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The *Mermaid?* Re-envisaging the 1818 exploration of Enderby Island, Murujuga, Western Australia

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ABSTRACT

Archaeological surveys documenting Aboriginal petroglyphs across the Dampier Archipelago (Murujuga) discovered a depiction of a sailing ship on Enderby Island. We argue that this is a depiction of His Majesty's Cutter (HMC) Mermaid, captained by the British naval officer Phillip Parker King in his survey of Australia's coastlines between 1817 and 1822. Archaeological evidence and a range of historical sources are used to interpret the image as part of a suite of commemorative mark-making behaviors along the Western Australian coast by King and members of his crew. This engraved ship depiction provides additional insights into cross-cultural encounters documented by King with the Yaburara people of the Dampier Archipelago. As this occurred early in British imperial recording of Australia's North West coastline, this provides new insights into Yaburara people's traditional lifeways prior to the significant impacts that followed the colonization of North West Western Australia.

Keywords Rock art, Dampier Archipelago, British exploration, Aboriginal history, Australia

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This manuscript has not been published elsewhere and has not been submitted for publication elsewhere. Address correspondence to Alistair Paterson, Archaeology, University of Western Australia, 35 Stirling Highway, Perth WA 6009, Australia. E-mail: alistair.paterson@uwa.edu.au Color versions of one or more of the figures in the article can be found online at www.tandfon-line.com/uica.

INTRODUCTION

Archaeological surveys on Enderby Island, Dampier Archipelago, Western Australia, in 2016 encountered an engraved depiction of a single-masted sailing ship. This image is on an elevated rock panel in an extensive Aboriginal engraving (petroglyph) site complex near a rocky water hole, overlooking a sandy beach at the southwestern end of the island. In this paper we argue that this image depicts HMC Mermaid, the main vessel of the historically significant British Admiralty survey that visited the islands in 1818 captained by Phillip Parker King. This interpretation is made through archaeological and historical methods. In making the case for this being a depiction of HMC Mermaid, and in exploring the possible purposes of this engraving, we suggest that this discovery is of nautical and historical significance to Australia and Britain as well as being significant to the Aboriginal people of the west Pilbara, being material evidence related to the first European documentation of cross-cultural encounter in this seascape.

Murujuga is globally renowned as one of the world's largest rock art estates already with National Heritage Listing (McDonald and Veth 2009; Mulvaney 2015). The pre-contact and deep-time history of the Dampier Archipelago, also known by its Aboriginal name Murujuga, is being documented by the Murujuga: Dynamics of the Dreaming project. Archaeological recording and excavation has documented long-term occupation by Aboriginal people (McDonald and Berry 2016; McDonald et al. 2018) to understand the deep-time stylistic rock art sequence of petroglyphs (Mulvaney 2015). Yaburara people occupied the archipelago for many thousands of years prior to the arrival of outsiders (Gara 1983; Tindale 1974; Veth et al. 1993). The discovery of this historical engraving resulted from comprehensive recording of Aboriginal rock art on this outer island of the archipelago.

Enderby Island is at the southwestern extent of the archipelago (Figure 1). It is one of the larger islands and rises (at Rocky Head) to a maximum of 87 m above sea level. While there is evidence for springs along some elevated interior creek lines, it has reliable water only after rain. The archaeological record for the outer islands reveals a peak in occupation during the Late Pleistocene/Early Holocene transition as the sea level reached this coastline, a short hiatus in occupation following island formation with continued sea-level rise and then intensive seasonal island use in the late Holocene (McDonald and Berry 2016; McDonald et al. 2018.

The Enderby Island ship depiction is located on a rocky slope overlooking a sandy cove (Figure 2a). The panel faces uphill and away from the beach, thus the ship depiction can only be seen looking across what is now named Mermaid Strait towards the mainland. The image measures 27×26 cm. No other engravings are on the panel, and thus no older Indigenous or subsequent younger images reveal superimposition. There are, however, numerous Aboriginal engravings along the blocky slope in the vicinity of the ship image. Survey of this part of Enderby Island located 1,064 motifs and 99 grinding patches set amongst midden and artefact scatters in moderately high-density rock art concentrations. The ship is a single masted sailing vessel, with sails set, and with water apparently depicted beneath it (Figure 2b). The creation of this image by thin and extremely shallow scratches depicts the upper hull, rigging and sails with light pecking and abrading for the lower two thirds to the waterline.

Such an unusual depiction raised questions: who made the image and what ship is depicted? The first documented ship to visit the archipelago was the HMS *Roebuck* captained by William Dampier in 1699. Dampier named the 'Rosemary Islands' after the plants he observed on the islands which he thought resembled European rosemary. It was over a century later that Phillip Parker King visited what was by then termed 'Dampier's Archipelago', to take observations and collect scientific specimens (King 1827).



Figure 1. The location of the image of the depiction of a sailing ship (small white dot in middle of black strip marking survey), Enderby Island, Dampier Archipelago (Image drawn by Ken Mulvaney).

Unlike Dampier in 1699, King and his crew recorded encounters with Yaburara people. They observed fresh tracks and fires on the outer islands, voyaging by small groups between islands on pegged log rafts, and significant numbers of people utilizing the inner islands. We think that the timing of King's visit is significant in terms of Yaburara history. King was present between February 25 and March 2 (King 1827:Vol. 1:35-37), in contrast to the visit by Dampier and Gregory, which was in mid-August. The 50-year rainfall record for Dampier shows that on average over 50% of rainfall (from a total mean of 272 mm) occurs during summer between January and March. Late Holocene and pre-colonial era use of the outer islands was likely seasonal: with most occupation during summer when monsoonal rainfall rejuvenated the rock pools, turtles were hatching, and the seas generally becalmed. Groups would have retracted back to the inner islands/mainland during winter. Such a seasonal expansion is being tested against seasonal dietary indicators from the middens recently recovered from the inner and outer islands. This seasonal use of the archipelago would have impacted significantly on observations which could be made about the Yaburara peoples' use of this land and seascape.

King was an extraordinary mariner who led four naval surveys of Australia's coastline, that were significant for their scale and intrepidness (Hordern 2002).



Figure 2. The Enderby Island ship image (a), showing view across Mermaid Strait to the Intercourse Islands, (b) line drawing of sketched ship (line drawing by KM, interpretation by RA) and (c), close up photograph of engraving.

When King visited the Dampier Archipelago in 1818 his crew included midshipman John Septimus Roe who, following the establishment of the Swan River Colony in 1829, would return to Western Australia to become renowned as an explorer and Surveyor General. Also on board was botanical collector Allan Cunningham, who followed in Dampier's footsteps by collecting plants as well as geological specimens and Aboriginal artefacts (Curry et al. 2002; McNinn 1970; Orchard and Orchard 2013). The resultant natural history collections are significant for their age and rarity. Their observations of Yaburara people are equally significant, given the rarity of documented accounts. Also on King's expedition was Boongaree—"Bungaree" in the Australian Dictionary of Biography (McCarthy 1966)—an Aboriginal man (Guringai) from north of Port Jackson acting as an intermediary with Aboriginal people around Australia's encountered coast. Boongaree had 18 years earlier become the first Aboriginal person to circumnavigate Australia, with Captain Matthew Flinders in 1801.

King's expedition was a precursor for European and American visitors: in following decades the waterways of the archipelwere visited by whale ships, ago particularly from northeast USA the (Paterson et al. 2019). Following the establishment of the British colony in Albany (1826) and the Swan River (1829) inevitably settlers moved north attracted by land for pastoralism and the pearlshell fisheries. European colonization of the North West in 1863 led to inter-racial violence, the most infamous event being the Flying Foam Massacre, a series of killings where between 5 (by colonial accounts) and 60 (according to records made 20 years later) Yaburara were murdered, significantly disrupting Yaburara life on the islands (Gara 1983; Gribble 1987 [1905]; Paterson and Gregory 2015). Today five local Aboriginal communities/language groups (including Yaburara) are responsible for the ongoing care of the archipelago and own and comanage Murujuga National Park (McDonald 2016; The State of Western Australia 2003).

Against this background then, is it possible to determine who created the ship depiction? Is it of HMC *Mermaid*? And if so, did King, his crew, or Yaburara people make it? To address these questions we consider first the various lines of evidence from historical records before examining the archaeological evidence—including the context and technique used to create the depiction.

DOCUMENTING PHILLIP PARKER KING'S EXPEDITION

The earliest documented European accounts of Australia were by Dutch navigators, who would make the first landfall in 1606 (at Cape Keerweer, in the Gulf of Carpentaria), conduct the first circumnavigation (Abel Tasman, between 1642 and 1644, at mostly a great distance from the coast), and begin to map much of the coast of Western Australia in the seventeenth and eighteenth centuries. French and British coastal exploration became increasingly common from the later eighteenth century, leading to new discoveries in southeast and eastern Australia, laving the basis for British settlement in 1788 at Port Jackson (Sydney). The British navigator Matthew Flinders circumnavigated and mapped what he termed "Terra Australis" in 1801, after which the Admiralty and Colonial Office in England requested further hydrographic expeditions to fill in the missing parts of Flinders' coastal survey (Hordern 2002). The French had made no territorial claims along the western or northern coastline, but their interest in the unexplored portions of the continent could not be ruled out. The Admiralty therefore instructed King to "examine the hitherto unexplored coast of New South Wales from Arnheem Bay... Westward and Southward as far as the North West Cape including the ... deep Bay called Van Diemens Bay and the cluster of Islands called Rosemary Islands [Dampier Archipelago] and the inlets behind them which should be minutely examined" (Croker 1817). King's expedition was conducted over four years (December 1817-April 1822), and involved successive visits to the North West coast in HMC *Mermaid* and later, HMS *Bathurst*.

King's hydrographic survey generated a large and rich archive. King kept a shipboard journal-the 'Remark Book'-which was a rough unstructured narrative of life on board, in which King also included a few small sketches (King 1818). While King presumably kept journals like this on all his voyages, this is the only journal from the entire survey which has survived, and it fortunately covers the expedition's activities in Dampier Archipelago. This daily journal helped King create his story of the expedition for his official account, published as two volumes in 1826 (reprinted in 1827) titled Narrative of a Survey of the intertropical and western coasts of Australia produced between the years 1818 and 1822 with an appendix containing various subjects relating to bydrography and natural history.

While the journal was a free-style text, the ship's log followed clear and strict Admiralty directives. In the 'Instructions to the Respective Majesty's Ships', an enclosure titled 'Form of Remark Book' set the guidelines for what information the Admiralty required: "situation; directions for sailing; marks for anchoring; wooding and watering; provisions; fortifications and landing places; trade and shipping; Inhabitants" (Dalrymple 1804; de Lima Martins 1999). The ship's log and logbook, which resembled more of a rough journal of observations, were kept by midshipman Roe: both documents remained the property of the Admiralty. The ship's log described the repetitive information of 24hour observations of weather, and location. While precision and repetition might seem mundane, there is beauty to these records as well. Skillful watercolors of coastal views and pencil sketches interrupt the daily observations, where Roe would rapidly render an encounter that had just occurred, map out a coastal view, and fill in time (and paper) with numerous sketches of the ship.

The botanist, Allan Cunningham also kept a journal, now in the possession of the Natural History Museum's Botany Library in London. Cunningham collected a vast number of seeds and plants, stored meticulously and carefully labeled (Orchard and Orchard 2013), as well as geological specimens.

A rich aspect of the expedition's archive is the picture collection, much of which remains unpublished. King was not the only illustrator aboard Mermaid-the Admiralty had asked King to supervise Roe's drawing and color-washing on the journey out to Port Jackson, and Roe began practicing his coastal views, painting Sugar Loaf Mountain at Rio de Janeiro and other scenes into his log. When Alexander Dalrymple was the hydrographer of the East India Company, he stressed the importance of explorers' visual recordings in his influential treatise titled Essay on Nautical Surveying (1771): "I must also strenuously recommend, to the expert Navigator to omit no opportunity of taking views of the land. It is obvious no plan can be well constructed without having a view of the land, at least in the mind's eye; and therefore much better to have it recorded, and always present to refer to ... views are useful, not only in giving the most competent description of the Country, but in pointing out the proper places for landing, watering, wooding, fishing, and etc."

For maritime expeditions, drawing was not merely for providing views of the land, but for recording information. As Felix Driver and Luciana de Lima Martins have observed, "The art of navigation involved a variety of skills, notably sketching and mapping: to recognise and reproduce coastlines was an essential aspect of the surveyor's task, providing a record of the ship's voyage and enabling others to follow in its tracks" (Driver and de Lima Martins 2002:145). Three main 'types' of drawings by maritime explorers are identified by de Lima Martins, who states. "The boundaries between them were often blurred coastal views and plans associated with



Figure 3. Upper, 'A Plan of Dampier's Archipelago on the North West Coast of Australia by Phillip P. King, Commander, R.N.; J. & C. Walker Sculpt.' In MAP British Admiralty Special Map Col./75, National Library of Australia. Lower, Inset showing detail of Enderby Island, Mermaid Strait and the ship's passage through the archipelago.

hydrographic surveys; illustrations for official accounts of maritime expeditions; and drawings intended as a personal record of the voyage" (de Lima Martins 1999:157). King and Roe produced all three types of drawings during their survey.

King saw the value in accurate and detailed coastal views, stressing the aid of an illustration in bad weather or on unknown coasts. William Dampier's coastal views of Dampier Archipelago were known to King; however, he wrote that he found these quite useless. He tried to identify particular islands from Dampier's descriptions and drawings, but, he wrote, "no light can be thrown upon the subject from his drawings of the headlands, since they are too minute to be compared with nature" (King 1827:Vol. 1:55).

KING'S ENCOUNTERS IN THE ARCHIPELAGO

The crew sketched scenes and encounters during their eight-day visit to the Dampier Archipelago. The expedition anchored at Enderby Island on February 25, 1818, before sailing north on March 5, 1818. King's published chart reveals their nautical surveying and cartographic skills (Figure 3). Anchorages are marked with an anchor, high points with a black dot, and the soundings indicate water depth in fathoms. The Enderby Island anchorage is within several hundred meters of the ship engraving.

King went ashore on Enderby Island on February 25 and with Roe:

climbed the summit of Rocky Head before the sun rose; in the ascent we crossed several deep ravines which, together with the hills, were thickly covered with a wiry grass [spinifex] growing over and amongst heaps of rocks that were piled up in all directions as if it had been done purposely; the greater part of the surface of the island being covered with these stones, we had a considerable difficulty in advancing, and it was not without some labour that we arrived at the summit of the hill. Here the view was verv extensive The land on which we were appeared to be the south-westernmost island of a considerable archipelago. (King 1827:Vol. 1:36)

As this was summer, surface water was available: "On the north side of Rocky Head, in a ravine, under the shade of a ficus, eight or ten gallons of water were found and brought on board" (King 1827:Vol. 1:39).

As well as taking in the view for setting down some of the islands on their maps, either King or Roe made a sketch on this spot, titled "View from Enderby Island from the Summit of Rocky Head" (Figure 4). This sketch includes *Mermaid* lying at anchor in the scene. While Roe and King were on the summit they built a cairn to mark their presence, and King recorded that "in the vicinity of Rocky Point and near the Bay formed on its N or W side—Mr Cunningham sowed some peach stones" (King 1818:Feb. 25). Other crew members were engaged in different activities: while some were digging for water, Boongaree speared some small mullet and parrot fish, and, with the second midshipman, Frederick Bedwell, searched the beach near the anchorage for shells. After planting the peach stones, Cunningham took "a walk round to the NE side of the island" (Cunningham 1818-1822:Feb. 25, 1818).

Upon returning to the boat, Roe, who returned to the anchorage with King, proposed to Cunningham that they walk "across island to the opposite shore." the Cunningham recorded that they "followed the windings of the Gully to an Eastward flat, between the shoulders of the higher hills Ascending over the Highest Hills, extending stony and cov'd with spinifex, we gradually descended thro' a Ravine and came ... upon a sand beach to the westward of the shores we had intended to have made." (Cunningham 1818-1822:Feb. 25, 1818)

While on Enderby Island, King noted two Aboriginal camps:

The shores of the bay were plentiful in shell-fish, particularly ovsters: and beche de mer [trepang, or sea cucumber] were also abundant in the crevices of the rocks; but there were no traces of this part of the coast having been visited by the Malays, who annually visit it to the eastward, for the purpose of taking that animal [trepang]. The tracks of natives and their fireplaces were everywhere visible and around the latter the bones of kangaroos and fishes were strewed. (King 1827:Vol. 1:36)

The sea was rich in resources. Cunningham noted that "the bay abounds with fish of various kinds, sharks are in schools, sea snakes and turtle are frequent" (Feb. 25, 1818). The months for turtles laying eggs on the beaches had passed, meaning they could only be hunted in the water. Later, "several large whales were seen



Figure 4. 'View of Mermaid Strait from Enderby Island (Rocky Head) Feb 25 [1818]', in Phillip Parker King - album of drawings and engravings, 1802-1902, Mitchell Library, PXC767.

spouting among the islands" (March 1, 1818). Leaving their anchorage at Enderby Island, the expedition sailed into what they named Mermaid Strait on the morning of February 26. Here they encountered three Yaburara men, fishing on logs, and paddling between what are now known as the Intercourse Islands. On one of the islands, about 40 men and women were gathered. One of the men paddling on his log was coerced on board Mermaid by the second midshipman Frederick Bedwell. Boongaree helped to appease the kidnapped man, removing his own clothes to show his black nakedness and 'pacifying' him (Shellam 2015). After being observed and given gifts on board, the Yaburara man was released with his watercraft, which he paddled to the nearby island where a group of men and women were waiting (Figure 5).

At sunset Roe, Cunningham, and Boongaree rowed to a rocky shore on Intercourse Island where a group of Yaburara were beckoning them to land. However, the shore was too rocky, so they communicated across the water, with gifts presented by the explorers. The British were inspired by the popularity of glass beads in cross-cultural exchanges elsewhere in the world, however beads were not often valued in Australia, as noted by Cunningham, the man brought aboard the Mermaid "was not disposed to admire these ornaments, preferring, rather, useful and beneficial things" (Feb. 26, 1818).

King remained anchored overnight at Intercourse Island and the Yaburara attempted to contact them again in the morning, however when King's crew landed on Intercourse Island later on



Figure 5. King's illustration of a Yaburara man and bis watercraft. Art Gallery of Western Australia: 2000/0041, Phillip Parker King, Native of Dampier's Archipelago, on bis floating log not dated, pen, ink and wash and scratching out on card, 7.9 x 11.5 cm (sheet). Transferred from the State Library Board of Western Australia, 2000 (reproduced with permission of the Art Gallery of Western Australia).

February 27 the group departed leaving behind a number of residential shelters. which King describes as "of (the) most miserable construction, being nothing more than a bush stuck in the ground, and forming only a very indifferent shade" (King 1827:Vol. 1:43). Cunningham, whose journals are rich with observations of Australian plants, applies deeper botanical context: "A small plant of the Cucurbitaceae and some Shrubs of the Atirplicinae before noticed & of which the natives [sic] Huts are made, are abundant on the shores" (Feb. 27, 1818).

The next day King and crew, from a new anchorage at Tidepole Island, attempted to land (possibly on East Intercourse Island or the Burrup Peninsula) but were dissuaded by a new group of 20–30 Yaburara who threatened them from the shore:

There was no mischievous feeling in their conduct towards us, for we were in their power, and had they been inclined, they might have speared the whole of our party before a musket could have been fired by us. Their object seemed to be merely to get rid of us, and in this they completely and very fairly succeeded, for our party was not numerous enough a landing without force to resorting to means which would entirely destroyed have the friendly intercourse we had just held with the last tribe. (King 1827:Vol. 1:48)

These encounters are the earliest observations of Yaburara people and their life in the islands prior to British colonization in the 1860s. The valuable description of the number of Aboriginal people, their watercraft and residential structures, as well as references to recent signs of camping and foraging on the outer islands such as Enderby Island, provides historical support for archaeological interpretations of the human use of the islands during the late Holocene.

KING'S MARKING BEHAVIORS AND MARITIME DEPICTIVE TRADITIONS OF AUSTRALIA

Here we explore marking behaviors as they relate to nautical expeditions, and particularly those of King and his companions. We argue that the engraving of a ship at Rocky Head on Enderby Island can be seen as part of a wider depictive practice by King which foregrounds their sailing ship in images of their voyage of exploration. Maritime cultures globally left their marks churches, in "ports, and defence structures... testament to a burgeoning mobility of goods and people occasioned through pilgrimage, migration, and trade" (Frederick 2017). In particular, forms of inscription were common among explorers in Australia. Sometimes trees were inscribed as a wayfinding strategy, or to communicate with subsequent explorers. Other inscriptions heralded a different purpose. As Richard White has suggested, "For those who left them, such markers were an acknowledgement of their own sense of their history-making in the present and they looked to the future for recognition" (White 2013). Around Australia's coast eminent explorers marked locations, in particular with the names of their ships. Dutch sailors were sometimes instructed to leave landmarks, and they erected a variety of signs and messages such as inscribed boards and plates (Anderson 2008). As stated by Frederick: "Inscriptions emplaced in the land were amongst a broader suite of 'exploration writings', symbolic gestures, and history-recording practices that underpinned colonialism's empirebuilding arsenal" (2017:8–9).

The Dutch explorer Dirk Hartog in 1616 commemorated the earliest recorded European landfall on the Western Australian coast by nailing an engraved pewter plate to a wooden post on what is now known as Dirk Hartog Island. In 1697 Willem de Vlamingh collected Hartog's plate and replaced it with a new inscribed plate commemorating both landfallsremarkably both plates still survive (now in museums). French explorers such as Hamelin and de Freycinet (part of Baudin's expedition) erected decorated posts at significant places, including Dirk Hartog Island in 1801, although wooden posts and boards rarely survived being less robust than metal plates and engraved stone surfaces. Thus certain locations became nodes for inscribing behaviors (Clarke et al. 2010), creating depictive and naming traditions linking visitors to those who came before them. For example, while Captain J. C. Wickham and the crew of the HMS Beagle were on Depuch Island in the Pilbara in 1840 they engraved at least three rocks to tangibly record their presence. Two of these inscriptions are on Anchor Hill, and the third is in Watering Valley. These inscriptions are white against the red dolerite, showing how little weathered and recent these are-serving at the same time to highlight how ancient the Aboriginal engravings are in comparison. Other ships such as the Penguin in 1909 would follow suit by also marking their vessel's name near the Beagle's (Ride et al. 1964:33).

The voyages of King, similarly provide a range of depictive and marking behaviors. If, as we argue, the Enderby Island ship depiction is of HMC *Mermaid*, this can be added to *Mermaid* markings at King George Sound, Shark Bay, and Careening Bay (Figure 6).

King's two visits to King George Sound in southern Western Australia saw an attempt to memorialize the visit that also illustrates how the material traces of their presence could be quickly eradicated.



Figure 6. Depictions along the Western Australian coast related to King's expeditionary vessels (a), Mermaid Tree, Careening Bay, (b), King George Sound, and (c), Shark Bay.

As indicated above, the expeditions' botanist, Allan Cunningham planted non-native seeds whenever he could. When King's expedition first visited King George Sound in late January 1818, two earlier travelers had planted gardens in Oyster Harbour. Captain George Vancouver, who visited in 1791, planted seeds and optimistically called this Garden Island. In 1801 the crew of the ship *Elligood* also planted seeds here. However, in 1818 Cunningham found no evidence of their plantings. This did not deter him from planting "peaches, apricots, lemons, marrowfat peas, long prodded and broad beans, scarlet runners, carrots, parsley, celery, parsnips, spinach, onions, cauliflowers, turnips, cabbage, tobacco, sweet and everlasting peas and broom" (Hordern 2002:65). At one of Cunningham's gardens, King recorded, "on the stump of a nearby tree which we felled for firewood Mr Cunningham cut the following 'Inscription MERMAID Jan. Cutter 1818 P.P. King Commg'" (King 1818:Jan. 27). When King's expedition returned to "Oyster Harbour three years and a half afterwards, no signs remained of the garden, and the inscription was scarcely perceptible, from the stump of the tree having been nearly destroyed by fire" (King 1827:Vol. 2:123). The only evidence for this early mark-making behavior at King George Sound survives in the historical watercolors by King (Figure 6b).

Further north, King and Mermaid's crew undertook repairs at Careening Bay in the Bonaparte Archipelago for three September-October weeks in 1820. Cunningham's journal entry of October 7, 1820, records an inscription being made: "The name of the vessel, etc. was marked on the large stem of a Capparis and more endurably punched on a sheet of copper which was well fastened on the stem of a Hibiscus Tiliacus [boab tree] growing on the beach" (Cunningham 1818-1822:Oct. 7, 1820). The tree had a split trunk. "HMC Mermaid 1820" was carved into it (Figure 6a). Like the tree at King George's Sound, at Careening Bay the crew undertook to memorialize themselves through such inscriptive practices. Repeated history-making pleased the crew as they wanted to experience the tangibility of their earlier presence; expressing disappointment when it had been erased.

When the crew returned to Careening Bay in June 1821 to collect water, they were keen to see the remnants of their earlier visit. King recorded:

As soon as the vessel was secured, we visited the shore, and recognised the site of our last vear's encampment, which had suffered no alteration, except what had been occasioned by a rapid vegetation: a sterculia, the stem of which had served as one of the props of our mess-tent, and to which we had nailed a sheet of copper with an inscription, was considerably grown; and the gum had oozed out in such profusion where the nails had pierced the bark that it had forced one corner of the copper off.... The sensations experienced at revisiting a place which had so seasonably

afforded us a friendly shelter and such unlooked-for convenience for our purposes, can only be estimated by those who have experienced them; and it is only to strangers to such feelings that it will appear ridiculous to say, that even the nail to which our thermometer had been suspended, was the subject of pleasurable recognition... (King 1827:Vol. 2:43–44)

Roe, in a letter to his father, reveals that he was the inscriber:

We anchored of(?)f Careening Bay where we last year laid the Little Mermaid onshore to stop her leaks: I was not well enough to go onshore at this time but Lieut King and a party of the gentlemen having landed found everything nearly as we had left them, the places at which we had pitched our tents were still observable, and a sheet of Copper upon which I had inscribed the Cutters name, and the year in which she visited that part, was found still affixed to the same tree on which I had nailed on. (Roe 1821)

King inscribed the expedition's presence as a way of linking themselves to predecessor explorers. As Marsdern Hordern has noted:

In Shark's Bay, King also left a record of his visit on Cape Inscription. He ordered the carpenter, Joseph Hanna, to cut a small block of deal and engrave it with his name and that of the Bathurst. This was to be placed in the sheave hole of the post set up by Hamelin in 1801 and, in a recess cut in the back, King placed a folded sheet of inscribed vellum. (2002:343)

Technique	Anthropomorphic	Geometric	Other	Tracks	Zoomorphic	Total	%f
Pecked	95	368	21	92	237	813	76.4
Abraded	17	60	3	14	46	140	13.2
Combination	11	20	1	9	23	64	6.0
Scratched	8	25	1	1	6	41	3.9
Gouged	1		1		2	4	0.4
Pounded					2	2	0.2
Total	132	473	27	116	316	1064	100

Table 1. Enderby Island sample transect which includes the ship depiction showing the techniques used in the recorded subject categories.

Cunningham recorded the inscription into his journal:

ANNO DOMINI On 1822. examining the posts erected by the French in 1801 (to one of which this is attached) no remains of any inscription nor of Dirk Hartog's plate were found. The Bathurst commanded bv Lieut. King, empl'd in surveying the West and N. West coasts of New Holland spent a week at anchor these roads in and procured an abundance of turtle on the beaches. Phillip P King 25 Jan 1822 (quoted by Hordern 2002: 343)

King left another record of his visit to Shark's Bay. After fixing the engraved block into the post's sheave hole, the carpenter then hammered about fifty square-headed nails into the post to form the name "KING," another set of nails recorded the year "1822." These posts are now in the Western Australian Museum (Figure 6c).

ARCHAEOLOGICAL EVIDENCE

To further interpret the ship depiction on Enderby Island we need to consider the material evidence of the archaeological record. The ship motif occurs within an extensive cultural landscape which includes Aboriginal engravings, seed-grinding activity, midden deposits, and stone tool scatters. The archaeological evidence indicates that there was a considerable focus of occupation around the waterhole with the fig tree between 9,500 and 8,500 years ago (McDonald et al. in prep.). The survey transect which includes the ship depiction has 1,064 classifiable motifs (Table 1).

The predominant technique is pecking, with abrasion the next most common. Combination techniques (e.g., pecking and abrasion) follow this. Scratching/incising is relatively rare; and motifs found with this technique are usually located on relatively smooth bedrock surfaces: like the ship depiction. The ship motif is classified as a Geometric (class) and a material culture object (subject).

When these specific motif classes are examined, scratching is evidently restricted to the ship motif and one spear-thrower (Table 2). These items of material culture produced using this relatively rare technique are separated by several hundred meters, and are unrelated.

The primary difference noted here between Indigenous subject matter and this contact motif is in the technique used in its production. A range of engraving techniques is deployed across the Dampier Archipelago because of the geological opportunities present, but generally, pecking (direct and indirect percussion) is the most common. Certainly, in this part of

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Material Culture	Pecked	Combination	Scratched	Abraded	Total
Axe	1				1
Bag	2				2
Boomerang	3				3
Hooked Stick	1			1	2
Other	3				3
Shield/Board	2	1			3
Ship			1		1
Spear Thrower	3	2	1		6
Total	15	3	2	1	21

Table 2. Enderby Island sample transect: Material culture items and technique.

Enderby Island pecking represents 55% of the motifs recorded. When we consider the more restricted motif category—material culture (Table 2) we can see that the technique used for the ship is not common amongst the depicted Aboriginal material culture items.

It is important to note that ship depictions exist in other colonial-era rock art of the coastal Pilbara, but these were made by Aboriginal people familiar with ships (Paterson and van Duivenvoorde 2014). At Inthanoona Station engraved boats are known to have been created by Aboriginal stockmen who worked seasonally on pearling luggers and also on these sheep stations (Paterson and Wilson 2009). The Inthanoona examples reveal a knowledgeable intimacy with the pearling lugger characteristics which they used during the pearling season and are created using a traditional engraving technique-pecking. One person depicted in traditional technique, but in the form of many contact motifs: with hands on hips; larger than scale (for the boat) is depicted standing on the deck. The Aboriginal artist(s) in this case knew intimately the structure and layout of decks, rigging, sails, and steam funnels, and understood that people operated these watercraft. There is similar detail depicted in traditional painting techniques on Groote Eylandt, northern Australia, where Aboriginal artists depicted the subwater line morphology and crews of human figures below deck to scale of visiting Macassan praus (Clarke and Frederick 2004).

It is thus important to compare the Enderby Island depiction with other Aboriginal-made images of vessels. The Enderby Island ship depiction demonstrates knowledge of the mast, rigging, and bowsprit of the vessel-and similarly-but importantly sees this as floating on the water, which is also drawn. This supports the artist being not only familiar with the vessel, but particularly knowledgeable about the rigging, and having a convention of depicting HMC Mermaid in a range of landscape contexts. Drawing the water in contact ship motifs is an extremely rare occurrence. The Enderby Island ship depiction appears in the landscape—as it floats on the water. While the mast, sail, and rigging are shown: there are no humans seen on the boat. The boat is placed on a panel which is devoid of Aboriginal art. The panel faces the water and frames the same view as depicted in the watercolor of this scene found in the explorers' journals. It is created in a technique and style unlike the majority of the petroglyphs recorded here, and it uses artistic conventions which are not recorded previously in Aboriginal art in this region.

As part of our analysis we undertook microscopic (DinoliteTM) analysis of the boat motif to further examine the techniques used in its production. This reveals

that the tool used to create the motif was probably not metal, but stone. Clear differences have been observed between stone and metal on other historic inscriptions in the archipelago (Paterson et al. 2019) made by whalers in the 1840s. But in this instance no v-shaped sections were observed. This is interesting but not conclusive evidence that the depiction could not have been created by one of King's expedition. There is a surplus of natural engraving tools present in the landscape, and a member of the visiting expedition could easily have picked up a local stone and deployed it in the fashion described.

It is necessary to ask whether this could be a depiction of the other ships known to visit the islands: William Dampier's vessel, as well as the numerous American whale ships. Dampier's ship was the HMS Roebuck, a three-masted warship built in 1690-the Enderby depiction is of a much smaller vessel with only one main mast. American whaleships typically were much larger vessels suitable for global circumnavigation and able to return to their home ports with tons of whale oil. Whaling ships and barques were threesquare-rigged vessels, masted, unlike the engraving.

From the mid-1860s the Dampier Archipelago was a central focus for the pearling fleet, which had large vessels supported by smaller craft, some of which would have had a single mast. We need to demonstrate why the Enderby Island depiction is the HMC *Mermaid*, and not one of these vessels, other than the argument already presented here that the engraving was made at the same location that King and crew made a watercolor of their vessel.

HMC *Mermaid* was built in Howrah, India, in 1816 as an 84-ton single-masted wooden cutter with dimensions of 55.77 feet (17m) length and 18.37 feet (5.6 m) beam (Australian National Historic Shipwreck Database). It had a mainmast length of 56 feet 7 inches (17.3 m), main boom length of 47 feet (14.3 m), bowsprit length of 40 feet (12.2 m), gaff length of 33 feet (10.05 m), and topmast length of 36 feet (11 m) (HMCS *Mermaid* rigging dimensions table, Phillip Parker King Album, State Library of NSW).

From the late eighteenth century British naval cutters were designed to be fast armed revenue cutters; to operate in the English Channel, with a bluff bow and fine lines below water, furnished with one mast and a straight-running bowsprit (Petersson 2015:11). With their fine lines, heavy sparring and massive sail carrying capacity these cutters were among the fastest vessels of their day (ibid.). Their qualities of speed and ability to sail to windward made them suitable for a variety of naval duties, including reconnaissance in waters where less agile square-rigged vessels would find maneuvering difficult (ibid.). These qualities also made cutters suitable for naval hydrographic and exploration work.

A specific design feature of British naval cutters including *Mermaid* was a horizontal bowsprit with a forestay attached to the stem, unlike sloop rigged vessels where the forestay attached to the end of the bowsprit (Petersson 2015:11).

Key features of the Enderby Island ship depiction include a mainsail, main gaff topsail, foresail, boom and gaff, and forestay attached to the stem consistent with a British naval cutter rig (Figure 2). The boom extends over the stern of the vessel and mainsheets are attached. A rudder is visible and the waterline and sea surface are depicted. Longitudinal lines on the hull may represent a color band on the hull. While the bowsprit is not depicted in full, this appears due to the constraints of the rock panel's surface.

Measurement of the key proportions of the unscaled Enderby Island ship depiction, namely the ratio of main deck length to combined main and top mast height above deck, provides a ratio of 1:0.85. The same measurements taken from a scaled *Mermaid* plan drawn by Phillip Parker King (*Mermaid* layout plan, 1817, Phillip Parker King Album, State Library of NSW) give a reversed ratio of 0.8:1. Given the inaccuracies of a rough, unscaled artwork engraved onto an uneven rock surface, this ratio comparison is not conclusive in itself.

What initially appears to be an angular line denoting a sharply rising bow outline does not match the design of bluff-bowed British naval cutters with a straight stem. However, on closer inspection a lighter scratched line is visible that appears to be a more bluff bow outline consistent with the design of a British naval cutter. The angled line might be interpreted as a bowsprit guy or an anchor chain. However the angle of this line is not consistent with a vessel lying at anchor, and the cutter is depicted underway, with sails set. It is also not consistent with a bowsprit guy as these are attached to the foremost end of the bowsprit, whereas this line appears to begin around the stem. This feature could be an attempt to depict a surveying activity such as sounding using a lead line, or even fishing.

The depiction of features such as the masts, bowsprit, sails, main sheet, shrouds, and possible jib and peak halliards are an indication that the Enderby Island ship depiction was made by a crew member familiar with the layout, rigging, and operation of the vessel.

Overall, despite the inaccurate scale of the Enderby Island ship depiction and given the irregular panel surface, its layout and major structural hull and rigging features match the design and rigging of a British naval cutter. This matches the rig of *Mermaid* at the time of its visit to Enderby Island in 1818.

DISCUSSION

This scratched engraving could have been executed relatively quickly in the time that the landing party was ashore in 1818. We have the watercolor of HMC *Mermaid* sitting at anchor off Enderby Island, with much the same coastal view as seen from the panel where the scratched ship motif is found, and we contend that it is highly likely that sketching their ship on this rock was one of a number of actions the explorers undertook at this place to document their visit.

The fact the image is on a panel separate from other nearby rock engravings can be

compared to other sites with ship images in Australia. On nearby Rosemary Island and Enderby Island in the 1840s American whalers would make inscriptions describing their presence in the islands, however they would choose to make these on boulders already heavily engraved by Yaburara people (Paterson et al. 2019). This occurs elsewhere, suggesting contexts where Europeans were "engaging with ... Aboriginal art, using physical emulation to connect with Aboriginal cultural practices" (Smith et al. 2017).

Of the senior crew, it appears more likely that the inscription was made by King or Roe. While Cunningham was present he was not an artist and rarely illustrated even his own specimens, and as he records, while they were "engaged in taking angles, and making obsns from the highest point of the island ... I employed myself on the lower sandy flat" (Cunningham 1818-1822:Feb. 25, 1818). Sketching was a form of observing.

It is also possible that this image was created by Boongarree who came ashore and undertook to fish and collect shells in the nearby shallow waters of the sandy bay. No doubt he was familiar with the recording activities undertaken by the white explorers that he traveled with, and as an Aboriginal person from Sydney-with a proud cultural tradition of engraving and drawing, and of depicting ships in the contact period (McDonald 2008)-there is no reason why he would not have observed the extensive Aboriginal record in the area or felt compelled to record his presence. The fact that this image appears to have been produced using a stone rather than a metal implement adds further fuel to this interpretation (see Paterson et al. 2019)

During their day on Enderby Island the explorers surveyed, mapped, constructed a survey marker, observed, provisioned, planted peach pips, collected natural hisspecimens, painted tory watercolors, and-very likely-had time to scratch out an image of their floating home, HMC Mermaid as it turned on its anchor line in the cove below them. The positioning of the engraving with an elevated view across numerous Aboriginal engravings and



Figure 7. Various views of the Mermaid (a), Endeavour River, (b), King's detailed section, (c), King George Sound, (d) Goulbourn Island (Phillip Parker King, 'Album of drawings and engravings', Mitchell Library, PXC767).

Mermaid Passage towards their next anchorage, places the expedition into this otherwise foreign landscape.

The image itself sits with the depictive traditions deployed by King and Roe. The image reveals an informed sailor's intimate knowledge of the vessel. The hull, mast, rigging, and sails are clearly depicted (Figure 7a and b). The line of the hull at the bow is fainter and more difficult to discern, as a shallow line carries the true line of the prow. When compared to other depictions of HMC Mermaid by King, the similarity is clear (Figure 7: b, c, d, e). Most portrayals of HMC Mermaid show the vessel at anchor and the sails furled, however a section of the vessel by King (Figure 7d, image reversed for comparison with the petroglyph) shows similarities: the sails set with similar shape for the mainsail, main gaff topsail, and foresail, and roughly similar ratios of sail size, mast length, and length of vessel. Significantly, the scratches depicting water are consistent with King's other renderings of subjects afloat, for example of the Yaburara man on his watercraft (Figure 5). The only unusual thing about this depiction is that the act of its production is not recorded by the explorers.

CONCLUSION

We have argued here that the ship depicted on Enderby Island is HMC *Mermaid*, and situate this amongst a suite of marking behaviors made by Phillip Parker King and his companions. In all likelihood the artist was either Phillip Parker King or John Septimus Roe, and this represents another media for the memorializing of their vessel around Australia's coast during the four years of their expeditions. The arguments for this are fourfold: 1) the scratching technique is not common among the assemblage which is attributed to Yaburara artists, and likely reflects the short period of time available to create the work and casual manner in which this memorial has been made; 2) we know that the ship depiction is located where members of HMC Mermaid's crew were present and where King and Roe made a watercolor of HMC Mermaid lying at anchor below; 3) the depiction demonstrates specific identifying features of a British naval cutter, and is consistent with other images of HMC Mermaid made by King and Roe in their journals; and 4) the act of making an image of their ship fits with a depictive and marking trope through which King and his complement memorialized their presence and that of their vessel in the landscape of their discoveries and encounters.

As the British seamen fleetingly marked their transient passage through a heavily inscribed Aboriginal landscape in their small unrated vessel, it would seem that this went unnoticed by the Yaburara: unsurprising given its location and inconspicuous form. It is tragic that the seasonal pulse and ebb of island use and the flexibility exhibited by Yaburara in re-grouping to repel these early explorers was overturned only 50 years later by a small and potent and heavily armed group of white settlers.

Being adapted to the rich resources and social opportunities of this 'maritime desert', and being heavily invested in imagery production as a means of asserting their cultural identity, these coastal Aboriginal groups would have been curious at this memorialization of a transient and liminal visit. The fact that they did not alter or overprint the engraving of HMC *Mermaid* was precisely because this did not overtly challenge their sense of place and ownership.

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