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ARE WEAPONS ALWAYS DEPICTED IN THEIR AREA OF MANUFACTURE? AN EXAMINATION OF FIGHTING POLES/ BOOMERANGS AND RAINFOREST SWORDS IN ROCK ART

Natalie R. Franklin and Phillip J. Habgood

Abstract. There is a long history within the Australian rock art literature of attempts to identify material culture items, including weapons and specific weapon types. This paper examines two groups of weapons not commonly noted in the literature on Australian rock art. We undertake a broad review of published rock art, focusing on the Kati Thanda-Lake Eyre basin, where long fighting poles/boomerangs were produced and used, and northeastern Queensland, where wooden swords were an iconic part of the material culture, to assess if there might be representations of these weapons and to answer the question: are images of weapons always depicted in the rock art of their areas of manufacture? It was found that depictions of long fighting poles/boomerangs and large wooden swords are rare, and generally, images were not found in their area of production. Potential depictions of these weapons were documented at locations outside of the production areas, suggesting that these weapons were exchanged/traded across large distances.

Introduction

Representations of items of material culture in general, and weapons in particular, are depicted within the corpus of Australian rock art. Weapons that have been identified include spears of various types (e.g. single-piece, barbed, multi-pronged), simple outlined and decorated shields, throwing sticks, fighting picks/ hooked sticks, many forms of club, various categories of spearthrower, multiple boomerang types, hafted stone axes, metal axes and guns (e.g. Brandl 1982; Chaloupka 1984, 1993; Davidson 1936a; Harper 2017; Hayward 2015; Lewis 1988; Morwood 2002; Walsh 1988). It should be noted that our use of the term 'weapon(s)' does not infer that these types of implements were only used for fighting/hunting-boomerangs, for example, were used for ceremonies/dance, and pairs were employed as clap sticks.

The 'dynamic figures' ('*Mimi*' figures, Fig. 2) from Kakadu National Park and Arnhem Land in the Northern Territory (Fig. 1) are represented with weapons (boomerangs, spears, stone axes), digging sticks, dilly bags and personal adornments including headdresses, hairbelts and pubic aprons (see Brandl 1982; Chaloupka 1993). Similarly, the *Gwion* figures from the Kimberley area of Western Australia (Fig. 1) are commonly shown with a range of material culture items (see Travers and Ross 2015; Welch 1996, 2007). In this region, there are also scenes illustrating animals with spears in their bodies, potential inter-group conflict and speared anthropomorphs (Travers and Ross 2015: Table 3, Figs 7–8; but see Welch 1997: 108–109, Fig. 3a–c who suggested these scenes are of people taking part in dances or ceremonies; see below for discussion).

Harper (2017: 155) suggested that the material culture items depicted in the corpus of petroglyphs around Marapikurrinya (Port Hedland) in the Pilbara region of northwest Western Australia (Fig. 1), '... are distinct enough to be identifiable'. Hayward (2016: 1) also argued that paintings of material culture items, including weapons, in the art of northern Kakadu National Park '... are often rendered in fine detail allowing for identification of specific artefact types'. To explore this observation further, Hayward (2016) compared rock art depictions of material culture with items held at the South Australian Museum that ethnographers collected from the Arnhem Land region in the late 19th and early 20th centuries. Hayward (2016) established that rock images of the weapons examined (types of broad spearthrower and barbed spears) appear to show actual types found in the ethnographic collection (see Aboriginal Australia 1981 for examples of wooden weapons from museum collections).

In Arnhem Land, specific weapon types have been identified in the pigment art. Chaloupka (1993: 146–148) recognised 11 types of composite spears (see also Chaloupka 1984; Hayward 2015; Jones and May 2015; Lewis 1988; Travers and Ross 2015). Similarly, Hayward (2015: Table 1) found seven types of spearthrowers and four morphologically differ-

ent categories of broad spearthrowers. Hayward (2017: Table 3) also categorised the principal spear types associated with broad and cylindrical spearthrowers. In the contact art, Wesley (2013) identified particular types of firearms (for example, musket, Martini-Henry rifle, Winchester carbine) based on particular features of the weapons (Wesley 2013: Figs 7, 8; see also Chaloupka 1993: Pl. 226; Lewis 1988: Fig. 271, Pl. 47; Roberts and Parker 2003: 25, 42-43, 45).

Changes in material culture and weapons depicted have been used to define stylistic and chronological sequences in the complex body of Arnhem Land rock art (see Brandl 1982;



Figure 1. Key locations mentioned in the text (map by M. Cheeseman).

Chaloupka 1984, 1993; Lewis 1988). In particular, Lewis (1988) used the terms 'Boomerang Period', 'Hooked Stick/Boomerang Period', 'Broad Spearthrower Period' and 'Long Spearthrower Period' (see also Morwood 2002: Fig. 6.9 for a summary of this sequence). Inherent in this typology is the assumption that the form or manner of these particular weapons' depiction (Chippindale and Taçon 1993: 36) can be 'identified' and 'read'. For example, Morwood (2002: 162) stated that 'rock paintings in the Kimberley region of northwestern Australia have similar, if not greater, potential for showing changes in weapons used' than Arnhem Land and observed that 'Identification of the weapons in Kimberley rock art relies on consistent details in form and contextual association' (Morwood 2002: 162), and he provided these details for spears and spearthrowers.

Chaloupka (1984, 1993) detailed compositions where figures appeared to be engaged in some sort of fighting/combat, with examples of two opposed figures through to larger groups of figures (see Chaloupka 1993: 127, Pls 7, 128, 129, 132, 134). Lewis (1988: 224, Fig. 87) reproduced an image from the Mt Brockman Massif, Kakadu National Park that depicts a human figure '... with its "hooked stick" apparently sunk into the back' of another figure, and two further images depicting opposed figures that appear to be fighting with hooked sticks/fighting picks (Lewis 1988: Figs 77, 78). Lewis (1988: 25) suggested these compositions were '... highly suggestive of confrontation or dispute resolution rituals'.

Taçon and Chippindale (1994) documented what they interpreted as a 10,000-year-long tradition of 'warrior art' in Arnhem Land and recognised a change over time from small skirmishes to battles between groups of warriors (Fig. 3). They provide an evocative description of a 'combat' scene:

... shown in combat, flailing boomerangs, dodging spears and

chasing with weapons raised ... Figures throw boomerangs at each other, and boomerangs fly between them; figures bend over to avoid volleys of spears; figures have spears protruding from torsos; figures bend down to help comrades that have spears in torsos (Taçon and Chippindale 1994: 217).



Figure 2. Red painting of Mabuyu hunting figure with material culture items, at Ubirr (Obiri Rock), Kakadu National Park, Northern Territory (photograph N. Franklin).

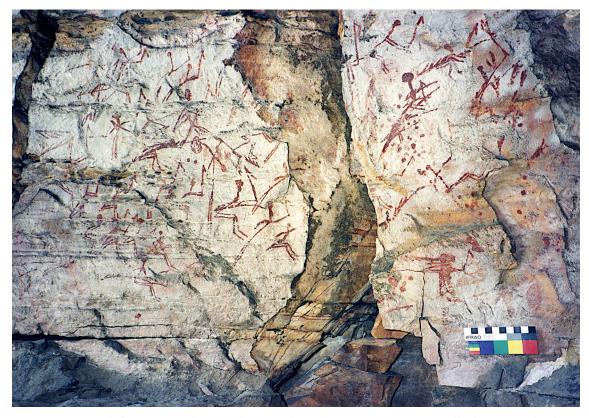


Figure 3. 'Simple figure' scene from Arnhem Land, Northern Territory, potentially depicting a battle – figures hold spears and hooked sticks/spearthrowers (image provided by P. Taçon).

They also described two figures apparently engaged in a boomerang fight, with one figure hitting the other's arm, which holds boomerangs (Taçon and Chippindale 1994: 220, Fig. 2). Another scene involves over 60 figures arranged in two opposing groups holding barbed spears, hooked sticks/spearthrowers and hafted stone axes—one figure has a barbed spear through its abdomen (Taçon and Chippindale 1994: 221–222, Fig. 7).

Taçon and Chippindale also reflected that:

The figures may, however, represent ceremonies, glorified fights or battles, myths, or have some other metaphorical meaning. Indeed, the paintings likely had both literal and metaphoric value for the artists (Taçon and Chippindale 1994: 217).

In addition to pigment art, there are petroglyphs identified as shields, boomerangs and spearthrowers within the Australian rock art repertoire. For example, on Depuch Island (Fig. 1), off the northwest coast of Western Australia's Pilbara region, Crawford (1964: 25) recorded how stick-figures were arranged in scenes carrying boomerangs, shields and/or spears and that 'The simple spearing scenes in which one man spears another are common' (Fig. 11). McCarthy (1961: 141) also suggested that 'Fighting is an important subject in this art'. He further speculated that:

Most of these compositions appear to represent spear ordeals in expiation of a crime or for men absent when a relative died who were not allowed to speak until they underwent this rite ... (McCarthy 1961: 141).

At Marapikurrinya (Port Hedland), further north

along the Western Australian coast, anthropomorphous 'Minjiburu' figures have been interpreted as being speared with plain or barbed spears (Harper 2017: Fig. 6.19; McCarthy 1962a: Figs 7, 14, 27, 30).

Interestingly, there are representations of weapons in rock art that, from the ethnohistoric record, are not known in the area where the images are found, especially particular types of spears, spearthrowers and boomerangs. For example, hooked/beaked/No. 7 boomerangs (Davidson 1936b: Fig. 8c; Jones 2004: 57, 61) originated in northern central Australia (Davidson 1936b: 94-95; Jones 2004: 67; McCarthy 1939a: Map 10; Mulvaney 1976: Map 3), but are depicted in rock art from northern Australia (Brandl 1982: Figs 75, 84, 168, 191; Lewis 1988: Figs 11, 48-49; Travers and Ross 2015: Table 2, Fig. 3). Davidson (1936c: 465, Fig. 3) observed that the 'leaf-like or paddle-shaped' broad spearthrower was '... commonly distributed in most of Western Australia, South Australia and Central Australia', but not in Kakadu National Park or Arnhem Land, yet they are depicted in the art of this area (see Hayward 2015; Lewis 1988). Similarly, Lewis (1988: 85; see his Figs 172, 226 for depictions of shields) observed that depictions of shields are rare in Arnhem Land art and that shields were not made '... in Arnhem Land at European contact and their presence in the art is probably due to low-level trade or chance acquisition from inland areas'.

Hiscock (2008: 113) observed the '... need to be very cautious with applying literal readings of rock art. We cannot be certain that motifs depict real or

Weapon type and place of manufacture	Characteristics
Fighting pole/boomerang, Kati Thanda-Lake Eyre basin	Two-handed weapon up to 2.5 m in length; straight or slightly curved; tapering to a point at either end; 6 cm in diameter with round to oval cross-section; generally not decorated.
Rainforest sword, northern Queensland	One-handed weapon up to 1.6 m in length; large, heavy wooden sword with a long rectangular blade that is either straight or slightly curved; short, straight, narrow handle often wrapped in fibre string covered with gum/ resin/beeswax.
Wooden sword, Mackay and Rockhampton region	Two-handed sword; a metre in length; curved blade; curved graduated han- dle that generally lacks fibre string and gum/resin/beeswax; often decorated with red, white and black painted patterns.

Table 1. Characteristics of fighting poles/boomerangs and wooden swords.

imagined events, or whether they were viewed as history or metaphor.' However, as well as painted representations and petroglyphs of weapons, as detailed above, there are also stencils of *actual* weapons present within the corpus of Aboriginal rock art. Chaloupka (1993: 122–123), for example, proposed that nearly all known boomerang types are represented in the stencil art of Arnhem Land (see also, Lewis 1988: Figs 43–49; Morwood 2002: Figs 6.13, 6.15, 8.19). Furthermore, some stencils may even be of unidentified weapons or items of material culture. For example, a large club-like weapon is only known in Queensland from a stencil in the Central Queensland Highlands (Fig. 1) (Walsh 1988: Fig. 118).

There are other examples of stencils and paintings of unidentified weapons from Arnhem Land and Kakadu National Park: hooked sticks (Lewis 1988), 'fish-shaped objects/weapons', in one image associated with a human figure carrying boomerangs and spears (Lewis 1988: Figs 20, 50, Pl. 19); and boomerang-like throwing sticks (Lewis 1988: Figs 45–49, Pl. 19), and Brandl (1982: Fig. 107) provided an image where two human figures held three unidentified implements/ weapons.

Rock art can also provide visual examples of social and cultural practices (see Domingo Sanz 2011; May and Domingo Sanz 2010). For instance, Wesley et al. (2017: 40) argued that the late Holocene battle scenes at Wulk Lagoon depict groups of males engaged in either actual or ritual combat or hunting, expressing individual engagements in social events. Also, whilst acknowledging that rock art is multi-functional, Taçon detailed some of the many purposes that the more recent rock paintings in western Arnhem Land were used for, including:

> Stick figures used to record aspects of daily life, including domestic and hunting activities; ceremonial pursuits, including secondary burials, dancing and didjeridu playing; fights over land and women, including large battle scenes that record actual events; contact with outsiders, such as Europeans (Taçon 1994: 123).

The preceding discussion demonstrates a long history within the rock art literature of attempts to identify material culture items, including specific weapon types, either depicted on their own or as parts of larger compositions or scenes incorporating human figures. The literature also outlines several different interpretations of these scenes, including conflicts between individuals and groups, ceremonies and other social events, dancing (see Welch 1997: 108–109, Fig. 3a–c) and more domestic pursuits. May and Jones stated:

> The analysis of material culture in rock art allows us to move into wider comparative analyses combining rock art, objects, historical photographs, museum collections and more (May and Jones 2015: 6).

In this paper, we attempt such an analysis by examining two groups of weapons that have not been commonly noted in the literature on Australian rock art-long fighting poles/boomerangs and wooden swords—iconic weapons that appear in museum collections, historical photographs and ethnohistoric accounts. We investigate ethnohistoric records to determine the nature of these weapons and how they were used (see Table 1 and Fig. 4 for descriptions and illustrations). We then provide a broad review of published rock art, with a focus on the Kati Thanda-Lake Eyre basin (Fig. 1), where long fighting poles/boomerangs were produced, and northeastern Queensland, where wooden swords were an iconic part of the material culture, to assess if there are representations of these large wooden weapons in the rock art of the areas where they were manufactured and used.



Figure 4. Diagrammatic representations of a two-handed fighting pole/boomerang [top], one-handed rainforest sword [middle], and two-handed wooden sword from the Mackay-Rockhampton region (not to scale).



Figure 5. 1803 watercolour by William Westall of a cave painting on Chasm Island showing a figure holding a sword-like implement above their head (National Library of Australia; https://nla.gov.au:443/tarkine/nla.obj-138890799).

Ethnohistoric context

There are representations of Aboriginal people holding what has been interpreted by early European observers as swords from the earliest cultural encounters-contact period (see Paterson 2022 for discussion of the use of the term 'contact'). Smith (1985) examined early European depictions of Australian Aboriginal people. He detailed how Sydney Parkinson, naturalist Joseph Banks' artist on Captain James Cook's first voyage to the Pacific in 1768-71, noted that some Aboriginal men he observed, probably in Botany Bay, had lances and a wooden sword. This seems to be the inspiration for a 1773 drawing by Thomas Chambers from Parkinson's journal, entitled Two of the natives of New Holland advancing to combat, which depicts a man with a shield and a very straight, narrow and pointed, metallic-looking sword (see Smith 1985: Pl. 2.4). Smith (1985: 27) accepted Joseph Banks' observation that the woomera (spearthrower) had been incorrectly referred to as a wooden sword.

Parkinson's interpretation is understandable given that some spearthrowers have a sword-like form, being often over a metre long and having a narrowing separating the handle portion (see Davidson 1936c: Fig. 6; Spencer and Gillen 1899: Fig. 111-1).

In the context of this paper, it is notable that the first account of a European discovery of Aboriginal rock paintings occurred on Friday, the 14th January



Figure 6. Diagrammatic representation of a two-handed fighting pole/boomerang.

1803, when Mathew Flinders landed on Chasm Island, an island off the Groote archipelago in the Gulf of Carpentaria, contains a reference to a weapon in the motif assemblage. The expedition's artist, William Westall, recorded two scenes in watercolour sketches, one of which he interpreted as depicting a man holding a sword-like weapon above his head (Fig. 5; see also Chaloupka 1993: 18, Fig. 16; McCarthy 1960: 381–382, Fig. 34 for slightly different descriptions and interpretations of the scene and weapon).

Flinders reported:

In the steep sides of the chasms were deep holes or caverns, undermining the cliffs; upon the walls of which I found rude drawings, made with charcoal and something like red paint upon the white ground of the rock. These drawings represented porpoises, turtle, kangaroos, and a human hand; and Mr. Westall, who went afterwards to see them, found the representation of a kangaroo, with a file of

thirty-two persons following after it. The third person of the band was twice the height of the others, and held in his hand something resembling the whaddie, or *wooden sword* of the natives of Port Jackson; and was probably intended to represent a chief (Flinders 1814: 120; our emphasis).

The following discussion provides a broad ethnohistoric context for large fighting poles/boomerangs and wooden swords. It details what they look like and how they were used.

Fighting poles/boomerangs from the Kati Thanda-Lake Eyre basin

Early accounts of the weapons used and collected in the Kati Thanda-Lake Eyre basin, which incorporates the Cooper (formerly Cooper's) Creek district of South Australia and the Diamantina River region of Queensland, include large fighting poles/boomerangs often referred to as 'sword-like' implements (see Table 1 and Fig. 6).

Alfred Howitt described the large fighting boomerang used in the Cooper Creek area:

> A singular weapon is the great boomerang, about five feet [1.5 m] long. It is made of heavy box-wood, and is used, I believe, as a club or broadsword in close quarters (Howitt 1878: 304).

Spencer and Gillen (1899: 599) described '... a weapon, which has been called a two-handed sword or club, but which in reality is simply a large boomerang used for fighting at close quarters, and of such a size and weight that it required the use of both hands'.

In the Cooper Creek and Diamantina River regions, large, straight to slightly curved fighting poles/boomerangs up to 2.5 m long were produced (Basedow 1925: 170; Davidson 1936b: Fig. 7j; Horne and Aiston 1924; Roth 1897). They can be smooth and polished with oil to a high sheen, painted with ochres, or longitudinally grooved and/or decorated with finely incised patterns, including banding and cross-hatching (Davidson 1936c; Horton 1994; see Aboriginal Australia 1981: Pls D 160, D 161, p. 123).

Roth (1897 section 245, p. 146) described two large fighting weapons from the Boulia district—the fighting boomerang (which Roth referred to as a 'sword') and the fighting pole. The two-handed fighting boomerang was around 1 m long and was curved and wider in the middle than the ends with evenly rounded tips (Roth 1897: Plate XX #354–358). The two-handed fighting poles were approximately 1–1.5 m long, straight with pointed ends and may have incised bands incised on the ends to facilitate better grip (Roth 1897: section 255 p150, Plate XXII #384). Similar large fighting poles were manufactured in the Mount Isa and Cloncurry regions, north of the Kati Thanda-Lake Eyre drainage basin (Fig. 1; Roth 1897: section 255, p. 150).

These large fighting poles/boomerangs were two-handed weapons used mainly during regulated and structured duels, but also in general fighting (Basedow 1925; Horne and Aiston 1924; Le Souëf 1878). Aiston (Horne and Aiston 1924: 14–15, Fig. 10)

documented an arranged/managed fight to resolve a dispute between two pairs of men using throwing boomerangs and fighting poles/boomerangs. When used for striking, these weapons would be held at one end with two hands, whereas when parrying blows, they could be held at either extremity with each hand. Aiston (Horne and Aiston 1924: 72) observed that the large fighting pole/boomerang (*murrawirrie*) was the favourite war weapon of a big man, as it needed much strength to wield it properly. He recorded that:

> They were carried in the belt at the back of the body with the end sticking up over their owner's head. In a fight, after all of the man's throwing weapons had been discharged, he would grasp the *murrawirrie* with both hands over his head, and holding it with hands about a foot apart at one end, with the curve downwards, he would use it as a sword, trying to use about only a foot of the end. The result would be that the motion of hitting with it was a drawing stroke when aimed at the chest. The wound usually inflicted penetrates into the pleural cavity, if it does not go right through the body (Horne and Aiston 1924: 72).

Basedow described how the central and northern Australian *kutturu* fighting stick was wielded:

The method the men adopt for settling their disputes among themselves is not unlike that of the women but more systematic. They place themselves face to face upon a clear piece of ground, with their *kutturus* in their hands, and about half a chain apart. After the customary abusive preliminaries, the psycho-

logical moment arrives when one man rushes at the other, carrying his weapon in both hands behind his back and, as he runs, preparing for a monstrous blow. When he reaches within striking distance of his opponent, he pulls up short and, with the momentum created by his run behind him, deals an awful whack. However, the other man has placed himself in the defensive attitude, and as the weapon falls, he springs forward and upwards to parry the blow destined to crash upon his skull. The striker now retraces his steps and prepares to receive the onslaught from the opposite side. This alternate attack and defence procedure continues until one of the men falls or both combatants are thoroughly exhausted (Basedow 1925: 167–168; see also Pl. XIII #2).

Roth described how the fighting weapons from the Boulia district were held and used:

.... his weapon [the two-handed fighting boomerang] when in use is held at either extremity with both hands ...' (Roth 1897: section 245, p. 146); and: In making attack with the fighting-pole (with men) one end of it is clasped by both hands closely one above the other: in the defence, one hand is held at each extremity, the weapon being thus maintained either horizontally above the head, or more or less vertically at the side, right or left as the case requires ...' (Roth 1897: section 255, p. 150).



Figure 7. Men holding decorated shields, a large wooden sword and a boomerang, Cardwell, 1890s. (Original image from the State Library of Queensland – Alfred Atkinson, negative number: 8212; http://hdl.handle.net/10462/deriv/220004.)



Figure 8. A group of men holding decorated shields, large wooden swords, and a boomerang and women sitting in the front, Cardwell, 1890s. (Original image from the State Library of Queensland, negative number: 108811; http://hdl.handle.net/10462/ deriv/146850).



Figure 9. Weapons displayed in the Cooktown Museum include a rainforest sword and two shields. Note the short, distinctive handle on the sword (photograph S. Habgood).

Large wooden swords from northeastern and central coastal areas of Queensland

Fighting-poles similar in broad design to those from the Boulia district are recorded from the northeastern coastal regions of Queensland (Roth 1909: section 30, p. 209).

However, more distinctive components of the material culture of the rainforest peoples of northeastern Queensland were large, heavy wooden swords (long rectangular blades with a short, narrow handle), which were used in conjunction with large decorated shields (see Figs 7-9; Brough Smyth 1878: Fig. 67; Spencer 1915: Pl. 3 #37-38; Blackman 1904: Pl. III #7444; Davidson

1936b: 88, Fig. 7k; see Aboriginal Australia 1981: Pls N 275–283, p. 172, N 284, p. 174, colour Pls 16–17). These particular weapons (rainforest swords and rainforest shields) are recorded in the area from Cardwell in the south to the Bloomfield River in the north, inland to the Herbert River and on the Atherton Tablelands inland from Cairns (Fig. 1; Brayshaw 1990; Brough Smyth 1878; Horton 1994; Khan 1993; Lumholtz 1889; McGregor and Fuary 2016; Roth 1909). The long rectangular blades of the swords were either straight or slightly curved. The short, straight handles were often wrapped in fibre string covered with gum, resin or beeswax. The large, decorated shields differ from those found elsewhere in Australia (Brough Smyth 1878: 334; Etheridge 1894: 515).

Roth (1909: section 32, p. 210, Pl. LIX #1; section 22, p. 204, Pl. LIX #6, 8–10) detailed how these swords and shields were made (see also Dalrymple 1865: 205).

Wooden swords are also recorded from the Mackay and Rockhampton region, central Queensland coast south of the rainforest areas (Fig. 1; Brayshaw 1990: 65, Pls 7–6, Appendix 6A, 7A; Brough Smyth 1878: Fig. 66; Spencer 1915: Pl. 3 #35–36; Ling Roth 1908: 79, Fig. 48; Lumholtz 1889: 332, figure on 334; Roth 1909: 209). These two-handed swords are different to the large one-handed rainforest swords from further north, as they are generally shorter, about a metre in length, have more curved blades with curved graduated handles that generally lack fibre string and gum/resin/beeswax, and were often decorated with painted patterns of red, white and black (Fig. 10; Spencer 1915: Pl. 3 #35–36; Brayshaw 1990: Appendix 6A, 7A; Brough Smyth 1878). These two-handed swords were associated with smaller shields (Brayshaw 1990: 63).

As with the fighting poles from the Kati Thanda-Lake Eyre basin, these northern Queensland wooden swords were used in regulated and structured duels at big social gatherings to settle disputes and conflicts between different groups and/or individuals, as well as in broader conflicts (see Blackman 1904; Kerkhove 2023; Lumholtz 1889; Roth 1909). Blackman described the process for regulated duels in northeastern Queensland:

Single combat, the usual resort in civil quarrel, was frequent. The procedure at such legal conflicts was regulated by the tribal council. The encounters took place, as a rule, between individuals, though at times tribal disputes were settled by this arbitrament between picked men. The chief causes of dispute were those relating to ownership, more particularly to that of women. A particular time

was appointed for the contests, generally in summer, and several days were spent by the participants in preparation for the encounter. This was begun in various ways, sometimes at a distance with boomerang and spear, and sometimes at close quarters. A usual form of duel was with the unwieldy wooden sword, when blows were deliberately given and received in turn. A form of shield ... was especially made for these occasions. The object was not to kill the opponent, but only to effectually disable him, and the infliction of mortal wounds was forbidden and punished by the tribe (Blackman 1904: 36; our emphasis).

One hand held the large rainforest sword, while the other grasped the large painted shield (Roth 1909: section 32, p. 210, Pl. XXIX).

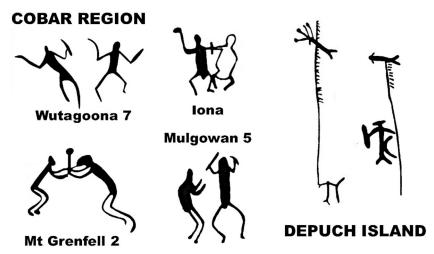
Lumholtz (1889: 121–127), a Norwegian ethnographer, provided evocative drawings of activities at a *borboby* (a meeting where groups assemble in order to decide their disputes by combat) he attended in the early 1880s: a warrior with a shield and one-handed sword (facing page 122), warriors fighting with spears, wooden swords and shields (facing page 124), and a combatant delivering the winning blow and women stepping in to protect the fallen warrior (Lumholtz 1889: 125).

Meston detailed attending a *bora* ceremony at Mt Milbirraman north of Townsville (Fig. 1), where there was a duel:

Then two grim old men stepped into the area, and there was a buzz of eager expectation. Each carried the broad, thin, flat shield, and the heavy hardwood



Figure 10. A sword-like wooden implement similar in form to those found in the Mackay-Rockhampton region (image provided by M. Westaway).



picked men. The chief causes of *Figure 11.* Depictions of two opposed figures with weapons (adapted from Crawford 1964 and McCarthy 1961).

sword.

As they advanced, each held the shield aloft horizontally, and twirled the sword rapidly round his head with the right hand. The sword cuts were received on the upper edge of the shield. Their movements were done with the rapidity of lightning, and it was really a marvellous display (Meston 1898: 11).

Brough Smyth (1878: 303) noted that the wooden swords from the Mackay region were '... used with two hands, to strike the back of an opponent's neck and break it'.

Review of rock art depictions of weapons

As noted earlier, it has been demonstrated that rock art scenes can detail aspects of Indigenous social behaviour and practices (Domingo 2011; May and Domingo 2010). As using long fighting poles/ boomerangs and wooden swords in regulated duels to settle disputes and conflicts was a widespread practice across central Australia and Queensland, it could be expected that these iconic weapons would be depicted in the corpus of rock art throughout this area. Also, as representations of conflict (mythical, dance, dispute resolution duels and/or real battles), including examples of two opposed figures fighting, are evident in rock art (see earlier discussion, Fig. 11), scenes of personal duels using long fighting poles/boomerangs and wooden swords may be represented in the rock art of central Australia and Queensland, where these weapons were made and used.

In rock art, items identified as weapons appear as individual objects associated with anthropomorphs or being held by these figures. It should be noted that although non-figurative motifs not associated with human figures may appear to be weapons, they can have a range of meanings or interpretations ('discontinuous meaning ranges', see Munn 1966). For example, Malkai (Malkai Awi, Malkaia, Malkayu), northern Ikara-Flinders Ranges (Fig. 1), has a painting of a crescent motif classified as 'obviously a representation of a

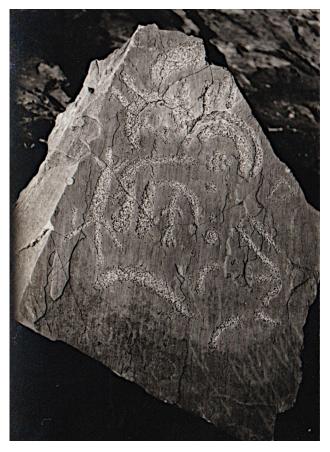


Figure 12. Petroglyphs of crescents-boomerangs at Mootwingee, western NSW (photograph N. Franklin).

boomerang' and nested crescents as 'amplifications of this design' (Hale and Tindale 1925: 52, Figs 19d, 19k, 20o), whereas polychromatic nested crescent motifs at Malkai were interpreted by a Traditional Custodian as representative of the ochre that was available for trade (Koolmatrie 2018: Fig. 16). Therefore, while a curve-shape may represent a boomerang or shield, it could be a crescent moon, a seated person, a cave, a windbreak, a rainbow etc., while a straight line might be a spear, a digging stick, a nulla nulla, a person, a pathway, a ceremonial pole, a baton or a dancing stick, and so on.

When directly associated with a human figure, however, an interpretation of a shape as a representation of a weapon is somewhat clearer, for example, the numerous scenes of figures with spears from Arnhem Land (see below). Also, at Mutawintji (Mootwingee), northeast of Broken Hill in western New South Wales (Fig. 1), petroglyphs of crescents (Fig. 12) that have been identified as boomerangs (see McCarthy and Macintosh 1962) occur separately, as single motifs, or as concentric/nested types. They are also associated with, or held by, human figures (McCarthy and Macintosh 1962). Examples include small human figures holding a boomerang and shield in each hand or hunters/dancers armed with up to three boomerangs in each hand, with others carrying spears and spearthrowers (McCarthy and Macintosh 1962).

There are also petroglyphs of individual and multiple crescents/boomerangs along with human figures with spears, throwing sticks, shields and boomerangs, often arranged in fighting/dancing/ceremonial scenes, in other parts of Australia, including western New South Wales, central and South Australia, and Depuch Island, northwestern Australia (e.g. Fig. 11; Crawford 1964; McCarthy 1961; McCarthy and Macintosh 1962; Nobbs 1984).

Importantly for the identification of depicted items, stencils of *actual* boomerangs, spearthrowers, clubs and axes occur in Australian rock art, providing the precise shape/form of particular weapons (see Fig.

Weapon type and place of manufacture	Attributes of weapon	Deployment of weapon	Scene
Fighting pole/boomerang, the Kati Thanda-Lake Eyre basin	Long, straight or slightly curved and tapering towards each end	Held with both hands at one end - attack; Held with one hand at each end - defence.	Two opposed figures; one holding the weapon with both hands at one end above their head ready to attack, the other holding the weapon at both ends to parry the blows.
Rainforest sword, northern Queensland	Long rectangular blade with a short, narrow handle	Held in one hand. Other hand may grasp a large shield.	Two opposed figures; sword held behind the back or above the head in the motion of striking. Large shield used to parry the blows.
Wooden sword from the Mackay and Rockhampton region	Curved blade and curved graduated handle	Held in two hands.	Two opposed figures holding the weapons with both hands at one end above their heads ready to attack.

Table 2. Typology of fighting poles/boomerangs and wooden swords used for this study.



Figure 13. Stencils at Carnarvon Gorge, including weapons (photograph P. Habgood).

13; Davidson 1936a; Lewis 1988; Morwood 2002 for examples).

The ethnohistoric review suggests that any scene depicting a regulated duel with long fighting poles/ boomerangs would involve two human figures, one holding the long and slightly curved fighting pole/boomerang with both hands at one end above the head. In contrast, the other would be holding the fighting pole/boomerang at both ends so as to parry the blows. By contrast, compositions of duels with non-barbed spears, for example, show these weapons as straight sticks that are generally held towards the middle (not at one end) or as being thrown, sometimes with a spearthrower (for instance, see Brandl 1982: Figs 13, 22, 38, 87, 103; Lewis 1988: Figs 9, 102, 162).

For the rainforest swords of northeastern Queensland, scenes of regulated duels would also be expected to involve two figures, each holding a large sword with one hand while the other grasped a large shield. The sword could be held over the shoulder, hanging behind the back in preparation for striking, or above the head in the motion of striking, whereas the shield may be held above the head in preparation for the blow. For the Mackay-Rockhampton region wooden swords, a scene would need to depict figures duelling with two-handed wooden swords, holding the weapons with both hands at one end above their heads, ready to attack.

These weapons could also be depicted individually and not directly associated with human figures. A large fighting pole/boomerang could be long, straight or slightly curved and tapering towards each end (see Table 2 and Fig. 6). The rainforest sword has a long rectangular blade with a short narrow handle (see Table 2 and Figs 7–9), while the associated large shields are decorated (Figs 7–9). The two-handed sword from the Mackay-Rockhampton region has a curved blade and curved graduated handle (see Table 2 and Fig. 10).

The following presents a geographical review of

weapon depictions in the published rock art literature to assess if there are potential representations of fighting poles/boomerangs and wooden swords. Table 2 provides the typology for the study (see Table 1 and Fig. 4 for more details on the implements). We will consider northern Australia, especially Arnhem Land and the northwest, where there are numerous depictions of weaponry; northern South Australia; western New South Wales and southwestern Queensland; and the rainforest regions of northern Queensland, as these regions incorporate or surround the areas where, from the ethnohistoric record (see above), long fighting poles/boomerangs and wooden swords were made and used. Appendix 1 provides further general and site-specific details for possible depictions of these weapons in rock imagery. As noted above, representations of other weapons, such as spears, boomerangs, clubs and shields, are found in the rock art of other regions of Australia but are not the focus of the current study (see Davidson 1936a).

Arnhem Land and Kakadu National Park

In the pigment art of Arnhem Land and Kakadu National Park, a wide range of weaponry, including spearthrowers, spears and boomerangs, is depicted (Fig. 14; Brandl 1982: Figs 75, 78). Many of the weapons appear to be used in hunting scenes (Fig. 13; see Brandl 1982 and Lewis 1988). As noted earlier, while not common, there are also images that are purported to depict fighting, including hand-to-hand combat and battle scenes, some showing 'wounded' individuals (Fig. 3; see Taçon and Chippindale 1994; Brandl 1982; Chaloupka 1993; Lewis 1988; Morwood 2002).

Some Arnhem Land spearthrowers, especially the linear-notched lathe type, are long and thin with a distinct narrowing near the handle and tapering towards the distal end, which makes them appear sword-like (see Basedow 1925: Pl. XIV #2; Davidson 1936c: Fig. 6a–c; Lewis 1988: Fig. 227, 256; Spencer and



Figure 14. Frieze of 'hunters' at Ubirr (Obiri Rock), Kakadu National Park, Northern Territory (photograph N. Franklin).

Gillen 1912: Figs 354, 355; Welch 1997: Fig. 20). For example, Brandl (1977: Fig. 4) reproduced a drawing of a painted image from Deaf Adder Creek, in nearby Kakadu National Park, of a man throwing a spear and holding a very sword-like lathe spearthrower. There are also sword-like clubs from Arnhem Land that are narrow 'paddle-shaped' weapons that lessened in width towards the proximal end where they expanded out to form a 'fishtail-shaped' handle (Etheridge 1894: PIs XXX 4, XXXIII 1, 1895: PI. XXII; see also Davidson 1936b: 87, Fig. 5e)—a very different shape to the implements under study here.

Some rock art images from this region may depict long fighting poles/boomerangs (see Appendix 1). Examples include a red painting of a running human figure who appears to have thrown a non-barbed spear and holds by one end a long stick in front, described as an 'unidentified weapon or implement' (Brandl 1982: 107); a front-on human figure holding by one end a stick (Brandl 1982: Fig. 200); a profile human figure with hooked sticks, barbed spears and boomerangs, holding a slightly curved long stick with both hands out from its side (Lewis 1988: Figure 82); a profile human figure in a bent pose holding a very long, slightly curved pole with a knob towards the middle, regarded as a dancing figure due to its posture (Welch 1997: Fig. 19, bottom individual). At the site of Ngarradj Warde Djobkeng within Kakadu National Park, there is a painting of an 'unidentified boomerang-like object' (Lewis 1988: Fig. 262). This weapon, which is curved like a boomerang but tapers at one end to what could be a handle, is reminiscent of wooden swords from around Mackay-Rockhampton (see Figs 4, 10).

At the site of Angoroko on Groote Eylandt, Gulf of Carpentaria (Fig. 1), which is adjacent to Arnhem Land, there is a scene of five male figures holding thin sword-like objects horizontally above their heads, although this is interpreted by McCarthy (1960: 326, Pl. 2) as '... men fighting with spears thrown with spear throwers' (see also Rose 1942: 175, photograph 2). Other examples from the Northern Territory are listed in Appendix 1.

Western New South Wales

Around Bourke and Cobar, central western New South Wales (Fig. 1), there are painted fighting/dancing/ ceremonial scenes of small anthropomorphs holding implements that appear to be weapons, such as shields, axes, throwing sticks, boomerangs, barbed spears, clubs and sticks of various lengths (see Figs 11, 15, Appendix 1; McCarthy 1976). Some depictions have small human figures holding a boomerang over their heads with one hand holding each end (Mc-Carthy 1976: Figs 68-2, 73-16, 78-5).

At the site of Iona, northeast of Cobar, there are numerous human figures holding long straight sticks/ poles/spears; a 'sword club' (McCarthy 1976: 33); and two adjacent/touching figures, one holding an axe, that look to be fighting/dancing (Fig. 11; McCarthy 1976: Fig. 64 [left]). The following images at the site appear to show human figures holding weapons in the manner of the long two-handed fighting poles/boomerangs from the Cooper Creek and Diamantina River regions:

- a group of four white painted figures, one holding a long straight stick with both hands at the base (Fig. 15; McCarthy 1976: Fig. 64 [right top]);
- four small red figures, characterised by McCarthy (1976: 100) as dancing, holding shields, boomerangs and/or clubs, one of which holds a club above its head with a hand at either end (Fig. 15; McCarthy 1976: Fig. 65 [right side top]); and
- three individual white painted profile figures, one holding a curved stick/boomerang with both hands towards the middle between its legs, another a large boomerang with both hands above its head, and the other a short stick with both hands at the base (Fig. 15; McCarthy 1976: Fig. 64 [right side]).

At Mulgowan 3, north of Cobar, a white painted figure holds a large, curved item that tapers towards the end, near where it is being held (Fig. 15; McCarthy 1976: Fig. 66 [10]). This item is much larger than the boomerangs and shields held by the small figures at the site and broadly resembles a two-handed wooden sword from around Mackay-Rockhampton (Fig. 10). Wuttagoona 7 has a small red painted figure holding a thin stick towards one end outwards from its side (Fig. 15; McCarthy 1976: Fig. 72 [3]), an unusual position in which to hold a spear.

The majority of the figures depicted in the rock art around Bourke and Cobar are front-on with the legs apart and bent at the knee into curves with the feet sometimes touching, while the arms are outstretched to the side or bent at the elbow, with the lower arms level with the heads and the indistinct hands holding material culture items (see McCarthy 1976; Walsh 1988: 111). Scenes such as these have been interpreted as either corroborees with dancing figures (McCarthy 1962b: 44, 1976: 66, 71, 76; Walsh 1988: 110) or as fighting between groups (McCarthy 1962b: 45, 1976: 71, 76; Westaway et al. 2016). However, Welch (1997, 2007) contends that most supposed 'battle scenes' in rock art are actually dancing figures at corroborees, as many body postures are similar to ethnographically observed dance positions. Dancers hold boomerangs,

spearthrowers, sticks, spears, shields and ceremonial poles (see Welch 1997: Figs 9, 12; 2007: Figs 5.16, 5.28, 5.29, 5.31).

In this context, Tommy Mc-Crae's drawings from the midto-late 1800s demonstrate the difficulties of differentiating between these interpretations, as there are clear similarities between the positioning and postures of dancers and combatants (Figs 16–17). However, determining between the different interpretations is not the focus of this paper.

Kati Thanda-Lake Eyre basin

It would be expected that the rock art of the Kati Thanda-Lake Eyre basin and the central desert region, where fighting poles/boomerangs were used and widely traded, would contain images of these weapons. However, in general, the rock art of these areas is characterised by bird and macropod tracks, dots, circles, arcs and simple lines, with only a limited range of figurative motifs other than tracks-mainly solid silhouette figures of anthropomorphs and lizards (Franklin 2004, 2007, 2011; Smith 2013). However, there are some images of anthropomorphs carrying weapons (see Appendix 1). At Red

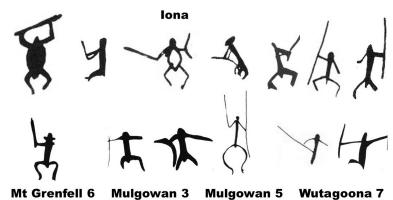


Figure 15. Figures with large sticks and/or spears from sites around Cobar, western New South Wales (adapted from McCarthy 1976).

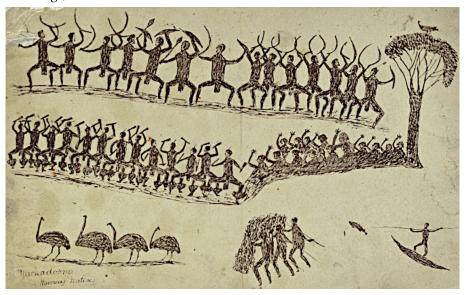


Figure 16. Collection caption: 'A corroboree', drawing by Tommy McCrae dated between 1880 and 1890 (photograph of drawing held by the State Library of Victoria Accession No: H97.1).



Figure 17. Collection caption: 'Fight with four kings', painting by Tommy Mc-Crae dated circa 1865 (held by the State Library of Victoria Accession No: H141224/2).

Gorge, Deception Creek, in the Ikara-Flinders Ranges of northern South Australia, for example, there are petroglyphs of a lizard-like figure carrying a shield in its left hand, a 'human' figure holding in the middle a short fighting stick, a 'man' carrying two boomerangs in each hand, and another figure carrying a spear/club (Mountford and Edwards 1964: Fig. 3A).

Little rock art has been recorded in southwestern Queensland, where fighting poles/boomerangs were made and used, but no motifs might be interpreted as

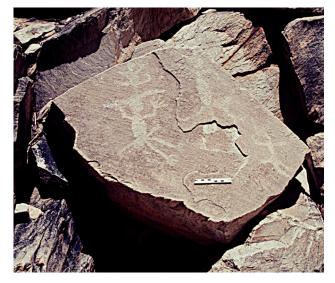


Figure 18. 'Human' figure with a knob-ended fighting club and holding a sword-like weapon above its head at Dajarra-Carbine Creek, northwestern Queensland (photograph by N. Franklin).

fighting poles/boomerangs. The only motifs that could broadly be interpreted as weapons are the crescents and concentric arcs at three petroglyph sites: Nappamerrie on Cooper Creek (Elkin 1949: 140, Text Fig. 2), Gilparrka Almira (Franklin et al. 2021) and a site on Brighton Downs east of Boulia in the Diamantina region (Elkin 1949: 142).

North-western Queensland

Long fighting poles/boomerangs were traded/exchanged throughout western and central Queensland (Roth 1897), areas with abundant rock art locations.

The Mt Isa region, northwestern Queensland, contains numerous sites with rock art—paintings

and especially petroglyphs (Franklin 1996; Morwood 1985). One site, Dajarra-Carbine Creek, has petroglyphs dominated by geometric motifs, including crescents/boomerangs, but there are also figurative representations, such as human figures (Franklin 1996, 2004; Morwood 1985). Morwood (1985: Fig. 2) illustrated petroglyphs of human figures from the site: one may be holding a shield, another a throwing stick or cross-boomerang (generally from northeast Queensland), and one figure is associated with a knob-ended fighting club (Morwood 1985: Fig. 2-a). This latter figure also appears to be holding a swordlike weapon in one hand above its head as if about to bring it forward and down onto an opponent (Fig. 18; Franklin 2004: Pl. 6B; Morwood 1985: Fig. 2-a). By contrast, pigment anthropomorphs from the region are not represented carrying weapons (Davidson et al. 2005: Pls 13.1, 13.2, 13.4-8.; Morwood 2002: Fig. 7.9-10).

Central Queensland

The rock art of the Central Queensland Highlands (Fig. 1), as typified by the large corpus of art in Carnarvon Gorge and at The Palace, incorporates stencils of weapons (boomerangs, spears, axes, fighting clubs, digging sticks/fighting sticks, spearthrowers and shields) and other objects (Figs 13, 19; Morwood 2002: 221–223, Fig. 8.19; Walsh 1988: 114, 116, Pls 115–119).

The Palace is an extensive rock art site near the headwaters of the Barcoo River, which flows into Kati Thanda-Lake Eyre. Amongst the numerous stencils and petroglyphs are painted criss-cross grid compositions that have been interpreted as 'net' motifs (Walsh 1988: 124, Pl. 131)—similar motifs are found at Carnarvon Gorge. There are also ovoid-shaped designs with criss-cross line infill that are similar to representations of shields, with the criss-cross line infill representing the decoration commonly applied to



Figure 19. Stencils including boomerangs at Carnarvon Gorge, Central Queensland Highlands (photograph by P. Habgood).

shields (compare Walsh 1988: Pl. 131 with Buhrich et al. 2016: Fig. 3; Harper 2015: Figs 3, 4, 7; McDonald and Harper 2016: Figs 3, 7; Roth 1909: Pl. LIX), and they show broad similarities with rainforest shields that are used in conjunction with the large wooden swords (see Figs 7–9; Hatte 1992: Fig. 3).

At the site of Marra Wonga, near Barcaldine, central Queensland, there is an 81 cm long red stencil of a stick that tapers to a point at one end, while the other end is indistinct (Taçon et al. 2022: Fig. 16). While this motif resembles a fighting stick/pole, Elders identified it as a digging stick (Taçon et al. 2022: 172).

Northeastern Queensland

As outlined earlier, large one-handed wooden swords with rectangular blades, a short narrow handle and large decorated shields were used in the rainforest regions of northeastern Queensland. Northern Queensland, including the rainforests of the Wet Tropics World Heritage Area, is home to large bodies of rock art depicting weapons.

For example, the Princess Charlotte Bay area of Cape York Peninsula (Fig. 1), including Bathurst Head and the offshore Flinders Group islands, has a few paintings of weapons including boomerangs, spearthrowers and a harpoon (see Appendix 1; Davidson 1936a: 67, Fig. 29; Hale and Tindale 1934: Fig 232f, Fig. 233k; Roth 1903: 494, Pl. XIV: 8). Roth's (1903: 494, Pl. XIV: 14) recording of a crescent-shaped painting that tapers towards one end, classified as a porpoise, broadly resembles a two-handed sword from the Mackay area. Roth (1903: 494, Pl. XIV 3) also documented an oval shape with internal dotted lines, which was described as a turtle but does not have the flippers and head indicated like other motifs identified as turtles in the same plate and resembles a rainforest shield. Hale and Tindale (1934: Fig. 233y) similarly reproduced an oval form with internal patterns that resemble a decorated rainforest shield. However, no items identified as long fighting poles/boomerangs or rainforest swords have been recorded in the rock art of this region (Appendix 1).

At sites in the sandstone plateaus around Laura, southern Cape York Peninsula (Fig. 1), depictions of weapons, although not common, include crescents/ boomerangs, spears, stone axes, spearthrowers and even some motifs identified as rifles (Cole 1995: Table 5.14; Flood 1987: Table 5; Trezise 1971: Fig. 3).

There is little direct association between human figures and commonly depicted traditional weapons (axes, boomerangs, spearthrowers) in Laura rock art (Cole 2010: 24). However, certain assemblages of human figures depicted at several rockshelters in the Laura region are associated with an elongated oval motif that looks 'sword-like'. This motif is straight or slightly curved, often narrowing at one end, and it sometimes has lines at one end suggestive of a fibre-covered handle (e.g. Cole 2010: Figs 6–9; Trezise 1971: Pls 2, 3, 11; Walsh 1988: Pl. 261). While these motifs broadly resemble rainforest swords in shape (without the short narrow handle), they have been categorised as rifles, being associated with human figures that have been identified by Aboriginal informants as 'bullymen' or 'black police troopers' from the Native Mounted Police (Cole 2010; Trezise 1969: 148, 1985: 75). Trezise (1971: 16) described one such motif at Crocodile Gallery A (1) as 'Bichrome large man with long shape under left arm ... and almost certainly depicts a man with rifle'. However, a stone axe is also depicted adjacent to a 'police figure' (Cole 2010: 24, Fig. 8). Cole (2010: 24) reflected that 'As Trezise does not indicate the source of the term "rifle" we cannot assume that it came from

Aboriginal informants'. It is noteworthy that these rifle motifs are much more schematic than the realistic depictions of rifles seen in, for example, Arnhem Land art (see Chaloupka 1993: Pls 218, 221, 222, 226; Lewis 1988: Fig. 271, Pl. 47; Roberts and Parker 2003: 25, 42–43, 45; Wesley 2013: Figs 7, 8).

In a paper specifically about rainforest swords and shields in Queensland, Colliver and Woolston (1980: 71) reported that in 1965, Percy Trezise, who recorded much of the rock art around Laura, told one of them that 'a drawing apparently of a long wooden sword' was present in the Woolston Gallery. They provided a photograph of what they called a 'doubtful pictorial representation of a sword' from near Laura (Colliver and Woolston 1980: 83, Pl. 4.3). One assumes this image is of Woolston Gallery, although the caption does not specify a location. In the photograph, there is a long, elongated, oval-shaped sword-like object with a short, narrow handle-like extension with a 'hilt' near the hand of a male figure (Colliver and Woolston 1980: Pl. 4.3). Similar rock images in the Laura area are usually categorised as catfish (e.g. Trezise 1971: Pls 5, 6), although the extension is narrower and longer, like that seen on swordfish motifs (e.g. Trezise 1971: Pl. 2; see Cole et al. 2024 for a discussion of catfish-eel motifs in Laura rock art).

Unfortunately, a recording of Woolston Gallery does not appear in Trezise's (1971) detailed publication of the rock art of Southeast Cape York (Laura region). The one photograph of rock art in Woolston Gallery in another of Trezise's publications (Trezise 1969: Pl. 23) does not show what could be called the 'long wooden sword' noted above. Nor do swords appear in Trezise's (1971: Fig. 3) classification of painted weapons and implements, whereas boomerangs and hafted axes do (spearthrowers are also not included in this classification, but they are found in the rock art).

However, a few images within the corpus of Laura rock art might depict rainforest swords, although they are classified as other items (see Appendix 1). One such example is a silhouette identified as a 'yam' at Red Bluff Gallery Site A (1) (Trezise 1971: 99, Pl. 23 #4). Representations of yams in Laura pigment art usually have protrusions or 'growths' extending out of the tops of the figures (Trezise 1971: Fig. 4, Giant Horse Gallery Site C (1) Pl. 11-4). The Red Bluff motif, positioned near what is described as a small human figure holding a knobbed stick (or sword?) aloft, has an elongated oval shape that tapers to a narrow extension at one end. This item could potentially be a representation of a rainforest sword. Other possible examples from the area are detailed in Appendix 1. However, for the most part, as with the nearby Princess Charlotte Bay area, no identifiable rainforest swords or long fighting poles/boomerangs have been identified in the corpus of rock art around Laura.

Further south, in the Lamb Ranges near Cairns (Fig. 1), three painted depictions of rainforest swords have been reported at two sites (Buhrich 2017). Due

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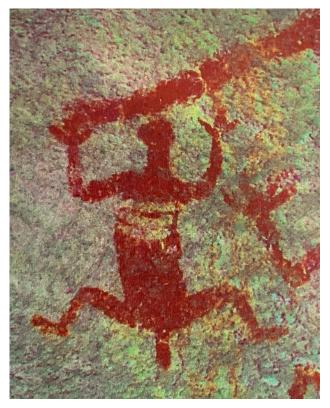


Figure 20. An initiated male figure holding a sword above his head (image provided by Alice Buhrich; use of image approved by Willie Brim, senior Buluwai representative and Traditional Custodian).

to the cultural significance of the sites and to ensure their protection, the names and specific locations of the two sites are not being provided here at the request of



Figure 21. Ovoid motifs with internal horizontal and vertical lines are usually identified as 'nets' but resemble painted images of rainforest shields from the Townsville region. Nara Inlet, Hook Island in the Whitsunday Islands, central Queensland (photograph by P. Habgood).

'Uncle' Willie Brim, senior Buluwai representative and Traditional Custodian (Willie Brim pers. comm. 2024). At the first site, two long, thin, rectangular shapes associated with anthropomorphs have been identified as rainforest swords. One of the sword motifs is held above the head of a male figure with lines on the chest identified by 'Uncle' Willie Brim as initiation scarscicatrices (Fig. 20; Buhrich 2017: 202; 'Uncle' Willie Brim pers. comm. 2024). The other similar sword-like motif at this site was painted next to the image of another initiated man (Buhrich pers. comm. 2023; Willie Brim pers. comm. 2024). 'Uncle' Willie Brim (pers. comm. 2024) indicated that the elevated sites at this location are 'controlled sites' associated with the male initiation ritual (Buhrich 2017). The site with the two swords associated with initiated men was described by 'Uncle' Willie Brim as '... the initiation site, where boys would be brought to be turned into men through the ritual of chest scarification' (Buhrich 2017: 213; Willie Brim pers. comm. 2024). The ceremonial association of the sites and the depictions of rainforest swords with initiated men suggest that these weapons were considered important items.

A sword-like motif was also recorded at another site in the Lamb Ranges (Buhrich 2017). This long painted cylindrical shape was identified by 'Uncle' Willie Brim as a sword due to its long straight shape with a narrowing at one end forming a handle, its size dimensions (1.38 m long), and the direct association with a cross motif, which was identified as the *wulma* cross boomerang (Dr Alice Buhrich pers. comm. 2023).

Further south again, in the Cardwell and Townsville region (Fig. 1), which incorporates some areas

> of rainforest but is mostly a dry tropics environment without rainforest, are sites with painted and stencilled weapons and painted shapes with a large range of infill designs that resemble rainforest shields (Brayshaw 1990; Hatte 1992). By contrast, rainforest swords have not been recorded in the rock art of this area.

> On Dunk Island, north of Cardwell, which supports a mosaic of rainforest vegetation, there is pigment rock art incorporating various figurative motifs and 'non-figurative' images, including ovoid and more elongated shapes with internal lines. Trezise's scaled drawings of some of the latter motifs (Trezise and Wright 1966: Fig. 3) resemble painted rainforest shields from the Townsville region (see Hatte 1992: Fig. 3). There is also an

elongated sword-like motif with a line across it towards one end, adjacent to one of these possible shield images (Trezise and Wright 1966: Fig. 3). However, the form of this motif is more akin to a narrow, elongated lathe-like spearthrower than a rainforest sword.

Central coastal Queensland

The recorded rock art in the Mackay-Rockhampton region, whilst not abundant, is generally characterised by hand stencils and 'non-figurative' motifs. There are no scenes of duelling with wooden swords or isolated representations of motifs that might represent the curved swords made and used in the region.

At Nara Inlet on Hook Island, just north of Mackay, art sites contain 'non-figurative' motifs, including images that have been interpreted as 'nets' (Barker et al. 1997). These 'nets', which are the most prominent motifs at the main rock art site, are ovoid (oval, 'balloon-shaped', 'leaf-shaped') in outline with internal horizontal and vertical lines forming criss-cross patterns (Figs 21–22; Walsh 1988: Pl. 137). They resemble painted images of shields from the Townsville region (Hatte 1992) and some painted rainforest shields (Buhrich et al. 2016: Fig. 3d) and club shields from the Mackay-Rockhampton area (Brayshaw 1990: Pls 7-2, 7-3).

Discussion

This review of substantial bodies of Australian rock art reveals that representations of weapons are relatively common, especially boomerangs, spears, spearthrowers and small shields. Weapons are depicted as being held by 'human' figures in presumed hunting/fishing scenes, used in dances or ceremonies, in potential scenes of inter-group conflict and individually.

Long fighting poles/boomerangs and wooden swords were used in regulated duels to settle disputes and conflicts and for more general fighting. While these weapons are present in museum collections, evident in historical photographs and detailed in ethnohistoric accounts, their depictions in rock art are rare—individual motifs held by anthropomorphs or in scenes.

Unless part of a scene or directly associated with a human figure, the identification of isolated long fighting pole/boomerang motifs cannot be definitive (similarly crescents/boomerangs) because of the generalised nature of the motif—a long, straight or slightly curved stick tapering towards each end. While some depictions broadly fit this description (see Appendix 1), they could represent digging sticks, non-barbed spears, tracks/pathways or a range of other things (i.e. the 'discontinuous meaning' range of Munn's 1966 research).

The wooden swords from northeastern Queensland and the Mackay-Rockhampton area have more distinctive shapes—long rectangular blades with short, narrow handles, curved blades and curved graduated



Figure 22. A leaf-shaped 'net' motif from Nara Inlet Hook Island in the Whitsunday Islands, central Queensland (photograph by P. Habgood).

handles, respectively. As with the long fighting pole/ boomerang, some depictions broadly fit these descriptions (see Appendix 1), but they generally appear to be lathe-type spearthrowers, boomerangs or are too small in size (stencils).

What is critical, but not available in most of these instances, is insight from Traditional Custodian knowledge holders (see, for example, Buhrich 2017; George et al. 1995; Koolmatrie 2018; Palmer, 1977). An excellent example of such insight in relation to Aboriginal material culture in rock art comes from the site of Marra Wonga, central Queensland, where Elders identified a stencil of a long, thin shape as a digging stick (Taçon et al. 2022: 172, Fig. 16).

Also, Traditional Custodian knowledge has identified two long, thin, rectangular/cylindrical shapes as rainforest swords at sites in the Lamb Ranges near Cairns. One sword motif was identified by 'Uncle' Willie Brim, senior Buluwai representative, as a sword due to its long straight shape with a narrowing at one end forming a handle, while the other was painted next to an initiated man.

As detailed above, there are depictions of figures in groups, pairs or individuals holding implements that broadly resemble long fighting poles/boomerangs or wooden swords. However, they could also be short spears thrown with spearthrowers (see Angoroko on Groote Eylandt), clubs or boomerangs. The body stance and positioning of the implement can help interpret these weapons. When used, long fighting poles/boomerangs and wooden swords were held with either one or both hands at one end and would have been brought forward from above the head down onto an opponent (see Table 2).

In Arnhem Land, there are representations of anthropomorphs holding the proximal ends of straight poles in two hands, like long fighting poles/boomer-

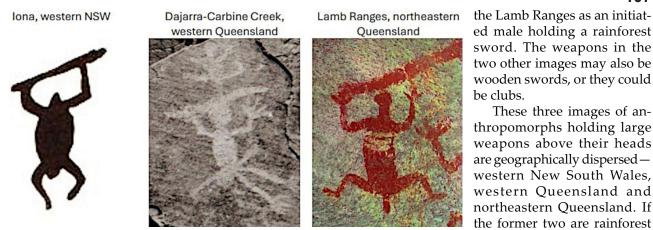


Figure 23. Anthropomorphous/human figures holding a weapon above their heads (not to scale).

angs from the Kati Thanda-Lake Eyre basin. One example depicts a running human figure who appears to have thrown a non-barbed spear and holds by one end a long stick in front (Brandl 1982: 107). Another image is of a profile 'human' figure with hooked sticks, barbed spears and boomerangs, holding a long stick in front of them with both hands (Lewis 1988: Fig. 82). These two images are suggestive of fighting/duelling or hunting. As noted earlier, Aiston (Horne and Aiston 1924: 72) observed that during a fight a warrior would discharge all of his throwing weapons and grasp their large fighting pole/boomerang with both hands, using it as a sword.

At sites near Cobar, central western New South Wales, there are also many images of figures holding the end of long straight sticks/clubs in one hand, including one holding a very long thin stick outwards from its side (see Figs 11, 15). This posture differs from the numerous figures holding spears at these sites. There are also profile anthropomorphs holding sticks and boomerangs with both hands (see Fig. 15) in the manner of the long fighting poles/boomerangs from the Kati Thanda-Lake Eyre basin. One figure holds a large, curved implement that tapers towards the end, near where it is being held (Fig. 15), that broadly resembles a two-handed wooden sword from around Mackay-Rockhampton (Fig. 10).

An anthropomorph at Iona near Cobar holds a club above its head with a hand at either end (Fig. 23)-asimilar position to the defensive posture when using two-handed fighting poles/boomerangs from the Kati Thanda-Lake Eyre basin or in the process of using the weapon. A comparable pose is evident in images from Dajarra-Carbine Creek, within the Kati Thanda-Lake Eyre basin, northwestern Queensland and the Lamb Ranges near Cairns (Fig. 23). These 'human' figures hold sword-like weapons in one hand above their heads as if about to bring them forward and down onto an opponent. All three weapons appear broadly similar in relative size and shape-about the same size as the figure holding them and relatively straight. The Traditional Custodian identified the figure from distances-over 1500 km.

Long fighting poles/boomerangs were produced within the Kati Thanda-Lake Eyre basin, yet there are no definite images of them in the rock art from this geographical area. The weapon held by the human figure from Dajarra-Carbine Creek does not resemble the long fighting poles/boomerangs from the Kati Thanda-Lake Eyre basin, even though the weapon is held in a similar position to the defensive posture when using these weapons. The best examples potentially depicting these weapons come from outside the area, some 500 km to the southeast, at sites near Cobar, central western New South Wales.

Rainforest swords, an iconic part of northeastern Queensland's material culture, were found in rock art at one location within this area-the Lamb Ranges near Cairns. Given the depiction of an initiated man wielding a rainforest sword and the consequent ceremonial associations of the sites here, as noted by 'Uncle' Willie Brim, it is surprising that there are not more depictions in the rock art of rainforest areas of northeastern Queensland.

The large shields that were used in rainforest areas in association with rainforest swords also played an important part in the initiation of young men, as each was given a shield to be painted in the young man's own design using symbols that often related to his personal totem (Aboriginal Australia 1981: 172, N283; see also McConnel 1935: 56). Young men learned to use these large shields and swords as part of their initiation into manhood. However, only one depiction of a rainforest shield was identified in the Lamb Ranges (Buhrich 2017: Table 5.4, Fig. 7.3). Few shield motifs are recognised in the art of Cape York Peninsula. However, further south in the Townsville region, pigment images of shields are the dominant motif at some sites, whereas there are no images of rainforest swords. Within this context, it is noteworthy that while rainforest swords and shields are used together and both are associated with initiation, they are not shown directly associated with each other in the rock art.

These three images of an-

swords, as the one from the

Lamb Ranges is, these weapons

have been transported large

Some potential shield motifs from the Central Queensland Highlands show broad similarities with rainforest shields but no depictions of rainforest swords.

Rainforest swords are represented in the rock art of the area where they were made and used but are not commonly found. Rainforest shields are not commonly depicted in the rock art of northeastern Australia outside of the Townsville region. Rainforest sword motifs may be evident in western Queensland and western New South Wales, but they are rare.

Images of long fighting poles/boomerangs are not found in the rock art within the Kati Thanda-Lake Eyre basin where they were produced and used but are potentially found outside of this geographical area. Rainforest swords and the complementary shields are only occasionally evident in the rock art of northeastern Queensland, though never in direct association, but are potentially found outside this area.

It has been argued that non-local items were objects of exchange, traded into areas, acquired through highly extended exchange networks, or were chance acquisitions (Hayward 2015; Lewis 1988; Travers and Ross 2015; Walsh 1988; Welch 1996). As Hayward summarised:

Depictions of people with broad spearthrowers in the rock art of Mirarr country [Kakadu National Park and western Arnhem Land] are, therefore, considered to be representations of artefacts that had their origins outside of the region and which were probably introduced during trade and exchange ceremonies that were recorded as being widely distributed throughout Aboriginal Australia (Hayward 2015: 37).

Trade/exchange in various goods was practised extensively across Aboriginal Australia, often involving weapons, especially various forms of spears, spearthrowers and boomerangs, but also fighting poles/boomerangs and wooden swords (Davidson 1936b, 1936c; McBryde 1987, 1997; McCarthy 1939a, 1939b; Mulvaney 1976). Exchange/trade networks, which could cover many hundreds of kilometres, incorporated reciprocal exchange, short-distance downthe-line barter and long-distance transfer-trade of goods (see Kerwin 2010; McCarthy 1939b; Smith 2013).

The important and extensive Kati Thanda–Lake Eyre Basin north-south exchange/trade network, which encompassed the vast river/stream systems that flow north to the Gulf of Carpentaria and south to Kati Thanda–Lake Eyre, involved items such as the narcotic plant pituri/pitcheri (*Duboisia hopwoodi*), stone material, grinding slabs and stone tools, as well as wooden weapons like boomerangs and spearthrowers (see McBryde 1997: Maps 1–3; McCarthy 1939a: Maps 10, 12–14; Mulvaney 1976: Maps 3–6). For example, Spencer and Gillen (1899: 602–603) recorded how fighting clubs were exchanged/traded throughout central Australia, while Howitt detailed how:

> The Yantruwunta People obtained shields from their neighbours higher up Cooper's Creek, who got them from tribes farther to the north-east. The Yantruwunta on their part exchanged weapons made by

them, and stone slabs for grinding seeds which they brought from the south (Howitt 1904: 714).

Horne and Aiston (1924: 73–74) detailed how in central Australia, the *kirra* (boomerang) '... that were quite flat on one side were sometimes traded from the north' while the *kirra umyarra* (hooked boomerang) '... were traded down along the Queensland route'.

Roth (1897: section 245, p. 146) recorded that the two-handed duelling swords manufactured in the Boulia district were taken north along the Georgina River where they were '... bartered for fluted and hooked boomerangs, peg-tipped spears and other things'.

Aboriginal groups from Cape York Peninsula, the Cairns region and down the coastal area through the wet tropics rainforests to Cardwell and onto the Townsville region, participated in smaller scale exchange/trade activities amongst themselves (Buhrich et al. 2016; Hale and Tindale 1934; McCarthy 1939a, 1939b, 1939c; Roth 1910). Exchanged/traded items incorporated ochre, baler shell and weapons, including long single-handed swords (Roth 1910: 19).

This review establishes that weapons were important items in extensive exchange/trade networks and that 'foreign' weapons were represented in rock art outside their area of production. Fighting poles/ boomerangs and wooden swords were exchanged/ traded, which could explain why rock art images potentially depicting long fighting poles/boomerangs and wooden swords come from outside of the areas where they were made—as they had been brought from a distant place, they may have gained 'prestige' and/or increased in social value.

Conclusion

Ethnohistoric accounts detail how structured and regulated combat/duels at big social gatherings to settle disputes and conflicts between different groups/ individuals using wooden fighting poles/boomerangs and swords were an important element of Aboriginal culture throughout the Kati Thanda-Lake Eyre basin and northern Queensland. Ethnographic collections in museums include examples of these types of weapons collected from these areas (see Aboriginal Australia 1981; Jones 2004). Hayward (2016) demonstrated that rock images of weapons appear to depict actual types found in ethnographic collections.

Representations of figures holding weapons (mythical, dance, dispute resolution duels and/or real battles) are evident in Australian rock art. Our research examined the corpus of rock art from the Kati Thanda-Lake Eyre basin, where long fighting poles/boomerangs were produced and used, and northeastern Queensland, where wooden swords were an iconic part of the material culture, to establish if there might be representations of these large wooden weapons in the rock art of their areas of manufacture. We also considered surrounding regions and northern Australia, where there are numerous representations of weaponry, to assess if non-local weapons might have been depicted.

It was found that depictions of long fighting poles/ boomerangs and large wooden swords are rare. Images of long fighting poles/boomerangs were not found in the rock art of their area of production, the Kati Thanda-Lake Eyre basin. In contrast, representations of large wooden swords were identified at only one location within the area of production. Potential depictions of these weapons were documented at locations outside of the production areas. Also detailed were three geographically dispersed images of similarly posed anthropomorphs holding a large weapon above their head-all potentially rainforest swords. This distribution of images of these weapons outside their production areas and across large distances is consistent with ethnohistoric accounts of fighting poles/boomerangs and wooden swords being exchanged/traded. These non-local 'foreign' weapons may have gained 'prestige' and increased in social value as they were exchanged/traded across large areas of the country.

While research has shown that rock art depicts both everyday and sacred themes, our findings indicate that not every aspect of ceremonies, other cultural activities, or even all material culture items is depicted in rock art.

Vinnicombe made similar observations concerning rock art from South Africa and noted that:

Specific subjects or activities selected for preferential treatment recur again and again at different sites over a wide area. Conversely, other subjects which were commonplace but essential components of the lives of the Bushman are excluded from the painted record (Vinnicombe 1976: 339).

Rock art is not a checklist of things (e.g. all animals or plants in the local environment), as David (2004: 171–173) demonstrated when detailing the difference between the terrestrial and marine animals depicted in rock art in the southeastern Cape York Peninsula and the faunal range represented in the food remains at excavated sites in the region. Rock art has meaning and structure and can only be fully understood when integrated within the overall fabric of the cultures that produced it (Morphy 1981: 65).

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Dr Natalie R. Franklin^{1,*} and Dr Phillip J. Habgood¹ ¹School of Social Science, The University of Queensland, St Lucia, Brisbane, Australia

*Natalie Franklin, n.franklin@uq.edu.au

Appendix 1

Examples of published rock art depictions broadly similar to the weapon types understudy from the regions reviewed in this paper but not detailed in the text.

Site/region	Description - comments	Reference		
	Northern Territory			
Arnhem Land	Two stencils and a painting of an unidentified 'fish-shaped' artefact from the Twin Falls Creek area and Death Adder Creek. The painting has the 'fish-shaped' artefact associated with a human figure and other weapons—spears, boomerangs; described as a sword-like artefact; suggested to be a weap- on, possibly a type of throwing club, but not a spearthrower. The 'fish-shaped' objects are slightly curved with a broad flat blade and narrow to a short handle but are less than 27 cm long.	Lewis 1988: Figs 20, 50		
Arnhem Land	A scene between two opposing groups of over 60 figures, who hold a variety of weapons, including barbed spears, hooked sticks/spearthrowers and a hafted stone axe, is identified as a battle scene.	Taçon and Chippindale 1994: 222, Fig. 7		
	Compositions depicting two opposed figures, including one where a figure on the right holds a spear while the figure on the left appears to be striking the arm of the opponent with a boomerang, and another depicting a boomerang fight between two opposed figures.	Taçon and Chippindale 1994: Figs 1 and 2 respectively		
Mt Borradaile, Arnhem Land	Red pigment human figure holding a stick/club in the right hand, which, due to superimposition, is over the head of a horizontally positioned human figure in white.	Roberts and Parker 2003: 53.		
Cadell River area, Arnhem Land	Painting of an anthropomorphous being with material culture objects: two thickly drawn long items, one slightly curved and tapers to a point at one end. Aboriginal informants identified these objects as two spears. Other material culture objects identified as a spearthrower and two firesticks.	Brandl 1982: 197, Fig. 100		
Ubirr (Obiri Rock), Kakadu National Park	Two running figures, one carrying two boomerangs in one hand and a spear in the other. Another is carrying a boomerang in one hand and holding a curved stick (spear?) by the end in the other hand.	Lewis 1988: Fig. 34		

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Site/region	Description - comments	Reference
Deaf Adder Creek, Kakadu National Park	Deaf Adder Creek: a running figure that appears to have thrown a spear with a spearthrower and holds in the other hand a long stick by the end; a running figure holding a stick-barbless spear towards one end and 2 boomerangs in the other hand with a hooked boomerang/club in the waist belt.	Lewis 1988: Figs 9, 11
	Kolondjorluk: red painting of a 'human' figure holding by one end a long stick described as an 'un- identified weapon or implement'.	Brandl 1982: 107
Ngarradj Warde Djobkeng, Kaka- du National Park	'Human' figure with an arm held towards a long straight stick with a bulge at the end.	Lewis 1988: Fig. 110
Mt Brockman Massif, Kakadu National Park	A group of over 35 'human' figures with weapons (boomerangs and hooked sticks), some depicted as opposed pairs. One example has 2 opposed figures that appear to be fighting with hooked sticks/ fighting picks. Another image has 2 opposed figures with hooked sticks/fighting picks raised above each other's heads.	Lewis 1988: Figs 77, 78, 79, 80, Pl. 27
Victoria River area	'Human' figure in twisted perspective holding a very long fighting pick up in the air.	Lewis and Rose 1995: Fig. 13
Yiwarlarlay, Vic- toria River area	Two male figures, one holding a short fighting stick horizontally towards the other figure.	Davidson 1936a: Pl. 5(4)
Urremerne (Oo- ramina) and other sites near Alice Springs	Paintings of oval shapes with infill decoration identified as shield motifs by Traditional Custodians.	Gunn 2011: 228, Figs 4, 6, 12
Roma Gorge, West MacDonnell Ranges, west of Alice Springs	Listed among the various petroglyphs are hooked boomerang and pole motifs, but no illustrations are provided.	Taçon 1994:120
Groote Eylandt, Gulf of Carpen- taria	Spears, spearthrowers, various types of clubs, some with rounded heads, stone knives, shields, stone and metal-hafted axes, harpoons and returning and non-returning boomerangs comprise the range of depicted weapons.	McCarthy 1955, 1960
	Angoroko: five male figures holding thin stick-like objects horizontally above their heads, one of which appears to be attached to a short straight item held in the hand. One figure holds what is probably a small shield. One figure holds nothing in their hands. Several short, straight objects are placed around the figures. One long, thin, slightly curved object is much larger than the human figures. Scene interpreted as 'Six small men fighting with spears thrown with spear throwers' and 'spears are drawn in flight through the air' with 'four men on one side and two men on the other'.	McCarthy 1960: 326, Pl. 2; Rose 1942: 175, Photograph 2
Chasm Island, the Groote archi-	Spears, spearthrowers, harpoons, clubs, axes and returning and non-returning boomerangs comprise the range of depicted weapons.	McCarthy 1955, 1960
pelago, Gulf of Carpentaria	Chasm Island Site 9: stencils of non-returning boomerangs of northern Australian fluted type and a 'pointed object'.	McCarthy 1960: 360, Fig. 22–2
	Chasm Island Site 14: male figure with long arms holding a sword-like club (spearthrower?).	McCarthy 1960: 364, Fig. 26A–5
	Chasm Island Site 27: three figures, one with a speared fish and another holding a stick with 2 hands towards the top end.	McCarthy 1960: 381, Pl. 3D–2
	Chasm Island Site 27: a Macassan prau carrying 34 people joined together by their hands. A man in the stern is paddling. A tall man in the bow is standing beside 'a container from which eight long fishing lines extend; he has one hand on the container and with the other is holding up a slender pointed oval object'. See Chaloupka (1993: 18, Fig. 16) for a different interpretation of this scene.	McCarthy 1960: 381-2, Fig. 34B–5
	Western Australia	
Depuch Island, off the northwest coast of the Pilba- ra region	Petroglyphs of individual and multiple crescents/boomerangs, long throwing stick/club; human figures depicted hunting (terrestrial and marine species), fighting, dancing and ceremonial groups; human figures frequently armed with weapons—plain and barbed spears, spearthrowers, throwing sticks, shields and boomerangs, including the hooked boomerang; scenes in which one figure spears another and scenes of groups of figures spearing a central figure.	McCarthy 1961: 140, Figs 41–54, 61, 63–70, 76, 114, 121, 232 312, 314, 316, 335; Craw- ford 1964: 35, Figs. 1, 2, 6, 7, 10, 17, Pls 8(B), 12(B)
	Petroglyph of a 'human' figure holding a shield and a spear.	Davidson 1936a: Fig. 27(g)
Marapikurrinya (Port Headland), Pilbara region	Petroglyphs of different types of boomerangs (plain silhouette and decorated), spearthrowers (dec- orated and plain), shields (decorated), hafted stone axes, plain and barbed spears, various types of clubs including what is referred to as a sword club, which is distinguished from the other types by its narrow grip; a barbed spear lying across a striped and barred boomerang. Anthropomorphous 'Minjiburu' figures depicted speared with plain or barbed spears.	Harper 2017; McCarthy 1962b; Tindale 1987. Mc- Carthy 1962b: Fig. 99, Pls V (c), (i) Harper 2017: Fig. 6.29; McCa-
	A female 'Minjiburu' figure holds a barred club (or hooked boomerang) in the left hand.	rthy 1962b: Figs 7, 14, 27, 30 McCarthy 1962a: Fig. 28
	A 'human' intaglio figure engraved over a long straight line said to be a plain spear.	McCarthy 1962a: Fig. 37
	A possible fight scene depicts a large 'Minjiburu' figure struck on the body by a bifurcated spear and a barbed spear; the latter may have been thrown by an adjacent small 'Minjiburu' figure.	McCarthy 1962a: Fig. 3
	A long straight pole said to be a spear or snake.	McCarthy 1962a: Fig. 32
	Composite human-material culture figure has a head attached to a boomerang motif and a body con- sisting of a decorated shield motif.	Harper 2017: Fig. 6.27

Site/region	Description - comments	Reference		
	South Australia			
Red Gorge, Deception Creek, Ikara-Flinders Ranges	Petroglyphs of anthropomorphs: a group of four includes a lizard-like figure carrying a shield in its left hand, a man carrying two boomerangs in each hand, a human figure holding in the middle a fight- ing stick and another figure carrying a spear/club; an 'owl-man' figure carrying a long club with a nob on the end; grouped crescents/boomerangs.	Mountford and Edwards 1964: 852-3, 857, Figs. 2D, 3A, 6F		
Eucolo Creek, Pimba, central South Australia	Petroglyphs of grouped crescents/boomerangs and a 176 cm long straight stick/pole described as a 'snake-like' design.	Hall et al. 1951: 377, Figs. 15, 25-28		
Mount Lofty Ranges, south- eastern South Australia	Pigment art, possible dancing scenes; potential weapons depicted: crescents/boomerangs, a hooked boomerang(?), barred oval (shield?), straight or slightly curved sticks/poles; human figures holding boomerangs, spears, shields, sticks/clubs and long poles; a figure holding a large, very curved boomerang(?) by each end above the head; long curved lines/poles.	Coles and Hunter 2010: Figs 66, 71, 86, 87, 89, 98, 106, 154, 155, 159, 163		
	At a shelter in Cockatoo Valley, a red 'turtle' figure holds a large stick above its head with another smaller stick that tapers at one end under the same arm.	Coles and Hunter 2010: Fig. 73		
	Western New South Wales			
Gundabooka, Bourke and Cobar region	Scene showing two groups of armed men painted in different colours (orange and white ochre), sug- gested to represent either a corroboree or inter-tribal conflict.	McCarthy 1962b: Fig. 25; Westaway et al. 2016		
Mt Grenfell, Bourke and Cobar region	Scene with white-painted armed men and women along with children, interpreted as 'the successful repulse of a hostile party attempting to capture the women or a camp quarrel important enough to be recorded as a painting', or a corroboree.	McCarthy 1976: 63; McCarthy 1979: Fig. 72		
Mt Grenfell 2, Bourke and Cobar region	Small painted human figures holding spears, shields, boomerangs, throwing sticks and clubs; figure holding a long stick by the base; two red-painted long curved items larger than the adjacent 'human' figures—possible boomerangs or curved fighting poles.	McCarthy 1976: Fig. 74 (16, 21)		
	'Human' figure holding a shield and a long, curved weapon—could be a spearthrower and spear; yellow-painted straight spear/fighting pole larger than human figure directly below.	McCarthy 1976: Fig. 75 (18, 15)		
Mt Grenfell 4, Bourke and Cobar region	Two red-painted male figures, one holding a curved stick/boomerang by one end, the other holding a boomerang and what is most probably a long spear with barbs on one side.	McCarthy 1976: Fig. 55		
Mt Grenfell 6, Bourke and Cobar region	Small painted 'human' figures holding spears, shields, boomerangs, axes, sticks and clubs. Scene of three front-on figures—one armed with shield and boomerang, one with short stick and shield, one with a big boomerang, and a profile figure holding in two hands a hooked stick/bladed club—described as a fight scene.	McCarthy 1976: 64, Figs 76-78 McCarthy 1976: 64, Fig. 77 (18)		
	Scene of six red-painted figures with various weapons, including bladed clubs and boomerangs; one figure holds what is described as a conical-headed club in one hand and a big boomerang in the other, but it is held downwards at the side of the figure, not up in the air as commonly depicted—described as a combat scene.	McCarthy 1976: 64, Fig. 77 (23)		
	Red-painted figure holding a very long curved stick by the end in one hand. Yellow-painted straight line/spear/fighting pole larger than adjacent human figures holding other	McCarthy 1976: Fig. 77 (36)		
	weapons.	McCarthy 1976: Fig. 78 (13)		
Iona, Bourke and Cobar region	Small painted 'human' figures holding spears, shields, boomerangs, axes, sticks and clubs. Red-painted small male figure holding a long stick/spear in the middle lacks the barbs of the usual representation of spears in this art.	McCarthy 1976: Figs 64–65 McCarthy 1976: Fig. 65 [left side top]		
	A slightly curved stick and a long and more curved stick that are as big or larger than the nearby hu- man figures – could be clubs, spears or fighting poles, but in isolation impossible to identify.	McCarthy 1976: Fig. 65 [left side top]		
	Two small red figures, one holding a boomerang in one hand and a long club/stick held at an angle at the base by the other hand, while adjacent figure holds a shield, and a boomerang is between them.	McCarthy 1976: Fig. 65 [right side centre]		
	Four small red figures, two holding a shield and a club in each hand, one holding two short straight clubs/sticks and another figure holding a stick above the head with a hand at either end, in the manner of the two-handed fighting sticks/poles from the Cooper Creek and Diamantina River regions—McCa-	McCarthy 1976: Fig. 65 [left side top]		
	rthy (1976: 100) suggested the figures were dancing.	McCarthy 1976: Fig. 65 [right side top]		
	White-painted figures holding boomerangs, shields, small sticks and a barbed spear; one male figure holds a long pole or non-barbed spear towards the middle. Two small human figures, one holding an axe, look to be fighting.	McCarthy 1976: Fig. 64 [left side centre]		
	Two sman numan ngures, one norung an axe, took to be ngnung.	McCarthy 1976: Fig. 64 [left side centre]		
Mulgowan 2, Bourke and Cobar region	Small painted human figures holding boomerangs and shields; two female figures holding digging sticks at the mid-point; two other human figures holding long sticks at the mid-point.	McCarthy 1976: 102, Fig. 20		
Mulgowan 3, Bourke and Cobar region	Stencils of boomerangs, a knob-headed club and hafted axes; small red and white painted figures holding shields, boomerangs, axes, throwing sticks and clubs.	McCarthy 1976: 103–105, Fig. 66		
0	Small white figure holding a long thin pole in one hand which extends downwards—could be a spear with upper section faded.	McCarthy 1976: Fig. 66 (7)		

112	Rock Art Research 2025 - Volume 42, Number 1, pp. 91-118. N. R. FRANKLIN and P. J. HABGOOD	
Site/region	Description - comments	Reference
Mulgowan 5, Bourke and Cobar region	Small painted male figures holding shields, boomerangs, throwing sticks and clubs; possible painting of a hooked club; boomerang stencil; elongated red painted sword-like motif with knob handle—probably a spearthrower. Red painting of a long straight pole; outlined bladed club; stencilled club.	McCarthy 1976: 107, Figs 67–69
	Small white-painted male figure holding a long pole by the end in one hand and a long pole by the middle in the other hand—identified as a pole club and a plain-headed spear, respectively.	McCarthy 1976: 107, Fig. 67 (1)
	Two separate depictions of opposed figures with weapons dancing/fighting. One is labelled 'Magician singing warrior'.	McCarthy 1976: Fig. 67 (2, 4), Pl. 4 [bottom]
Wuttagoona 6, Bourke and Cobar region	White-painted bird-like/anthropomorph holding a straight stick by the end in one hand and a short stick in the middle in the other hand.	McCarthy 1976: Pl. 5
Wuttagoona 7, Bourke and Cobar	Small yellow or white-painted human figures holding spears, shields, boomerangs, clubs and throw- ing sticks; painted clubs; stencilled boomerang.	McCarthy 1976: Figs 36, 38, 71, 72
region	White-painted female figure holding a large, curved item (boomerang, digging stick or fighting pole) in one hand that extends above her head while her other hand joins with that of a male figure.	McCarthy 1976: Fig. 71 (5)
	Red painted elongated oval motif with internal decoration classified as a dendroglyph design associated with a painted straight line—resembles a decorated shield.	McCarthy 1976: Figs 14, 72 (10)
	A pair of human figures armed with boomerangs and clubs—resembles a fight/dance.	McCarthy 1976: 125, Fig. 72 (6)
Sturt's Meadows	Petroglyphs of human figures holding weapons—shields, spears, short sticks, individual and grouped crescents/boomerangs.	Clegg 2002: Fig. 2; Flood 1997: 217; Franklin 2004: Table 3:15, 2007
Mootwingee-Mut- awintji	Petroglyphs of: crescents identified as boomerangs, which occur separately, as single motifs, and as concentric/nested types, frequently associated with, or held by human figures; small human figures holding what are identified as boomerangs, shields, clubs, spearthrowers and spears, some with barbs. Some compositions said to show men hunting and fighting.	McCarthy and Macintosh 1962: 284–5, Figs. 2, 3-1, 6-1, 7-2, Pls XXI, XXIII, XXV, XXVII
	Paintings and stencils of weapons, such as boomerangs, shields, spears and clubs. Painted straight lines that are classified as linear bars/rods.	McCarthy and Macintosh 1962: 284–285, Figs. 6-2, 8, 9
	Cave 2 or Big Cave: a yellow silhouette of what is called a pole club. Also, an image that appears to show two hand stencils holding a horizontally positioned short stick (linear bar/rod) at both ends—	McCarthy and Macintosh 1962: 282, Fig. 9.
	potentially due to deliberate or incidental superimposition. Cave 8: three ovals in thick white outline, one resembling a shield or coolamon.	McCarthy and Macintosh 1962: 282.
	Cave 15: stencils in red of three boomerangs and a club, and in yellow of three boomerangs; six oval shields or coolamons painted in solid purplish-red, five vertically, one horizontally.	McCarthy and Macintosh 1962: 283.
Gap Hills	Petroglyphs of nested arcs/boomerangs, human figures holding boomerangs and vertical short sticks towards the middle, often in pairs.	Clegg 1993: Figs 2–5
	Human figure holding in the right hand a long stick with a small horizontal barb near the top and a short stick in the left hand.	Clegg 1993: Fig. 2
	Queensland	
The Palace, Barcoo River headwaters near Barcaldine, cen- tral Queensland	Stencils of boomerangs. Paintings of thin, slightly curved throwing sticks. Painting of a club that grad- ually becomes bigger towards one end.	Morwood 2002: Fig. 8.7; Walsh 1988: Pl. 131
Marra Wonga,	Petroglyphs of paired crescents/boomerangs;	Taçon et al. 2022: Fig. 10
near Barcal- dine, central Queensland	Pigment art at the site, predominantly stencils, including a red boomerang stencil with hand stencils, a pair of longer red boomerang stencils 86.1 cm long adjacent to a red fist stencil and hand stencil; a yellow boomerang stencil, an 81 cm long red stencil of a digging stick and stencils of 5 digging stick tips. Elders identified the digging stick stencil.	Taçon et al. 2022: 172 Figs 15, 16
	An 81 cm long red stencil of a stick that tapers to a point at one end, while the other end is indistinct, identified by Elders as a digging stick.	Taçon et al. 2022: 172, Fig. 16
Central Queensland Highlands	Numerous sites contain stencils of a range of weapons, including boomerangs, spears, spearthrowers, hafted axes, a 79.5 cm long broad-bladed club and some very large 64 cm long 'war boomerangs'. Petroglyphs include crescents/boomerangs. Weapons not represented in ethnohistoric collections are recorded in stencils.	Morwood 2002: 221–223 Figs 6.14, 8.14, 8.19; Walsh 1988: 116, Pls 117, 119
Carnarvon Gorge, Central Queensland Highlands	Stencils of long sticks (digging/fighting?), shields, boomerangs, spears, axes, fighting clubs and cool- amons or shields.	Morwood 2002: Fig. 7.5; Mitchell 1941: Pl. XX (lower image); Walsh 1988: Pl. 115
Buckland Creek, Central Queensland Highlands	Stencils include shields or coolamons, boomerangs and hafted stone axes. There are also 2 long, verti- cally positioned engraved lines/sticks.	Morwood 1976: 84, Pl. 1, Fig. 2, 2002: Fig. 8.10

Site/region

Description - comments

Site/region	Description - comments	Keference
Middle Park Station in the	Stencilled art dominates, especially hand stencils, but other stencils include boomerangs, spear throw- ers, stone axes, a spearhead, a shield and a digging stick/club.	Wade et al. 2011: Table 1, Figs 4–5
Gregory Range	Adjacent to a stencil of an elongated oval shield with a yellow painted strip down the centre and linear pecked infill is a stencil of a straight stick identified as a digging stick/club.	Wade et al. 2011: Fig. 8
Tattoo Holes, North Queensland Highlands	Petroglyphs of crescents/boomerangs, short sticks and six throwing club-like weapons.	Walsh 1988: 96, Pl. 95
White Moun- tains, North Queensland Highlands	Petroglyphs of boomerangs, shields, hafted axes, clubs and a long straight line/stick.	Morwood 2002: 245, Fig. 9.11
Quippenburra Cave, North Queensland Highlands	Stencil of a long, gently curved fighting boomerang(?) associated with hand stencils.	Morwood 2002: Fig. 9.14
Clack Island (<i>Ngurromo</i>), Princess Charlotte Bay, Cape York Peninsula	A few depictions of weapons were reported, including boomerangs, stone axes, spears, spearthrowers and a harpoon. Images of canoes and a club reported but not subsequently confirmed. Roth's (1903) recording of a crescent-shaped painting that tapers towards one end (described as a porpoise but possibly representing a boomerang) broadly resembles a two-handed sword from the Mackay area. Oval shapes with internal patterns resemble rainforest shields.	Hale and Tindale 1934: 147; Roth 1903: 494, Pl. XIV: 8; David and Chant 1995: 443 Roth 1903: 494, Pl. XIV: 14; Layton 1992: 107 Roth 1903: 494, Pl. XIV: 3; Hale and Tindale 1934: Fig.
Walaeimini	See Layton (1992: 175, 178–182) for a discussion of the differences in image interpretation/identifica- tion. Representations of spearthrowers. A possible rainforest shield with infill painting referred to as a	Hale and Tindale 1934: Figs
Shelter, Bathurst Head, Princess Charlotte Bay, Cape York Pen- insula	<i>'toanam'</i> . Whilst recognisable, one of the spear-thrower images is said to be not pictorially accurate, with the 'peg against which the spear fits is grossly disproportionate and the baler-shell grip is ill-drawn' (Hale and Tindale 1934: 155).	232-f, 233-y; Davidson 1936a: Fig. 29-u; McCarthy 1962a: Fig. 26-k; Hale and Tindale 1934: Fig. 233-k
West Worei Shelter, Bathurst Head, Princess Charlotte Bay, Cape York Pen- insula	Possible boomerangs in three groups of pairs, one above the other.	Hale and Tindale 1934: Fig. 229
Palmer River, Cape York Pen- insula	Paintings of men hunting kangaroos, shields and a spear.	McCarthy 1979: 74
Daintree River, Cape York Pen- insula	Drawings of a man with a shield and another with a spear/sword.	McConnel 1935: 56; Hayward 2020: 255
Mushroom Rock Site A (1), Laura area, Cape York Peninsula	Stencils of a spearthrower and a metal axe; Catfish motifs without whiskers are broadly sword-like. Stencil of a hafted stone axe. Large crescent with infill lines broadly sword-like, but probably a large elaborately decorated boomerang.	Trezise 1971: 34–35, Pl. 5: 28, 34, 41, 48, 69, Plate 6: 54, 69
Quinkan Gallery Site B (1), Laura area, Cape York Peninsula	Stencilled boomerangs; motifs described as solid elongated shapes, positioned near a group of 5 pig- ment boomerangs; a slightly curved elongated object that tapers at one end that could be a representa- tion of a club or potentially a rainforest sword, adjacent to large catfish.	Trezise 1971: 39, Pl. 7: 41, 53, 54
Quinkan Gallery Site B (2), Laura area, Cape York Peninsula	Elongated pigment motif that tapers to a point at one end identified as a yam—positioned near the hand of a human figure identified as male; a vertically positioned, narrowed elongated motif that has a bulge at one end and tapers towards the other end, described as a phallic shape—potentially a club/ throwing stick.	Trezise 1971: 41, Pl. 7: 1, 2, 50
Quinkan Gallery Site B (6), Laura	Motif described as a silhouette of a digging stick. Although justifiable, it is quite large compared to the 'human' figures on the same panel, so possibly a fighting stick/pole.	Trezise 1971: 54, Pl. 9: 22
area, Cape York Peninsula	Motif described as a silhouette of an elongated oval—could be a coolamon or a representation of a large rainforest shield; motif described as an elongated oval with internal grid pattern—could be a coolamon or a representation of a described rainforest shield.	Trezise 1971: 54, Pl. 9: 33, 35

coolamon or a representation of a decorated rainforest shield.

Reference

Site/region	Description - comments	Reference
Giant Horse Gallery, Laura area, Cape York Peninsula	Site C (2): Horizontal human figure described as a police trooper wearing shoes and holding reins after having been thrown from a nearby horse. Pointed stick motif identified as the rifle of the fallen police trooper, which could explain why it is perpendicular to the body and not parallel as normally represented. Potentially a digging or throwing stick.	Trezise 1971: 58, Pl. 11: 9, 10
	Motif described as a silhouette of a bichrome digging stick. Although justifiable, it is not pointed at both ends like most digging sticks, but it is rounded at one end and tapers to a point at the other end. Possibly representation of a club or potentially a sword.	Trezise 1971: 58, Pl. 11: 10
	Site C (4): Motif described as a bottle shape, potentially a short, broad sword with distinct handle. Adjacent to a woomera.	Trezise 1971: 63, Pl. 12: 17, 18
	Site C (5): Two sword-like motifs with distinct handles, described as phallic shapes.	Trezise 1971: 66, Pl. 13: 7, 8
Crocodile Gallery, Laura area, Cape York Peninsula	Site A (1): Police troopers with schematic representations of rifles. Crescents, potentially boomerangs, but one large example tapers towards one end that is adjacent to the hand of 'human' figure. Oval shield shapes. 'Human' figure with rayed head-dress that appears to be holding hooked club.	Trezise 1969: 148, 1971: 16, 19, Pl. 2
	Site A (2): Long pointed shape with small lateral projection at midpoint.	Trezise 1971: 20, Pl. 2-25
Emu Gallery Site B (1), Laura area, Cape York Peninsula	Police troopers with schematic representations of rifles. Barbed spear. Two stick-like motifs that could be weapons adjacent to hafted stone axe motifs.	Trezise 1971: 23–24, Pl. 3
Pig Gallery Site B (2), Laura area, Cape York Pen- insula	Police troopers with schematic representations of rifles. Woomera, boomerang and hafted stone axes. Male figure holding a shield. A large oval could be a shield. Oval shape with 2 dots near one end and dotted line down the centre identified as possibly a beetle but could be a rainforest shield with decoration. Very long stick identified as a schematic representation of a rifle, but direct association with nearby horizontal male figure not clear due to superimposition of other motifs. A long stick identified as a schematic representation of a police trooper, but the motif is positioned further along the arm than the usual representations, which are closer to the body. A stick motif identified as probably a rifle near the hand of a human figure that does not have the typical attributes of a police trooper.	Trezise 1971: 27–28, Pl. 4
Gugu-Yalanji,	Sites B (2), (3): Two elongated ovals with small end projections, one with interior lines, identified as	Trezise 1971: 78–79, Pl. 20:
Laura area, Cape York Peninsula	bark bone containers — could be representations of shields, one with decoration. Site B (5): Elongated motif with a round nob at the end of a narrow section joins a broader section that then narrows to a point at the other end, identified as a snake. Other representations of snakes in Laura's rock art have a narrow tail section but not the round nob. This motif is sword-like with a handle and a broad blade but has a pointed end.	19, 28 Trezise 1971: 78–79, Pl. 20: 19, 28
Ginger Creek Gal- leries Site A (1), Laura area, Cape York Peninsula	Large crescent motif with internal bars identified as a boomerang. One end is pointed whilst the other is rounded—it could be a representation of a fighting boomerang, pole or sword.	Trezise 1971: 80, Pl. 21: 58
Red Bluff Galleries, Laura	Site A (1): male figure holding aloft a knobbed stick; elongated oval shape with a short narrow protru- sion at one end identified as a yam—broadly sword-shaped.	Trezise 1971: 99, Pl. 23: 3, 4
area, Cape York Peninsula	Site A (3): vertically positioned pigment line that tapers to a point at one end identified as a digging stick, positioned under the arm of a large female figure; stencil of a spearthrower.	Trezise 1971: 100, Pl. 23: 72, 88
Mun Gin Creek Galleries Site A (1), Laura area, Cape York Pen- insula	Pigment images of a boomerang, 2 spearthrowers, 2 ovals (shields?), elongated oval (shield?); bottom half of a male figure with top half faded—one of the supposed curved arms, which now does not join the body, is very long and ends adjacent to the figure's foot; the figure could have been holding a large fighting boomerang/stick.	Trezise 1971: 103, Pl. 24: 23, 24, 26, 30, 32, 33, 34
Hann River Galleries, Laura area, Cape York	Site A (1): pigment representations of a bichrome shield shape, and 2 boomerangs, boomerang petro- glyph.	Trezise 1971: 107, Pl. 25: 6, 11, 12 Trezise 1971: 108, Pl. 25: 5,
Peninsula	Site B (1): petroglyphs of a cross (cross-boomerang?), 19 boomerangs and egg-shaped oval (shield?) associated with boomerangs.	9–17, 19–27, 29, 30
Various sites within the wet tropics near Cairns, northern Queensland	Painted and stencilled crescents/boomerangs, hooked stick/boomerang. Motif classified as barred ovals could represent decorated rainforest shields.	Buhrich 2017
Lamb Ranges near Cairns, northern	Painting sites with mostly figurative but some geometric motifs, including crescents/boomerangs, hooked stick/boomerang, spears and straight lines that could depict digging/clap sticks.	Buhrich 2017: Table 5.4; Clegg 1977: Figs 4–9 Buhrich 2017: Table 5.4, Fig
Queensland Mt Elliot National Park, near Towns- ville	A depiction of a decorated rainforest shield adjacent to a painting of a bird (cassowary). Paintings of shields with internal designs, boomerangs and stickmen holding boomerangs.	7.3 McCarthy 1979: 73

Site/region	Description - comments	Reference
Mount Claro, Seaview Ranges, between Cardwell and Townsville	Mount Claro II: Stencilled weapons including boomerangs, and what appear to be the end of a club and two wooden L-shaped clubs, similar to what is referred to as a <i>bendi</i> further south in the Rock- hampton area; A curved object with barred infill that could represent a decorated boomerang, club or throwing stick. Yellow/orange elongated ovals with dotted infill—broadly shield-like but identified as 'sugarbag' designs. Straight object probably a club or throwing stick, but is incomplete so potentially a fighting stick/pole.	Brayshaw 1990: 129, Pl. 8-5, Fig. 8-3; Lumholtz 1889: 332, figure on 334
	Mount Claro I and III: Barred oval motifs that resemble shield-like designs.	Brayshaw 1990: Fig. 8-8
Herveys Range, Townsville region	Turtle Rock: Pigment art dominated by shields; Herveys Range B and C, Clevedon, Thunderbolt Creek, Many Peaks A and Fanning River D have shield-like designs. Fanning River E has a long, thin, curved object with barred infill that could represent a decorated boomerang or a fighting stick/pole.	Brayshaw 1990: 129, Table 8-1, Pls 8-8, 8-9, Figs 8-4, 8-10, 8-11, 8-12, 8-14; Hatte 1992: Fig. 3 Brayshaw 1990: Fig. 8-13
Cerito E, inland from Bowen	Shield-like motifs referred to as oval-shaped grids.	Brayshaw 1990: 132, Table 8-1, Fig. 8-6
Dunk Island, near Cardwell, north- ern Queensland	Pigment art incorporates various figurative and non-figurative motifs, including ovoid and more elongated shapes with internal lines. An early recording refers to paintings of weapons and includes a sketch of six boomerangs.	Banfield 1908; Barker et al. 1997; Trezise and Wright 1966
	Drawings of ovoid shapes with internal lines resemble painted rainforest shields from the Townsville region. An elongated sword-like motif with a line across it towards one end adjacent to one of these possible shield images, but it is most probably a lathe-like spearthrower, not a rainforest sword.	Banfield 1908: 258, facing p. 255; Trezise and Wright 1966: Fig. 3

REFERENCES

- Aboriginal Australia 1981. *Exhibition catalogue*. Australian Gallery Directors Council Ltd, Sydney.
- BANFIELD, E. J. 1908. *The confessions of a beachcomber*. T. Fisher Unwin, London.
- BARKER, B., K. SALE and A. WATCHMAN 1997. Authentication of rock art in the Whitsunday Islands, Queensland, Australia. *Rock Art Research* 14(2): 113–123.
- BASEDOW, H. 1925. *The Australian Aboriginal*. F. W. Preece and Sons, Adelaide.
- BLACKMAN, L. G. 1904. Aboriginal wooden weapons of Australia: illustrative of the collection in the B. P. B. Museum. Occasional Papers of the Bernice Pauahi Bishop Museum of Polynesian Ethnology and Natural History 2(2): 33–51.
- BRANDL, E. 1977. Human stick figures in rock art. In P. J. Ucko (ed.), Form in Indigenous art: schematisation in the art of Aboriginal Australia and prehistoric Europe, pp. 220–242. Australian Institute of Aboriginal Studies, Canberra.
- BRANDL, E. 1982. Australian Aboriginal paintings in western and central Arnhem Land: temporal sequences and elements of style in Cadell River and Deaf Adder Creek art (2nd revd edn). Australian Institute of Aboriginal Studies, Canberra.
- BRAYSHAW, H. 1990. Well beaten paths: Aborigines of the Herbert/ Burdekin district, north Queensland: an ethnographic and archaeological study. Studies in North Queensland History Series 10, James Cook University, Townsville, Australia.
- BROUGH SMYTH, R. 1878. *The Aborigines of Victoria: with notes relating to the habits of the natives of other parts of Australia and Tasmania, Vol. 1,* compiled from various sources for the Government of Victoria. John Ferres, Melbourne.
- BUHRICH, A. 2017. Art and identity: Aboriginal rock art and dendroglyphs of Queensland's wet tropics. Unpubl. PhD thesis, James Cook University.
- BUHRICH, A., F. GOLDFINCH and S. GREER 2016. Connections, transactions and rock art within and beyond the wet tropics of north Queensland. *Memoirs of the Queensland Museum – Culture* 10: 23–42.
- CHALOUPKA, G. 1984. From palaeoart to casual paintings. Northern Territory Museum of Arts and Sciences Monograph

Series 1, Darwin.

- CHALOUPKA, G. 1993. Journey in time: the world's longest continuing art tradition. Reed, Chatswood.
- CHIPPINDALE, C. and P. S. C. TAÇON 1993. Two old painted panels from Kakadu: variations and sequence in Arnhem Land rock art. In J. A. Steinbring, A. Watchman, P. Faulstich and P. S. C. Taçon (eds), *Time and space: dating and spatial considerations in rock art research*, pp. 32–56. Occasional AURA Publication 8, Australian Rock Art Research Association, Melbourne.
- Clegg, J. K. 1977. A method of resolving problems which arise from style in art. In P. J. Ucko (ed.), *Form in Indigenous art: schematisation in the art of Aboriginal Australia and prehistoric Europe*, pp. 260–276. Australian Institute of Aboriginal Studies, Canberra.
- CLEGG, J. K. 1993. Gap Hills: a new simple figurative engraving site in western New South Wales. *Rock Art Research* 10(1): 55–58.
- CLEGG, J. K. 2002. Variability and information in rock art. In S. Ulm, C. Westcott, J. Reid, A. Ross, I. Lilley, J. Prangnell and L. Kirkwood (eds), *Barriers, borders, boundaries:* proceedings of the 2001 Australian Archaeological Association annual conference, pp. 101–108. Tempus 7, University of Queensland, Brisbane.
- COLE, N. 1995. Rock art in the Laura-Cooktown region, south-east Cape York Peninsula. In M. J. Morwood and D. R. Hobbs (eds), *Quinkan prehistory: the archaeology* of Aboriginal art in S.E. Cape York Peninsula, pp. 51–70. Tempus 3, St. Lucia: Anthropology Museum, University of Queensland.
- COLE, N. 2010. Painting the police: Aboriginal visual culture and identity in colonial Cape York Peninsula. *Australian Archaeology* 71(2): 17–28.
- COLE, N., C. MUSGRAVE, R. GEORGE, L. WALLIS and the Laura Indigenous Land and Sea Rangers 2024. Categorising catfish, jewfish and eel motifs in Laura (Quinkan) rock art, Cape York Peninsula, Australia. *Rock Art Research* 41(1): 28–40.
- COLES, R. and R. HUNTER 2010. *The ochre warriors: Peramangk culture and rock art in the Mount Lofty Ranges*. Axiom: Stepney, South Australia.

- COLLIVER, F. S. and F. P. WOOLSTON 1980. The rain forest sword and shield in Queensland. *Occasional Papers in Anthropology* 10: 63–93.
- CRAWFORD, I. M. 1964. The engravings of Depuch Island. In W. D. L. Ride and A. Neumann (eds), *Depuch Island. Special Publications of the West Australian Museum 2, pp* 23–63. Western Australian Museum, Perth.
- DALRYMPLE, G. E. 1865. On the establishment of a new settlement, Cardwell, in Rockingham Bay, and the discovery of a route over the coast range to the valley of lagoons. *Proceedings of the Royal Geographical Society of London*, 1865–1866 10(2): 33–34.
- DAVID, B., 2004. Rock-art and the experienced landscape: the emergence of late Holocene symbolism in northeast Australia. In C. Chippindale and G. Nash (eds) *The figured landscapes of rock-art: looking at pictures in place*, pp. 153–181. Cambridge University Press, Cambridge UK.
- DAVID, B. and D. CHANT 1995. Rock art and regionalisation in north Queensland prehistory. *Memoirs of the Queensland Museum* 37(2): 357–528.
- DAVIDSON, D. S. 1936a. Aboriginal Australian and Tasmanian rock carvings and paintings. *Memoirs of the American Philosophical Society, Philadelphia*. Vol. 5.
- DAVIDSON, D. S. 1936b. Australian throwing-sticks, throwing-clubs, and boomerangs. *American Anthropologist* New Series 38(1): 76–100.
- Davidson, D. S. 1936c. The spearthrower in Australia. Proceedings of the American Philosophical Society 76(4): 445–483.
- DAVIDSON, I., N. COOK, M. FISCHER, M. RIDGES, J. ROSS and S. SUTTON 2005. Archaeology in another country: exchange and symbols in north-west central Queensland. In I. Macfarlane, with M-J. Mountain and R. Paton (eds), Many exchanges: archaeology, history, community and the work of Isabel McBryde, pp. 101–128. Aboriginal History Inc., Canberra.
- Domingo Sanz, I. 2011. The rock art scenes at Injalak Hill: alternative visual records of Indigenous social organisation and cultural practices. *Australian Archaeology* 72(1): 15–22.
- ELKIN, A. P., 1949. The origin and interpretation of petroglyphs in south-east Australia. *Oceania* 20(2): 119–157.
- ETHERIDGE, R., 1894. On five interesting shields from northern Queensland, *Proceedings of the Linnaean Society*, N.S.W., 2nd Series 9(2): 506–517, Pls XXXIII–XXXVIII.
- ETHERIDGE, R., 1895. A highly ornate 'sword' from the Coburg Peninsula, north Australia, *The Journal of the Anthropological Institute of Great Britain and Ireland* 24: 427–430.
- FLINDERS, M. 1814 A voyage to Terra Australis Vol. 2 [facsimile edn, 1966]. G. and W. Nicol, London.
- FLOOD, J. 1987. Rock art of the Koolburra Plateau, north Queensland. *Rock Art Research* 4(2): 91–126.
- FLOOD, J. 1997. Rock art of the Dreamtime: images of ancient Australia. Harper Collins Publishers, Sydney.
- FRANKLIN, N. R. 1996. An analysis of rock engravings in the Mt Isa region, northwest Queensland. In P. Hiscock and P. Veth (eds), Archaeology of northern Australia, pp. 137–149. Tempus 4, Anthropology Museum, the University of Queensland.
- FRANKLIN, N. R. 2004. Explorations of variability in Australian prehistoric rock engravings. BAR International Series 1318. British Archaeological Reports, Oxford.
- FRANKLIN, N. R. 2007. Discontinuous Dreaming networks: analyses of variability in Australian prehistoric petroglyphs. *Rock Art Research* 24(1): 79–103.
- FRANKLIN, N. R. 2011. Rock art in South Australia: analyses of Panaramitee tradition engravings and paintings. *Journal*

of the Anthropological Society of South Australia 34: 56–89.

- FRANKLIN, N. R., M. GIORGI, P. J. HABGOOD, N. WRIGHT, J. GORRINGE, B. GORRINGE, B. GORRINGE and M. C. WEST-AWAY 2021. Gilparrka Almira, a rock art site in Mithaka Country, southwest Queensland: cultural connections, Dreaming tracks and trade routes. *Archaeology in Oceania* 56(3): 284–303.
- GEORGE, T., G. MUSGRAVE and the Ang-Gnarra Rangers, 1995. *Our country, our art, our Quinkans*. Ang-Gnarra Aboriginal Corporation, Laura.
- GUNN, R. G. 2011. Eastern Arrernte rock art and land tenure. Rock Art Research 28(2): 225–239.
- HALE, H. M. and N. TINDALE 1925. Observations on Aborigines of the Flinders Ranges, and records of rock carvings and paintings. *Records of the South Australian Museum* 3(1): 45–60.
- HALE, H. M. and N. TINDALE 1934. Aborigines of Princess Charlotte Bay, north Queensland Part 2. *Records of South Australian Museum* 5(2): 117–172.
- HALL, F. J., R. G. McGowAN and G. F. GULEKSEN 1951. Aboriginal rock carvings: a locality near Pimba, SA. *Records of the South Australian Museum* 9(4): 375–382.
- HARPER, S. 2015. Engraved material culture in a fluid landscape: looking at designs on shields, spearthrowers and boomerangs in the Port Hedland rock art repertoire. *The Artefact* 38: 41–52.
- HARPER, S. 2017. Inside the outline: understanding inclusive and exclusive identity in Marapikurrinya (Port Hedland) rock art. Unpubl. PhD thesis, The University of Western Australia; https://research-repository.uwa.edu.au/en/ publications/inside-the-outline-understanding-inclusive-and-exclusive-identity.
- HATTE, E. 1992 'Boring coastal stuff': rock images of the Townsville district, north Queensland. In McDonald, J. and I. P. Haskovec (eds), *State of the art: regional rock art studies in Australia and Melanesia*, pp.71–75. Occasional AURA Publication 6, Australian Rock Art Research Association, Melbourne.
- HAYWARD, J. A. 2015. The broad spearthrower in Arnhem Land rock art: a reassessment of the 'broad spearthrower period'. *The Artefact* 38: 27–40.
- HAYWARD, J. A. 2016. A mutual correspondence? Comparing the rock art of west Arnhem Land with the South Australian Museum's Australian Aboriginal material culture collection. *Journal of the Anthropological Society of South Australia* 40: 1–34.
- HAYWARD, J. A. 2017. The agency of artefacts: socio-ideological functionality and the long-necked spearthrowers of Mirarr Country, northern Australia. In B. David, P. Taçon, J.-J. Delannoy and J.-M. Geneste (eds), *The Archaeology of rock art in western Arnhem Land, Australia*, pp.69–85. Terra Australis 47. Australian National University Press, Canberra.
- HAYWARD, J. A. 2020. Two rare shield depictions from the Burrungkuy rock art region of western Arnhem Land, Australia. Australian Archaeology 86(3): 253–263.
- Hiscock, P. 2008. Archaeology of ancient Australia. Routledge, London.
- HORNE, G. and G. AISTON 1924. *Savage life in central Australia*. Macmillan and Co. Limited, London.
- HORTON, D. 1994. *The encyclopaedia of Aboriginal Australia: Aboriginal and Torres Strait Islander history, society and culture* (general editor). Aboriginal Studies Press for the Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra.
- HOWITT, A. W. 1878. Notes on the Aborigines of Cooper's

116

Creek. Appendix D. In R. Brough Smyth, 1878b, *The Aborigines of Victoria: with notes relating to the habits of the natives of other parts of Australia and Tasmania* Vol. II. Compiled from various sources for the Government of Victoria, pp. 300–309. John Ferres, Melbourne.

- HowITT, A. W. 1904. *The native tribes of south-east Australia*. Macmillan, London.
- JONES, P. 2004. *Boomerang: behind an Australian icon*. Wakefield Press, Kent Town, South Australia.
- JONES, T. and S. K. MAY 2015. Rock art and ritual function: the northern running figures of western Arnhem Land. *The Artefact* 38: 53–66.
- KERKHOVE, R. 2023. *How they fought: indigenous tactics and weaponry of Australia's frontier wars.* Boolarong Press, Tingalpa, Queensland.
- KERWIN, D. 2010. Aboriginal Dreaming paths and trading routes: the colonisation of the Australian economic landscape. Sussex Academic Press, Brighton, England.
- KHAN, K. 1993. Catalogue of the Roth collection of Aboriginal artefacts from north Queensland, Vol. 1. Items collected from Archer River, Atherton, Bathurst Head, Bloomfield River and Butcher's Hill, 1897–1901. *Technical Reports of the Australian Museum* 10: 1–205.
- KOOLMATRIE, J. 2018. Rock art and Yura Malka: a study on the relevance of archaeological rock art practices and theories from Adnyamathanha perspectives. Unpubl. MA thesis, Flinders University; https://flex.flinders. edu.au/file/597b4e5c-ab88-4145-bbb4-956f2be853fb/1/ ThesisKoolmatrie2019OA.pdf.
- LAYTON, R. 1992. *Australian rock art: a new synthesis*. Cambridge University Press, Cambridge, England.
- LE SOUËF, A. C. 1878. Appendix C: Notes on the Natives of Australia. In R. Brough Smyth 1938b, *The Aborigines of Victoria: with notes relating to the habits of the natives of other parts of Australia and Tasmania, Vol. 2. Compiled from various sources for the Government of Victoria.* pp. 289–99. John Ferres, Melbourne.
- LEWIS, D. 1988. *The rock paintings of Arnhem Land, Australia.* BAR International Series 415. British Archaeological Reports, Oxford.
- LEWIS, D. and D. ROSE 1995. *The shape of the Dreaming: the cultural significance of Victoria River rock art*. Aboriginal Studies Press, Australian Institute of Aboriginal Studies, Canberra.
- LING ROTH, H. 1908. *The discovery and settlement of Port Mackay, Queensland*. F. King & Sons, Ltd, Halifax, England.
- LUMHOLTZ, C. 1889. Among cannibals: an account of four years' travels in Australia and of camp life with the Aborigines of Queensland. Charles Scribner's Sons, New York.
- MAY, S. K. and I. DOMINGO SANZ 2010. Making sense of scenes. *Rock Art Research* 27(1): 35–42.
- MAY, S. K. and T. JONES 2015. Current themes in the study of material culture in the rock art of northern Australia. *The Artefact* 38: 3–7.
- MCBRYDE, I. 1987. Goods from another country: exchange networks and the people of the Lake Eyre Basin. In D. J. Mulvaney, and J. P. White (eds), *Australians to 1788*, pp. 252–73. Fairfax, Syme & Weldon Associates, Broadway N.S.W., Australia.
- MCBRYDE, I. 1997. The cultural landscapes of Aboriginal long-distance exchange systems: can they be confined within our heritage registers? *Historic Environment* 13: 6–14.
- McCARTHY, F. D. 1939a. 'Trade' in Aboriginal Australia and 'trade' relationships with Torres Strait, New Guinea and Malaya. *Oceania* 10(1): 80–104.

- McCARTHY, F. D. 1939b. 'Trade' in Aboriginal Australia and 'trade' relationships with Torres Strait, New Guinea and Malaya. *Oceania* 9(4): 405–438.
- McCARTHY, F. D. 1939c. 'Trade' in Aboriginal Australia and 'trade' relationships with Torres Strait, New Guinea and Malaya. *Oceania* 10(2): 171–195.
- McCARTHY, F. D. 1955. Notes on the cave paintings of Groote and Chasm Islands in the Gulf of Carpentaria. *Mankind* 5(2): 68–75.
- McCARTHY, F. D. 1960. The cave paintings of Groote Eylandt and Chasm Island. In C. P. Mountford (ed), *Records of the American-Australian Scientific Expedition to Arnhem Land. Vol. 2, anthropology and nutrition,* pp. 297–414. Melbourne University Press, Melbourne.
- McCARTHY, F. D. 1961. The rock engravings of Depuch Island, north-west Australia. *Records of the Australian Museum* 25(8): 121–148.
- McCARTHY, F. D. 1962a. The rock engravings at Port Hedland, northwestern Australia. *Kroeber Anthropological Society Papers* 26: 1–73.
- McCARTHY, F. D. 1962b. *Australian Aboriginal rock art*, 2nd edn. The Australian Museum, Sydney.
- McCARTHY, F. D. 1976. Rock art of the Cobar pediplain in central western New South Wales. Australian Aboriginal Studies Research and Regional Studies 7, Australian Institute of Aboriginal Studies, Canberra.
- McCARTHY, F. D. 1979. *Australian Aboriginal rock art*, 4th edn. The Australian Museum, Sydney.
- McCARTHY, F. D. and N. W. G. MACINTOSH 1962. The archaeology of Mootwingee, western New South Wales. *Records* of the Australian Museum 25(13): 249–298.
- McConnel, U. H. 1935. Inspiration and design in Aboriginal art. *Art in Australia* 59: 49–68.
- McDonald, J. and S. HARPER 2016. Identity signalling in shields: how coastal hunter-gatherers use rock art and material culture in arid and temperate Australia. *Australian Archaeology* 82(2): 123–138.
- McGregor, R. and M. FUARY 2016. Walter Edmund Roth: ethnographic collector and Aboriginal protector. *Memoirs* of the Queensland Museum – Culture 10: 43–58.
- MESTON, A. 1898. A fragment of a description of a bora at Mt. Milbirraman. *Science of Man* 1(1): 10–1.
- MITCHEL, S. R. 1941. A scenic wonderland. *The Victorian Naturalist* 57(2): 195–198.
- Мокрну, H. 1981. The art of northern Australia. In *Aboriginal Australia* (exhibition catalogue), pp. 53–65. Australian Gallery Directors Council Ltd., Sydney.
- MORWOOD, M. J. 1976. Three rock art sites in central Queensland. *Occasional Papers in Anthropology* 6: 84–96. Anthropology Museum, University of Queensland.
- MORWOOD, M. J. 1985. Facts and figures: notes on rock art in the Mt Isa area, northwestern Queensland. *Rock Art Research* 2(2): 140–145.
- MORWOOD, M. J. 2002. Visions from the past: the archaeology of Australian Aboriginal art. Allen and Unwin, Sydney.
- MOUNTFORD, C. P. and R. EDWARDS 1964. Rock engravings in the Red Gorge, Deception Creek, northern South Australia. *Anthropos* 59(5/6): 849–859.
- MULVANEY, D. J. 1976. 'The chain of connection': the material evidence. In N. Peterson (ed.), *Tribes and boundaries in Australia*, pp. 72–94. Australian Institute of Aboriginal Studies, Canberra.
- MUNN, N. D. 1966. Visual categories: an approach to the study of representational systems. *American Anthropologist* 68: 936–950.
- PALMER, K. 1977. Myth, ritual and rock art. Archaeology and

Physical Anthropology in Oceania 12(1): 38–50.

- PATERSON, A. 2022. Keeping contact. *Australian Archaeology* 88(1): 104–105.
- ROBERTS, D. A. and A. PARKER 2003. Ancient ochres: The Aboriginal rock paintings of Mount Borradaile. J.B. Books, Marleston, South Australia.
- Rose, F. 1942. Paintings of the Groote Eylandt Aborigines. Oceania 13(2): 170–176.
- ROTH, W. E. 1897. *Ethnological studies among the north-westcentral Queensland Aborigines*. Queensland Government Printer, Brisbane.
- Rott, W. E. 1903. Games, sports and amusements of the northern Queensland Aboriginals. In A. Morton (ed.), *Report of the ninth meeting of the Australasian Association for the Advancement of Science held at Hobart, Tasmania,* 1902, pp. 485–520. Government Printer, Hobart.
- Roтн, W. E. 1909. North Queensland ethnography. Bulletin No. 13. Fighting weapons. *Records of the Australian Museum* 7(4): 189–211, Pls. LVIII–LXI.
- Roth, W. E. 1910. North Queensland ethnography. Bulletin No. 14. Transport and trade. *Records of the Australian Museum* 8(1): 1–19, Pls. I–VII.
- SMITH, B. 1985. The first European depictions. In I. Donaldson and T. Donaldson (eds) *Seeing the first Australians*, pp. 21–34. George Allen & Unwin, Sydney.
- SMITH, M. 2013. The archaeology of Australia's deserts. Cambridge University Press, Cambridge.
- SPENCER, B. 1915. *Guide to the Australian ethnological collections in the National Museum of Victoria*. Printed for the Trustees of the Public Library, Museums, and National Gallery of Victoria by D. W. Paterson Co. Pty. Ltd., Melbourne.
- SPENCER, B. and F. J. GILLEN 1899. Native tribes of central Australia. MacMillan, London.
- SPENCER, B. and F. J. GILLEN 1912. Across Australia Vols. 1–2. MacMillan, London.
- TAÇON, P. 1994. Socialising landscapes: the long-term implications of signs, symbols and marks on the land. *Archaeology in Oceania* 29(3): 117–129.
- TAÇON, P. and C. CHIPPINDALE 1994. Australia's ancient warriors: changing depictions of fighting in the rock art of Arnhem Land, N.T. Cambridge Archaeological Journal 4(2): 211–248.
- TAÇON, P., S. THOMPSON, K. GREENWOOD, A. JALANDONI, M. WILLIAMS and M. Kottermairf 2022. Marra Wonga: archaeological and contemporary First Nations interpretations of one of central Queensland's largest rock art sites. *Australian Archaeology* 88(2): 159–179.
- TINDALE, N. B. 1987. Kariara views on some rock engravings at Port Hedland, Western Australia. *Records of the South*

Australian Museum 21(1): 43–59.

- TRAVERS, M. and J. Ross 2015. The shifting function of artefacts in Australia's northwest Kimberley rock art assemblage. *The Artefact* 38: 8–26.
- TREZISE, P. J. 1969. Quinkan Country. Adventures in search of Aboriginal cave paintings in Cape York. A. H. & A. W. Reed, Sydney.
- TREZISE, P. J. 1971. *Rock art of southeast Cape York*. Australian Institute of Aboriginal Studies, Canberra.
- TREZISE, P. J. 1985. Crocodile 1 Gallery, Laura. Rock Art Research 2(1):74–77.
- TREZISE, P. J. and R. S. V. WRIGHT 1966. The durability of rock-paintings on Dunk Island, northern Queensland. *Mankind* 6(7): 320–4.
- VINNICOMBE, P. 1976. *People of the eland: rock paintings of the Drakensberg Bushmen as a reflection of their life and thought.* University of Natal Press, Pietermaritzburg (republished 2009, Wits University Press, Johannesburg).
- WADE, V., L. A. WALLIS and the Woolgar Valley Aboriginal Corporation 2011. Style, space and social interaction: an archaeological investigation of rock art in inland north Queensland, Australia. *Australian Archaeology* 72(1): 23–34.
- WALSH, G. 1988. *Australia's greatest rock art*. E. J. Brill-Robert Brown and Ass., Bathurst.
- WELCH, D. M. 1996. Material culture in Kimberley rock art, Australia. Rock Art Research 13(2): 104–123.
- WELCH, D. M. 1997 Fight or dance? Ceremony and the spearthrower in northern Australian rock art. *Rock Art Research* 14(2): 88–112.
- WELCH, D. M. 2007. Bradshaw art of the Kimberley. In M. Donaldson and K. Kenneally (eds), *Rock art of the Kimberley*, pp. 81–100. Kimberley Society, Perth.
- WESLEY, D. 2013. Firearms in rock art of Arnhem Land, Northern Territory, Australia. *Rock Art Research* 30(2): 235–247.
- WESLEY, D., T. JONES and R. WHITAU 2017. People and fish: late Holocene rock art at Wulk Lagoon, Arnhem Land. In B. David, P. S. C. Taçon, J.-J. Delannoy and J.-M. Geneste (eds), *The archaeology of rock art in western Arnhem Land, Australia*, pp. 21–49. Terra Australis 47, Australian National University Press, Canberra.
- WESTAWAY, M., D. WILLIAMS, R. WRIGHT, R. WOOD, J. OLLEY, J. SWIFT, S. MARTIN, J. KEMP, R. ROLTON and W. BATES 2016. The death of Kaakutja: a case of peri-mortem weapon trauma in an Aboriginal man from north-western New South Wales, Australia. *Antiquity* 90(353): 1318–1333.

RAR 42-1459

118