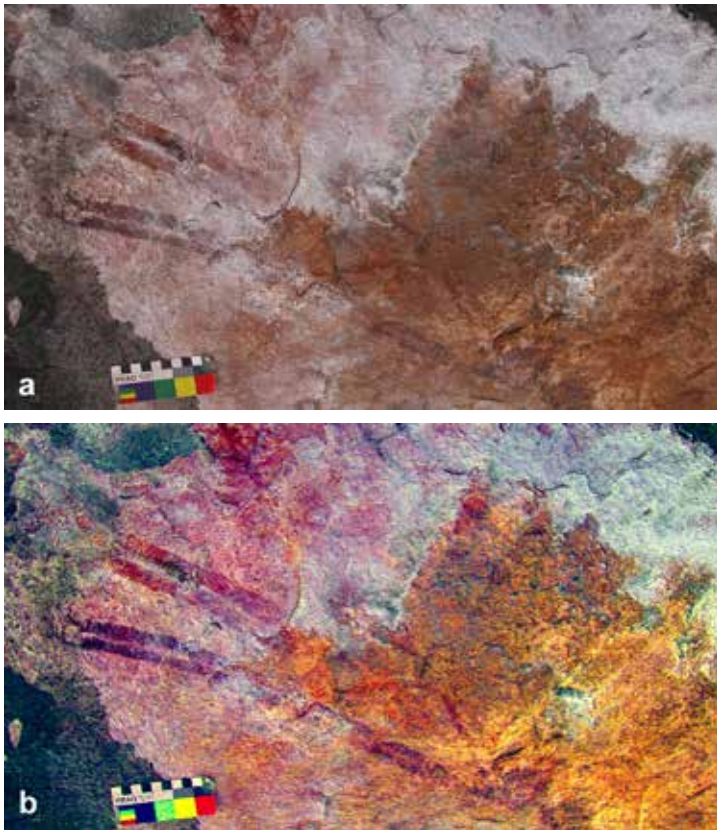


Figure 10. (a) Kimul Shelter 4 ceiling with deposit-covered wine-red figures. Photograph: Mark Crocombe. (b) DStretch by R. G. Gunn.



Figure 11. Kimul Shelter 4 ceiling with wine-red figure visible through a thin deposit. Photograph: Mark Crocombe.



Figure 12. Kimul Shelter 5 ceiling with wine-red figures with fan-form 'headdresses' and lower 'limbs' partly surrounded with pattern of white dots. Photograph: Mark Crocombe.

anthropomorphs recorded on the Kimul Shelter 4 group (Fig. 9b), and the pair of wine-red anthropomorphs on the Kimul Shelter 4 ceiling that is partly covered by the salt deposit (Fig. 10b).

The Kimul Shelter 5 ceiling was also affected by white encrustation. Here a major variation in the wine-red figure repertoire was recorded: several parallel figures, about 0.75 m in length (Fig. 12). All were divided by a dark line of organic growth; the proximal part of the human-like forms — the 'head' and 'headdress' of each — were encrusted with a white deposit, while the distal sections were clearer. The 'headdress' in each case is fan-palm shaped — almost plumose — but less extensive than that observed in the main wine-red figure at Kimul Shelter 2. The wine-red lower 'limbs' are accompanied with a surrounding pattern of white dots; it is not clear whether these were contemporaneous with the original depiction or added later.

Ngagara Shelters

There is a series of shelters on the southern bank of the Fitzmaurice River c. 20 km from its mouth. These are located on land previously covered by the Bradshaw pastoral lease that is now part of the Department of Defence's Bradshaw Field Training Facility. Ngagara Shelter 1 is located along a tributary of the Fitzmaurice and is difficult to approach except by boat; it contains a variety of pictograms mostly in red or orange pigment. The rock shelters designated



Figure 13. Approach to Ngagara Shelter 4 viewed to E from near site 3, July 2004. Photograph: Graeme K Ward.

Ngagara 8 and 9 are nearby while Ngagara 2 to 7 are further inland at the edges of a complex of discontinuous sandstone escarpments (V9: NTGS 2006).

Ngagara Shelter 4 is located in a long low outcrop approximately 1200 m from the river (Fig. 13), and the others are further to the south. Ngagara 4 is about 15 m long, a few metres high and has a shallow floor; the blocky substrate has resulted in many instances of rock fall. We recorded no figures

of definite wine-red hue at Ngagara 4; there were images that appeared to be made with yellow-red and white pigments but their true colour might have been occluded by a surficial deposit (Fig. 14).

As for the Kimul complex images, our view of some of the Ngagara Shelter depictions, our view of some of the Ngagara Shelter depictions can be enhanced by the DStretch process. In Fig. 14b, the Ngagara 4

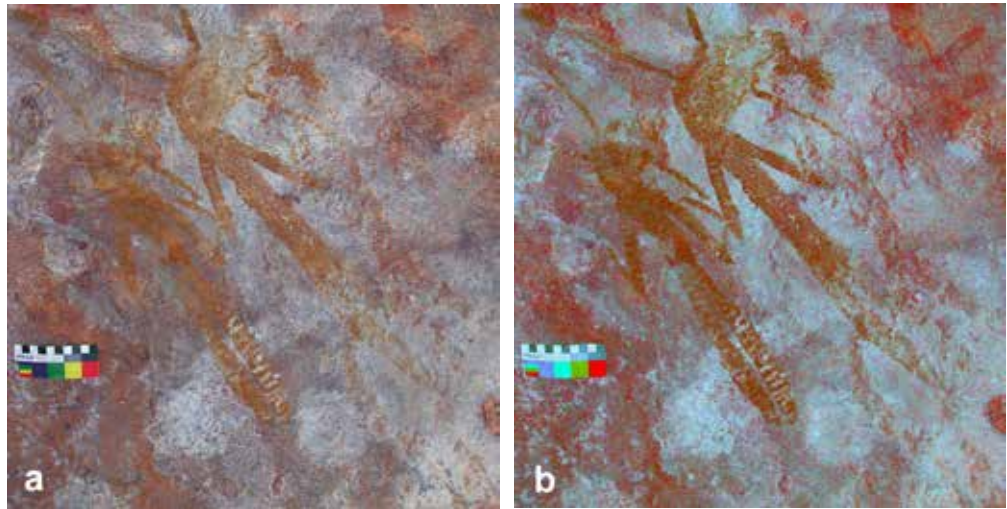


Figure 14. (a) Ngagara Shelter 4. Yellow-red figures with white transverse stripes. Photograph: Mark Crocombe. (b) DStretch by R. G. Gunn.

figures that were described originally as 'yellow-red figures with white transverse stripes' can be seen to be associated with other motifs and various accoutrements: headdresses, and perhaps spears and spear-throwers.

Ngagara Shelter 5 is about 500 m to the south of Ngagara 4 (Fig. 15). The shelter is approximately 30 m from east to west; the roof is relatively high, but the



Figure 15. Ngagara Shelter 5 viewed from near Ngagara 3. Photograph: Mark Crocombe.



Figure 16. Ngagara Shelter 5 rear wall of upper level with wine-red motifs. Photograph: Mark Crocombe.



Figure 18. Ngagara Shelter 7, showing painted wall beneath massive overhang (June 2006). Photograph: Mark Crocombe.

floor is shallow. The great majority of pictograms were hand-stencils and various forms made in white, red, orange, and red-and-white pigments, but there were a small proportion of wine-red motifs (Figs. 16, 17).

In the remaining shelters of the Ngagara series, there was little evidence of the existence of pictogram types other than the frequently observed white, red, orange or red-and-white pigment images. At the extensive Ngagara Shelter 7 (Fig. 18), Crocombe recorded faint images of wine-red motifs partly overlain by remnants of orange pigment (Fig. 19). More distinct is a set of large (>1m long) possibly anthropomorphous figures in a purple-red paint that have what may be interpreted as their 'lower limbs' overlain with white stripes or rough dots, some of which have become discoloured by a pink-red wash (Fig. 20). Thus they are similar those from Ngagara Shelter 4 pictured above (Fig. 14), except that their colour is more clearly wine-red. The central and upper parts of the pictogram have been partially obliterated by water-wash so that it is difficult to trace the form of the whole of the image, but the basic wine-red paint of the extremities on the left of the picture also can be seen to be similarly treated with white outline and stripes.



Figure 17. Ngagara Shelter 5 wine-red motif. Photograph: Mark Crocombe.

Discussion

Regional relationships of the Fitzmaurice River 'wine-red' figures

Superficial appraisal of the similarities of the Fitzmaurice River anthropomorphous 'wine-red' figures — not only their colouring but also their elongate 'body' forms and fine brush work — suggests clear similarities with some categories of pictograms reported from regions to the northeast and the southwest, the 'hooked stick' figures of western Arnhem Land (Lewis 1988), the Karlinga figures of the Keep River (Taçon et al. 2003), and the Gwion figures of the Kimberley (e.g. Ngarjono et al. 2000; Walsh 1994; Welch 1993a).³ Because of over-painting and damage to the figures from water-wash and various deposits, some attributes of the Fitzmaurice River figures are not readily observable and, while it is less possible to be sure that the images are associated with depictions of many cultural materials, these formal characteristics can be noted: their technique of representation is in-filled 'painting'; their generally slender (in relation to whole 'body' dimension) elongated 'legs' tend to be placed close together; they apparently are depicted with 'headdresses' with tassel-like trimmings, and in at least one instance perhaps associated implements that might represent spears and spear-throwers.

While it was not a central focus of our research to pursue such relationships, some of the Fitzmaurice River wine-red figures clearly have attributes that are replicated elsewhere, and we take the opportunity

³ Similar images may be found in Walsh's second 'Bradshaws' book (2000) and in Donaldson's recent books (2012).

here point to some of these, but leave further detailed studies to others. In doing so, we note these provisos: the limited sample, the high degree of over-painting, and damage to many of the images constrain our ability to explore comparison of the attributes of the Fitzmaurice River figures with those of other regions. Moreover, either because of legibility or simple absence, we are unable to depend upon many depictions of items such as ornamentation, weapons, containers etc., as may be identifiable as connected with the images in the way that such associations were invoked by Lewis (1997).

In comparison to Arnhem Land pictograms, and in regard to their method of depiction and body form, the Fitzmaurice figures are less like the outline 'drawing' (cf. 'painting': Chaloupka 1993: 106) forms, and the open-legged, active stances of 'dynamic figures' of Chaloupka (1993: 106–119) and Lewis' 'boomerang period' (1988: 45), and more similar to many examples of Chaloupka's 'post-dynamic figures' (1993: 124–129), and perhaps most akin to the figures of the 'hooked stick period' illustrated by Lewis (1988: 47, 214ff). More direct comparisons may be made with the 'Ngar-mimi' and other simple anthropomorphs with boomerangs (Gunn et al. 2013).

The Keep River region, located about 100 km to the southwest of the Fitzmaurice site complexes, is where Taçon and others (2003: 2, 7) recorded in the Weaber Range '... purple rock-paintings [including] clear examples of human-like figures, resembling the so-called 'tasselled Bradshaws' ...'. They considered them to be sufficiently different from the Kimberley figures to use a local name, 'Karlinga figures', for them, within which rubric they included human and animal forms, prints and stencils. They provided no clear illustrations of the purple anthropomorphs, and, while a 'yellow 'Karlinga' human figure' (Taçon et al. 2003: 7, Fig. 7) shows some similarity in form to some of the Fitzmaurice wine-red figures, it was formed from a 'mustard-yellow' pigment.

Further to the southwest in the western Kimberley plateau a considerable corpus of wine-red figures have been recorded by several

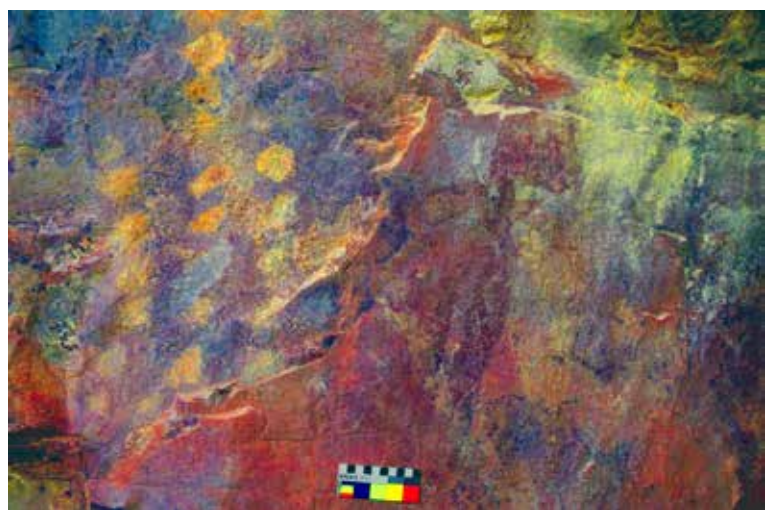
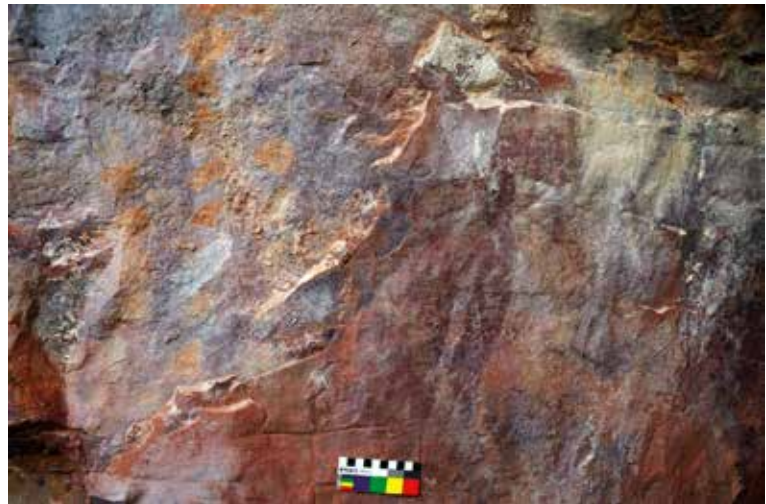


Figure 19. (a) Ngagara Shelter 7. Wine-red motifs partly overlain by remnants of orange pigment. Photograph: Mark Crocombe. (b) DStretch by R. G. Gunn.



Figure 20. Ngagara Shelter 7. Large wine-red motifs with overlay of white stripes or dots. Photograph: Mark Crocombe.

field-workers and these are probably the best known of the trans-regional genre. Welch (e.g. 1993a, 1993b, 1996), Walsh (1994, 2000) and latterly the weighty books by Donaldson (2012) provide a wealth of illustrative materials and archaeological perspectives upon that region's wine-red anthropomorphs. A complexity of views about sub-types, sequencing and possible dating has been advanced by various authors and on-line commentators; we do not wish to enter into these discussions except to note that some is apparently self-contradictory and too little appears well-informed by the knowledge of the appropriate Tradition Owners (cf. Ngarjno et al. 2000; Doring 2014).

The generally slim elongated limbs of the Fitzmaurice River figures are shared by both the Arnhem Land figures and Kimberley Gwion but the red-infill appears to be more regularly characteristic of the latter. Some of the Fitzmaurice River wine-red figures, for example, those on the detached block at Kimul 3 (Fig. 7), Kimul 4 (Fig. 9), and perhaps those depicted at Ngagara 7 (Figs 19, 20) appear to have heavier, almost parallel-sided 'limbs' (if this is what they are supposed to represent). Kimberley parallels can be found among the category indelicately designated as 'clothes peg figures' (e.g. Walsh 1994: 240ff) and 'Dalal Gwion' (Donaldson 2012; cf. Ngarjno et al. 2000: 98). But the Fitzmaurice figures have a very different 'body' shape and relative length of 'leg' and 'torso'; the Kimul 4 anthropomorph (Fig. 11) is depicted with a small thin 'torso' and the attachment of the disproportionately long 'limbs' to the 'torso' does not resemble that of Kimberley figures. The Ngagara 5 anthropomorph (Fig. 17) 'legs' are not parallel and have a slight tendency to a 'bent knee' characteristic, but nothing as distinctive as some Kimberley examples (e.g. Welch 1993a: 32ff).

The Ngagara 7 (Fig. 19, 20) anthropomorphs exhibit decorative elements — both white stripes and dots — reminiscent of body-painting common to ceremonial practice in both the Daly–Fitzmaurice and Kimberley regions (Ngarjno et al. 2000: 202ff), and examples can be found in the Kimberley wine-red figures (e.g. Walsh 1994: 158, 166, 172, 202, 204, 280).

'Headdresses' provide conspicuous examples. The linear, feathery or fan-shaped items associated with the 'head' of both the Kimul 2 and Kimul 4 anthropomorphs (Fig. 5, 11) have clear parallels among the Kimberley Gwion (e.g. Ngarjno et al. 2000: 36ff; Walsh 1994: 140, 158, 170–172, 264), and possibly the Keep River 'Karlinga' (Taçon et al. 2003: 7, Fig. 5), and Ngar-mimi of Arnhem Land (Gunn et al. 2013). Similarly, in the case of the Ngagara 7 anthropomorph/s (Fig. 20), if a 'head' is depicted facing the left side, it appears to carry a large, heavy, rounded structure similar to those illustrated with Gwion figures seen in the Kimberley (e.g. Ngarjno et al. 2000: 173, 209ff; Walsh 1994: 104ff); the white-stripping attribute is seen in another example (Walsh 1994: 178). Large striped 'headdresses' also appear to be not uncommon in Arnhem Land (Lewis 1988: Figs 4ff).

A final example of inter-region parallels is found in the technique of outlining body profile with white dots — assuming that the dots are contemporary with the wine-red motif — as seen at Kimul 5 (Fig. 12). Comparison may be made with the illustration provided by Ngarjno and others (2000: 210).

Some characteristics of the Fitzmaurice River figures are less clear because of over-painting and water-wash and various deposits overlying the figures, but as far as we can ascertain, there are few examples of wine-red figures depicted in association with representations of cultural materials such as weapons and implements. A possible example is seen in the Ngagara Shelter 4 images (Fig. 14), where the anthropomorphs appear not only to have 'headdresses', but to be associated with depictions of spears and what may be related implements such as spear-throwers. However, details are indistinct and these depictions appear too general to draw particular parallels.

Support for the argument that the Fitzmaurice wine-red figures are comparable to those known from regions the northeast and southwest is provided by age estimates: the range of age determinations for this genre of anthropomorphous figures across the major regions suggests that their early manifestations may date to about 5000 to 6000 years ago. (While they may have been painted earlier than this, there is evidence (presented below) that indicates that they continued to be painted into more recent times.)

Age of the Fitzmaurice River 'wine-red' figures

Elsewhere, we have reviewed the range of pictograms recorded in the Daly–Fitzmaurice region alongside the dating evidence provided by Watchman (et al. 2010). In terms of subject matter — from an etic perspective — the range of pictograms included geometric designs, hand stencils and prints, anthropomorphous and zoomorphic figures, and tracks. The most common pigments used were red ochre, and a range of orange-yellow and cream to white pigments. There were some bichrome — red-and-white — paintings, usually in the form red-infill-and-white-outline. We noted that many of these images show similarities in size, shape and colour to others found in areas south of the Fitzmaurice and in the Victoria River District, and that the presence of unstable white pigment in many of these paintings indicate that they were likely to be relatively young (Watchman et al. 2010: 225). That the 'wine-red' anthropomorphs tended to be older than the others was indicated by superimposition sequences such as that described above for the Kimul 2 ('stingray') site (Fig. 4).

The youthfulness of the red and bi-chrome pictograms was confirmed by AMS analyses of samples of pigment and rock-surface coatings that place them within the range circa 600 to 1700 years BP; confirmation of an earlier date for wine-red figures was provided by AMS analysis of 'paint' from the Kimul 2 anthropomorph (Watchman et al. 2010: Table 1: sample SS1: >4870 ± 50 BP). In summary:

Site	Sample number	Material / painting style	Sample location	Sample size	Laboratory number	AMS result delta ¹³ C (‰)	Age determination (years BP)
Kimul 2 'stingray' shelter	SS1	Paint / wine-red	Anthropomorph	1.28 mg	NZA 20738 (R28657/2)	-12.7	4866 ± 50

Laboratory number	Uncalibrated ¹⁴ C age, error factor	Calibration curve	95% (two sigma) age ranges (cal BP)	Relative area under distribution
NZA 20738	4866 ± 50	Southern Hemisphere atmospheric data (McCormac et al. 2004)	5648 to 5456	88.4%
			5374 to 5329	6.7%

Table 1. Details of Kimul 2 anthropomorph sample (SS1) and age estimate.

- All-white, off-white and mud-coloured paintings were painted in recent times, within the last one hundred years or so.
- Beeswax-moulded figures are up to about 600 radiocarbon years old and thus within the range of such figures found elsewhere, which generally date to less than 1800 BP.
- Paintings comprising red pigments, and red-with-white outlines are about 2000 radiocarbon years or less.
- All non-wine-red, pigment-based rock paintings date to less than 3000 BP.
- The wine-red figures probably date to about 5000 BP.

Further information about the SS1 sample is now available. The upper part of Table 1 provides the sample details and un-calibrated radiocarbon results, and the lower part the calibrated age ranges as provided by the Rafter Radiocarbon Laboratory.⁴ The most likely result — as indicated by the 88.4% factor in the 'relative area' column — gives a calibrated age range 5648 to 5456 cal BP, which may be rounded to '5650 to 5460 years ago'.

While the recent Daly-Fitzmaurice region pictograms are of the same age as similar styles of paintings in adjacent areas, the Wardaman (e.g. David et al. 1999) and Keep River complexes (Taçon et al. 2003), the radiocarbon age claimed for the wine-red figures is consistent with uncalibrated age estimates obtained by Watchman for comparable figures in the Keep River area (Watchman et al. 2000) and the Kimberley (Watchman et al. 1997; Watchman 1997, 2000).

The Kimul 2 age estimate adds to the body of data supporting a mid-Holocene age for wine-red figures. In regard to the earlier dating of Kimberley Gwion figures, the critique by Maxime Aubert is pertinent. Aubert (2012: 575–576) detailed problems with interpretation of the optically stimulated luminescence (OSL) dating of quartz grains collected from mud-wasp nests by Roberts (et al. 1997). Roberts had argued for a minimum date for an adjacent Gwion figure and hand

stencil of about 23 000 ± 2400 years or 16 400 ± 1800 BP (depending on the criteria invoked; not the oft-quoted '17.5 ka' or 'about 17 ka'). Aubert pointed out that the relationship between the OSL dated quartz grains and the pictogram was in doubt and raised questions about the nest-building behaviour of mud-dauber wasps. Similar doubts have been raised by Bednarik (1997) who concluded that Roberts' result '... is spectacular but provisional, and should certainly not be used further in the formation of ... derivative archaeological or art historical hypotheses'. Roberts, however, maintains his position regarding relationship of the targeted images to OSL samples (Ward 2010), and recently has reiterated this (David et al. 2013).

As well as data allowing exploration of the maximal age of wine-red figures, we should not lose sight of the strong likelihood that these depictions have contemporary links. The colonial settler Joseph Bradshaw (1892), exploring the Prince Regents River region in 1891, saw men with headdresses similar to those that he saw depicted in the distinctive Gwion imagery of the area (Ngarjno et al. 2000: 24). David Welch (e.g. 2007) has made convincing cases for the similarity of various attributes of the Gwion images with decoration common in the ethnographic present, including tassels, armbands, various headdresses, body painting, and a variety of weapons, bags etc. The Ngarinyin *munnumburra* claim the Gwion as part of their cosmology and, in 1999, Nyawarra was photographed at the Garimbu Creek shelter painting a Gwion figure (Ngarjno et al. 2000: 120–121; Doring 2014). In the Daly-Fitzmaurice region, Stanner photographed similar ceremonial headdresses (*kadhawula* [Murinhpatha]) formed from paperbark; an example recently has been painted by Lawrence Kolumboort who copied it from a bark painted by his clan elder Joe Biarri.

Two further dating considerations should be explored here. First, the relationship of the materials dated to the materials contributing to the definition of an image is centrally important. One needs to question whether an age estimate is based upon material comprising or mixed with the 'paint' — in which case the relationship is as direct as possible — or whether the relationship between the image and the dated

⁴ Some sample details were not available when we prepared the original paper. We are grateful to Ms Dawn Chambers of the Rafter Laboratory for supplying these details (pers. comm. to GKW 6 March 2013).

sample is instead less direct and can provide only a limit within or beyond which the age of the depiction could be argued: material sampled from within a 'skin' or other layer underlying the material forming the image means that the image must be younger than the age estimate provided by the sample, and thus would provide a maximum date. Material dated from within a layer overlying the image indicates that the image is likely to be older than the sample age estimate; that is, it would provide a minimum date for that image. In some published instances, the source of the material dated is not clear. Second, if the material sampled is not only organic but changing because some elements of it are living organisms binding recent oxygen, any age estimate sampling such material would tend to be more recent than the actual painting event, and it may be difficult if not impossible to quantify any range of difference. This would suggest that attempting to analyse a maximum/minimum envelope — one provided by 'skins' containing suitable organic materials that have formed below and above the image in question — is likely to provide a surer age estimate for some wine-red figures.

Terminology

We do not propose that a local name be used here for the purple-red-hued pictograms that are found in the shelters of the Kimul and Ngagara complexes; we use the term 'wine-red figures' for the style described here. If the argument (above) for the inter-regional similarity of comparable images is sustained, would this descriptor be of wider utility for the genre so identified?⁵ The term sometimes used to describe the colour of the Kimberley Gwion figures is 'mulberry'. Taçon and Chippindale (1999: 103) ascribed this usage to Walsh (1994), describing it as 'apt';⁶ Taçon and others (2003: 4) wrote of the putatively old pictograms described by Walsh as surviving '... as purple or mulberry figures'. We used 'mulberry red' and 'dark mulberry' in an earlier account of the dating of some Daly-Fitzmaurice region pictograms (Watchman et al. 2010). None of us appears to have taken into account some of the factors considered here.

First, there is a wider range of colour represented by the Gwion figures and those pictograms described

as similar in Arnhem Land and the Fitzmaurice sites than can be covered by the rubric 'mulberry red', and subsequently needed invocations such as 'cherry red' and 'terracotta red'. The wide colour variation appears greater than any range of natural ochres (haematite) that we have observed; moreover, changes over time are most likely.⁷ Another possible reason for this range of hues is explored by Pettigrew and others (2010) in their interesting article on 'living pigments' in Kimberley rock art in which they describe the original paint as having been 'replaced by a biofilm of living, pigmented micro-organisms whose natural replenishment may account for the longevity and vividness of these ancient paintings':

The vast majority of paintings, independent of location and overall colour, was occupied by colonies of micro-organisms, with no sign of paint ... a black pigmented fungus ... was prominent. Its black pigment made a major contribution to the famous 'mulberry' coloured paintings. A reddish organism ... probably a species of Cyanobacteria, was usually found along with the black fungi. When the black fungi had a minor presence and the red 'cyanobacteria' dominated a particular painting, the overall colour was the well-recognised 'cherry' (or 'terracotta') shade ... rather than the 'mulberry' shade ...

They proceed to describe a black fungi, probably one of the Chaetothyriales, 'an extremely conservative group of rock-adapted fungi that replicate without hyphae by cannibalising their predecessors *in situ* ...', whose presence could explain retention of the sharp contours of the pictograms that would otherwise have been blurred by fungi growing beyond the edges of the image.

If Pettigrew's results and interpretations are confirmed, it may be found that a combination of 'cyanobacteria' and fungi would be responsible for the range of colour of the pictograms as seen today, for the oft-described vividness of the paint, and for the longevity of the edge-definition of the images. If the 'original paint' used for a proportion of these images was formed as described by Ngarjno and others (2000: 99–100, 123) from the bark of the *mamandu* tree (Ngarinyin; colloquially: 'native mulberry') commonly found near painted shelters on the Kimberley Plateau and widespread in coastal Top End,⁸ then the sap might have provided the organic basis (as opposed to the mineral-heavy ochre of other pictograms) for the processes described by Pettigrew, and the 'mulberry red' term

5 'style – a combination of distinctive features of artistic expression or execution peculiar to a particular person, people, school or era ...'; 'genre – a category of rock art perceived by contemporary humans as forming a distinctive entity ...' (Bednarik et al. 2010: 7, 17).

6 'A distinctive feature of some of the most archaic red paintings is the turning of the pigment to a bluer or pinker hue, aptly called 'mulberry' by Walsh (1994), who finds the same tone in archaic red-ochre paintings of north Western Australia' (Chippindale and Taçon 1999: 103). Walsh used the term 'mulberry hue'; his discussion of the various hues of the Kimberley Gwion pictograms led Walsh to a convoluted consideration of colouration and environmentally determined population-replacement theories (1994: 23ff).

7 John Clarke (e.g. 1978), working from the Western Australian Museum, analysed Kimberley pigments and described possible changes over time in these; the processes involved various salts and silicas and appeared most complex; cf. Bednarik (1980: 60–61); Watchman (1997).

8 *Terminalia ferdinandiana* Exell (family Combretaceae), a spreading tree native to Australia and common in Kimberley region and coastal Northern Territory; commonly called 'billygoat plum' in the Top End; fruit is eaten and used for antibacterial and antifungal properties (Nambatu et al. 2009: 69; SKIPAS n.d.; WAH n.d.).

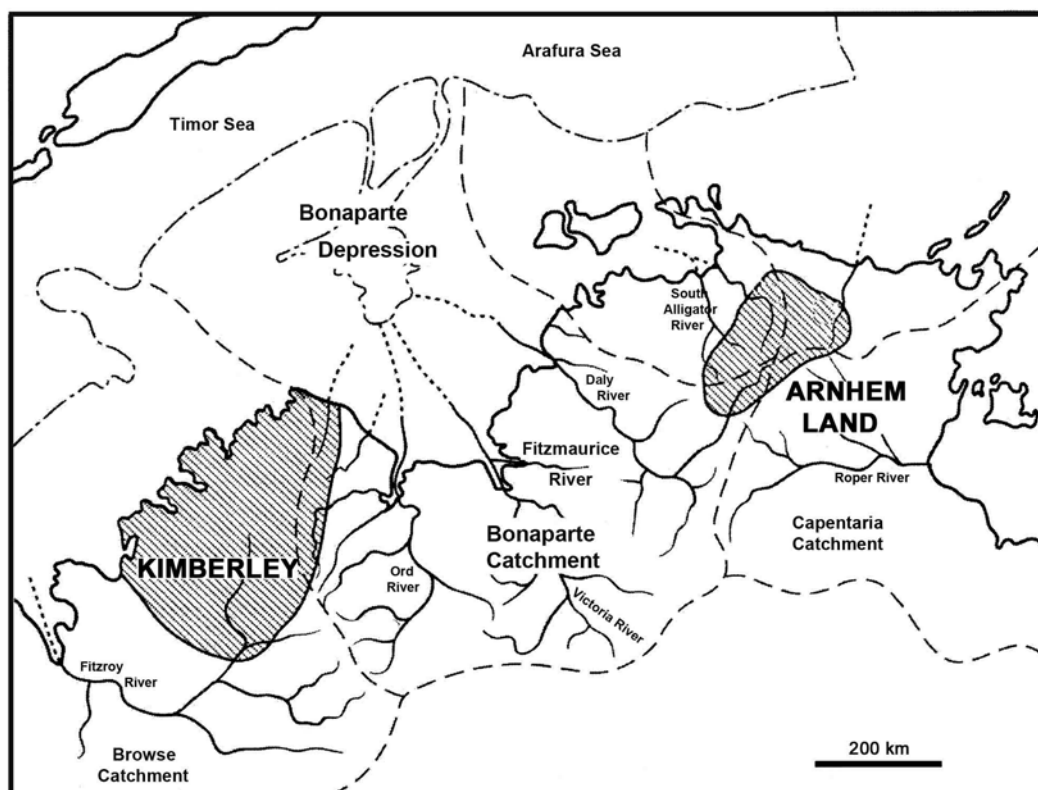


Figure 21. Map (after that of Lewis 1997: Fig. 1) showing relationship of Fitzmaurice River sites to the Kimberley and Arnhem Land regions and to the various catchment areas. The current shoreline is represented by a solid line, and the approximate Pleistocene (c. 18 ka) sea-level by the dotted line.

also would become ironically apposite.⁹ However, in the Daly-Fitzmaurice region, *T. ferdinandiana* is found on coastal flats; it is not known by the Kimberley vernacular term. *T. carpentariae* (Murinpatha: *mimarndayeng*; colloquially: 'hill billygoat plum'), which is found in the rocky country and near rockshelters, appears more likely to be the source of a paint colour. Another possible source is *nanthi tek* (Murinpatha), colloquially known as 'red root' *Haemodorum coccineum* (Haemodoraceae); the fruit and roots of mature bushes are used to make a range of red-brown to purple hues with which to dye fibres (Nambatu et al. 2009: 48).

Second, while the evidence provided by Ngarjno and others may be persuasive for the Kimberley Gwion figures, apparently we lack similar evidence for Arnhem Land and Fitzmaurice pictograms — the matter is yet to be tested. It would be safer, then, to eschew the possible assumptions implied by the use of the term 'mulberry red', especially in any discussion attempting comparison involving more than one region.

Given the comparability of the range of colours observable today in any dinner-table of red wines, from the pale young pinots of Burgundy and the Yarra — a very 'cheery-red' — to the full-bodied darker Australian cabernets and shiraz and their aged — 'purple-red' — companions, and the crisp-edged nature of many,

⁹ There is no indication that Walsh prior to the 1994 publication or subsequently consulted Ngarinyin *munnamburra* such as Ngarjno on this matter.

with the range of hues familiar from descriptions of the Gwion figures and to a lesser extent the pictograms recorded in the Fitzmaurice River shelters, we prefer to apply the term 'wine-red' to the lesser-known Fitzmaurice River images.

While this term deals with only one evident characteristic of the images, the relationships among which we are exploring, this term could suffice as an initial descriptor for a wider range of similar anthropomorphic figures than those of the Fitzmaurice River sites.

Conclusion: modelling the paintings

How to account for the similarities identified across significant geographic and, today, apparently diverse cultures? Lewis had noted that, in the late Pleistocene a single catchment linked the Kimberley and Arnhem Land regions, and that this would have provided a more direct geographical opportunity to allow cultural exchanges. This connection subsequently was broken by rising seas with increasing isolation leading to gradual changes in forms of representation in the two regions '... and that the differences became greater than the similarities' (Lewis 1988: 84–94, 1997: 1, Fig. 1).

The Daly-Fitzmaurice region is part of the Bonaparte Catchment as described by Lewis lying between the Kimberley and western Arnhem Land regions, north of the Victoria River District (VRD) and west of the Katherine region (Fig. 21). The parallels explored above

point to likely connections with both the Kimberley and Arnhem Land that would have been facilitated in the past by lowlands connected during periods of lower sea-levels. Lewis' Figure 1 compares the modern coastline with lowest-sea-level coastlines and catchments about 18000 years BP.

The data from various sources for final Late Pleistocene and early Holocene climate and sea-level change and stabilisation appears firm: that is, the major sea-level rise of about 60 m followed early Holocene deglaciation and culminated about seven thousand years ago (7 ka cal BP) and, following a fall related to glacio-hydroisostatic effects of up to 3 m in the Australian region, sea levels have remained within a few metres since at least 3000 years ago (e.g. Lambeck and Nakada 1990; Lambeck 2002; Smith et al. 2011. Hiscock 2008: 21–24 has provided an accessible discussion). We have argued that current dating evidence suggests that the wine-red figures in some regions date from at least about 5.5 ka ago. At this time large areas of continental shelf — if not as much as seen today — in the northwest of the continent would have been inundated and thus there would have been a lessened opportunity for contact across these regions along coastal routes.

Here is an inconsistency in what would otherwise be an attractive and explanatory general picture — the model advanced by Lewis, with the addition of data that he sought from the intervening area. There would have been, in a Pleistocene past, a broadly shared community of ideas about cultural depictions. This may have had various regional expressions across the considerable distance between Kimberley and Arnhem Land; such differences may have become emphasised over time. Moreover, the far reaches — the upper, inland areas — of the various catchments may have been appropriate places for 'fringe' expressions; these would have become exaggerated with the relative isolation of each region. These factors would have contributed to the regional differentiations that we see today.

Aspects of the dating are inconsistent with this model. If we reject older age estimates and accept that the dating of wine-red anthropomorphs is more securely placed to within the last six millennia or so, this places them within the period when sea-levels stabilised (about seven to three thousand years ago). Will more research into the northern Australian pictograms, and particularly the wine-red figures, lead to further re-assessment of their dating — acknowledging that the current available data give 'minimum dates' for their production in particular instances — or to the reassessment of the model and/or development of another paradigm?

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