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PRAUS IN MAREGE: MAKASSAN SUBJECTS IN ABORIGINAL ROCK ART OF ARNHEM LAND, NORTHERN TERRITORY, AUSTRALIA

ABSTRACT: *From at least the middle of the 17th century to as recently as 1906 fleets of Makassan praus made their way through the eastern islands of the Indonesian Archipelago to Kai Jawa, the Kimberley coast of Western Australia and to Marege, the Arnhem Land coast of the Northern Territory. The principal aim of their visits was to collect and process trepang. Eyewitness accounts, trading documents and oral traditions in South Sulawesi describe this period, the reason for the voyages and the types of vessels used, however there is a lack of local pictorial record that would clearly document what the praus of the period were like. The situation is different in Australia. Here, since the beginning of the 19th century a number of European artists and observers have depicted, and in some considerable detail described, Makassan vessels operating along the Arnhem Land coast and the activities of their crew. There are however even earlier records of the praus, sailing canoes and other items of Makassan origin painted by the Aboriginal artists on walls and ceilings of their rock shelters. That these artists had an intimate knowledge of all the praus' features and how they were used can be seen in the detail of their rock paintings.*

KEY WORDS: *Makassans – Praus – Aborigines – Rock art – Arnhem Land – Northern Territory – Australia*

INTRODUCTION

Most Australians regard 1788 as the year of commencement of continuous external contact with the indigenous Australian Aboriginal populations, however, the Aboriginal groups living along the Arnhem Land coast and Gulf of Carpentaria retain knowledge of annual visits by Makassan trepangers long before this. Their languages, ceremonies, history, art, and social structures are influenced by this contact, and validated by myths and Dreaming sites that commemorate their shared past. Many Aboriginal people consider this era of great importance. The recent awareness and recognition of Australia's future as being inseparable from that of South-east Asia have made the period of Makassan contact of interest and significance to a wider Australian and Indonesian community.

The term Makassan used throughout this paper denotes the people that were engaged in the trepang industry on the northern Australian coast: the Makassans and Bugis from South Sulawesi, and the Bajau and representatives of ethnic groups from other parts of the Indonesian Archipelago. At present the date of commencement of Makassan activities in *Kai Jawa*, the Kimberley coast of Western Australia where archaeological investigations of trepanging sites are in progress, has not been established. It is probable that they may have been coterminous with the beginning of annual visits to *Tanah Marege*, "the land of the black people", coastal Arnhem Land, more than three hundred years ago (*Figure 1*). They came to exploit the shallow seas for trepang (*bêche de mer*), edible holothurians sought by Chinese traders as a culinary delicacy with aphrodisiacal properties, and for tortoise shell, pearl shell and pearls.

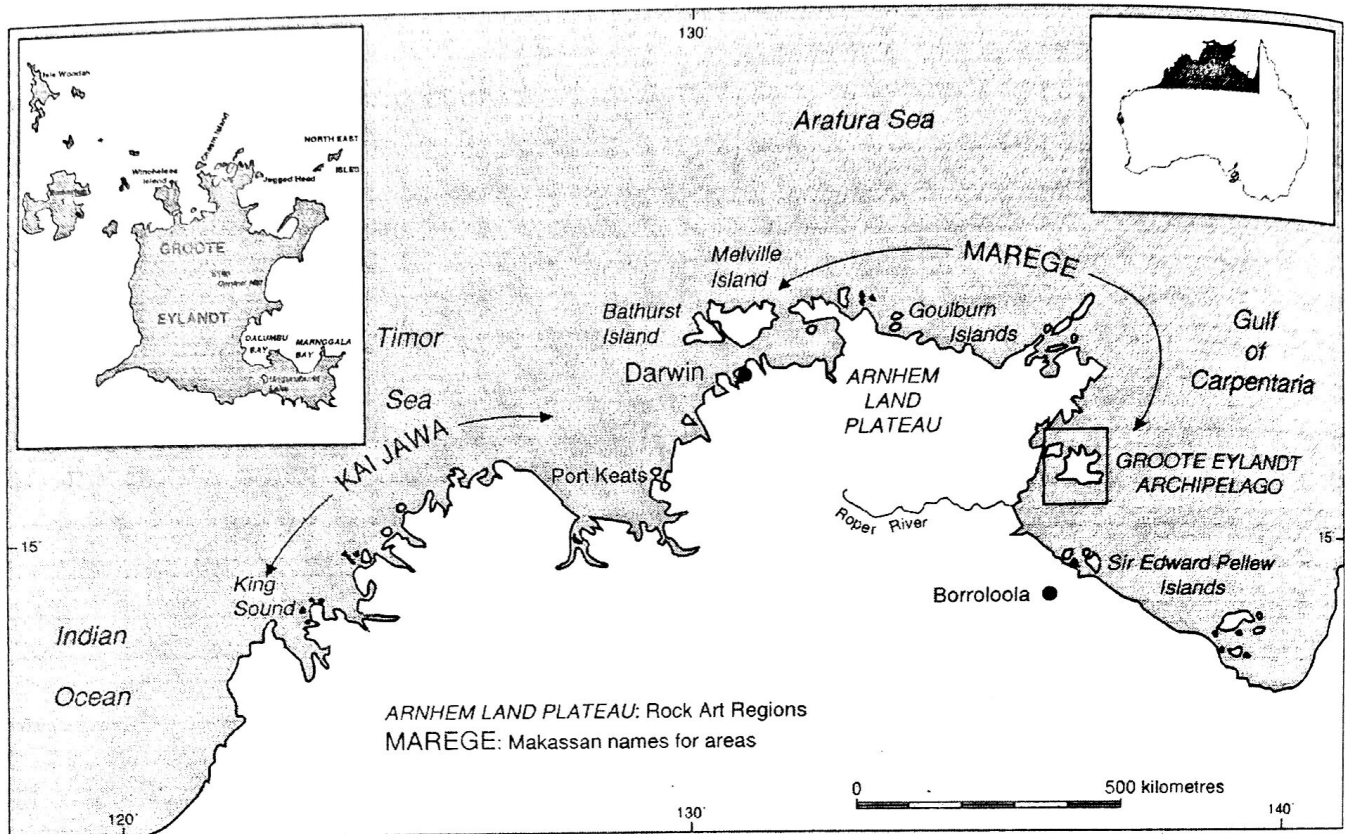


FIGURE 1. Map of northern Australia showing the extent of Makassan activities in *Kai Jawa* and *Marege* (adapted from Urry and Walsh 1981).

Large and regular fleets of praus, with up to two thousand men aboard, sailed in with the north-west monsoon each December. They spent the next four months sailing along the Arnhem Land coast, gathering and curing trepang, and returned home with the south-east trade winds in March or April. The Makassans camped in sandy, sheltered bays close to the trepang beds and stands of mangrove trees required for the curing process. During their extended period of contact, they generally developed close social and economic ties with the local groups, although there are also reports of conflict. Members of the clan groups in whose estates Makassans established their camps and others from farther inland, attracted by availability of exotic goods, worked alongside the visitors, participating in all their endeavours. As payment they received dugout canoes, cloth, tobacco, spirits, and treasured iron knives and tomahawks.

Many Aboriginal men sailed with Makassan crews along the Arnhem Land coast and into the Gulf of Carpentaria to exploit trepang beds in the estates of language groups other than their own. At the end of the season, some would sail with the Makassans to *Mangadjarra* or *Mangathara*, two names in their languages for the port of Makassar. Most of them returned the next season with news of their travels and tales of the wider world. However there are also stories about men and women who were taken away against their will, and of others who did not return. Documentary evidence

indicates that from the establishment of the Victoria Settlement at Port Essington on the Cobourg Peninsula in 1838 until its abandonment in 1849, a number of Aborigines sailed on praus to Makassar each year (Earl 1841: 116, Jukes 1847, 1: 259). People from other areas of Arnhem Land made similar journeys to Makassar and beyond (Tindale 1926: 130) and such voyages are also documented by Aboriginal commentators (Lamilami 1974: 70-1).

Aborigines recorded this period of contact in rock art, in bark paintings, sculptures, stone arrangements, and in song-cycles that recall Makassan presence and activities in Arnhem Land, and their own lives while in Makassar. The Makassans had a profound and lasting influence (Berndt, Berndt 1954). Some ninety years have passed since this contact ended and contemporary song-cycles and ceremonies continue to be permeated with Makassan associations. Many Aborigines learnt a "Makassan" language, a coastal *lingua franca*, spoken by all the groups visited by the trepangers. To this day many words in the local Aboriginal languages are of Indonesian origin (Urry, Walsh 1981: 89-108).

RECORDINGS OF PRAUS BY EUROPEAN OBSERVERS

The first indication to European colonists that the north Australian coastline was subject to visitation and

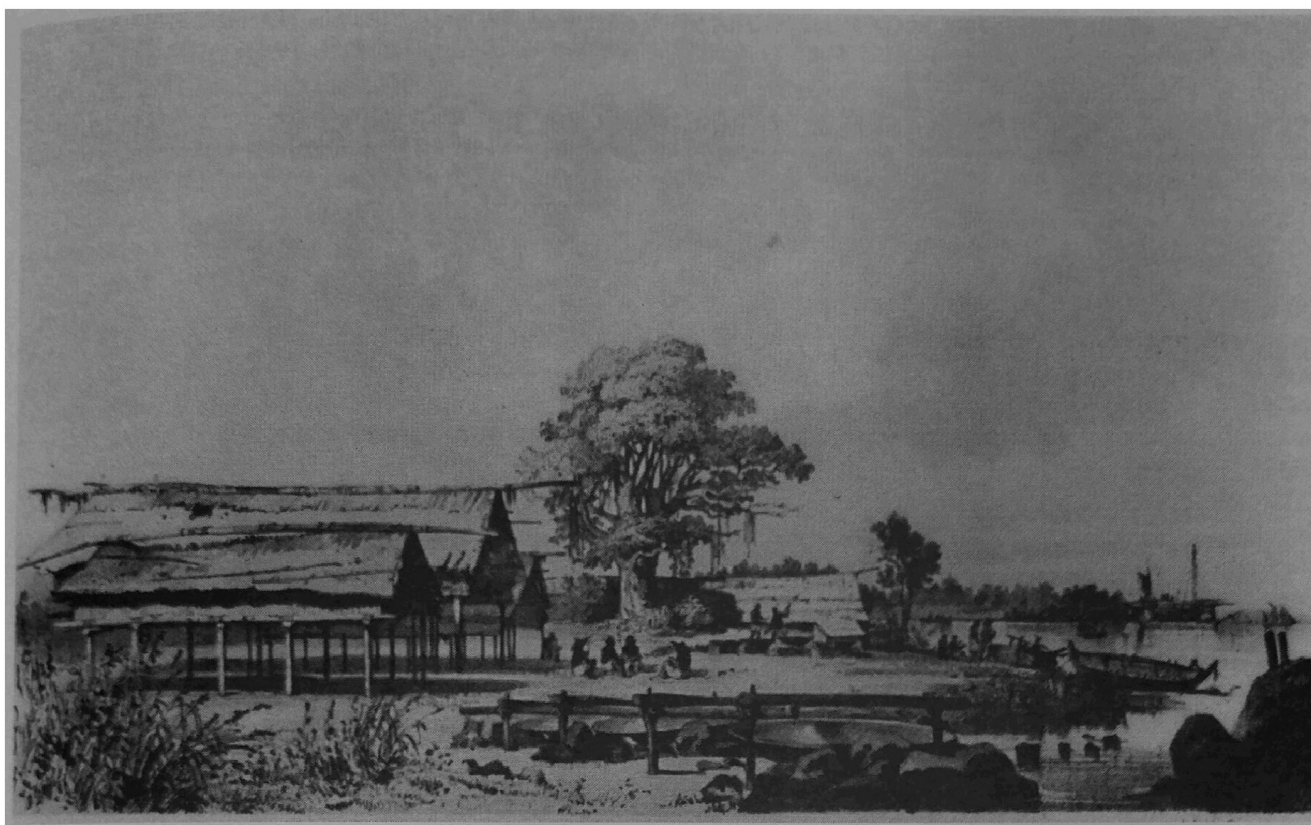


FIGURE 2. Makassan trepang processing site on an island in Raffles Bay by L. Le Breton 1839.

exploitation by overseas interests occurred early in 1803. On 17 February of that year the navigator Matthew Flinders, after completing his survey of the Gulf of Carpentaria aboard *HMS Investigator*, rounded Cape Wilberforce, the north-eastern extremity of Arnhem Land, and came across six strange vessels. Pobassoo, spokesman for the six praus, told him that they were part of a larger fleet of sixty vessels belonging to the Rajah of Bone. The praus left Makassar two months earlier with the commencement of the north-west monsoon, and at the time of this meeting they were positioned along the coast in groups of five or six, Pobassoo's group being the foremost.

Flinders commented in his journal that the praus seemed to be of about twenty-five tons each with a crew of twenty or twenty-five men, and that they were sailed without the aid of any nautical instruments except for a small pocket compass. Each vessel carried one month's supply of water in lengths of bamboo, and basic food: rice, coconuts and dried fish. Flinders records the types of trepang collected, how it was processed, and that on return to Makassar it was sold to the Chinese. He found that the men were armed with krises or daggers, while muskets and small brass guns were found aboard their vessels (Flinders 1814: 228-29). During this historical meeting, William Westall, the ship's artist, made pencil drawings of two individual praus, of a group of eleven praus, and of Pobassoo, the master of the fleet (Westall 1962: Plates 108-11).

The second encounter and recording of Makassan vessels along the Arnhem Land coast occurred in April 1818 when Captain Phillip Parker King in *HMC Mermaid* came across a number of praus on Sims Island and in Mountnorris Bay. As many other educated English gentlemen of that period, King had some skill as a watercolourist and made sketches of the two meetings (Macknight 1976: Plates 1, 2). Later that month he met a fleet of fifteen praus with about three hundred men aboard at the base of Cobourg Peninsula. King named the location of this meeting Malay Bay, as most of the early commentators referred to Makassan trepangers and indeed all peoples of the Indonesian archipelago as Malays (King 1827, 1: 77).

The most detailed description of Makassan praus was made by L. F. De Roquemaurel, a member of a French expedition visiting Raffles Bay on Cobourg Peninsula in 1839:

"The praus used for trepang fishing are large vessels ... with a quite well-built bottom. However, the upper works or superstructure are so high out of the water and so overloaded with decking, cabins and huts that at a first glance the vessels appear much larger than they really are. The most notable feature is a rather large poop, crossed at deck height by a strong beam or member which projects three or four feet on both quarters of the prau. A circular

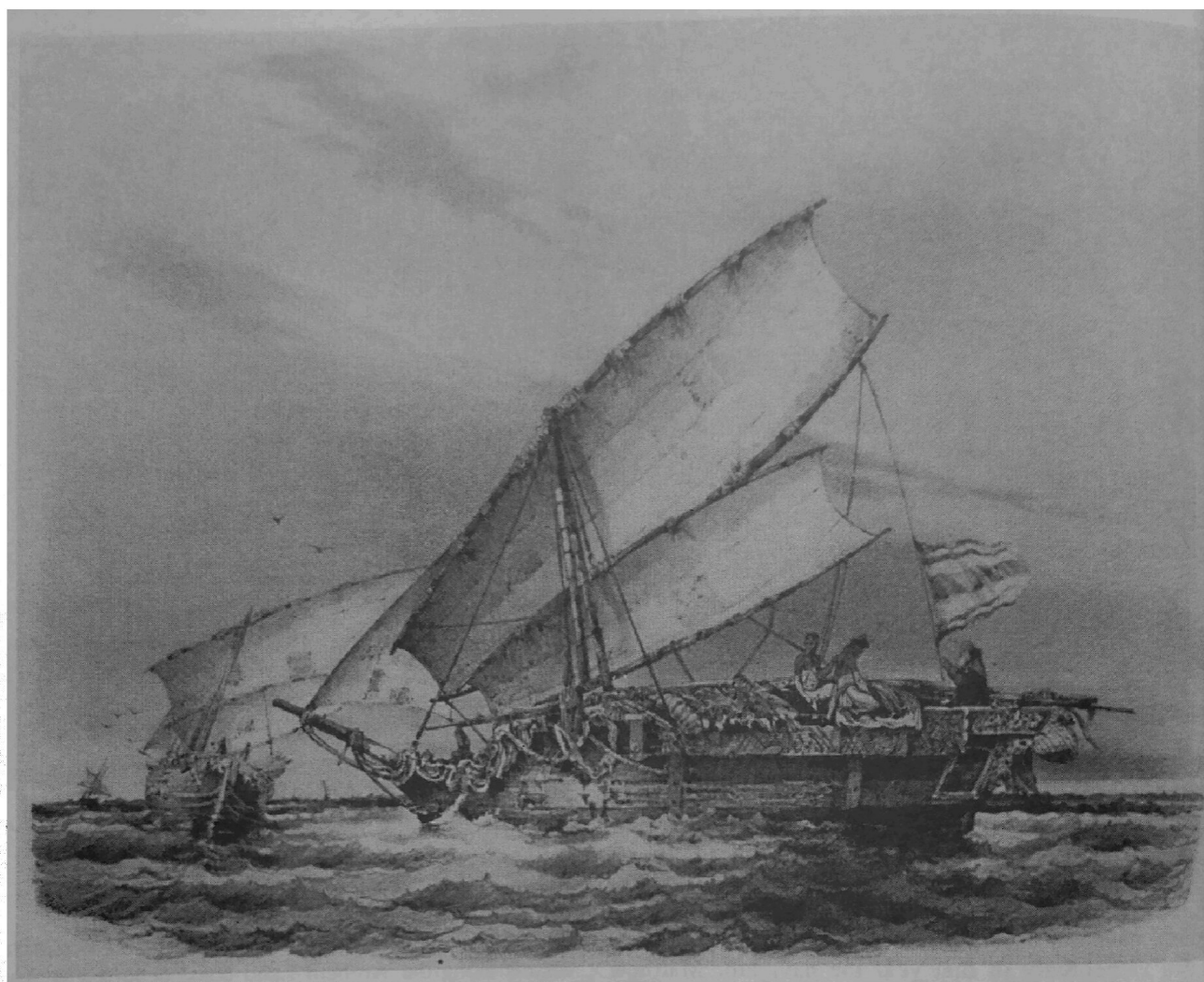


FIGURE 3. Makassan praus off Raffles Bay by L. Le Breton 1839.

groove cut in the after portion of this beam contains on either side a rudder, held up by a loop of rattan around the thwart. Straps of the same material keep the rudder straight in the water for sailing, or draw it up out of the water for anchoring. Thus each vessel has a rudder on either side which is adjusted by means of a tiller pointing backwards, in front of a large hole or port cut in the poop. The pilots or helmsmen, seated in their cabin, adjust the tiller of each rudder with the foot. A compass no larger than one of our pocket instruments is fixed between the two.

The prau has no deck but above the water hold and trepang bunker, from the poop up to the foremast, there is a floor of bamboo rods, covered with a mat roof, thus forming a sort of between-decks for the thirty or forty sailors. Forward of these quarters there is the captain's cabin, where it is only possible to sit or lie. Above the roof are further cabins that one would easily take as chicken roosts. Add to all this a multitude of small packages, bags of rice, chests, etc. and you will perhaps get an idea of such a vessel. The prau has two masts with stays, but no shrouds. These are replaced by long bamboos which, resting on the side of

the boat and tied to the top of the mast, act as shear legs. These legs are bound together in five or six places which provides rungs for climbing in the rigging. The masts are not stepped in the hold. They rest on a strong timber or beam with two blocks rising up like bitts in order to steady the foot of the mast. A linch-pin which can be withdrawn at will, allows the mast to be lowered on to the deck. The anchors are made of two pieces of wood put together with a tenon and mortise joint so as to form the shank and one fluke of an anchor. Several bands of iron, or more often of rattan, strengthen the arrangement. A stone fixed at the junction of the two pieces acts as a weight. The ropes are of rattan or *gomotou*."

(Macknight 1976: 24-25)

During their visit L. Le Breton, the expedition's artist, recorded a Makassan prau and a trepang processing site on an island in Raffles Bay (*Figures 2, 3*). The following year, in 1840, Lieutenant Owen Stanley of *HMS Britomart* made a watercolour sketch of Makassan praus sailing past Port Essington (Macknight 1969: between pages 154-55).

In 1845 H. S. Melville, draftsman on the surveying voyages of *HMS Fly*, depicted a Makassan processing site at Victoria, Port Essington, introducing details of the trepanging industry not recorded by earlier observers. The engraving documents men tending two lines of boiling cauldrons full of trepang, types of pottery used in the camp, and the mode of dress worn by the visitors. In the background are smokehouses, canoes and praus (Mulvaney 1975: 32-33, Plate 7).

In 1882 the South Australian Government, which at the time controlled the Northern Territory, introduced licensing of the visiting praus. The Makassans were also required to pay a tax on goods they brought with them such as rice, alcohol and tobacco, and this made their enterprise less profitable. Alfred Searcy, appointed as the sub-collector of customs to collect duties imposed on the visiting praus, first described the prau's sails and how these were used:

"The sail is of matting stretched on two bamboo yards of immense length and such girth that a section would make a fair-sized bucket. These yards are suspended in a manner that admits of their being inclined in any direction – straight up, slanting or horizontal – whichever suits best for the wind. At the end of the lower yards is fitted a cross handle, so that when it is desired to furl or reef this can be done by its aid. There is a sort of bowsprit upon which two or three small sails can be set."

(Macknight 1976: 25)

In 1906 the South Australian Government refused to issue any further trepanging licences to Makassans. That year a solitary prau made its last voyage to *Marege*. The basic reason for the Government's decision was to encourage and protect the local industry as a number of European trepangers were beginning to operate along the northern coast.

The Makassan voyages and their organisation, the trepang industry, and how this period is reflected in archaeological record was the subject of Campbell Macknight's PhD thesis and his subsequent 1976 publication *Voyage to Marege*. Macknight considered all the pictorial records available at the time and concluded that there was no standard model for a Makassan prau. The generic names he found to describe these vessels among records in South Sulawesi were *palari* and *padewakang*. Other terms referred to the relative proportions of these vessels: *bondeng* was short and wide, a *lambere* long and narrow. The *palari* had a square poop, double rudders, a single large rectangular sail on a tripod mast, one jib on a bowsprit and a small fore-and-aft sail on a single mast towards the stern. The *padewakang* was a similar but larger vessel with two jibs and a stern tripod mast with a smaller rectangular sail. The main tripod mast carried both a large rectangular sail and a smaller fore-and-aft sail. Macknight suggested that a smaller type of prau, the *pajala*, was also used, and can be identified in

the detailed drawings of Makassan praus made by William Westall in 1803. This prau has no bowsprit or jib and no square poop stern. Both bow and stern post have some sheer at the waterline but curve round and project more vertically above the gunwale. A beam laid across the gunwale towards the stern supports a single rudder, while the steersman is protected by a small, peaked roof. A single rectangular sail is raised on a tripod mast (Macknight 1976: 25-26).

In the mid 1980's, Nick Burningham, an associate of the Museum and Art Gallery of the Northern Territory, was directed to undertake research to reconstruct the design of a 19th century Makassan *perahu padewakang* and to produce a series of drawings and models to convey that design to traditional shipwrights. Burningham based his reconstruction on a number of 19th century ship models, drawings of praus by European observers, photographs of similar vessels in the early 20th century, and on interviews with contemporary Indonesian boat-builders and sailors. He was surprised at the considerable continuance of some design features seen in Indonesian vessels, particularly the rig, first depicted on a sailing craft in a frieze at Borobudur (Figure 6a) dating back to the 8th century (Burningham 1993: 2).

Burningham's research formed the integral part of an Australian Bicentennial Celebration project involving the construction of a full-size replica of a Makassan *perahu padewakang*. The vessel, *Hati Marege*, was built traditionally, using no metal fastenings, by the renowned Konjo boat-builders from Tanah Beru, Banto Baharai district, South Sulawesi, and was sailed to north Australia in 1988 by Makassan sailors following the traditional route of the trepanging fleets. At the time that Burningham was preparing his reconstruction plans, he was not aware of the existence of depictions of Makassan vessels in Aboriginal rock art.

MAKASSAN SUBJECTS IN ARNHEM LAND ROCK ART

Rock paintings depicting praus and other items of Makassan origin are found in two widely separated regions of Arnhem Land. In the west they are represented in the shelters of the Arnhem Land Plateau, a discrete cultural area, while the eastern region encompasses the islands of the Groote Eylandt archipelago in the Gulf of Carpentaria. On Groote Eylandt and in north-east Arnhem Land Aboriginal artists have also depicted Makassan subjects in bark paintings and in other art forms.

Rock art of the Arnhem Land Plateau region has been described in a number of major publications: Mountford (1956), Brandl (1973), Edwards (1974), Lewis (1988), Jelínek (1989) and Chaloupka (1984, 1993). I divided this region's chronological sequence of rock art into four periods positioned between time indices suggested by the contents of individual styles of each period. These are:

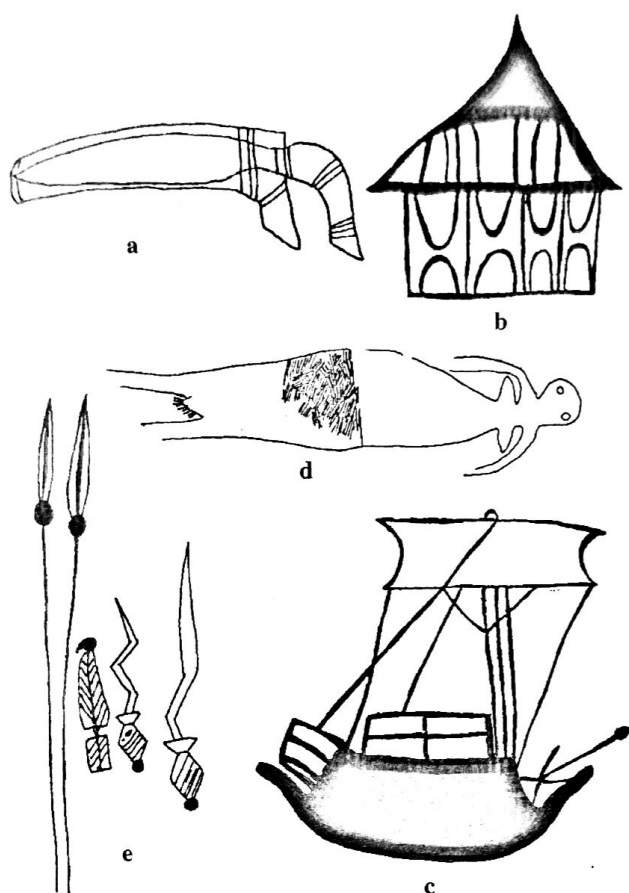


FIGURE 4. Makassan subjects in the Arnhem Land Plateau rock art: *a* *badik*, knife, 29 cm; *b* smokehouse, 47 cm; *c* prau, 47 cm; *d* Makassan woman in a short sarong, 120 cm; *e* two kris as a part of an Aboriginal weapon complement, 17 and 26 cms respectively.

pre-estuarine, *estuarine*, *freshwater* and *contact*. The *pre-estuarine* period commences some 50,000 years ago, the date suggested by the recovery of the earliest cultural items, including ground pieces of haematite and other types of red ochre used in preparing pigment, and ends with the rise of the sea level after the last Ice Age. The *estuarine* period begins with the first depictions of estuarine fauna colonising the riverine environment along the north-west margins of the plateau, a consequence of the rising sea that peaked some 8,000 years ago. The last major ecological change commenced around 1,500 years ago and is reflected in the *freshwater* period of rock art, when freshwater billabongs, lagoons and seasonally flooded plains developed over the previously saline plains and became a major habitat of waterbirds seen in rock art. The *contact* period commenced some 300 years ago with paintings depicting Makassan praus and other items of material culture associated with the trepanging industry, and continued into the 1960s documenting the colonisation of Aboriginal lands by Europeans.

The majority of rock art sites with paintings of Makassan contact within this region are located in the

Wellington Range, a complex of outliers extending from the plateau toward the coast. Four of the sites are located at Mabuludu, some 10 km south of Anuru Bay, an important centre of Makassan trepanging activity. At the Anuru Bay processing site Macknight (1976: 64) found evidence of twenty-one lines of stone fireplaces and eight depressions in the ground where smokehouses for curing trepang once stood. One art site is found within the plateau proper, at Djiringbal, some 90 km from the nearest known Makassan campsite.

Mabuludu 1 is an extensive rock art site dominated by a 5 m long painting of a saltwater crocodile with further layers of paintings executed over the central part of its body. In the most recent layer is a painting of *badik*, a Makassan knife. This subject, as the majority of all the other paintings in this shelter, is depicted in the *x-ray* art convention. In this stylistic convention the artist usually portrayed not only the subject's external form, but also what he knew of its interior. The animal species were represented with backbone, internal organs, muscle and layers of fat. In this instance the shape of the knife is seen through its sheath (*Figure 4a*).

The artist may have depicted a knife worn and used by Makassans in their camps, or one that he may have received as payment for his services. Lamilami, a traditional owner of Anuru Bay and the Mabuludu rock art sites, recalled that the Makassans would give people bags and ask them to collect, in their absence, turtle shells, bailer shells and buffalo horns. On their return "... they would bring them presents: *liba* [sarongs] and the big knives called *badi* and different ones called *jara* (*yara*), and tomahawks and other things" (Lamilami 1974: 71).

Another painting executed in this site as a consequence of Makassan contact is found placed high above ground level on a side wall. It represents two monkeys in a tree and is, in all probability, the work of one of the many men from this western region who travelled with the Makassans to Sulawesi. Further evidence of Makassan contact – pottery shards of Asian origin and broken glass from Dutch gin bottles, is found on the surface of this site's occupational deposits.

Mabuludu 2 is a site formed by a deep but low overhang and was used mainly as an occupational shelter. On its uneven rear wall are several paintings, the most prominent being a depiction of a smokehouse (*Figure 4b*). Reports from European observers, and an outfitter's contract located by Macknight (1976: 20) in South Sulawesi record that Makassans brought with them bamboo and prefabricated wall panels, in a form of *kajang* and *ataps*, mats of woven cane and palm leaf from which they constructed their living quarters and smokehouses for curing trepang.

Mabuludu 3 site is a slightly protected rock face with a number of weathered paintings. The most recent painting here is the representation of a Makassan prau executed as a white silhouette and then outlined and detailed in red (*Figure 4c*).

Mabuludu 4 is a site with a slightly protected exfoliating rock face on which is a single, horizontally executed female

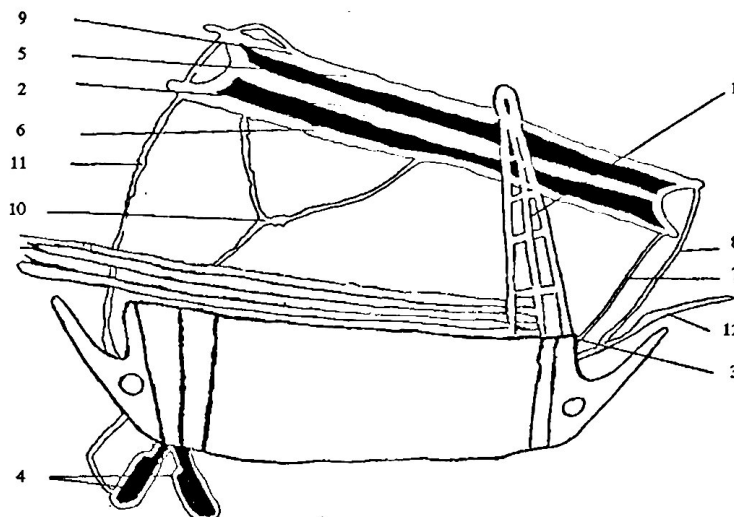


FIGURE 5. Aboriginal terms (Anindilyaugwa language) for prau's features derived from Makassarese (after Turner 1974: 180, Plate 5).

Anindilyaugwa	Aboriginal Translation	Makassarese	English
1. <i>balijara</i>	mast	<i>palayarang</i>	mast
2. <i>dumbala</i>	sail, cloth	<i>sombala</i>	sail (No. 2)
3. <i>balangwa</i>	anchor	<i>balango</i>	anchor
4. <i>gulinga</i>	rudder or stern	<i>guling</i>	rudder
5. <i>bawa</i>	pole attached to sail	<i>bau</i>	top yard for sail
6. <i>bilagwanga</i>	pole attached to sail	<i>pelokang</i>	bottom boom
7. <i>bunalunda</i>	rope attached to sail	<i>pangagalontong</i>	rope fixed to bottom boom to adjust sail – links to gunwale
8. <i>buguna</i>	rope attached to sail	<i>poko</i>	rope fixed to lower end of yard
9. <i>gundaija</i>	rope attached to sail	<i>gantayang</i>	rattan binding the sail to the yard and boom
10. <i>bajabaja</i>	rope attached to sail	<i>baya-baya</i>	Y-shaped ropes below the boom
11. <i>lungalunga (lula)</i>	rope attached to sail	<i>lolo</i>	rope fixed to the upper end of the yard
12. <i>andja</i>	bow	<i>anjdjong</i>	bowsprit

figure. The painting is said to represent a Makassan woman, perhaps the artist's girlfriend. This assumption is quite likely because paintings representing Aboriginal women in this region are of a recurrent stylistic mode, quite different from this particular depiction. The figure was first painted as a white silhouette and then a red pigment was used to outline the body's form and to detail the short patterned sarong. In his execution the artist has suggested how this garment was worn by indicating the fold and fastening of the cloth (Figure 4d).

Djiringbal site is located in the main Arnhem Land Plateau escarpment, where an Aboriginal artist has depicted two knises as an integral part of his weapon complement (Figure 4e).

A large and complex body of rock art, consisting of several hundred painted shelters, is found on Groote Eylandt, on Chasm and Bickerton Islands and on one of the North East Isles. The first documented recording of Australian rock paintings was carried out in this remote region on Chasm Island by Matthew Flinders and William Westall in 1803, just a month before their historical meeting

with Makassan seafarers (Flinders 1814: 188-89). Later Tindale published a series of notes on the local Aboriginal groups, their material culture and traditions, including a description of rock paintings he discovered in East Bay (Tindale 1926: 116-19). Further rock art sites on Groote Eylandt were recorded by Rose (1942: 170-76), Worsley (1954: 93) and Cole (1973: 24-25), on Chasm Island by Mountford (1956: 102-6), on Groote Eylandt and Chasm Island by McCarthy (1960: 297-411) and Chaloupka (1988), and on Bickerton Island by Turner (1973: 286-325).

The earliest paintings in this region were executed during the low sea levels of the last glacial maxima when the islands of the Groote Eylandt archipelago were prominent features on the Sahul Shelf then joining Australia to New Guinea. Consequently this first period of artistic activity is called *Sahulian*, during which the main subjects represented in rock art were terrestrial animals, hand stencils and stencils of many types of boomerangs, a weapon not used for hunting purposes here, nor anywhere else in Arnhem Land during historical times. The following

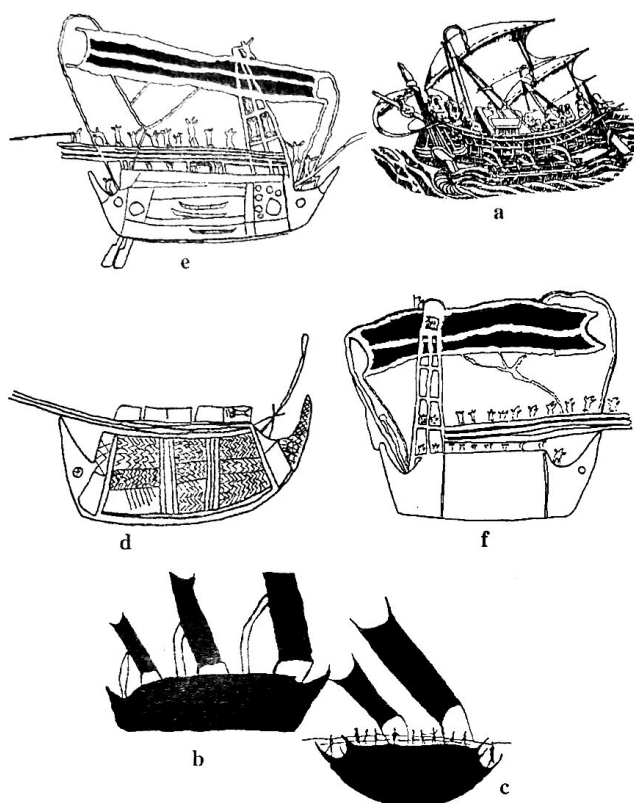


FIGURE 6. Images of Makassan praus: *a* prau-like vessel, copy of a frieze from Borobudur c. 8th century; *b* three-masted prau, Jagged Head, 63 cm; *c* prau or possible Sulu Sea pirate vessel, Jagged Head, 51 cm; *d* prau with its mast lowered, North East Island, 80 cm; *e*, *f* praus, Marnggala 1, 95 cm and 69 cm respectively.

period is called *Maritime*, reflecting the majority of subjects then depicted. In the last phase of this second period Aboriginal artists recorded Makassan praus and the dugout canoes introduced by these seafarers. There is also a suggestion, given by the presence in rock art of a specific type of canoe, that there may have been visitors that pre-date the coming of Makassans (Chaloupka 1988).

Rock paintings representing Makassan praus and sailing canoes found in this region's rock shelters, document in their detail the artists' intimate knowledge of the vessels' functions. People of the Groote Eylandt archipelago called the praus *midjijanga*, and the dugout canoes *lipa lipa*. They also had names, derived from Makassarese, for many of the prau's features (Figure 5). Tindale, who spent fifteen months on Groote Eylandt and adjacent mainland during 1921-22, noted that the islanders spoke Makassarese and had as well a smattering of other languages such as Bugi and Malay. They worked for the Makassans, sailed with them along the coast, and some voluntarily or otherwise went to Makassar and beyond. Yembukuwa, a senior Aboriginal man, told Tindale that he was taken away as a youth before his initiation and returned when middle aged. He recounted that he had visited many foreign places and told of woolly-haired Papuans, of Timor Laut, Makassar,

Ke, Aru, Banda and many other places that Tindale (1926: 130) could not recognise.

Most of the paintings of Makassan praus and canoes are found in rock shelters situated along the northern and eastern coast of Groote Eylandt, in the vicinity of popular trepang locations. One representation of a prau is located on North East Island, while Turner (1973: 312, Fig. A8) recorded a prau painting on Bickerton Island.

The majority of prau paintings are depicted in the *x-ray* art convention, in two or more colours. This is the only subject in Groote Eylandt rock art in which the artist depicted its external form as well as its internal configuration. It is possible that the multicoloured *x-ray* paintings of praus were executed after the artists of this region, as passengers on Makassan praus, visited the coastal groups of western Arnhem Land where the *x-ray* depiction of subjects was the prevalent art form of this period. One of the prau paintings is a simple construct of red lines, two were painted as red silhouettes and two others are of a decorative nature.

Jagged Head 1 site is located on a small rocky island off the north-eastern coast of Groote Eylandt. The most prominent subjects at this site are two praus executed as red silhouettes, superimposing a number of manned canoes. One of the praus in this composition has three masts, suggesting a particularly large vessel in the context of the trepang industry, or one that may have been seen by its Aboriginal artist on a visit to the port of Makassar. It has a long straight keel as opposed to the curving keel or "rocker" of the other vessel. The three sails are correctly shown with the aftermast sail closest to horizontal and the forward sail most vertical (Figure 6b).

Burningham (1993: 4) commented that the three-masted vessel may represent a large South Sulawesi cargo *perahu*, with a carefully observed and quite correct set of sails, arranged to maximise their efficiency and to minimise back winding. He suggests that the smaller two-master with a rather different hull shape and an open rail may be a Sulu Sea pirate vessel (Figure 6c). Makassan praus were sometimes preyed on by the Sulu pirates who operated as close to Australia as Rote Strait at the southern end of Timor. If that is what is represented, these paintings must predate the suppression of the Sulu pirates' and slave raiders' operations in eastern Indonesia during the 1840s.

North East Island site is entered by descending through a narrow circular opening in a rock pavement into one of a series of underground caverns interconnected by passageways. Its ceiling is completely covered by paintings of maritime subjects. The most recent, as well as the most prominent painting is a colourful and decorative portrayal of a prau (Figure 6d).

In this representation the vessel's bowsprit is shown with interesting detail. It curves steeply upwards and seems to have a finial. This is very like the bowsprit carried by some 20th century *perahu patorani* that are the most similar praus still in use. The bowsprit of the *patorani* is not a functional spar, no jib is set, but the up-curved end of the bowsprit often

bears various talismans and charms intended to bring good luck and prosperity. At the inboard end of the bowsprit the painting shows two short spars that cross under it and, like the bowsprit step on the bulkhead. These short spars are called *pa'sipi* and their inclusion implies considerable familiarity with the rigging and gear of Makassan praus.

The hull profile is stylised and the stern is shown with more rake (angle from perpendicular) than the stern post. The rectangular bulkheads, *selompeng*, are shown at each end. Above the hold are the cabins with a man shown laying in the forward cabin. This was usually the captain's cabin. Like many of the other depicted praus, the circular decoration on the bow may represent *oculi* – the "eye" of the boat. The South Sulawesi praus are not usually decorated with this symbol and there is no other evidence that they were so ornamented during the 19th century. However, boats from some other parts of Indonesia have this decoration on the bows, and the practice is widely known throughout the world. This is the only known representation of a prau in rock art depicted with its mast lowered. As it was common for the masts to be taken down when anchoring for more than a short time, this may suggest that most of the other paintings may depict vessels at the point of arrival or departure.

Marnggala 1 site, located on the south-eastern coast of Groote Eylandt, was a popular wet season shelter with a deep overhang and soft, sandy floor. This is a major rock art site with twenty-two praus and nine sailing canoes of varying sizes, detail and complexity painted on its sloping walls. A number of these praus were executed over earlier depictions of similar vessels. It is possible that some of the weathered and indistinct representations found here may date back to the very beginning of Makassan contact.

The main wall of this shelter is dominated by comparatively well preserved paintings of two typical *perahu padewakang*. Both vessels are depicted in the x-ray art convention, in which the artist portrayed not only the prau's characteristic hull, but also what he knew was stored in its hold. This detail is not so evident in the lower vessel, as later, a European sailing boat was sketched in charcoal over it. The praus are depicted as if at the point of arrival or departure. Their crews are standing on the elevated deck, on the rungs of the mast, and even on the top of the sail next to the mast, their hands held up high in the air as if waving to welcoming hosts or farewelling them. Two men in the stern of the upper boat (*Figure 6e*) are holding onto the rope as if they had just concluded hoisting the sail. The vessel's elevated deck is shown clear of the hull suggesting that this may represent spare spars, or lengths of bamboo used to construct smokehouses and dwellings at their campsites.

Every depiction of Makassan seacraft exhibits a number of features and technical detail that clearly identify the given vessel as a prau or a sailing canoe. The painting of a prau found on a side wall (*Figure 6f*) shows horizontal struts between the spars of the tripod mast, forming a ladder leading to the masthead and its prominent sheave. The

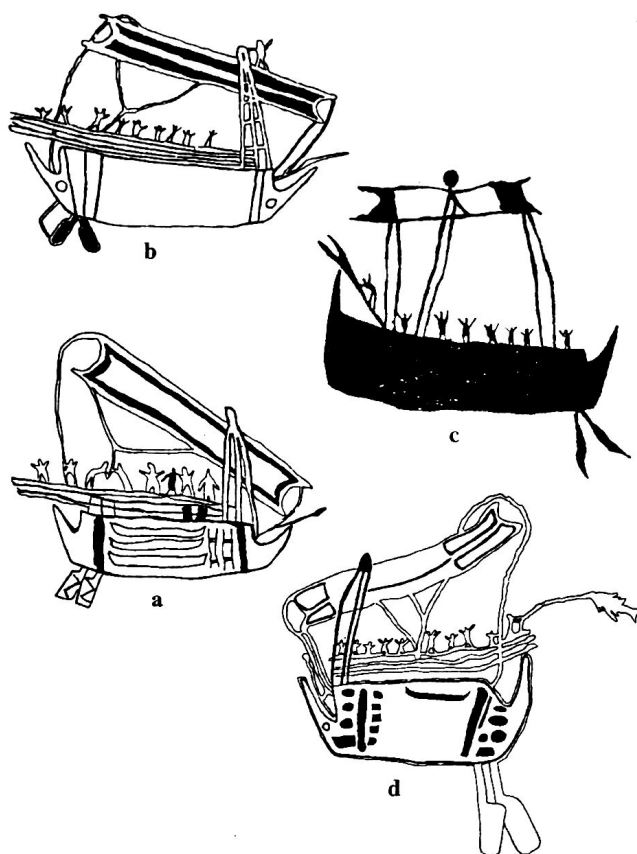


FIGURE 7. Prau paintings *Marnggala 1*: a 62 cm; b 92 cm; c 55 cm; d 83 cm.

sheets that control the lower spar or boom are divided to distribute the strain on the light spar. This seems to be a smaller vessel as there are no cabins depicted on the deck. This, as many other painted walls are mosaics of superimposed images, that, as they weather, become indistinct or reveal figures that they previously obscured. In this instance the prau was executed over a large human figure and over two smaller beings.

The adjoining prau (*Figure 7a*) was executed in deep yellow and red pigment. The artist who painted this prau paid a great deal of attention to the shape of its hull. The stern is shown higher and more vertical than the bow and has a shorter *selompeng*, the distinctive step down. Other detail shows a bowsprit with a spear-like finial, while three canoes and other cargo are depicted within the vessel's hull. Amongst the Makassan crew standing on the deck depicted in yellow, is a person painted in red that clearly stands out. This colour differentiation, denoting the crew's ethnicity, suggests that the figure may represent an Aboriginal person.

A number of other prau paintings document that the people on board were representatives of different ethnic groups. One of the better preserved paintings in this shelter depicts a comparatively small prau with *oculi* on its bow

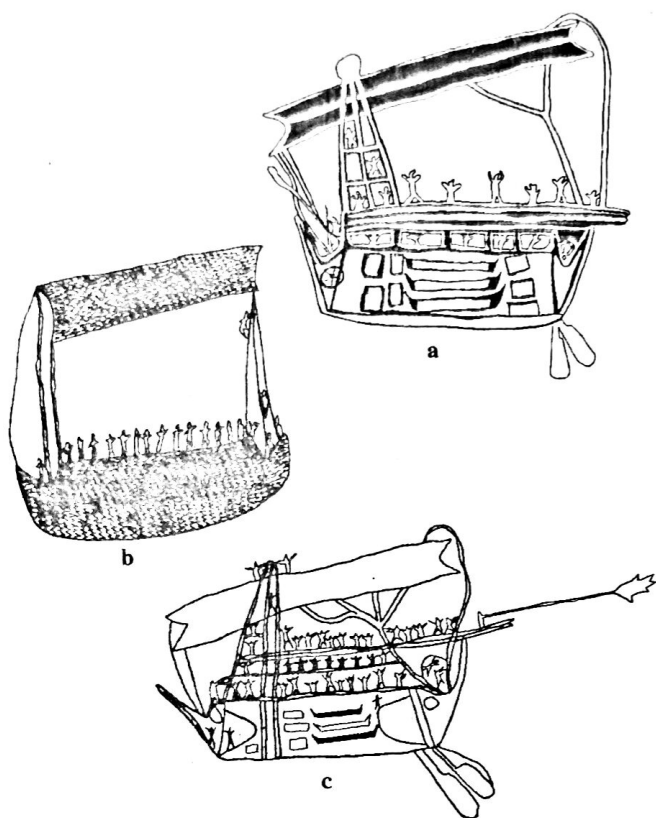


FIGURE 8. Prau paintings: a *Marnggala 1*, 90 cm; b *Marnggala 2*, 59 cm; c *Marnggala 3*, 96 cm.

and stern (Figure 7b). There are ten crewmen aboard, three executed in red pigment to suggest that they represent Aborigines.

Another painting represents a prau of a different type with a pole (single spar) mast, no *selompeng* in the bow, with the stern more raked than the bow. As this vessel has two rudders and a bowsprit, it is unlikely that this is a portrayal of a large sailing canoe (Figure 7c). A possible clue to its identity is the very exaggerated gore (concavity) of the luft of the mainsail, found on some of the historical vessels of the Bajau people of the Sulu Sea (N. Burningham pers. comm.). Contemporary records document that the Bajau sailed to the north Australian coast in the 19th century (Earl 1846: 65).

Underneath a low, adjoining overhang are representations of two large praus, both depicted with cargoes in their hull. In the first prau, while most of the crew is standing on the deck, a man at the stern is shown holding a fish on a line (Figure 7d). Aboriginal informants identified this fish as *debedeba*, a species common to Groote Eylandt waters. Three canoes and bags or chests are portrayed in the second prau's hold. A large *oculi* is depicted in the bow of this vessel (Figure 8a).

In this shelter the Aboriginal artists also recorded a number of canoe types, previously only seen as praus' cargo. The best preserved painting depicts a sailing canoe with a single pole mast propelled by paddles and a sail.

This canoe is fitted with a single rudder carried on the quarter, which identifies that it is not an Aboriginal dugout (Figure 9a). Canoes were used to move between the boats, shore camps and shallow sea beds where men dived or dredged for trepang. They were of two types: smaller *lepa lepa* with only one outrigger or none at all, and *bulolang*, large dredging canoes commonly with two outriggers. It is interesting to note that the outriggers are not depicted in any of the rock painting portrayals of these canoes.

Another painting represents a sailing canoe with some interesting detail. The ends of this craft are almost vertical, and while the bow is similar in shape to depictions of praus, the stern is of a distinctive shape. It is also depicted with a rudder mounting of a type commonly fitted on large canoes in South Sulawesi, where it was only adapted at the end of 19th century, introduced by the Bajau people (Figure 9b). The combination of the stern's shape and the rudder mounting suggests that this is either a Bajau *sope* or a large canoe styled after this type of boat (N. Burningham pers. comm.). A painting of a canoe with a similar shaped hull, but lacking the rudder and its mounting is also found in this shelter (Figure 9c), as is a representation of an Aboriginal sailing canoe (Figure 9d).

Marnggala 2 site is a small shelter with only a single prau painting, but this is distinctly different from all the previous depictions of this vessel. It demonstrates that some artists expressed their view of the Makassan craft in their own individual way instead of using the usual conventions in depicting these vessels. In this instance the artist has payed some attention to the general shape of the vessel, filling its interior with a fine, decorative pattern, while the texture of the intricately decorated sail suggests its plaited nature. The patterning is also reminiscent of traditional *kain rege* sarongs of the Bugis and Makassans (Figure 8b).

Marnggala 3 site has a deep protective overhang, consequently the prau painting on the shelter's rear wall is as clear and vivid as if made only recently even though the last prau sailed to the northern coast in 1906. Considering the number of its crew, this painting depicts a very large vessel. Forty-three men are shown standing on the decks, on the mast, and on top of the sail, their arms held high in the air. That the voyagers on the trepanging vessels were a diverse lot, is documented in this painting, where the crew's ethnic composition is suggested by the three pigments used in its portrayal. One crew member sits on the length of bamboo overhanging the stern, with a fish on his line. This would suggest that a vessel that depicts fishing activity may portray the prau's arrival rather than departure (Figure 8c).

Marnggala 4 site is formed by a low, deep overhang. Its ceiling is covered by several layers of multicoloured paintings including a number of sailing canoes. The best preserved representation of a sailing canoe is partially indistinct as it was superimposed by later paintings. It is depicted with a similar rudder mounting (Figure 9e) as the one seen on a sailing canoe in *Marnggala 1* site (see Figure 9b).

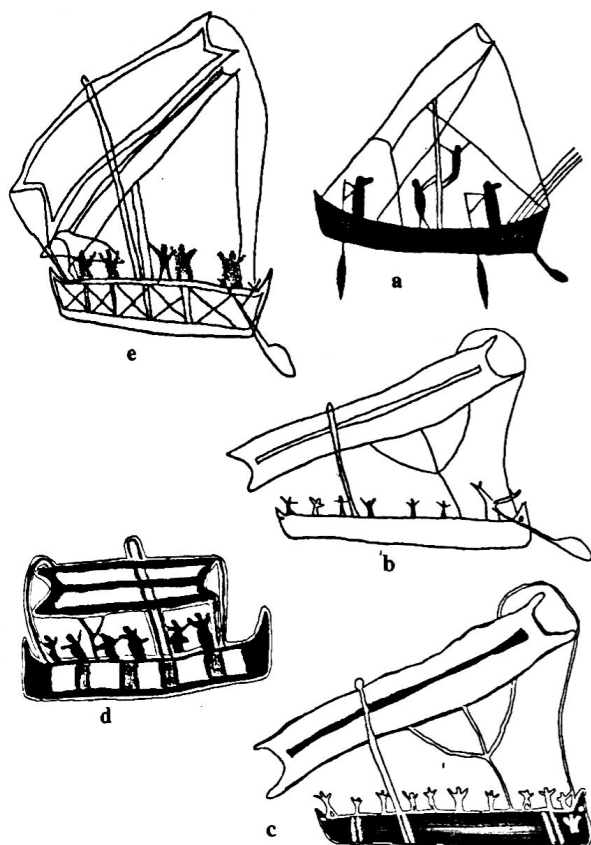


FIGURE 9. Sailing canoes: Makassan sailing canoes *Marnggala* 1, a 34 cm; b 59 cm; c 39 cm; d Aboriginal sailing canoe *Marnggala* 1, 39 cm; e Makassan sailing canoe *Marnggala* 4, 41 cm.

CONCLUSION

Most of the Arnhem Land paintings representing Makassan praus are found in shelters of the Groote Eylandt archipelago, where suitable rock formations extend from the coasts inland. In the Arnhem Land Plateau region the closest shelters to trepanging sites are ten kilometers or more inland, and this perhaps accounts for the paucity of Makassan subjects in local rock art. However, it is of interest to note that subjects other than the praus were recorded in this region, whereas the Groote Eylandt artist was only interested in the praus, dugout canoes and how these were sailed. It is also of interest to note that the only subject on Groote Eylandt represented in most instances in the *x-ray* art convention are the depictions of Makassan praus.

The detail of Makassan praus observed by European commentators is also reflected in rock paintings depicting these vessels. The details shown in rock paintings of Makassan praus indicate that the artists were clearly interested and involved in sailing these vessels. The basic hull form was well observed, with the stem more raked than the sternpost, with the short foredeck lower than the

corresponding feature in the stern, and with the twin rudders mounted at the sternpost. Many of the praus are depicted with a deep step in the bow, suggesting that they represent large *perahu padewakang*, while those with a lower step are smaller, sleeker vessels, *perahu palari* or *pajala*. A painting of one large three-masted prau documents that large cargo vessels may also have visited this region, while a different hull shape of other representations suggests the presence of Sulu Sea pirate vessels. The size of individual boats is also suggested by the number of crew depicted by the artist aboard given vessels. In most of the paintings the rig is simple – a single tripod mast with a single rectangular sail. The sail is controlled by a tack, a vang on the heavy upper spar, and a sheet that is attached to the light bamboo boom by crowfoot which spreads the load on the flexible spar. There is also a line used to control the heel of the upper spar when changing tack. As the sail is always carried to leeward of the mast and the vang, it must be shifted around the forward side of the mast when changing tack. There is a risk of the vessel capsizing if the sail should get aback and foul the mast and vang. The Aboriginal artists were aware of this possibility and in their paintings lead the vang clear of the sail (Burningham 1993: 3). Burningham suggests that the more recent prau paintings portray vessels of the middle of the 19th century.

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