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ABSTRACT

Archaeologists have a longstanding interest in cross-cultural engagements between Indigenous people and Others, especially in settler colonial nations. In Australia, much archaeological attention has been directed to how such engagements are reflected in rock art, particularly in respect of colonial period seafaring activities and non-Indigenous watercraft technologies. Scholars have written extensively about depictions of foreign watercraft in Arnhem Land (Northern Territory, NT), and to a lesser extent Groote Eylandt in the Gulf of Carpentaria (NT), and the Kimberley and Pilbara regions of Western Australia, but have largely overlooked this topic in the northeast of the continent. Here we describe non-Indigenous watercraft motifs from mainland southeast Cape York Peninsula, Queensland. The majority of the motifs identifiable to a specific type represent coastal vessels dating to the late nineteenth and early twentieth centuries. This was the period when *bêche-de-mer*, pearl shell and trochus boats were locally commonplace and largely operated by Indigenous crew, who we argue were probably the creators of the rock art. Given the likely time period and subject matter, we suggest that artists in this region incorporated non-Indigenous watercraft into their artistic traditions once these items had become core elements of their Indigenous worlds. Rather than conveying a sense of strangeness associated with outsiders, the images convey core ideas of the self, as well as encoding new experiences.

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Cross-cultural engagements; *bêche-de-mer* industry; trepang industry; trochus shell industry; coastal vessels; Bama; sandstone rockshelters

Introduction

Ever since researchers brought attention to the history of Makassan seafarers visiting northern Australia (e.g. Berndt and Berndt 1947; Key 1969; Macknight 1969a, 1969b, 1972, 1976; Walker and Zorc 2011; Worsley 1955) there has been interest in how Aboriginal peoples interacted with outsiders, including via depictions of non-Indigenous watercraft in rock art. The regional focus for this external contact has emphasised Arnhem Land in the Northern Territory (NT) (e.g. Burningham 1994, 2000; Chaloupka 1996, 2010; Clarke 2000; Clarke and Frederick 2006; de Ruyter et al. 2023, 2025; May et al. 2013a, 2013b; Roberts 2004; Taçon 2012; Taçon and May 2013; Taçon et al. 2010; Turner 1973; Wesley and Viney 2022; Wesley et al. 2012), across

to the Kimberley in Western Australia (WA) (e.g. Balme and O'Connor 2015; Bigourdan 2013; Bigourdan and McCarthy 2007; O'Connor and Arrow 2008; Ross and Travers 2013), and south to the Pilbara (e.g. Paterson and van Duivenvoorde 2013; Paterson and Wilson 2009; Paterson et al. 2020). Artists creating watercraft-related rock art in the NT and WA were clearly selective in the vessels and structural details they represented, with their known paintings ranging from simplistic outlines to intricate, realistic portrayals using perspective. Some motifs display sufficient distinctive features to enable classification of vessel types and, in rare instances, identification of a named ship, leading to suggestions that some artists possessed intimate knowledge of vessels through first-hand experience.

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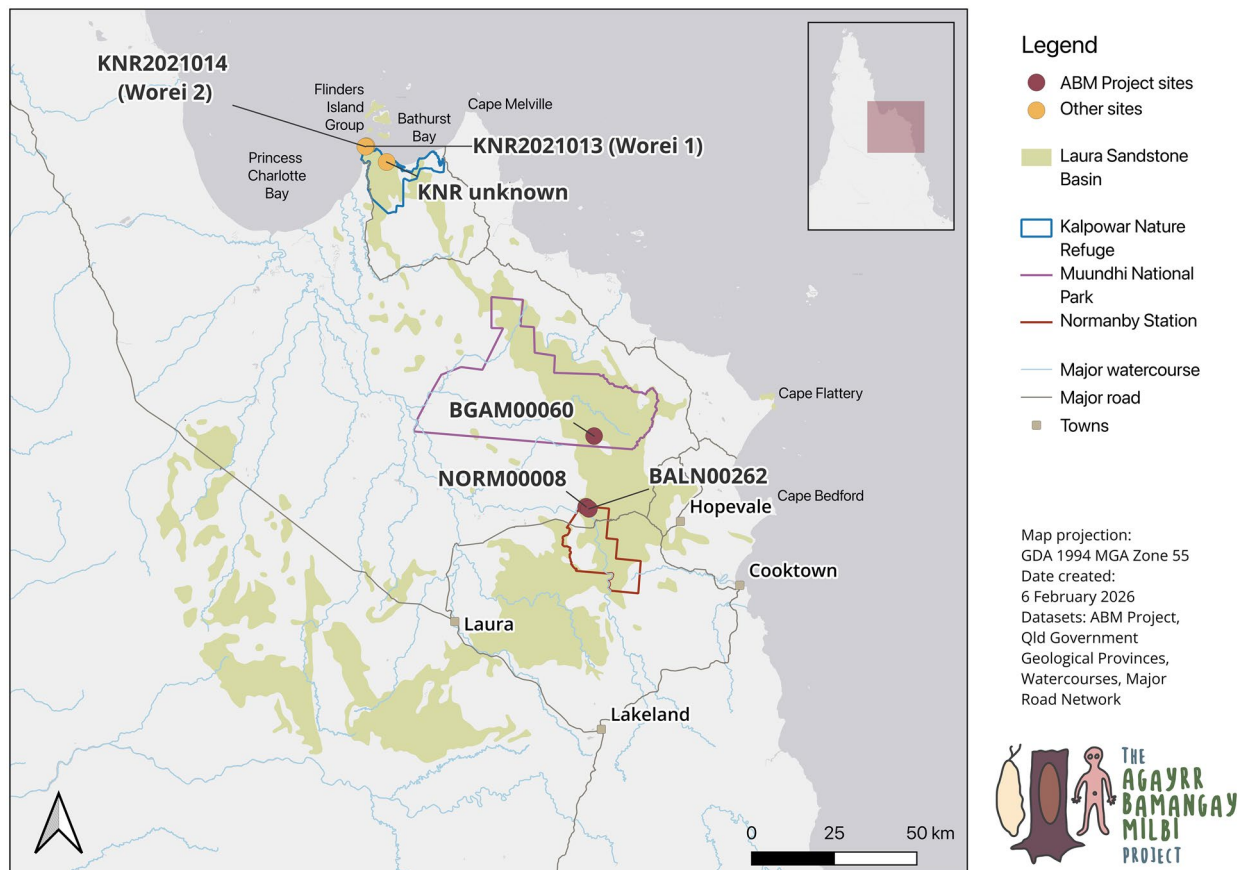


Figure 1. Key places and sites mentioned in the text.

While researchers have gained valuable insights into foreign watercraft depictions in Arnhem Land and WA, they have yet to uncover similar knowledge in northeastern Australia. Despite several centuries of exposure to non-Indigenous watercraft and common depictions of local double outrigger canoes and other maritime themes in the Torres Strait Islands, Brady and McNiven (2022; see also Brady 2005) noted a conspicuous *absence*, in fact, of European watercraft in local rock art. They argued this omission was by deliberate choice, with European watercraft understood ontologically as ‘a cosmological dimension of marine voyaging by Indigenous ghosts of the dead’ (Brady and McNiven 2022:111). By the time local artists had come to understand and accommodate newcomers as living persons ‘the tradition of rock-art production had all but ceased’ (Brady and McNiven 2022:112). In a broader study questioning the absence of introduced subject matter resulting from Makassan and colonial encounters in the rock art on Yanyuwa Country in the Gulf of Carpentaria, Brady et al. (2024) similarly reconfigured absence to be an active strategy of Indigenous presence rather than a result of taphonomy or evidence for historical absence. In arguing that archaeologists need to reposition rock art as only one particular (and fractional) form through which Indigenous ontology and epistemology are expressed,

they reconceptualised absence to be ‘a political statement in and of itself’ that encodes other ways of understanding and experiencing the world, especially ones that are non-human centred (Brady et al. 2024:295).

Like elsewhere in Australia, southeast Cape York Peninsula (CYP) has a long history of cross-cultural encounters, and from the early nineteenth century Western visitors had been aware of the presence of European watercraft depictions in the region’s rock art (e.g. Coppinger 1883; King 1827a). Yet there has been little specific research on such motifs or what they might reveal about the nature of local cross-cultural interactions. To address this gap, we describe newly identified European-style watercraft motifs from mainland southeast CYP, recorded primarily as part of the Agayrr Bamangay Milbi (ABM) Project, and compare these with a small selection of other recorded European watercraft motifs in the vicinity that had not previously been subjected to detailed analysis (Figure 1).¹ ABM Project Traditional Owner partners include: the Balnggarawarra and

¹We note that there are other watercraft motifs in southeast CYP, such as those on the islands of the Flinders Group (Arnold et al. 2025) and at Bustard Park 7 not far from Hopevale (Edwards 2007 and Trezise 1971), as well as slightly south at Mount Pieter Botte (Buhrich 2017).

Melsonby Rangers, and the Normanby Land Management team, who have cultural responsibilities for Normanby Station; the Cape Melville, Flinders and Howick Islands Aboriginal Corporation (many members of which are strongly connected to the Kalpowar Nature Refuge); and the Buubu Gujin Aboriginal Corporation, who own Muundhi National Park, jointly managed with the Queensland Parks and Wildlife Service (QPWS).

Given that most Aboriginal rock paintings of watercraft in northern Australia are of European or Indonesian origin (Taçon 2012), and that Makassan fishermen did not voyage to the east coast of CYP (see below), it is unsurprising that our dataset solely depicts European style watercraft. Further, as later indicated, the boats are primarily of the type regularly used in north Queensland's commercial fishing industries that engulfed Aboriginal people of the study area from the 1880s. By identifying, characterising and contextualising these culturally and historically significant images we search for insights into cross-cultural interactions, following approaches in global 'contact' rock art research (Goldhahn and May 2018). First, we broadly outline the historical trajectory of cross-cultural encounter in southeast CYP to situate the types of European watercraft most prevalent in the region. Just as other researchers have identified degrees of detail and realism in images of non-Indigenous watercraft as indicators of the artists' long-term knowledge of, and familiarity with, colonial marine industries (Frieman and May 2020; May et al. 2013a; O'Connor and Arrow 2008; Roberts 2004), we also analyse the southeast CYP motifs for evidence of such detail and immersion. This connects with the general aim of studying these motifs as expressions of Indigenous world views amidst contact era cross-cultural interactions (see Brady et al. 2022; Clarke and Frederick 2006; Frieman and May 2020; Paterson and van Duivenvoorde 2013 for such studies elsewhere in Australia). We are particularly interested in questions of interaction and identity—were the boats created to emphasise the presence of otherness or foreignness, a 'weighty assumption' often applied to rock art (Brady et al. 2024), or do the images instead convey ideas of the self, borne of familiar experiences that were enmeshed in culture and therefore subsequently storied into Country (Roberts 2004)?

Maritime exploration and industries of CYP (1606–1930s)

The local history of non-Indigenous voyages in CYP waters began in the early 1600s, with several Dutch explorations along the west coast of CYP and/or

Torres Strait (Collingridge 1906; Heeres 1899; Mutch 1942; Robert 1973; van Dijk 1859:33–50). Interestingly, Jan Carstenzoon, captain of the Dutch yacht *Pera*, observed in 1623 that Aboriginal people on the west coast of CYP did 'not use any form of watercraft, whether large or small' (van Dijk 1859:42). In contrast, on the east coast, Haddon and Hornell (1937:179) advised that double outrigger canoes were used as far south as Princess Charlotte Bay, with single outrigger use extending even further south to Hinchinbrook Island (see also Rowland 1987).

Nearly 150 years after these Dutch visits, James Cook and the crew of His Majesty's Bark (H.M.B.) *Endeavour* came ashore on the east coast of CYP at Endeavour River (now Cooktown, in the heart of Guugu-Yimithirr territory), in order to repair their ship, having run aground on a reef near Cape Tribulation on 10 June 1770. The 368-ton *Endeavour* was a Whitby collier, or a 'cat-built' wooden bark—a ship type known for its sturdy construction, with a broad, flat bow and square stern. It had a long, box-like hull with nearly upright sides, and its flat floors created a flat-bottomed hull with a wide beam, which made it a slow yet steady sailing vessel (MacArthur 1997:31). During their seven week stay, Cook and the crew of the *Endeavour* had mixed interactions with Guugu-Yimithirr people, ranging from face-to-face conflict over the outsiders' theft of sea turtles, to a tense retaliation and a later act of conciliation by a senior Guugu-Yimithirr man (see Woolston 1970).

While the ships used by the earliest Western explorers were typically large sailing vessels, the tedious charting of a passage inside the Great Barrier Reef after 1815 (Gill and Lieut. Charles Jeffreys 1979) demanded slower transits using smaller vessels. These visits afforded Aboriginal people ample time to observe and become generally familiar with such craft, albeit often from afar rather than through direct inspection. Of particular note in this regard was Philip Parker King's (1827a, 1827b) surveys of the southeast CYP coast in 1819, 1820 and 1821, commanding the cutter *Mermaid* for the first two voyages and then the sloop *Bathurst* for the final one, sometimes accompanied by other smaller vessels. On King's 1821 journey he observed Aboriginal people in canoes between Cape Flattery and Cape Melville, and on the mainland at Bathurst Bay, although mutual apprehension and lack of a common language precluded positive interactions occurring when the two groups met directly (King 1827b:16–17).

King's and others' charting transits opened the east coast to regular shipping. Smaller, more versatile coastal trading vessels consequently became more



Figure 2. Bêche-de-mer luggers at Cooktown, c. 1906 (photo: State Library of Queensland, Negative no. 19303).

commonplace as the inner passage (paralleling the mainland coastline) slowly began to emerge as an essential transportation route (van Duivenvoorde et al. 2023), with the ports of Cardwell (to the south) and Somerset (at the tip of CYP) both being established in 1864. Many of the wooden vessels operating locally in the second half of the nineteenth century were colonial-built traders, including cutters, ketches and schooners. Steamships also began servicing north Queensland ports after 1864, with the major period of steamship services lasting from the 1880s until the 1920s (Davies 1937; Pearson 2013).

This situation changed dramatically with the announcement of a payable gold field on the Palmer River (about 200 km southwest of Cooktown) in 1873 (Hann 1873; Mulligan 1875). In October of that year the Northeast Coast Expedition under George Elphinstone Dalrymple arrived at the Endeavour River aboard the chartered cutters *Flying Fish* and *Coquette*. The iron paddle steamer *Leichardt*, carrying the first government expedition to the goldfields, arrived shortly thereafter (Tompson 1873). With a lively township and major port established at Cooktown, southeast CYP consequently became a key northern destination in its own right. However, fierce regional Aboriginal resistance to the invasion, and brutal attacks by the Native Mounted Police, resulted in a protracted frontier war across the region that lasted until at least the 1880s, fundamentally altering the lifestyles, seasonal rounds and

occupation patterns of local *Bama*² (Burke and Wallis 2019; Cole 2004, 2010, 2016a, 2016b, 2022; Loos 1982).

Evidence for Makassan presence associated with the bêche-de-mer trade is absent in CYP, where colonial entrepreneurs, mostly Sydney-based, dominated the industry (Chester 1880; Ganter 1994; Griffin 1885; McPhee 2001; Pohlner 2016:193–194). Bêche-de-mer fishing boats and stations were operating on the Great Barrier Reef as early as the 1840s, with large scale operations commencing in the 1860s (Mullins 1992), becoming centred on Cooktown as the headquarters after 1874 (Bolton 1972:76); by 1889 27 bêche-de-mer boats (chiefly ketches and smaller luggers) were based out of this flourishing port (Loos 1982:118) (Figure 2). Each bêche-de-mer vessel carried a predominantly European captain and crew of four. Alongside those men were 12–15 *Bama* who were responsible for harvesting, preparation and curing the delicacy.

Deep sea pearling became dominant in the waters of Torres Strait after the 1860s but was not suited to the comparatively shallow waters of the Barrier Reef, where small-scale trochus fishing took precedence, the latter eventually extending as far south as

²The general term used for Indigenous people across southeast CYP. In their glossary, Haviland and Hart (1998:191) noted that *Bama* is a Guugu-Yimithir word for an Aboriginal person.

Princess Charlotte Bay (Haysom 1999:31). Cooktown was marginal to the trochus trade, with only a small number of operators making it their base, although larger numbers of 'pearling' vessels regularly called into its port (Stephens 1970:28) and the industry was active in the vicinity of Cape Melville in 1899 (Douglas 1899). Similarly to the bêche-de-mer trade, each predominantly European-captained pearl shell vessel had numerous support dinghies, with 40–50 *Bama* who served as divers and shell cleaners. Following a decline in the Queensland pearl shell fishery, by the 1920s many boats and crew had turned their attention to trochus and bêche-de-mer fishing instead (Ganter n.d.). The trochus/pearl shell industry involved barques, ketches and schooners acting as a 'mother ship' or tethering vessel (Allbrook 2022:84; Griffin 1885; Kerr 1993:231; Mullins 1992:69–70).

The lucriveness of bêche-de-mer, pearl shell and trochus fishing depended largely on entrepreneurs ruthlessly keeping costs low by systematically exploiting a disempowered and virtually unwaged *Bama* workforce (e.g. Chester 1871; Haviland and Hart 1998; Loos 1982; Meston 1896; Mullins 1992; Sutton 2005). Locally, so-called 'recruiters' of *Bama* crew were known to be operating at Cape Melville from the 1880s (Loos 1982), but this practice probably pre-dated this period. 'Recruitment' often involved the kidnapping of *Bama* men and women, alongside other acts of violence and oppression. Despite a government-commissioned report recommending the 'absolute prohibition of all Aboriginal labour on pearl-shell, bêche-de-mer and tortoise-shell fishing boats under any conditions whatever' (Meston 1896:13), exploitation of *Bama* labour on commercial fishing boats persisted, particularly north of Cape Bedford (Ganter n.d.; Thomson as cited in Sutton 2005:148).

The impacts of these industries on Aboriginal social life and fabric were widespread. When anthropologists Herbert Hale and Norman Tindale undertook research around Princess Charlotte Bay in 1927, the 'natives of several tribes visited' (Hale and Tindale 1933:63), but by then the *Bama* population had declined drastically compared to the number of residents photographed by Walter Roth at Cape Melville in 1899 (Sutton 2016:92). Hale and Tindale (1933:85) specifically attributed this decline to the impacts of the commercial fishing industry:

The advent of the pearling and trepang fisheries on the Great Barrier Reef, and the consequent employment of the majority of the younger men as divers and hands on the boats struck a deep blow at the whole social fabric of the coastal natives. The older people, deprived of their food-gatherers, and

ravaged by introduced epidemic diseases, are dying out rapidly, while the prolonged absences of the potential fathers of the coming generation has no doubt assisted in reducing the birth rate almost to vanishing point.

Recruitment of *Bama* labour for the fishing industries became regulated from 1928 onwards, with workers henceforth required to be sourced from missions and reserves. Missions themselves afforded an alternative mode of *Bama* interaction with maritime industries, although these relationships were not unproblematic owing to the isolation and regimentation of mission life (Ganter n.d.; Haviland and Haviland 2011). The Elim Lutheran mission (established at Cape Bedford in 1886 and later moved inland to Hope Valley, now Hopevale) relied heavily on watercraft for transportation, provisioning and industry, operating at least six vessels between 1886 and 1942 (Pohlner 2016). The vessels *Killarney* (type unknown), *Fairy Queen* (cutter) and *Kiora* (cutter) were used to transport individuals and supplies between the mission and Cooktown. In 1914 the mission purchased the motorised cutter *Hiawatha*, and in the 1920s the ketches *Pearl Queen* (Figure 3) and *Spray*, to support a successful bêche-de-mer venture (Loos 1982:134; McIvor 2010; Pohlner 2016:194–195), although Evans (1972:31) claimed that the mission's returns on bêche-de-mer and trochus fishing on the reefs were 'meagre'. As Pohlner (2016:104) noted, the *Bama* who crewed and ran these vessels, 'traversed the seas, getting experience, handling the boats ... and became sea captains in their own right'.

Shipwrecks

Ships wrecked close to shore provide alternative opportunities for Indigenous people to observe vessels safely and at leisure. They further provided possibilities for salvage, particularly for high value material such as iron (Wallis et al. 2024b:27). Following its introduction, iron quickly came to be valued by *Bama* in southeast CYP, as indicated in King's (1827a) entry for 30 June 1819, which describes 12 men from the Endeavour River 'repeatedly (making) signs for hatchets'.

Nearly 50 years later, Archibald MacMillan, Government Roads Engineer and one of the contingent who disembarked from the *Leichardt* in 1873, noted that the spears of Guugu-Yimithirr people 'and many of their other tools are made of steel, principally socket chisels and other such things, that they must have got from wrecks, and which they kept in a wonderfully efficient state of sharpness and have fitted to the handles in a very neat and artistic



Figure 3. The Hopevale Mission ketch, *Pearl Queen*, under sail, with two deck structures and towing a dinghy (photo: State Library of Queensland, Schwarz Hopevale Mission Photograph Album, Album 3).

manner' (Anon 1874:4). A small group of travellers along the coast north of Cooktown in 1876 reported 'discovering dozens of wrecks along the beach, one vessel of 400 tons which had broken up, and everything stripped by the blacks' (Anon 1876). The only documented record of salvage is associated with the earliest known shipwreck in the region, the 210-ton wooden vessel *Frederick*, wrecked in Princess Charlotte Bay in 1818 (King 1825). One year later King (1825:14, July 1819) noted that,

... the miz[z]en mast and main topmast had been cut away, and there were a few marks of the axe upon her mainmast. The natives appeared to have taken notice of the ironwork, for some spike nails were found about their fireplaces; these traces, however, were not very recent.

The Australasian Underwater Cultural Heritage Database lists 72 known wrecking events between 1818 and 1910 along the coast and islands of southeast CYP from Princess Charlotte Bay to Cape Tribulation, most of which (other than *Frederick*) took place post-1865 (see also Loney 1993). Cyclones were a frequent cause of wrecking, with the particularly devastating Cyclone Mahina in March 1899 resulting in the loss of ~55 vessels from the pearl shell fleet in Bathurst Bay (Anon 1899; Townsend 2020). *Bama* therefore had multiple opportunities to observe and interact with non-Indigenous watercraft in southeast CYP before Europeans arrived en masse post-1874, after which time cross-cultural interactions intensified

and transformed. The following sections explore how such vessels have been represented in local rock art assemblages and what this might mean for understanding the nature and character of cultural interaction between *Bama* and outsiders.

Methods

The recording of watercraft motifs took place from 2021 to 2024 as part of the ABM Project. The ABM Project covers five national parks (Muundhi, Garraay, Binirr, Juunju Daarrba Nhirpan, and Cape Melville), certain parcels of freehold land, and areas in which the Laura Rangers, Balnggarrawarra Melsonby Rangers and Normanby Land Management team have cultural responsibilities. Recording of watercraft motifs on Muundhi National Park and Normanby Station occurred during pedestrian surveys in sandstone escarpment Country by Traditional Owners and archaeologists. Records were made via standardised digital recording forms and digital photography. Where possible and/or necessary, images were enhanced using DStretch to improve visibility.

Recording in Kalpowar Nature Refuge took place outside of the ABM Project, but with ABM researchers, including Traditional Owners from the Cape Melville, Flinders and Howick Islands Aboriginal Corporation who have cultural connections and responsibilities for Kalpowar (Wallis 2021). Records of a site at a further undisclosed location in Kalpowar

were obtained from Bednarik's (2014) publication detailing work from 2010.

Vessel classification

A systematic framework was adopted to classify vessels following Wesley et al. (2012). Vessel features were grouped under sub-headings of hull structure, superstructure, propulsion, rigging, name, flags and content, with attributes thereunder including cabins, rudders, wheelhouses, funnels, masts, mainsails, topsails, jibs, bowsprits, crows nests, cargos, peoples and dinghies. The quality of images—affected either by photography or preservation—meant that some attributes could not be determined. Formal elements (such as motif position, size, technique, colour and superimposition) were also recorded and detailed analysis of the stylistic conventions is ongoing.

We primarily classified vessel types by their rigging, with our types all having features consistent with those of watercraft used from the mid-nineteenth century onwards (cf. Paterson and van Duivenvoorde 2013:40).³ The main rig types for ocean-going ships sailing along the northeast coast of Australia in this period include the barque, barquentine, brig, brigantine, schooner, ship and topsail schooner (Bloomster 1969; Underhill 1974), while vessels rigged as cutters, ketches, luggers, sloops and smaller-size schooners generally sailed in coastal waters and were often employed in local transport and fishing industries (Bloomster 1969; Kerr 1993; Underhill 1974). Based on visible attributes, motifs were thus assigned to a particular sailing rig, such as cutter, ketch, lugger, or sloop, and, in some instances, to a combination of wind propulsion and steam power. Once classified, all vessel types were cross-referenced with historical sources in an attempt to identify them to a named vessel, albeit unsuccessfully.

To avoid confusion, Figure 4 illustrates the main vessel types as per their rig, with some further

explanatory information provided below for those rig types identified in the rock art discussed in this article.

A brig is a two-masted vessel rigged with square sails that was employed for both coastal navigation and open-ocean voyages. In terms of construction and the quantity of sails carried, its masts correspond to those of a fully rigged ship. In a brig, however, the spanker—also referred to as the main trysail—is attached to the lower mainmast (Figure 4; Bloomster 1969:12; Underhill 1974:6). A brigantine is also two masted and has a similar sail arrangement, but it has a fore-and-aft mainsail rather than a square main course (Bloomster 1969:12; Underhill 1974:7).

A cutter is a vessel with one mast carrying two or more headsails (jibs) and a gaff or Bermuda mainsail (Underhill 1974:14, 74–78). Head-sails or jibs are triangular and usually extend from the mainmast to the bowsprit. A sloop may be described as a cutter with a single jib (Underhill 1974:14).

Ketches are classified as sailing vessels with two masts, both fore-and-aft rigged. They differ from two-masted schooners in that ketches have a high mainmast, placed forward, while their mizzen mast is shorter and stepped 'on the foreside of the tiller' (Figure 4) (Underhill 1974:12). Both masts carry a fore-and-aft sail (Underhill 1974:12), often referred to as a boom-sail or a gaff sail. A boom is a wooden yard (spar, pole) that runs along the foot of the sail, primarily used to control its shape and angle to the wind, while a gaff supports the head of the sail. The key difference is their position and function—a boom is horizontal and controls the bottom edge of the sail, while a gaff is angled and supports the upper edge of the sail.

Schooners have two or more masts, all with fore-and-aft boom-sails—the largest ones had seven masts. They also may have additional gaff topsails on their masts, although this is not always the case (Underhill 1974:66–71). Note that 'topsail schooners' were vessels with two or more masts, rigged with fore-and-aft sails on all masts but carrying square sails on their fore top masts (Underhill 1974:8–9). When schooners and topsail schooners are two-masted, they differ from ketches in that they have a mainmast that is taller or slightly higher than their foremast (Underhill 1974:10, 58–60).

Researchers have often used the relative heights of the two masts to distinguish between ketch and schooner motifs in rock art (Paterson and van Duivenvoorde 2013; Roberts 2004), although only when relative proportions are accurately depicted—for example, a taller mainmast and a shorter foremast, or a foremast of equal height—can a vessel be

³Until the late eighteenth century, sailing vessels were classified primarily by their hull shapes. In his seminal work *Architectura Navalis Mercatoria*, Swedish naval architect Fredrik Henrik af Chapman (1768) identified five principal merchant ship hull types: the frigate, haggboat, pink, cat and bark. Each of these forms could be outfitted with a specific sailing rig—such as ship, schooner, brig or brigantine—many of which remain in use today. Even in Chapman's era, however, these hull types were becoming increasingly similar in form and thus more difficult to distinguish (Falconer 1769; MacGregor 1985:29), further complicated by geographical differences in the names given to a particular hull shape. Falconer (1769) used the term bark as a general label for small ships, yet in Scandinavia a bark was a broad sterned vessel (MacGregor 1985:32). This gradual shift in, and different meaning of, hull terminology sometimes caused confusion. As hull and rig design continued to evolve in the nineteenth and twentieth centuries, rigging became the principal method of classifying sailing vessels (MacGregor 1985:29).

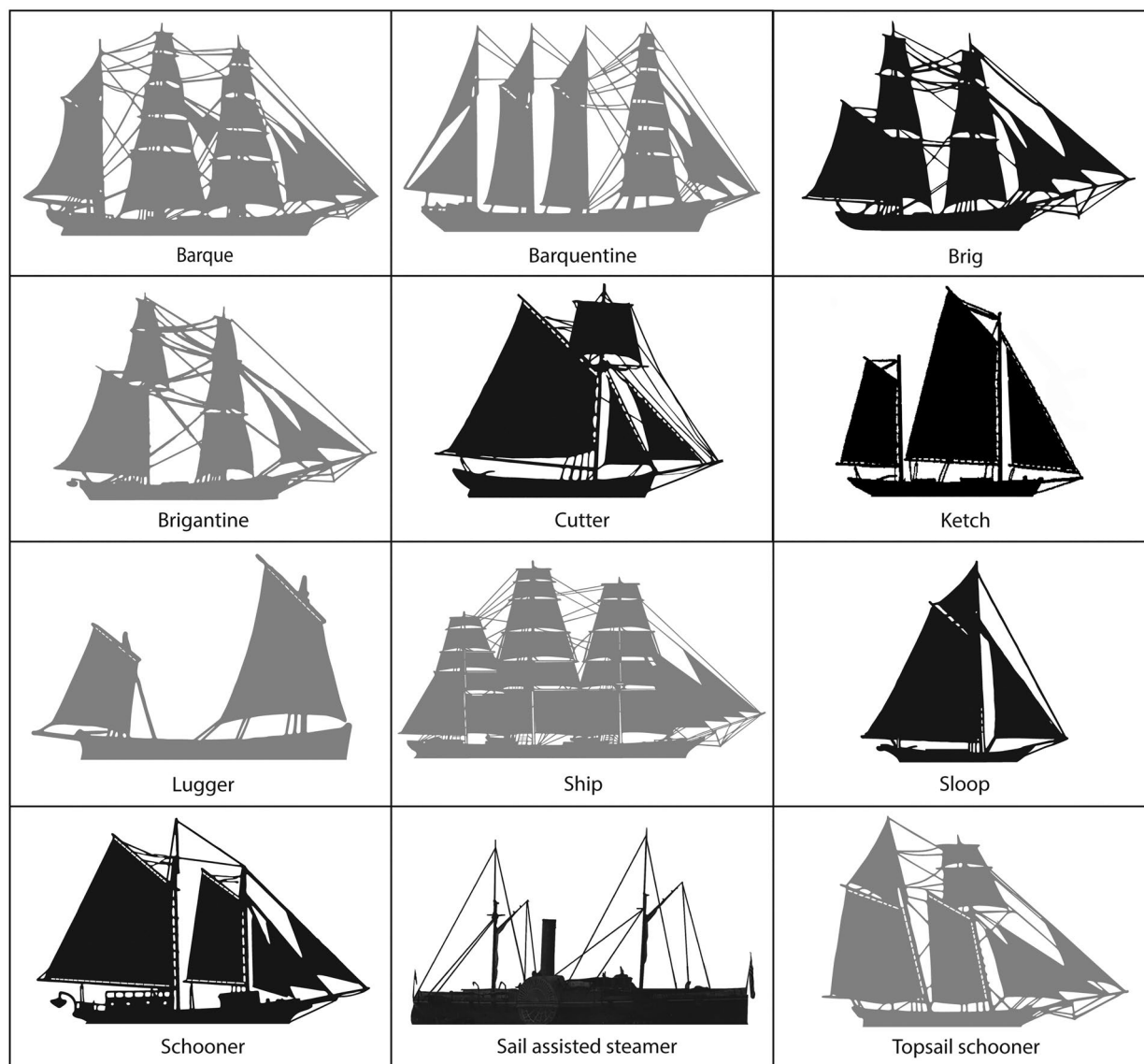


Figure 4. Idealised illustrations of various vessel types mentioned in the text (not to scale) (after Bloomster 1969; Underhill 1974). Those in black are types depicted in rock art, while those in grey are other types mentioned in the text.

securely identified as a schooner; a taller mainmast paired with a shorter mizzenmast is taken here to indicate a ketch.

Luggers, used interchangeably for pearl shelling, *bêche-de-mer* and trochus fishing, are unique to Australian waters and are difficult to identify in rock art unless they are lug rigged (giving rise to the name [Kerr 1993:232]). Lugs were originally two-masted vessels with a tall mainmast with a fore-and-aft sail set on a yard, of which about 'one third is on the fore side of the mast' (Underhill 1974:16). Their shorter mizzen masts also carried such sails. Luggers operating in Australian waters could, however, have ketch or schooner rigs, and their defining features were instead their hull dimensions and shape (Kerr 1993:231–257). Torres Strait 'luggers', for example, measured 52 feet in length, 12 feet and 6 inches in beam, and had an average draft of 7 feet. Luggers are therefore nearly impossible to

identify in rock art motifs by their rigs alone, though they presumably would have been the most common sailing vessels along the coast of southeast CYP in the nineteenth and twentieth centuries.

The study sites

A total of 23 painted vessel motifs were analysed from six sites on mainland southeast CYP (see Figure 1). From north to south these comprised:

- One vessel from Worei 1, three vessels from Worei 2, and eight vessels from an undisclosed site, all around Bathurst Head in the Kalpowar Nature Refuge;
- Three vessels from BGAM00060 in Muundhi (Jack River) National Park; and,
- Six vessels from NORM00008 and two vessels from NORM00262, both on Normanby Station.

More detailed information about each site is described below.

Kalpowar Nature Refuge: Worei 1, Worei 2 and undisclosed site

The Kalpowar Nature Refuge ('Kalpowar'), incorporating Bathurst Head (aka Ama Arranthingu; Qld Land Tribunal 1994:122)—separating Princess Charlotte and Bathurst Bays—contains at least three rockshelters with watercraft motifs: Worei 1 and Worei 2, located about 150m apart and close to the shoreline (Hale and Tindale 1934; Horsfall 1992, 2010; Walsh 1984), and a third unnamed site at an undisclosed location (Bednarik 2014). Three co-authors of this paper (BH, QR and RH) gave permission for use of these data. A recent survey of other shelters in the vicinity of Worei 1 and 2 revealed many with art and occupation remnants, but no additional vessel motifs (Wallis 2021).

Worei 1 (aka Hale and Tindale's [1934:150] 'East Worei Shelter') is a relatively spacious, comfortable shelter located immediately adjacent to the current shoreline. This site is known to have been lived in by Muunthiwarra clan member Alice Normanby and others in the early 1900s (Bernie Hart pers. comm. 2021; Qld Land Tribunal 1996). Hale and Tindale (1934:150) originally illustrated some 'traditional' motifs in this site and noted the presence of, though did not illustrate, a painting of a 'trepan cutter'.

Worei 2 is 150m farther from the shoreline along the same valley, its entrance for at least the last two decades being concealed by dense vegetation (Horsfall 2010; Wallis 2021). Being narrow, its living space is restricted, but Worei 2 has well-protected and extensive walls that display two phases of art: a small number of faded motifs and a clearly recent suite of vivid motifs depicting both traditional and contact subject matter.

A third, unnamed site in Kalpowar, was publicised in a local newspaper by journalist Gavin King (2009), after which it was visited by Robert Bednarik in 2010. Little is known about its distance from the coast, though King (2009) described 'a one-hour walk over jagged rocks' to reach it. It comprises 'two angular sandstone shelters ... The eastern shelter ... about 4m deep and 2m wide ... Some 6m to the west of this chamber begins a walkthrough cave, 8m long, 3–4m wide, and 1.2–1.6 m high. It is also distinctly rectangular in section' (Bednarik 2014:228). Bednarik (2014:228–229) noted that the motifs in these two shelters are 'dominated by imagery relating to the pearling activities that occurred in the area towards the end of the nineteenth century, such as a large number of pearling luggers'. Paintings of other

European objects, including bags, knives and a steel axe, are also represented at this site.

Muundi (Jack River) National Park: BGAM00060

Located in Muundi (Jack River) National Park, approximately 35km from the coast, BGAM00060 is a spacious sandstone rockshelter with a level sandy floor, stone artefacts and a rich rock art assemblage. The latter contains no other contact-era subject matter beyond the watercraft, and in relation to coastal contact, another shelter in the same complex contains a large baler shell on the shelter floor (Wallis et al. 2024a). The site complex within which BGAM00060 occurs is amongst low sandstone outliers, with small permanent watercourses nearby, in what is easy travelling country, well north of the main travel route to the Palmer River goldfield.

Normanby Station: NORM00008 and BALN00262

Sites NORM00008 and BALN00262 are both located on Normanby Station, approximately 57km inland, on either side of a tributary that runs south into the northern side of the Normanby River. The scalloped NORM00008 shelter has a small living space, set high on a talus slope and providing commanding views of the valley to the east. The site contains a vast number of motifs in complex superimpositions, including contact motifs, such as clay pipes, a rifle and human figures wearing hats. Located 1km to the southeast of NORM00008, the BALN00262 site contains painted and stencilled motifs. While no other motifs in this site are clearly from the contact period, a piece of rusty wire attests to the use of the site after European incursion.

Motif analysis

All vessels in this study were painted in profile and occur in relatively equal proportions of bichrome and monochrome, in red toned and/or white toned pigments. The monochromes (in red or white) are totally infilled or painted only in outline; the bichromes are totally infilled, usually in red, with an outline and sometimes interior marks in a contrasting colour, usually white.

Their relative states of preservation range from very fresh-looking to highly degraded, so much so that they cannot be adequately seen without using enhancement such as Dstretch. Figure 5 shows watercraft motifs recorded as part of the ABM project, and Figure 6 those reported by Robert Bednarik at the undisclosed site in Kalpowar Nature Refuge.

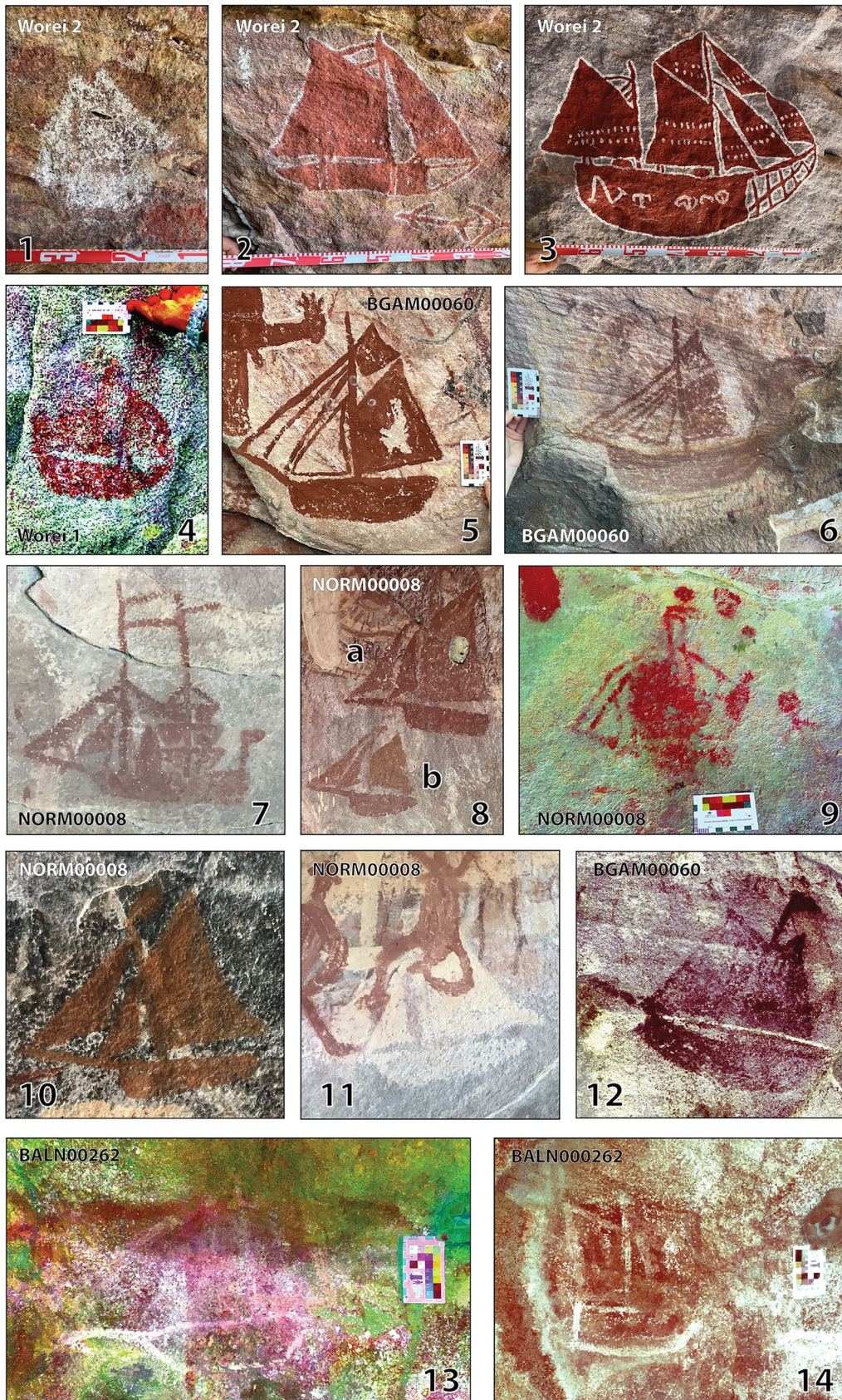


Figure 5. Mainland watercraft motifs recorded by the authors.

Table 1 summarises the key vessel attributes as per the classification framework adopted from Wesley et al. (2012), and the subsequent interpretation of each vessel type.

Kalpowar Nature Refuge

The lone vessel in Worei 1 (Figure 5, Motif 4) features a single mast, mainsail and jib and is clearly a sloop, i.e. a cutter with one jib.

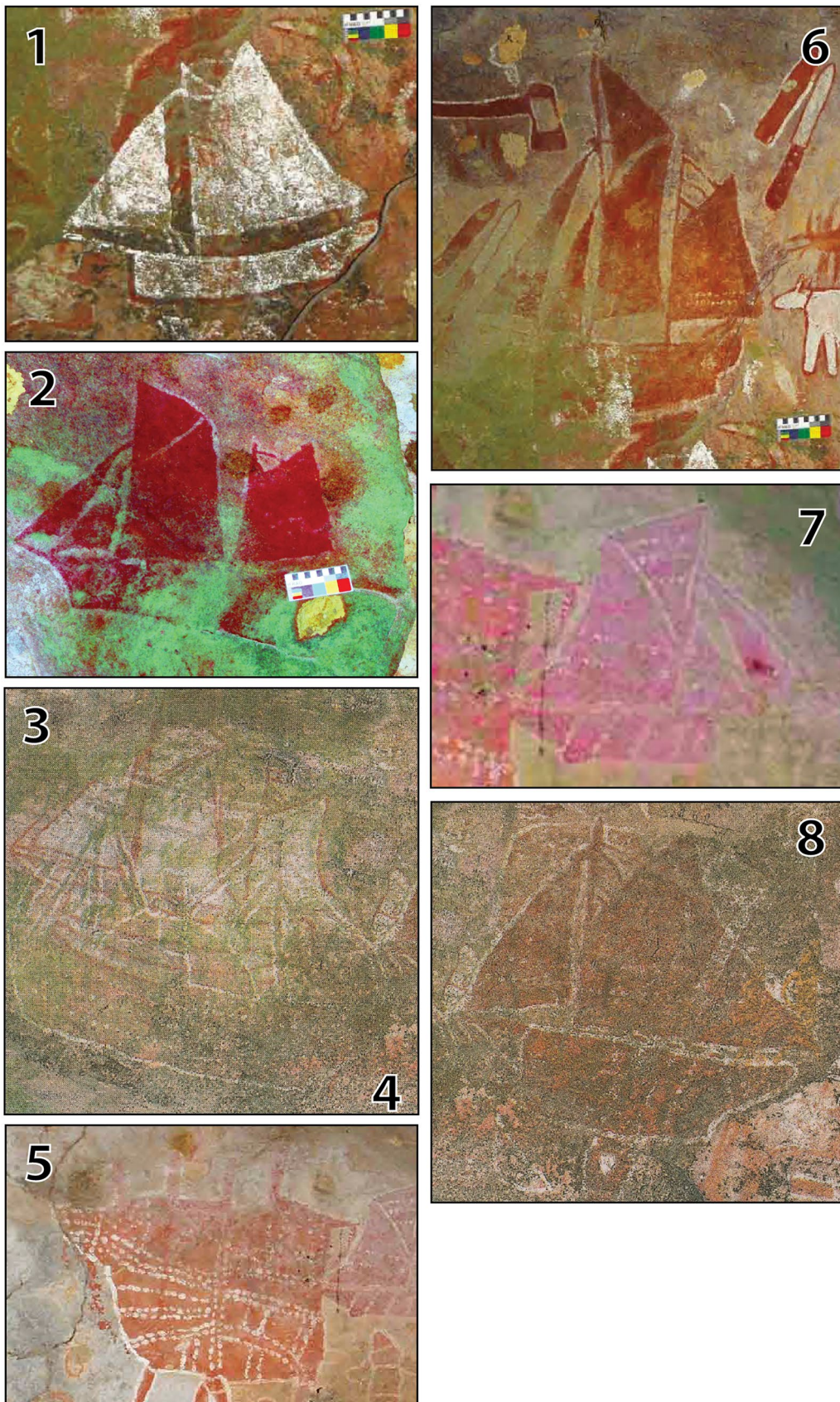


Figure 6. Mainland watercraft motifs reported by Bednarik (2014) in Kalpowar Nature Refuge.

In Worei 2, Walsh (1984:31–32) originally described the vessels as comprising:

Two excellent sailing boats ... depicted in red and white pigments, one of a lugger ... featuring the traditional double-belted decoration on its hull, and

the other ... reputedly depicting a schooner ... [the latter] displays remarkable detail, particularly in the area of its sails and rigging. This boat boasts a fore royal staysail as well as a flying jib, an outer jib and in inner jib. Nets are also shown under the jib

Table 1. Attributes of painted watercraft motifs in southeast CYP.

Location	Site	Source	Fig.	Motif										Interpretation		
				#	Propulsion	Rigging	Masts	Sails	Jibs	Bowsprit	Flag	Superstructure	Internal structure		Other	
Kalpowar Nature Refuge	Worei 2	Walsh 1984; Wallis 2021	5	1	Sail	Cannot determine	1	Jib, mainsail (gaff)	1							Sloop
Kalpowar Nature Refuge	Worei 2	Walsh 1984; Wallis 2021	5	2	Sail	Running and bobstays	1	Jib, mainsail (gaff)	1	Y				Vertical dotted lines on hull possible internal bulkheads, standing rigging or fenders off side of vessel	Horizontal dotted lines on the sails indicate reef lines	Sloop
Kalpowar Nature Refuge	Worei 2	Walsh 1984; Wallis 2021	5	3	Sail	Standing, running and bobstays	2	Flying jib, fore topmast sail or outer jib, jib, fore sail or fore staysail, main gaff topsail, main sail (gaff), mizzen (gaff)	4	Y			Cabin aft of the mizzenmast and hatch aft of the mainmast on deck	Horizontal dotted lines on the sails indicate reef lines; NT painted on hull with circular motifs- possible trepang, portholes or hawseholes		Ketch
Kalpowar Nature Refuge	Worei 1	Hale and Tindale 1934; Wallis 2021	5	4	Sail	Cannot determine	1	Jib, mainsail (gaff)	1	Cannot determine						Sloop
Muundhi (Jack River National Park)	BGAM00060	ABM Project	5	5	Sail	Standing	1	Fore sail or fore staysail, main gaff topsail, main sail (gaff)	1	Y						Cutter
Muundhi (Jack River National Park)	BGAM00060	ABM Project	5	6	Sail	Standing	1	Fore sail or fore staysail, main gaff topsail, main sail (gaff)	1	Y						Cutter
Muundhi (Jack River National Park)	BGAM00060	ABM Project	5	12	Sail	Cannot determine	2	Fore sail (reversed gaff) and mainsail (gaff)	Cannot determine	Y	Y					Schooner

(Continued)

Table 1. Continued.

Location	Site	Source	Fig. #	Motif	Propulsion	Rigging	Masts	Sails	Jibs	Bowsprit	Flag	Superstructure	Internal structure	Other	Interpretation
Normanby Station	NORM00008	ABM Project	5	7	Sail/steamer	Standing and running	2	Jibs, mainsail, main topsail, main top gallant sail (all square)	2	Y	4	Possible funnel	Large object on deck between fore and main masts		
Normanby Station	NORM00008	ABM Project	5	8a	Sail	Cannot determine	1	Jibs, mainsail (gaff)	2	Y					Cutter
Normanby Station	NORM00008	ABM Project	5	8b	Sail	Cannot determine	1	Jibs, mainsail (gaff)	2	Y					Cutter
Normanby Station	NORM00008	ABM Project	5	9	Sail	Standing	1	Jib, mainsail (gaff)	1	Y	Y				Cutter
Normanby Station	NORM00008	ABM Project	5	10	Sail	Cannot determine	1	Jibs, mainsail (gaff)	2	Y	Y				Cutter
Normanby Station	NORM00008	ABM Project	5	11	Sail	Cannot determine	1	Jibs, mainsail (gaff)	2	Y					Cutter
Normanby Station	BALN00262	ABM Project	5	13	Sail	Standing	1+	CND		Y					Unknown
Normanby Station	BALN00262	ABM Project	5	14	Sail	Cannot determine	1	Mainsail (gaff)							Sloop or cutter
Kaipowar Nature Refuge	Cannot determine	Bednarik unpub. data; Bednarik 2014	6	1	Sail	Running	1	Jib, mainsail (gaff)	1	Y					Sloop
Kaipowar Nature Refuge	Cannot determine	Bednarik unpub. data; Bednarik 2014	6	2	Sail	Running	2	Jibs, fore sail or fore staysail, main gaff topsail, main sail (gaff), mizzen (gaff)	2	Y					Ketch
Kaipowar Nature Refuge	Cannot determine	Bednarik unpub. data; Bednarik 2014	6	3	Sail	Standing	2	Jibs, fore sail or fore staysail, main gaff topsail, main sail (gaff), mizzen (gaff)	2	Y	Y				Ketch
Kaipowar Nature Refuge	Cannot determine	Bednarik unpub. data; Bednarik 2014	6	4	Sail/steam	Standing	2	NA	NA			Funnel (1), paddlewheel	Dotted lines on hull indicate the seams of metal hull plates and their rivets		Sail assisted steamer

(Continued)

Table 1. Continued.

Location	Site	Source	Fig. #	Motif	Propulsion	Rigging	Masts	Sails	Jibs	Bowsprit	Flag	Superstructure	Internal structure	Other	Interpretation
Kalpowar Nature Refuge	Cannot determine	Bednarik unpub. data; Bednarik 2014	6	5	Steamer	NA	NA	NA				Funnels (4) and deck structure		Dotted lines on hull possibly indicating seams of metal hull plates and their rivets, or internal bulkheads or other	Steamer
Kalpowar Nature Refuge	Cannot determine	Bednarik unpub. data; Bednarik 2014	6	6	Sail	Running	2	Jibs, fore sail or fore staysail, main gaff topsail, main sail (gaff), mizzen (gaff)	2	Y			Horizontal dotted lines on the mizzen sail indicate reef lines	compartments	Ketch
Kalpowar Nature Refuge	Cannot determine	Bednarik unpub. data; Bednarik 2014	6	7	Sail	Running	1	Jibs, fore sail or fore staysail, main gaff topsail, main sail (gaff)	2	Y			Vertical dotted lines on hull possible internal bulkheads, standing rigging or fenders off side of vessel	Horizontal dotted lines on the sails indicate reef lines	Cutter
Kalpowar Nature Refuge	Cannot determine	Bednarik unpub. data; Bednarik 2014	6	8	Sail	Cannot determine	1	Jib, mainsail (gaff)	1	Y			Vertical dotted lines on hull possible internal bulkheads, standing rigging or fenders off side of vessel	Horizontal dotted lines on the sails indicate reef lines	Sloop



Figure 7. Pearling luggers at low tide, Roebuck Bay (photo: State Library of Western Australia, Image no. 754B/8).

boom. A most interesting feature is the letters painted on the hull [see Figure 3, Motif 3] ... Other motifs ... were a small monochrome white sailing boat.

Motif 1 in Worei 2 appears to be a sloop or cutter, while Motif 2 in Worei 2 is a sloop, as it only has one jib, and Motif 3, a ketch (Figure 5); Worei 2 Motif 1 bears a strong resemblance to Motif 4 from the nearby Worei 1 site. Worei 2 Motif 3 is exceptionally well preserved, and unusually features the initials 'NT' painted on the stern. Motifs 2 and 3 in Worei 2 also feature a series of single or double contrasting dots running along the lower margins of the sails. Their placement in this formation at this precise location indicates they represent reef lines, also known as reef points. Reef lines were short lengths of knotted rope secured to reinforced strips of canvas (reef bands) on a sail that allowed the sail area to be reduced in strong winds; they are visible as rows of short dark lines on the bottom portions of the sails on the vessels in Figures 3 and 7.

Of the eight motifs in the undisclosed Kalpowar site, one is a sail assisted steam ship with two unrigged masts and metal hull plates with rivets (or possible bulkheads) (Figure 6, Motif 4) and one appears to represent a steamer with four funnels and metal hull plates with rivets (or possible bulkheads) (Figure 6, Motif 5), while the other six are all sailing

vessels with a variety of mast numbers, sail and jib arrangements, representing one cutter (Figure 6, Motif 7), three ketches (Figure 6, Motifs 2, 3 and 6), and two sloops (Figure 6, Motifs 1 and 8). Motifs 6, 7 and 8 also feature the rows of contrasting dots that indicate reef lines.

Muundhi National Park

Rockshelter BGAM00060 contains three monochrome red painted vessels (Figure 5, Motifs 5, 6 and 12). Motifs 5 and 6 are well preserved, although the third vessel (Motif 12) is difficult to see without enhancement. The similarity between Motifs 5 and 6—both depicted with a bowsprit and a single mast with three lines of standing rigging for jibs, one distinct fore sail or fore staysail (open triangle, outlines but not coloured in), a main gaff topsail and a main sail with a gaff—strongly suggests that they represent the same cutter and were possibly painted by the same artist.

Motif 12 in BGAM00060 appears at first glance to depict a single-masted vessel with two mainsails (both fore-and-aft gaff sails), bowsprit and flag, making classification somewhat challenging. In fact, it represents a two-masted pearl lugger with a schooner rig, in which the sails are of similar size. A close parallel can be found in a historic photograph taken

Table 2. The number and type of vessels at each site.

Site	Cutter	Ketch	Schooner	Steamer	Brig	Sloop	Unidentified	Total
Worei 1						1		1
Worei 2		1				2		3
BGAM00060	2		1					3
NORM00008	5				1			6
BALN00262	1 (or sloop)*					1 (or cutter)*	1	2
Kalpowar Nature Refuge	1	3		2		2		8
Total	8 (poss. 9)*	4	1	2	1	5 (poss. 6)*	1	23

*Indeterminate, vessel type only counted once in totals.

around 1908, showing two pearling luggers grounded in the mud at Roebuck Bay in WA while their crews wait for the tide to turn (Figure 7). To prevent mildew, the sails have been hoisted to dry, resulting, on one vessel, in two opposing gaff sails. In the photo the foremast gaff sail appears in an almost reversed position—precisely as depicted in Motif 12 (Figure 7, lugger on the right).

Normanby Station

Rockshelter NORM00008 contains six non-Indigenous watercraft motifs (Figure 5, Motifs 7, 8a, 8b, 9, 10 and 11) in a solid infill style, with five executed using red-toned pigments and the other with cream (Motif 11). All vessels overlie other motifs, and Motif 11 itself is overlain by a male and female anthropomorph, that, as indicated by this superimposition, are also 'contact' period art. Motif 9 is poorly preserved and difficult to discern without enhancement.

Motif 7 features a relatively large object on the deck between the fore and main masts, suggestive of a funnel and therefore of its identification as a sail-assisted steamer, while the other vessels are all clearly sailing vessels. Motif 7 is also the most intricate of the vessels in this site, possessing a bowsprit and two masts—i.e. foremast and mainmast with standing and running rigging—with two jibs between bowsprit and foremast, and three square sails set on the mainmast; it is the only vessel at any site depicted with square sails. The two masts and the main sails identify it as an ocean-going brig.

Motifs 8a, 8b, 10 and 11 share similar features, each vessel displaying two jibs set between its bowsprit and single mast and the mainmast set with a gaff mainsail, clearly identifying them as cutters; Motif 10 also has a flag or topsail. Motif 9 is different, but its poor preservation obscures critical details. It appears to have a single mast with a gaff mainsail, standing rigging, including two stays of standing rigging between its bowsprit and mainmast, one of which has a jib, and it carries a flag at its stern. It most probably represents another cutter.

Rockshelter BALN00262 contains two adjacent vessels in white, in contrast to the monochromatic

infill motifs of NORM00008 (Figure 5, Motifs 13 and 14). Motif 13 overlies at least two anthropomorphs of different styles and is itself overlain by white stencilled human foot and hand/arm motifs, indicating a superimposition sequence. The poorly preserved Motif 14 overlies an inverted anthropomorph and an indistinct red motif and is overlain by another white stencilled human hand. Such superpositioning of white hand stencils is a much broader regional tradition (Cole and Watchman 1996).

In BALN00262, Motif 13 is extremely degraded and appears to depict at least one mast, a bowsprit and a bobstay. Overall, the details are insufficient to determine its vessel type. Motif 14 (Figure 5), with its single mast and mainsail, is more suggestive of a sloop or a cutter.

Summary

At least eight cutters, four ketches, one schooner, five sloops, one sloop or cutter, one brig, one sail assisted paddlewheel steamer with two masts, and a steamer could be identified in the rock art motifs from the study sites (Table 2). Only one motif depicted an ocean-going sailing vessel (the brig from NORM00008); all others would have plied coastal waters, some locally, others regionally or, in the case of the steamships, inter-colonially. Of the four ketches, the one from Worei 2 (Motif 3) is shown with sufficient detail to enable its specific identification as a fishing ketch.

All motifs depict sail-powered, sail-assisted steam or steam vessels. Fourteen vessels had one mast, one at least one mast, seven two masts, and one no masts (steam ship). Standing rigging was prominent on nine vessels, and indications of running rigging are present on six. There was only one square rigged vessel, identified as a brig (Motif 7 at NORM00008). Certain attributes occurred infrequently, such as the presence of a cabin, multiple funnels, square rigging, four jibs, portholes or hawseholes. Interestingly, none of the motifs depicted people, although four included flags. Superstructures (e.g. cabins, hatches, a paddlewheel and funnels) were evident only on four vessels.

Discussion

Most of the paintings of European-style watercraft in our study area have sufficient detail to be readily identifiable at a general level, though not to specific named vessels (see Table 1). The results suggest several things about the chronology and nature of Indigenous peoples' engagements with non-Indigenous watercraft in southeast CYP.

Timing

Based on their rigging styles, all watercraft motifs represent craft in use from the second half of the nineteenth century onwards (rather than ocean-going sailing vessels of the eighteenth or early nineteenth centuries); the ketches, cutters, sloops and schooners were all typical of the commercial fishing industries established in the region from the 1870s, and the brig at NORM00008 (Figure 5, Motif 7) was a typical nineteenth-century ocean-going vessel that would have been commonly seen in the bustling port of Cooktown (noting that rockshelter NORM00008 is located some 50km from the coast).

Of relevance here in respect of chronologies is the presence of another watercraft motif in a site located about 25km due east from the coast near the Cooktown-McIvor and Battlecamp Roads intersection. This site was recorded by Charles Mountford as Bustard Park 7 (see Edwards 2007:17) and by Percy Trezise as Hopevale Turnoff 3 (see Cole 1995:66, Trezise 1971:116–117; Woolston 1970:14). It contains a single painted watercraft motif that Trezise (1971:116) described as a non-specific 'lugger', noting the adjacent presence of sea slug motifs, with Mountford suggesting it was a 'pearling lugger' (Edwards 2007:17). The published illustrations of the vessel show a bowsprit, two masts (with a crow's nest on the mainmast), two jibs, a mainmast with a gaff sail, a mizzen sail, running rigging, one, possibly two flags—one atop each mast—and a stern-hung rudder, meaning it is more accurately described as a ketch. Woolston (1970:14) suggested it would have been painted by a man who had worked in the *bêche-de-mer* industry after the 1870s. Hale and Tindale (1934) also contribute to a discussion of regional chronology by noting that watercraft motifs in a rockshelter on an offshore island in Princess Charlotte Bay were painted in the two decades before their visit in 1927.

At Worei 2 on the mainland, there is clear evidence of a relatively recent painting in the form of a ketch (Figure 5, Motif 3). This motif is thought to

have been painted by respected Lamalama⁴ elder Norman ('Normie') Tableland, based on the initials 'NT' painted on the stern and several T-shaped and N-shaped motifs elsewhere in the site (Bernie Hart pers. comm. 2021). Normie Tableland is well remembered in this region, being known to have worked aboard ketches in Princess Charlotte Bay and still living in the area around World War II (Qld Land Tribunal 1996:114, 126–127).

The lone Worei 1 motif (Figure 5, Motif 4) was described by Hale and Tindale (1934:150) as a 'tre-pang cutter, a type of vessel which has only become common along the coast within the last three decades'. As Alice Normanby, who lived in the Worei 1 shelter in the early 1900s, did not recall seeing any vivid motifs when she was young (Bernie Hart pers. comm. 2021), it seems the fresh-looking motifs in that shelter were, therefore, also painted in the twentieth century.

Based on the collective evidence outlined above, we suggest that the watercraft motifs studied in this paper were all produced after the invasion of 1874 associated with the Palmer goldrush, and most probably around the turn of the twentieth century or even later. This is in keeping with the results of other published work from elsewhere in northern Australia. A review of 15 studies spanning from Torres Strait (Qld) to Inthanoona (WA) provides only a vague time period (e.g. 'the contact period' [May et al. 2010], or 'relatively recent' [Ross and Travers 2013]), or no date range (Clarke and Frederick 2006; May et al. 2010, 2021), or no clear evidence for older ships (Turner 1973; Wesley et al. 2012). Most, in fact, argue for watercraft depictions being no earlier than the late nineteenth century, often extending into the mid-twentieth century (Balme and O'Connor 2015; Brady et al. 2022; May et al. 2013a, 2013b; O'Connor and Arrow 2008; Paterson and van Duivenvoorde 2013; Paterson and Wilson 2009; Roberts 2004; Ross and Travers 2013; Wesley and Viney 2022). A motif at Djulirri in the Wellington Range (NT), previously identified as an eighteenth-century tall ship (Taçon et al. 2010) and therefore a clear outlier to this argument, has been convincingly argued recently by de Ruyter et al. (2025) as more likely to be the H.M.S. *Fantome* from the early 1900s.

⁴Lamalama People are the southernmost Sandbeach People of eastern CYP (Rigsby and Chase 2014).

Familiar, not foreign

Details captured on some motifs suggest close association between the artists and the operation of at least some of the southeast CYP vessels. The addition of deck structures, and vertical lines representing rigging, ropes, fenders, or bulkheads (Motif 3 in Worei 2), all suggest familiarity with key operational elements of these ships. If Motif 12 at BGAM00060 represents sails hoisted to dry, then this indicates further experience of a ship's operational life. More tellingly, Motifs 2 and 3 in Worei 2 (Figure 5) and Motifs 6, 7 and 8 at the undisclosed Kalpowar site (Figure 6) all contain representations of reef lines, a small and specific detail that demonstrates an intimate understanding of the mechanics of sails and sailing. Other motifs at Worei 2 illustrate complementary elements of fishing industries, including two groups of rectangular motifs painted in red with white outline, and featuring peaked upper corners with white lettering (possibly a T over a W) on the body. Walsh (1984:32, see also Figure 40 caption) described these rectangular motifs as 'possible sack bags', and we argue they represent divers' catch bags, or bags with packed trochus shell or bêche-de-mer. The undisclosed Kalpowar site also contains motifs that resemble sack bags, as well as images of knives and scissors, tools that were probably used on commercial fishing boats. These images of bags and tools suggest they were painted by artists with close personal experience of commercial fishing.

The relatively realistic technical detail in the motifs and their temporal context, extending from the later nineteenth century into the first decades of the twentieth century, therefore suggests that the watercraft repertoire does not represent the strangeness of foreign mariners who voyaged in these waters in earlier times. Rather, the attributes and contexts of these motifs reflect the involvement of *Bama* in the trochus shell and bêche-de-mer fishing industries that intensified from the 1880s. Table 1 presents the repertoire in the rock art as an array of motifs interpreted as ketches, cutters, sloops and schooners, including the remarkable image painted by the late Norman Tableland. That all of the watercraft images are in rockshelters with evidence of ongoing cultural use in the form of sequenced rock paintings, and the overlaying of 'contact' motifs by traditional painting, confirms the continuity of rock painting into relatively recent times in the region. As further evidence of cultural continuity, at least one rockshelter (Worei 1) is known to have been occupied by Traditional Owners in the early twentieth century.

Although ostensibly depicting innovative subject matter, the watercraft motifs are all painted on

Country and are likely to have functioned as 'new visual markers' of people's existing relationships to place (see Ross 2018:229), after the foreign had become familiar. As Roberts (2004:43) pointed out, 'The very idea that Aborigines [sic] regarded these subjects as exotic, foreign entities, existing outside the traditional Aboriginal experience, may be misleading', a product more of the researcher's perspective than the artist's worldview. This implies that, despite the extended violence—both direct and indirect, personal and structural—that colonialism brought to southeast CYP, and the devastating impacts on individuals, families, clans and regions, this rock art was much less a reflection of the consequences of colonisation than an expression of *Bama* selfhood. Although quite different in location and character from the Laura area sorcery rock art that was aimed directly at perpetrators of colonial violence (see Cole 2010; Trezise 1985), the watercraft paintings reflect similar cultural resilience. Europeans and their technologies were far from the foundations of *Bama* worldviews in the contact period, as artworks and designs continued to be stories: 'things people tell or dance or paint ... dramas in which people themselves belong' (Sutton 2011:1; and see Cole 2011).

It is, therefore, no coincidence that the temporal focus of ship motifs, most of which were probably painted in the early twentieth century, coincides with the increased presence of European maritime industries in which *Bama* were—willingly or otherwise—active participants. The focused selection of cutters (including sloops) and ketches in particular, suggests first-hand familiarity, likely to have been born from direct interaction as workers in the bêche-de-mer and trochus fishing industries. The extent to which *Bama* crewed and worked on the vessels engaged in the local transport and coastal fishing industries has often been overlooked, with the focus often placed on the higher-ranked colonial workforce, especially Malay and Japanese labourers, despite the significant contribution made by *Bama* divers, fishers and crews (Kerr 1993; Leonard 2017).

Conclusion

Despite sailing vessels often being viewed by researchers as the 'defining symbols of the technology and culture of foreigners' (Roberts 2004:20), the analysis of paintings in mainland southeast CYP suggests this was not the attitude of *Bama* when it came to incorporating such objects into their rock art repertoire. Located in rockshelters that had clearly been used by *Bama* for extended periods of time and sometimes depicting technical details

indicating familiarity from first-hand experience, here watercraft rock art motifs embody acts of intentional location, illustrating meaningful elements of personal experience ('anecdotal storytelling', Roberts 2004:40), that were subsequently storied into Country. Contrary to assumptions that these depictions are emblems of colonial intrusion, reflecting the new, the unusual or the exotic (Turner 1973:303), it is more likely that the very act of painting these elements signals their quotidian, even normative, nature, as familiar to the artists as the animals, plants and other material culture items that dominate the rock art.

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