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The Macassans
A study of the early trepang industry along the Northern Territory coast

by

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Two volumes and a case

Volume 1

This thesis was submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in the Australian National University

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This thesis is the result of my own research, except for that material specifically credited to other people.

C. C. Macknight

C. C. Macknight

19 XII 1969
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INTRODUCTION

In 1769, Alexander Dalrymple, still young in his career of schemes, acrimony and hard work, was recommending to the Court of Directors of the English East India Company the advantages to be gained by establishing a settlement on the island of Balambangan, off the north point of Borneo. Among the agents who might be expected to distribute from here the products of Europe and India, and bring in return the exotic products of the distant islands of the eastern archipelago, he lists the Bugis seamen and traders. 'They have penetrated to New-Holland on the south, and to Papua on the east; they also voyage to Bencoolen, Quedah, Manila, and to all the intermediate countries' (Dalrymple 1769:83). This quotation, presumably based on information acquired by Dalrymple in the early 1760s, can fairly be taken as the earliest certain reference to the trepang industry on the coast of northern Australia.

Two points only will be noted here: the voyaging of these renowned sailors to Australia is set in the context of their activity throughout the archipelago, and the fact that they do come to Australia occasions no surprise. These two comments can, in a general way, be applied to virtually all the many descriptions of the industry left by those who observed it in operation over the next century and more. To such men, who had read and studied the accounts of northern Australia given by Flinders (1814), King (1827) and others, and for whom the world, particularly in this remote corner, was so wide and free that events were directed more by opportunity than control, the existence of the industry offered little occasion for remark or reproach. The basic facts were widely known, so that even a member of the
general public, such as Rachel Henning, a central Queensland pioneer of the 1860s, was aware that the coast was visited by 'Malays' (Henning 1952:68).

However, by the end of the century, enthusiasm for northern Australia had been tempered by repeated failures in the task of development. Interest was centred on those more favoured regions in the south where an ideology was being developed that would claim a whole continent for one people. The development of the concepts of exclusiveness and national identity was not restricted to southern Australians, for the Dutch also, around the turn of the century, were forging those tighter bonds of administrative control between their Indies possessions that have led to the modern unitary state of Indonesia. Thus after about 1890, and even more after the end of the industry in 1907, there was little incentive to recall that northern Australia had once been linked in commercial relationships with the islands to the north, and many Australians of the early decades of this century, or even of recent years, would have regarded the industry as unexpected, perhaps unwelcome, and certainly as exotic and unfamiliar.

Today the position is changing as interest in the area slowly rekindles and as the work of the scholars who have concerned themselves with the area becomes more widely known. Following the classic work of Warner in the thirties which first described in any detail the repercussions of the trepang industry on Aboriginal culture, a succession of anthropologists and ethnographers have gathered more evidence to fill out the fading picture. At the same time, the background of the industry within Indonesia has become clearer through the work of various scholars. In this respect, the contribution of Cense (1952) has been the most outstanding. One aim of this thesis is to consolidate, combine and in some matters extend the historical and ethnographic knowledge already available.
It is no accident that the visit of Golson and Mulvaney to the Gove Peninsula in 1963, which marks the beginning of the present phase of work on the subject, was in connection with a proposed mining project. Northern Australia is once more witnessing attempts at economic development, and some authorities are aware of the vital importance of creating a wider understanding of the region and its history, leading to a greater sense of identification and acceptance by those who live there. Furthermore, (and this is not to suggest anything sinister), public opinion is increasingly able to accept a relatively impartial treatment of a subject involving non-European activity in Australia.

Although Golson and Mulvaney found little of interest in 1963, two years later Mulvaney returned to Arnhem Land and visited a number of locations around the coast. Some archaeological investigations of trepang processing sites had already been undertaken in 1948 by McCarthy and Setzler (1960), and R.M. and C.H. Berndt had obtained several other collections of pottery, but little significant information had resulted from these efforts. Mulvaney, however, demonstrated very clearly the possibility of recovering useful archaeological evidence which could be integrated with other forms of source material (Mulvaney 1966). The present thesis is an attempt to realize this potential.

To some archaeologists and anthropologists accustomed to long field expeditions, the time I have spent in the Northern Territory on this project may appear short—less than five months spread over the dry seasons of 1966 and 1967. The achievement of so much in this time was facilitated by the detailed planning which was possible as a result of Mulvaney's work, not least in the making of personal contacts, and by the extensive information available concerning the location of sites. Moreover those familiar with the area will be aware of the unfailing kindness of all
who live there in arranging transport for visitors, together with the considerable difficulties of maintaining for an extended period a camp at any distance from a settlement. Two other factors which made my task easier were the negative result of Mulvaney's survey in 1965 to the west of Darwin in search of sites and the work of Mr Ian Crawford in the Kimberley area. Although I have specifically excluded from this thesis any extended discussion of the trepang industry in Western Australia, a general awareness of Mr Crawford's results has helped in seeing the subject in perspective.

One last point is relevant here. Since the topic is unusual in the diverse methods required to explore it, the reader needs to remain fully aware of the central subject - the men who used to sail each year from Macassar or nearby to the coasts of Arnhem Land and the Gulf of Carpentaria for the chief purpose of collecting and preserving trepang. The activity of these men formed only a part of the total trade and commerce of the eastern archipelago, just as the contact that they had with the Aborigines and various Europeans in Australia made up only one facet of the experience of the latter groups. These wider subjects have only been touched on as they are relevant to the main theme.

This matter will be seen more clearly by explaining the use of two words used in the title. Firstly, the word 'industry' is used for the activity of getting trepang (in preference to such terms as 'fishery' or 'trade'), since more was involved than just collecting, and since no money or commodities were exchanged for its direct acquisition. Although other activities beside the trepang industry were also carried on, this was always the main form of labour and the chief hope of profit. Secondly, and more importantly, in using the term 'Macassan' (both as a noun and as an adjective), I simply refer to any person who came on the
annual fleet of praus to the Northern Territory. The only minor exception might be any returning Aborigines, though even they are best regarded as part of the trepanging group when out of their own tribal area. 'Macassan' is used in preference to the colloquial 'Macassar' or 'Macassar-man' found in some sources, though I take these terms to be similar in meaning. Other terms which each have their own specific meaning and should not be confused, are Macassarese, Malay, Bugis, Indonesian, Bajau, Kupanger, etc.

Two of the most striking features of the Macassan industry in the Northern Territory are its distinctness and cohesion. The regular captains were well aware of the size and composition of the fleet spread out along the entire coast. To a lesser extent they were aware of praus that had chosen to work along the northern coast of Western Australia, but this area was known by a different name and seems to have been visited by more diverse groups. The use of the term 'Macassan' for trepanggers in the Western Australian context is likely to lead to confusion and more precise terms should be employed. It must be emphasized that the term 'Macassan' does not refer to any racial, linguistic or cultural group as such within the Indonesian archipelago.
PART I: THE VOYAGE TO MAREGE

Chapter 1

The Context of the Industry

A factor of striking importance in the history of island Southeast Asia has been the export of various commodities to places far beyond the boundaries of the region. The gathering and processing of trepang on the north coast of Australia and its transport to the main point of demand in China forms only a part in the total story, but one which cannot be understood except in terms of the larger whole. It is the purpose of this chapter to set the industry in its context.

Trepang is the most convenient term for a range of edible Holothurians. The name is derived from the Malay (and now Indonesian) teripang, and similar forms are found in some related languages such as Macassarese and Buginese. The spelling, trepang, is preferred over several others by the Oxford English Dictionary, and the word in this form can be taken as accepted English usage. However the term, bêche-de-mer, derived from the Portuguese bicho da mar, meaning sea worm, is a common alternative. More prosaically the animal is known as sea slug or sea cucumber.

1 The Oxford English Dictionary derives the term from the obvious French meaning of 'sea spade', but the Portuguese derivation is to be preferred on grounds of sense and historical probability. It is certainly accepted by most writers on the subject. In view of the apparent lack of remark on the industry during the sixteenth century, it would be of some interest to be able to show precisely how the term originated.
A further English term, now obsolete, is swallo. Other languages employ various cognates, and yet more separate terms. The most useful of these are the Malay *gamat* (*gamah, gamēt*) or *beronok* and the Chinese *hai-*sen, meaning 'sea ginseng'.

Although often used more loosely, the word trepang is best reserved for those species which have been found suitable for use as food. These belong, probably without exception, to the families Stichopodidae and Holothuriidae of the order Aspidochirota (class Holothuroidea, phylum Echinodermata). Various genera of these families occur on the seabed throughout the world, though naturally only those found in reasonably shallow waters have been exploited as a source of food. The best description of the animals, covering all aspects and listing the extensive literature, is given by Hyman (1955). Considerable confusion still exists concerning the systematic description of particular species, though it is clear that the greatest diversity and abundance of the animals occurs in the Indonesian archipelago and adjacent waters. Clark (1946) has a useful treatment of this subject, and much information on the distribution and other matters relating to the Australian forms. The taxonomy of older works such as Saville-Kent (1893) or Koningsberger (1904) cannot be taken as reliable.

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2 The Oxford English Dictionary derives this from either of two forms of Malay, *suwāla* or *suwālā*. Yule and Burnell (1903:883) say the latter is 'Bugī (Macassar)'. Aard. en Stat. Woordenb. (1869:1124) perhaps following Crawfurd (1856:440) also gives *soeala* as a name from Celebes for trepang. However I cannot find this word in Matthes. Koningsberger (1904:30) says the term *soewaloe* is used for trepang on the south and west coasts of Sumatra.

3 The other family in the order, Synallactidae, is found mainly in deep waters.
A wide range of names, often overlapping and certainly not coinciding with the systematic distinction of species, are applied to various types of trepang by different cultural groups. Koningsberger (1904:31-4) gives a long list of these names. However the actual number of types distinguished for purposes of trade by any one group is very much less. Crawfurd (1820,3:442) says that 30 varieties are distinguished by the Chinese in the market at Macassar, and this is perhaps a maximum. Matthes (1859:336-7) lists 20 names of the more important types in Macassarese, while Kolff (1840:172-4) gives a similar list of 19 names from the Aru Islands, many of which are clearly related to those in Macassarese or Buginese. About a dozen varieties are generally recognized today in Australia and New Guinea.  

Clark (1946) links many of these names, at least as they were known to him in Torres Strait, with particular species. For example, the type of trepang known as 'prickly red' is Thelenota ananas. These colloquial names, or their cognate forms in other languages, probably refer to roughly similar types of trepang throughout the Indonesian archipelago, though in detail the picture is very confused, especially if one attempts to particularize species. Thus when Clark says that Actinopyga lecanora is known as 'stone fish', the cognate trepang batu is recorded by Kolff (1840:173) in the Aru Islands. Matthes (1859:336) following Vosmaer (1839:162) gives taripang batu as 'black reef trepang'. This identification is confirmed by Flinders (1814,2:231) who

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Information from Mr V. Wells, (Fisheries Branch, Department of Primary Industry, Canberra) and from Department of Agriculture, Stock and Fisheries, Port Moresby.
describes the *baatoo* that he was shown by the Macassans on
the Arnhem Land coast as black trepang. A similar line of
identifications can be followed in reverse. The white or
grey trepang which Flinders says was called *koro*, appears
as Kolff's *trepang corro* and Matthes' *taripang koro*,
meaning 'white reef trepang'. The species is difficult
to determine, but Clark's 'curry fish' or *Holothuria scabra*
is possible. The specific preparation of both *trepang batu* and *trepang koro* is described by Vosmaer (1839:165-6).
These two series of identifications are also acceptable in
terms of the known distribution of the species and some
additional details given in some of the sources concerning
the relative prices of the processed animals. However it
must be emphasized that they are by no means certain.
Koningsberger (1904:26-54) for example, lists many names,
including the two given above, under the same species on
several occasions. Also, on the prices he gives, *koro*
is more valuable than *batu*, and not the reverse as in the
previous sources. In 1969 I collected similar information
(and samples) on the island of Barrang Lombo off Macassar.
This island is a modern (and perhaps traditional) centre
for trade in various local products. *Taripang koro*, a
white variety, was quoted in three size grades (the largest
being the most valuable) at 400-500 rupiah per kilogram,
Rp. 250 and Rp. 150. *Taripang batu*, a black variety, was
quoted similarly at Rp. 250, Rp. 150 and Rp. 100.
*Taripang bangkuli*, also in three sizes, was a little cheaper
still, and *taripang pandang* came in only one quality at
Rp. 25. *Taripang passir* was also known at about the price
of *taripang bangkuli* (there is further discussion of types
and prices in chapter 3).

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5 See Matthes (1859:43) for the literal meanings of
*koro*. 
The main features of the industry and resulting trade are relatively simple, and can be set out here as a preliminary to later, more detailed discussion. The various varieties of trepang are usually clearly visible, lying apparently inert, on the sea floor or in areas exposed at low tide. The various terms applied to them adequately describe their appearance—slugs, cucumbers, worms are polite names. In natural conditions, they are about 10 to 50 cm. long, though larger species grow up to a metre or more. The colour of different species varies widely, some being black, other white, or grey, or brown, or even blue or red, and many variegated species occur. They are seldom attractive. When collected, the catch is immediately cleaned, eviscerated and placed in boiling water. After this boiling, the 'fish' may be buried in sand for a period before being thoroughly dried and perhaps smoked. By this stage it should be quite hard and needs to be kept completely dry if serious damage is to be avoided. It is then sorted, if need be, and sold.

The use of trepang is almost entirely restricted to the Chinese, who eat it prepared as a soup, or braised or fried. The culinary art which converts an item so unpromising in its appearance, either in its natural state or as processed, into an acceptable food is indeed remarkable. Among Chinese communities, it is extremely popular, perhaps largely because of its reputation as a general stimulant and aphrodisiac. The European palate finds the taste quite

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There is a good summary of the industry in Indonesia and a bibliography of the Dutch sources on this in Enc. Ned.Ind., 2:437-40. Fuller information on various methods of collecting and preparing trepang used in different parts of the archipelago is given by Koningsberger (1904:55-62).
pleasant, though this is usually derived more from various subtle spices used in the cooking than from the trepang itself. Sopher (1965:244) lists the evidence for its very limited use by other groups.

The origin of the Macassan trepang industry presents a number of problems, which are discussed in chapter 12. However it is convenient to set out here certain general background information.

The earliest references to trepang in the Chinese sources are listed in appendix 1. From this evidence, it would appear that the Chinese first learnt of trepang as a source of food from northern waters and that it most probably came into common use about the seventeenth century. On this hypothesis, it is not difficult to explain the entry of Southeast Asian trepang into the market. There was already a substantial trade between this area and China, and significant numbers of Chinese were beginning to establish themselves in various ports. The great abundance and variety of this new delicacy in these regions presented an obvious opportunity. Nor need there have been any difficulty in imparting the relatively simple technology involved in preparing the animal to the various native peoples.

Birds' nests and sharks' fins are other unusual items of food which seem to have been first consumed by the Chinese at about the same time as, or perhaps even a little earlier than trepang. This taste for exotic foods in the late Ming period can be related to many wider cultural manifestations.

The direct documentary evidence from Southeast Asia confirms this approximate date for the beginning of the industry in that region. Although the source material on sixteenth and early seventeenth century trade is both
extensive and detailed, there does not appear to be any mention of the trepang industry during this period, and there is certainly no major treatment of the subject as exists for so many other items of trade. It is difficult to be sure of such a negative conclusion, but several sources, particularly Pires and Erédia, are so detailed on matters of trade that the omission of a major item seems most unlikely. Furthermore, there have recently been a number of large scale studies of early Indonesian trade and none of these mention trepang in exhaustive lists of trade items. The most directly relevant works are that by Meilink-Roelofsz (1962) who covers the period 1500 to about 1630, and those mentioned below on Macassar in the seventeenth century. The only specific discussion of this question is by Sopher (1965:244) who has similarly failed to find any documentary evidence of the industry at this early date.

There is no evidence to support the statement of Burkill (1935,1:1181), relying on Hornell, that the Chinese were collecting trepang in Ceylon a thousand years ago. This appears to be a gratuitous explanation of the possible presence of the Chinese there at such a date (see Sopher 1965:244). Similarly the suggestion of Crawfurd (1856:349) that there was a pre-Spanish trade from the Philippines to China in trepang, birds' nests and mother-of-pearl appears to be merely an assumption that those items of trade exchanged in the past were the same as those current at the time of writing. There is, of course, no doubt of the antiquity of this contact in other forms.

In itself, this negative evidence is impressive, but it is made more so by the frequent mention of the industry in the sources from the eighteenth and nineteenth centuries.
If it existed in earlier times, there is no reason why it should have been less obvious. It must be understood very clearly that this silence on the industry in the sixteenth and seventeenth centuries, and to some extent even earlier, is not just a lack of documents. The much earlier carbon dates described in part II, must be seen against this background.

However, irrespective of the problem of dating, the trepang industry needs to be seen in the wider context of events in island Southeast Asia, particularly those in the eastern part of the archipelago, and of the general pattern of trade and commerce in the region. The daunting prospect of attempting to summarize this in a few pages is somewhat alleviated by the fact that, at least in historic times, our interest can be concentrated on the Macassarese and Bugis of South Celebes. It is one of the main conclusions of this thesis that the majority of the Macassan trepangers in the Northern Territory belonged to one cultural group which can be identified as Macassarese-Buginese.

The eastern archipelago, and by this term is meant all the islands to the east of the straits of Macassar and Lombok, is screened from China on the north and India and the Europeans on the west, by the Philippines and the large islands of western Indonesia. As Wolters (1967) has shown in such detail, the latter area was trading with China from the early fifth century A.D. and even earlier with India. In the Philippines, there is ample evidence of Chinese pottery dating probably from late Tang and early Sung times (perhaps ninth and tenth centuries A.D.) (Locsin & Locsin 1967:6). There is little similar evidence of 'foreign' trade behind the screen in the first millenium, but even at this early date it is possible that goods from the eastern regions were being brought to the emporiums of the 'favoured coast' of southeast Sumatra or to the points
of contact in the southern Philippines. Even the comparatively limited archaeological work that has so far been done in this area has shown that metal in various forms and perhaps other 'imports' such as the goat had reached Timor and elsewhere long before this (Glover 1969; forthcoming).

The documentary references to the eastern archipelago in the centuries before the arrival of the Portuguese are extremely slight, but they do confirm that the highly developed cultures of the western archipelago and the wider world with which they were in contact, had some knowledge of, and commerce with the area long before that date. In 1225 a Chinese writer gives a list of names which may refer to Timor, Banggai (off the east coast of Celebes) and the Moluccas (Vlekke 1965:51). Over a century later in 1365, the Nagarakertagama includes a similar list, and whatever view is taken of the precise relationship between these outlying places and the various kingdoms of Java and Sumatra, there can be no doubt that even the claim of vassal status implies a considerable amount of contact, and probably the settling of traders from western areas. Vlekke (1965:52-3) dates the development of this contact from the twelfth century. The strongest evidence for this trade lies in the fact that spices from these areas did reach the farthest corners of the globe. An extremely productive source of enquiry might be to examine the records for the appearance in India, Europe and China of goods which can only have originated in the eastern archipelago. It must be realized though that this contact was the result of traders from the west, whether Javanese or Arab or Indian, visiting the eastern islands. Voyaging by people from the east itself probably began rather later.
From the arrival of the Europeans at the beginning of the sixteenth century, events can be followed in some detail. Tomé Pires, writing between 1512 and 1515, gives an account which enables us to see fairly clearly the position at that time. It is worth quoting at some length a passage relating to Celebes and its inhabitants.

'The islands of Macassar are four or five days' journey beyond the islands we have described, on the way to the Moluccas. The islands are numerous. It is a large country. One side goes up to Buton and Madura and the other extends far up north. They are all heathens. They say that these islands have more than fifty kings. These islands trade with Malacca and with Java and with Borneo and with Siam and with all places between Pahang and Siam. They are men more like the Siamese than other races. Their language is on its own, different from the others. They are all heathens, robust, great warriors. They have many foodstuffs.

These men in these islands are greater thieves than any in the world.... The Javanese call them Bugis (Bujuüs), and the Malays call them this and Celates. They take their spoils to Jumaia (?) which is near Pahang, where they sell and have a fair continually.

Those who do not carry on this kind of robbery come in their large well-built pangaivavas with merchandise. They bring many foodstuffs: very white rice; they bring some gold. They take bretangis and cloths from Cambay and a little from Bengal and from the Klings; they take black benzoin in large quantities, and incense. These islands have many inhabitants and a great deal of meat, and it is a rich country. They all wear krisses. They are well-built men. They go about the world and everyone fears them, because no doubt all the robbers obey these with good reason' (Pires 1944,1:226-7).
The rise of Macassar as a trading emporium and the assumption of a major rôle in maritime activities throughout the archipelago by the Bugis and Macassarese can be directly linked with specific Dutch policies of the seventeenth century and their effects. When the Dutch began to establish themselves in the archipelago at the beginning of the seventeenth century, they adopted a very different policy from that of the Portuguese in respect of native trade. A constant pre-occupation of Dutch policy was the attempt to obtain an exclusive monopoly of any trade in which they were involved, and the most important aspect of this was to control completely the spice trade from the Moluccas. Only two consequences of this need concern us here.

Firstly, the Dutch did succeed in effectually eliminating the native trade between the Moluccas and the western archipelago. The maritime interest of the Javanese in particular never recovered from this disaster, just as the prosperity of the Moluccas was permanently blighted by the Dutch control.

Secondly, Macassar found itself chosen by those in opposition to the Dutch as the most suitable port through which they could continue to work. No doubt there had been a settlement in the vicinity of the modern city long before the Europeans arrived, and in the sixteenth century this was already involved in some trade, though still on a small scale. By 1605, when the ruler of Goa was converted to Islam, Macassar was clearly the most import centre, though not the capital, of the joint Macassarese states of Goa and Tallo'. From that time until its final capture in 1669, the commerce of the city
flourished to an extent which could not fail to provoke the Dutch. 8

The main natural advantage possessed by the port is its central position at the intersection of shipping routes to the east across the Banda Sea, to the west across the Java Sea, to the south across the Flores Sea and to the north through Macassar Strait between Celebes and Borneo. However a much more important factor was the welcome given to foreign traders. Under the protection of the expanding Macassarese political and military power, a diverse community of Malay, Portuguese, English, Danish and other native traders began to visit or even settle in Macassar. The fact that this was a new development is well illustrated by the statement of an English merchant that a Chinese junk which arrived in 1613 was the first which had ever arrived direct from China (Foster 1897:32). It is significant though, that even then the Macassarese, with the exception of their ruler, were slow to enter trade on this new scale. Schrieke (1955:66) quotes a source in 1625 as saying 'few Macassarese travel by sea to distant places, but busy themselves with proas and small ships in places lying around Celebes.' However the situation was changing and by the middle of the century, the Macassarese were playing a larger part in the new trade which had grown up around them.

8 There has been a great deal written on various aspects of the history of Macassar in the seventeenth century, though as yet there is no study which integrates all this work. Schrieke (1955), van Luer (1955) and Meilink-Roelofsz (1962) have some information about commercial matters. Boxer (1967) supplies a detailed picture of Portuguese activities and Bassett (1958) has worked on the very useful English material. The political history has been most recently studied by Skinner (1963) who provides full references to the extensive previous publications on the Macassarese and Dutch sources. The variety of the references well illustrates the diverse nature of society in Macassar at this period. Further references to specific matters will be found in the relevant chapters of Soedjatmoko (1965), an indispensable guide to any study of Indonesian history.
After a prolonged and complicated struggle, culminating in the treaty of Bongaja (1668) and the final occupation of Macassar by the Dutch (1669), the political power of the Macassarese was effectively broken. The commerce of the city was hindered by the expulsion of the Portuguese and other traders in the interests of the Dutch monopoly. Up to 1820, the direct traffic of the port with China was limited to one junk per year (van der Capellen 1855:375). For example, Forrest (1792:72) saw a single junk of about 600 tons in the harbour during a visit in 1763.

However the Dutch had had as their allies in the struggle with Macassar the Bugis states and particularly Bone under its leader Arung Palacca. The development of Bugis commerce centred on Macassar offset to some extent the effect of the Dutch restrictions. Throughout the eighteenth century the Bugis often proved troublesome to the Dutch, and not only in Celebes. In its heyday, Macassar had extended some sort of political control over islands to the south and east. The Bugis however, now expanded mainly westwards, establishing settlements and sultanates independent of their original home. Their most important sphere of direct influence was in the Riau Islands, but their trading settlements were scattered throughout the whole archipelago and their honesty, business sense, seamanship and sometimes their fighting ability are commented on by many detached observers throughout the eighteenth and nineteenth centuries. Indeed they are still famous as sailors today.

In addition to this historical outline, some knowledge of Buginese-Macassarese culture and society is also needed to understand the background of the Macassan trepang
industry. For those unfamiliar with the area, it must be emphasized that the culture is highly developed and the society tightly organized. The two groups are mainly distinguished on linguistic grounds and to some extent on former political grounds. In other ways they are very similar. The strong feudal character of society, with numerous ranks of nobility, probably pre-dates the introduction of Islam at the beginning of the seventeenth century, and its expression in terms of a number of coherent states may be associated with the evolving political situation of the previous century. Since its introduction, Islam has been a powerful force in the area, though many pre-Islamic beliefs and practices have persisted, particularly among the lower classes of society.

Even the relatively lowly crew members of the trepangging fleets - or at least their captains - were very much aware of the wider context of their culture. Many of them were literate and their culture possesses a not inconsiderable written literature. Their society was governed by the rule of adat law, of which the maritime code is the best known section. Certainly many individuals were widely travelled, a trait encouraged by their religion as well as by reasons of trade and employment.

Although the agrarian resources of the area are far from limited, a substantial part of the population has developed an orientation towards maritime affairs - shipbuilding, voyaging and trading. Some groups seem to have specialized even further on the trepang industry. In

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There is no modern account of the Bugis and Macassarese in English, but full bibliographies of the literature are given in Chabot (1950) and Kennedy (1955). Kennedy (1953) and Collins (1937a; 1937b) give good circumstantial accounts.
seeking to explain this specialization in the Northern Territory, it is only necessary to state that it was a viable economic proposition overall and that there were relatively few other valuable commodities to be collected or traded for on this coast.

However, to understand the rôle of the Australian trepang industry in the maritime activities of the people from South Celebes will involve a brief review of wider trading patterns throughout the eastern archipelago. Though much work has been done on European trade in the area, the subject of non-European trade is as yet very imperfectly understood (Tan in Soedjatmoko 1965:402). In terms of function, the trading activities relevant to our subject may be divided into three loose categories. It must be stressed that these are not exclusive categories and often captain and prau might engage in differing activities in various years, or even on one voyage, though naturally there was some specialization (Sydney Monitor 1838). Similarly although the Macassarese and Bugis have long been dominant, they were not alone. They shared these waters not only with various varieties of bickering Europeans, but also with Ternateans, Tidorese, some settled Chinese, sea nomad peoples and the like.

Firstly there was the long distance carrying trade particularly between the eastern and western parts of the archipelago. The specifically Bugis interest in this was no doubt stimulated by their dispersal in the eighteenth century, but as Pires shows, it did not begin then. It was this form of trade that the Dutch tried hard to suppress, and with considerable success except in the case of the Bugis.

Davidson (1846:56-7) writing of a period about 1830 describes the Bugis trade with Singapore. 'On an average, two hundred of these boats come to Singapore in the fall of
of the year, each manned by about thirty men.' They came from 'the different ports on the islands of Celebes, etc., but principally from Macassar.' Their cargoes included coffee, gold-dust, tortoise-shell, native clothes, trepang, deer-sinews, and rice, in exchange for which they obtained items such as opium, iron, steel, cotton yarn, cotton goods, and gold thread.

Secondly there was the distribution of trade goods throughout the eastern islands and the corresponding centralization of their products for sale. Bassett (1958:19) mentions Macassarese collecting voyages to the islands east of Timor in the 1640s, and the products obtained there led the Dutch to set up a factory on Damar (Coolhas 1960). However unlike the position in many parts of the Pacific, Europeans never managed to capture more than a fraction of this type of trade. An outstanding example of a voyage of this type is that described by Wallace (1869, 2:157-284). In 1856 he travelled on a prau from Macassar to Dobbo in the Aru Islands, where a considerable number of traders gathered for several months and bartered their outward cargo for the goods collected by the local inhabitants.

In 1825-6, about 30 praus were said to visit the Arus each year (Kolff 1840:155), and by 1841 the trade had considerably increased. On this latter occasion, Owen Stanley gives some idea of the variety of people involved. When he arrived at the end of June, the main fleet had left about two months previously. This consisted of 'four or five ships and brigs, with a number of Macassar and Bughis proas, whose united crews were said to have amounted to 5,000 persons.' They had left behind 'a few Dutch traders from Macassar, some dozen Chinese, and about 300 Bughis and Macassars' together with 'two large Macassar proas and a Ceramese junk' (Stokes 1846, 2:335-7).
Kolff at Larrat in the Tanimbar Islands during June 1826, gives a glimpse of an individual trading transaction. 'I had given permission to one of my interpreters to take on board a quantity of tortoise-shell and trepang, to purchase which he had brought from Banda a quantity of goods suited to the taste of the natives. I had thus an opportunity of witnessing closely the manner in which the trade is conducted. He purchased a picul... of trepang, for goods worth twenty-two guilders (£1.17s). These consisted of two Javanese dresses, two pieces of lining chintz, two red karwasses, two parangs or chopping-knives, two plates, two combs, two handkerchiefs for the head, and two catties... of copper wire. According to an old custom, the articles they receive for their produce must always be in pairs, except if they consist of valuables, such as gold, elephants' tusks, etc., which are valued and paid for accordingly' (Kolff 1840:362-3).

From the seventeenth century on, a common impediment to this trade arose out of the Dutch attempt to keep a tight monopoly on the production and distribution of the more important spices. The simplest way to control 'smuggling' was to control all forms of trade. Thus Forrest, who was spying out the possibility of circumventing the monopoly, noted in 1775 that Dutch trusted only the local Chinese at Ternate and Tidore to trade with New Guinea. The 'burghers' of those ports were suspected of wanting to deal in nutmegs. However he gives a full list of the other items of exchange at Dore Bay in New Guinea, which shows the permissable alternatives. The Chinese provided iron tools, chopping knives, axes, blue and red cloth, china beads, plates, bowls, etc., in return for Misoy bark, slaves, amber gris, trepang, tortoise-shell, small pearls, black parrots and large red parrots, birds of Paradise and other dead birds dried (Forrest 1779:106).
The third and final form of trade practised was the actual collection of goods by the crews of the vessels involved, though it is perhaps rather misleading to regard this as trade since no exchange occurred. The trepang industry proper in Australia falls into this category, though such activity was certainly not restricted to this area. Dalrymple (1769:91) records that 'a very sensible old man, whom I met at Sooloo in 1762, informed me that he had, many years ago, made seven voyages to Papua for sea-slug, or becha-de-mar, which they do not purchase, but gather themselves.' The area referred to was probably around the western extremity of New Guinea. In a sense, the local inhabitants of the Kei, Aru and Tanimbar Islands, who collected goods for the Bugis and other traders, can be said to have been engaging in this sort of activity. However it was not necessary to go so far afield to find opportunities for collecting. The coasts of Celebes produced excellent trepang and other items. An important group exploiting these resources were the sea nomads, or Turijene, as the particular section of these people in the vicinity of Macassar were called. Sopher (1965:239-40) indicates the range of items available in the strand environment which could be collected for trade. In addition to trepang and tortoise-shell, which are the most important, there is mother-of-pearl, pearls, sea-shells, coral (akar bahar), agar-agar, dried oysters and snails, birds' nests, mangrove bark and wood, dye-yielding roots, honey, beeswax, eaglewood, and dammar.

The distinction between the various forms of trade, as well as the Dutch attitude to the first two, is seen in a passage by Earl. 'The Dutch settlement at Macassar is small and of little importance, except that it acts as a check on the commercial enterprise of the Macassars, who are even more skilful navigators than the Bughis. The trade of the
eastern islands was once chiefly in their hands, but the prohibition on the importation of British calicoes at Macassar, together with the great discouragement given by the authorities to intercourse with Singapore, has enabled the Bughis successfully to rival them in all branches of the eastern trade, excepting that with the north coast of Australia, which being a fishery and not requiring articles of European manufacture, the Macassars still retain' (Copies or Extracts 1843:44).

Although our quantitative information is in many respects defective, some attempt must be made to indicate the scale of the Macassan trepang industry in the Northern Territory in the context of the commerce of its time. This is only really possible for the nineteenth century and for the sake of simplicity, items of trade other than trepang can be ignored.

From the more detailed figures presented in chapter 3, the annual production from the Northern Territory in the early nineteenth century can be estimated to be in the order of at least 200 or 300 tons, and perhaps more. Even in the last years of the Macassan industry, for which reasonably accurate figures are available, a production of more than 100 tons was maintained until 1891 (see chapter 13).

This made up a large part of the total export of trepang from Macassar. Crawfurrd (1820,3:443) says the annual export of trepang from Macassar to China was 7,000 piculs (416 tons), though there seems to have been considerable variation. For example, Vosmaer (1839:180-1) says that the annual export in 1832 had declined from Crawfurrd's figure to 4,900 piculs (288 tons) and in 1833 to only 2,500 piculs (147 tons) and even less the next year. He attributed this decline to competition from Singapore and a run of low prices. In the middle of the century, Lion (1855:2), a not
altogether reliable source, gives a higher figure of
8,000 or 9,000 piculs (475 - 534 tons), and in 1915, the
export from Macassar was 569,000 kilograms (559 tons)
(Enc. Ned. Ind., 2:440). In 1969, the annual production
from a wide area which passed through the island of
Barrang Lombo off Macassar, was said to be about 600 tons.

This annual export of about 500 tons of trepang from
Macassar during the nineteenth century was of considerable
importance in the area's economy. Unfortunately Crawfurd
(1820,3:441) contents himself with saying that trepang
'constitutes, in quantity and value, the most considerable
article of the exports of the Indian islands to China,
unless, perhaps, we except pepper.' However in 1824, after
confirming that trepang holds first place in the trade of
Macassar with China, van der Capellen (1855:375) quotes its
value for that year as about 350,000 guilders. This is
about 140,000 dollars, or £28,000. In comparison,
Crawfurd's figures for tortoise-shell indicate a total
value for it in China of about 60,000 to 70,000 dollars, and
for pearl shell, mainly from the Sulu archipelago, a value
of another 70,000 dollars, which he estimates as £15,750
(Crawfurd 1820,3:444-5). These figures confirm the
impression of Dumont d'Urville (1844:219) in 1839 that
the trepang industry and the getting of tortoise-shell
were almost the only activities of the maritime population
around Macassar.

10 In 1869, the figure is said to be 8,000 tal ponden,
but I do not know what is meant by this measure (Aard. en
Stat. Woordenb. 1869:1125). Perhaps it is about a picul
or a hundredweight or 100 Dutch pounds.

11 This is allowing 2.5 guilders to the dollar (Lion 1855:4).
A similar rate is obtained for 1826 by using the equation
by Kolff (1840:362) who says £1.17.0 is equal to 22 guilders,
in association with a value of 4 shillings to the dollar.
The latter is approximately that used by Crawfurd and is
given as a fair estimate by Barnes in 1823 (HRA III, 5:738).
But if the proceeds of the trepang industry were of importance to native commerce in the eastern archipelago, they pale into insignificance beside the sums of money involved in the European directed trade of the western area. For example in 1823, only 4 years after its foundation, the value of imports and exports for Singapore totalled well over 13 million dollars (Hall 1964:478). Van der Capellen's estimate of the total trade in trepang from Macassar in the following year is only about one hundredth part of this.

It would appear however, that as far as the trepang trade specifically was concerned, Macassar, and through it the Northern Territory, supplied a large proportion of the total Chinese market. Vosmaer (1839:178) mentions that trepang Marege' (from the Northern Territory) and trepang Kayu Djawa (from the Kimberleys) was particularly intended for the Canton market and was almost unknown except at Macassar, where it was shipped on Macao vessels.

No figures are available on the quantities of trepang gathered along the coast of China itself, but some idea can be obtained of the size of imports both directly and by the production figures for other areas. For the 1850s, Dodge (1966:4) estimates a total annual import of only some 400 tons. While this is almost certainly too low as an average, we can confidently disregard Lion's (1855:2) wild guess of 90,000 piculs (5,340 tons).

The Indonesian archipelago was almost certainly the main source of trepang, and all authorities agree that Macassar was the chief market in that region. In 1915, for which our figures are probably reasonably accurate, 86% of the total export of trepang from the Netherlands Indies passed through Macassar (Enc. Ned. Ind., 2:440). The Philippines are another obvious source of supply and there was certainly some market at Manila, but it is
difficult to determine the size of this branch of the industry.

Other regions from time to time supplied small quantities. Thus, for example, the Fiji Islands produced a total of about 600 tons between 1828 and 1835, the first period of trepangning there, and another similar quantity in the 1840s (Ward n.d.). Another area of temporary importance was the Queensland coast and Torres Strait. Some trepang was being sent from here surprisingly early, but it was not until the 1880s that the quantities were substantial (Bolton 1963:76). Saville-Kent (1893:231) gives the figures for this decade which range between 160 tons per annum and 255 tons per annum, with some additional coming from New Guinea. However these quantities were not maintained.

Allied with the question of quantity is that of quality. The quality of the trepang found on the Northern Territory coast is discussed in chapter 3, but whatever conclusion is reached on that question, there is no doubt that the Northern Territory industry played a major rôle in the total production,
particularly since it continued regularly over a long period. In the early nineteenth century, perhaps something of the order of a third to a half of the China market may have been supplied from this source.

A circumstance which resulted in the recording of much valuable information about the industry, yet in itself had little effect on it, was the establishment of a series of abortive British settlements in northern Australia during the early nineteenth century. These were Fort Dundas (1824-9) on Melville Island, Fort Wellington (1827-9) in Raffles Bay and Victoria (1838-49) in Port Essington. Since the rôle of the trepang industry in the formation and progress of the settlements has been fully described by Howard (1933) and more recently by Allen (1969), it is only necessary here to reiterate the main points.

The most important motive in the foundation of Fort Dundas was the hope that British commerce would be thus enabled to capture what was called Dutch commerce in the archipelago. In effect, it was an attempt to compete in the first form of trade distinguished above, the import and export of goods from the eastern islands. The collection and distribution of goods within the region was to be largely effected by the Macassans. This aim was frustrated at Fort Dundas by its totally unsuitable location. The lack of practical experience was further demonstrated by the loss of two European ships which attempted to enter the second or distributive form of trade.

Fort Wellington was established in Raffles Bay to overcome the problem of location, and though a position a little further east (perhaps on South Goulburn Island or at the Liverpool River) might have been even more advantageous, this was probably good enough. Friendly relations were begun with the Macassans in 1828, and there
is evidence that a number of merchants arrived with the fleet at the end of 1829, only to find the site deserted.

The reasons for the foundation of the Port Essington settlement were more complex, and trade, though much flaunted, was possibly only a subsidiary motive. In practice, its encouragement and even the provision of a reasonable opportunity were studiously neglected by the government, though the small exchange of goods that did take place offered some promise of greater things (Earl's evidence in Overland Route Minutes 1843).

It is difficult to say whether the possibility of establishing a 'second Singapore' in northern Australia really existed, since the scheme was never given a proper trial. Certainly it is possible to see a pattern of trade into which it might have fitted quite easily. Jukes (1847, 1:363), who dismisses the idea by stressing the Dutch control of trade at Macassar, rather misses the point, which has also eluded Gibson-Hill (1959:118). This is really whether a trading system of sufficient size and vigour could have been built around an entrepôt in northern Australia which would overcome the problems of establishment and competition from the existing centres. Thus McArthur at Port Essington was unconcerned when he encountered some hesitancy in Macassan trading because of contract provisions, since he foresaw the Macassan financiers themselves coming to the settlement (Copies or Extracts 1843:38). Naturally the Dutch, with their traditional policy of monopoly, could be expected to oppose any change in the existing pattern of trade. In fact they did show considerable interest in New Guinea about this time, possibly with the intention of frustrating the trading possibilities of the British settlements (Thomson 1917:308). However, even without such competition, it is difficult to see how the comparatively small population of the eastern archipelago
would have been able to support a trade of sufficient magnitude to meet the cost of an establishment of any size in northern Australia. Even the wildly optimistic dreams of the propagandists for the scheme fall far short of the soaring volume and infinite variety of the commerce on which the prosperity of Singapore was founded. Furthermore, it has now been shown with depressing regularity over more than a century, just how difficult an environment is that of northern Australia.

Because the modern international boundaries in this region, the result of more or less arbitrary colonial activity, obscure the continuities and similarities which exist between the eastern archipelago, western New Guinea and northern Australia, it is necessary to stress the fact that the Macassan trepang industry in Australia fits very naturally into a much wider context of activity. Within that context, it forms a distinct unit which it is the purpose of the following chapters to describe.
Chapter 2

The Voyage and its Organization

In this and the following two chapters, the Macassan trepang industry is described in general terms. This is based on the assumption, which appears to be justified by both the documentary and archaeological sources, that the industry was essentially similar throughout its history. The use of the archaeological evidence is reasonably straightforward, and the only point worth noting is the difficulty of establishing even an approximate date for any given assemblage. However, the documentary sources describing the industry present a number of special features. To begin with, they nearly all date from the nineteenth century when, on any account, the industry was well established and latterly declining. More importantly, many of the descriptions are based on no more than a few days' or even hours' observation. Thus the observer is often rather unaware of what is really going on - to say nothing of having a normal share of prejudices and preconceptions depending on his background and relation to the Macassans - and he has no way of distinguishing any unusual event as such. Certainly with the numbers of men involved over even one century, there would have been many exceptions to any general statement, not least because of the European presence on a particular occasion. Therefore, when in the following pages a reference is given in support of a statement, this involves not only the fact that a particular practice is recorded there, but also, unless specifically excluded, the assessment that this practice was probably normal.

All sources agree that the chief point of origin for the praus on the Northern Territory coast was Macassar.
In 1803 the first six praus met by Flinders are specifically stated to come from Macassar (Flinders 1814,2:229). In the 1828-9 season, all the 34 praus that called at Raffles Bay gave their home port as Macassar (appendix 4). At the end of the century, not only do all the surviving papers of the praus indicate the same port of origin, but all the praus still engaged in the industry appear to have been covered by the approaches made by the South Australian government to the authorities at Macassar.

The evidence for the identity of the crews on the praus is not so categorical, but in general it is clear that they were chiefly, though not exclusively, Macassarese or Bugis. The complete crew lists for two praus survive. The first is mentioned by Kern (1933:245,248), but it is necessary to refer back to Matthes (1883:310-11) for the original, which dates it from before 1860. Some idea of the origin of each individual can be got from the form of his name. The captain and one other of the 34 crewmen have the Macassarese or Buginese title Daeng; two names have the prefix Bapa, meaning father and another two the prefix Uwa, meaning uncle; twenty eight have the Macassarese-Buginese prefix i and there is one papua. The second is a list preserved in SAA 790/1903/438, of the 51 people on the paduwakang bondeng Mannongkoki (prau L) when she left Macassar on 21 November 1902. The master, i Oenoesoe daeng Rimba (Unusu daeng Remba), has in his crew 5 men with the title Daeng, 2 called Bapa, 5 called Uwa, 21 with the prefix i to their name and 17 with no prefix to their name. It would be unwise to place too firm a dependence on the form of the names as evidence for the background of any particular individual, but the overall predominance of Macassarese-Buginese is clear.

Frequently, the historical evidence does not really allow any certain distinction between Macassarese and Buginese individuals, or even groups. Even if an observer
got past the approximation of 'Malay', there is no certainty that he was aware of the precise implications of the terms used. For example, can we be sure that Dalrymple was able or bothered to distinguish between Bugis and Macassarese? Another danger is that of reading too much significance into the point of origin of a prau. In the most common case, both Macassarese and Bugis seamen (as well as many others) were available in Macassar.

However, there is some evidence which suggests a predominance of Macassarese. In the only specific discussion of the point by a knowledgeable contemporary, Earl is clearly of the opinion that the Australian trepangers are Macassarese, rather than Bugis (Copies or Extracts 1843:44 - quoted in chapter 1). Various informants in Macassar also emphasize the rôle of the Macassarese. Furthermore, the source of linguistic borrowing by Aborigines, including the Macassan place names in Australia, seems to be largely the Macassarese language (see chapter 11).

It would be wrong though, to discount all references to the Bugis in Australia. For example, when Pobassoo told Flinders in 1803 that part at least of the fleet belonged to the 'Rajah of Boni' (Flinders 1814,2:230), it is reasonable to assume that a considerable number of Bugis were involved, though the precise implications of 'belonging' are not quite clear.¹

In a few cases, quite definite information is available. Thus Daeng Sarro, the old man interviewed by Cense and who came to Australia about the turn of the century, was

¹ Flinders, both here and in his log book says that the whole fleet of 60 praus belonged to the Rajah of Boni. However Brown (1802-3), who seems to have written his journal actually on the Macassan prau or immediately afterwards, and is probably more reliable on the exact details of the conversation, only says that the original 6 praus 'belong to the Rajah Bone.'
definitely Macassarese (Cense 1952; pers. comm.). In 1969, I met in Macassar Mangngellai daeng Maro, the son of Using daeng Marangka (master 15 in appendix 8), a famous captain in the final period of the industry. Mangngellai, who had himself come as a young boy in the very last years, said that his father was part-Macassarese and part-Bugis.

The actual appearance of a Macassan is perhaps best shown in Westall's sketch of Pobassoo (plate 2.1), though the portrait of Remba (plate 2.2) and the photograph of Mangngellai (plate 2.3) are also of interest.

Though Macassarese and Bugis made up the majority of the crews, they were not alone. In the first crew list given above, there was one papua, though it is possible that this term applies to an Aborigine. The name of one of the captains who called at Raffles Bay in 1829, Boodieman, almost certainly indicates that he was Javanese (Dr Sutjipto Wirjosuparto pers. comm.). There were probably few crews that did not include some variety.

More significantly, a few praus seem to have been quite different. Earl (1846:65) says that of the 13 praus which visited Port Essington in 1840, 'eleven ... were from Macassar, the remaining two being a small Prahu from the island of Sumbawa, and a vessel belonging to that singular people the Badju.' He noted that the Bajaus concentrated on hunting turtles for their shell, and also that the prau came from 'the vicinity of Macassar' (Copies or Extracts 1843:13). It is difficult not to identify this prau as one of the Tau-ri-djene (Turijene) vessels which Vosmaer (1839:161) says were coming only a year or two earlier. He also mentions their concentration on tortoise-shell, though the group were famous for their trepanging. Sopher (1965:145,212) includes the Turijene among the Sea Nomads and describes their connection with Macassarese and
Bugis communities. In 1969, his description still applied to a small group living among the islands off Macassar. In the case of the prau from Sumbawa, it is uncertain whether this came directly or via Macassar. In either case, there was a substantial Macassarese population on the island, so that the difference may have been more apparent than real.

Even if we could ascertain that an individual was Macassarese or Bugis, that does not mean that his experience was limited to Celebes. For example, the servant whom Wallace took with him to the Aru Islands in 1856 had been to Australia several times (Wallace 1869,1:336). More surprisingly, Searcy mentions 'a man on board one of the proas, who had been at Port Darwin' (SAA 790/1886/356), and a few years earlier, the boatswain or serang on the government cutter was 'not only a native of Macassar, but actually had a brother in one of the proas' (SAA 790/1884/177).

However the crew was made up, it was bound together by the operation of a strict maritime code. This has mainly been studied in relation to trading voyages (Tobing 1961), but enough evidence survives to show how this operated on an essentially collecting voyage. There can be no doubt that such a system was in operation on the praus that came to the Northern Territory. Brown (1802-3) saw some of the documents relating to this and gives a vague account of their contents.

Pobassoo shewed us a written order from the Raja addressed to Salloo directing him to return to Macassar with the fleet under his command by a certain time. It would seem that the commander of the Prao furnishes his crew with necessaries & (?) later) deducts it from their pay or charges it to the Raja. They shewed us an account (??) with some of the crew.

In 1835 Earl (1837:335-6) had planned to go trepanging with these people to the Arus and northern Australia, but the scheme fell through. He also says that they went to the Kimberley coast more often than to Arnhem Land (Copies or Extracts 1843:45).
In the case of the Macassan trepangning praus the most important document was a contract between the outfitter of the prau and the master. Two of these have been published. The Macassarese original of the first, dating from before 1860, is to be found, with a few notes, in Matthes (1883:310, 66). This contract was translated into Dutch with further notes by Kern (1933). The second which was produced in court on 27 November 1886, is translated and annotated by Nederburgh (1896-8). In the notes on this, some details are given of a third contract dating from 1851. The first and second contracts specify the Northern Territory coast as a destination, and it is probable that the third also did. Both the prau (W) and the master (25) mentioned in the second contract appear in the South Australian records (appendix 8). This is unlikely to date from the season just beginning, and for three of the previous four seasons we have complete lists in which this combination of prau and master does not appear. It may therefore, date from the remaining season in 1884-5. The basic provisions of these contracts are very similar. In fact, they are probably drawn up from a common model. The following pattern of arrangements is clearly normal.

To begin with, the owner of the prau had to find an outfitter and a master, though in many cases two, or even all of these rôles were filled by the same individual. Some idea of the possible combinations can be gained from the table in appendix 4 where the three rôles appear to be separated. Thus the prau Mannarima was owned and outfitted by Daeng Manye, while the master was Pua Atye. However, Pua Atye also owned the Kadarou which was outfitted by Daeng Manye and captained by Pato. Although the two praus left Macassar on different days, they were together by the time they reached Raffles Bay. On the other hand, a number of masters own their praus and the fact that no consignee is given perhaps indicates that they also outfitted them themselves.
probably from 1884, includes a list of these supplies which shows what was needed.

77 piculs and 22 catties of rice
120 kadjang (awning mats made of palm leaves)
and 250 ataps (similar roofing mats made of nipa palm leaves)
350 catties of rattan
60 pieces of karoro' (palm leaf sailcloth)
12 iron pots of cooking trepang
150 parring bamboos (a strong type for building) and 2 pattung bamboos (another type)
8 baskets (krandjang)
100 catties of tamarind fruit
Anchor rope for towing the vessel (the Macassarese for towing rope is otere' parenreng)
80 catties of kuwal (probably leaves from kuwal palms)
16 piculs of rice (Rangoon rice) to pay as tribute
20 sovereigns
Cost of this contract and hire of a dogcart

Total expenses

(after Nederburgh 1896-8 (1919:145))

3

1 picul = 133 lbs = 100 catties
1 cattie = 1.3 lbs

4

In a note Nederburgh says that this rice is to be given to the local inhabitants in return for permission to collect the trepang. He may have had Aborigines in mind, but from the South Australian records we can be quite sure that it was intended to supplement the 20 sovereigns paid to Robinson. The point is confirmed by the price for the rice. That for general consumption cost 8 guilders per picul; the Rangoon rice cost 9 guilders.

5

Thus 1 sovereign costs 12.5 guilders. Searcy (1907:68) says that in 1883 the Macassans claimed that they had had to pay 14 guilders.
Secondly, the outfitter advanced to the captain and crew individual sums of money. In the second contract again, a few figures are given: 513 guilders for the master; 100, 80 and 54 guilders for three crewmembers. A full list is given by Matthes (1883:310-11) for the pre-1860 contract where the figures range from 10 to 25 reals (20 to 50 guilders) for ordinary crew members, though the master got 100 reals (f.200) and the *papua* only 8 reals (f.16). The purpose of these advances is not absolutely clear. Ostensibly they are to cover expenses, but it is hard to see the need for such substantial sums. For example the 80 guilders advanced to one man in the second contract would have bought the equivalent of 10 piculs of rice, enough to feed one person for 2 to 3 years. The most likely explanation is that they were a means of taking over the debts, at least in part, incurred either in previous voyages or in the months since returning from the last voyage. In point of fact, because of the expectation that succeeding voyages would be made with the same master (see below), these advances may often have been made soon after the return from the previous season's voyage. Perhaps it was also necessary to provide in some way for dependants and there would naturally have been some small personal expenses such as new clothes. Seen in this light, these advances are a functional equivalent of wages. More explicitly, they are a form of mortgage - and often a second mortgage if the borrower were already in debt - against the labour to be provided on the voyage.

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6 Using the figure 1 real = 2 guilders given by Nederburgh (1896-8 (1919:148)).
This is an important point which has been missed by previous writers. It does not deny that most crew members were permanently in debt - but it does show how such a system worked. It is also vital for an understanding of the specific articles in the contracts. These relate to procedure on the return of the prau, but need to be described here as they reveal the expectations governing crew members starting out.

The first matter to be settled on return was the sale of the official cargo. Article 8 in both the first and second contracts states that the outfitter, master and crew must all give permission for this vital sale, except when the master and crew cannot be found, or do not wish to be found, the outfitter may proceed alone. In many cases, the outfitter may actually have bought the cargo himself or at least received a selling commission. The lump sum thus obtained is then divided into fixed proportions. First, one sixth goes directly to the owner of the prau and another sixth goes to the outfitter. These two parts would often have been combined where the same individual was both owner and outfitter. They are clear profit, though the size of this depends on the success of the voyage. From the remaining two thirds, the food and equipment expenses of the outfitter are then refunded in full, but without interest. Next, the remainder is handed over to the master, who takes over the responsibility of repaying to the outfitter the advances for general expenses made to the crew. If these have not been met by the money available, the outfitter has thus consolidated his debt on to one man. In any case the master is left with the task of distribution to individual

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7 It also escaped some contemporary observers. Cadell, for example, clearly misconstrued the whole situation in his letter of 23 December 1878 from Macassar (SAA 790/1879/83), though his figures, when interpreted, confirm those suggested elsewhere in this and the following chapter. Perhaps it is easier to understand this system in the light of modern economic theory than it was for such a paragon of Victorian enterprise.
crew members. This he does by dividing the sum available into equal parts, one for each crewman and three for himself. If a share is larger than the expenses advance made to a crewman, he will therefore receive a cash payment; alternatively, if it is smaller, he will incur a debt to the master, but not to the outfitter. Naturally at this stage of the division, the sums involved are not large. The profit (or loss) by the individual crew member is in the nature of a bonus (or penalty) for a successful (or unsuccessful) voyage.

Various clauses cover possible difficulties. A crewman in debt to a master is required to go on a further voyage with that master unless he can pay his debt by obtaining an advance from another master. However the 1851 contract includes a provision that if the outfitter is unwilling to finance another voyage, the master and crew are not obliged to pay a previous loss. Presumably this also cancelled the debt of the crewman to the master.

In the event of any deception by a crewman, either by decamping with his advance before the voyage or by obtaining a second advance in the same season from another master, the debt of original advance is doubled. Again the 1851 contract has an article releasing the crewman from an untrustworthy master.

Should an ordinary crewman die during the voyage, the master takes over his interest, whether it be profit or loss. However in some cases, the original advance to a crewman has been made to another person, who then maintains his interest in the event of death. There are rather different notes by Kern and Nederburgh on this last provision, which is essentially the same in both the first and second contracts. Kern says that it refers to cases where a man is not a good credit risk and is looked after by some other person or his karaeng, but he does not know exactly what is meant by this.
Nederburgh however thinks that it refers to slaves or indentured labourers, and quotes the 1851 contract where no euphemism is adopted. If this is correct, it confirms the fact that the crew members' main return was in the original advance.

Another article covers a whole range of possible disasters: wreck, fire, capture by pirates, or the death of either master or outfitter. In the latter two cases, matters are to proceed as normally as possible and the contract is not broken. If the prau is completely lost however, and this was no rare occurrence, the loss is borne by the outfitter (and presumably the owner). However, if the voyage does not take place at all, then advances must be refunded.

Finally, there are a number of minor points in connection with any cargo collected by the crew independently of the official cargo. This extra cargo is called *pabisalima* in Macassarese, or literally the 'washing up.' The captain has to share this out fairly. In the second contract of 1886, certain supplies are to be paid for directly in trepang. A picul of tobacco costs a picul of trepang and the hire of 4 dugout canoes comes to 4.6 piculs of trepang. The equivalent cash value is small (between about 70 and 150 guilders), and the quantity of just over $\frac{5}{2}$ piculs would have been only 5 per cent or less of the total trepang cargo.

There are no accounts preserved for an actual voyage, but it is interesting to apply this formula to the fleet as a whole, assuming that all praus worked under a similar system. On this basis, the figures given in the South Australian records may be used, bearing in mind that they represent certain approximations. From table 13.1, we see that for the 1885-6 season, 16 praus, carrying 457 men collected 200 tons of trepang worth £9000 (53/5\(\frac{1}{2}\) per picul). The price is rather high, but the quantity per prau relatively moderate. All this trepang can be taken as the official
cargo, though it must be remembered that any which was pabisa-lima gave a slightly greater rate of return to the crew, and this takes no account of any other commodity. Firstly, one third must be taken out for the owner and outfitter, leaving £6000. Using the rate of £1 = 12.5 guilders, this comes to 75,000 guilders. In the second contract from 1886, the advances for supplies to one prau totalled 1365.76 guilders plus a small repayment in kind. From the quantity of rice, this prau seems to have been of about average size and 1500 guilders as an average total for supplies is reasonable. This leaves 51,000 guilders to be divided among 441 crewmen and 16 masters. A single share for a crewman therefore would be just over 104 guilders and a triple share for a master 313 guilders. The agreement of these very approximate figures with those actually given in the second contract is extremely close. The three crew members mentioned there would have received cash payments of 4 guilders, 24 guilders and 50 guilders, while the master would have suffered a loss of 200 guilders. Of course these figures do not represent the actual result of that voyage, but they do confirm our understanding of the operation of the system. Various features of this system require comment. Firstly, it is remarkably sophisticated. Earl (1846:84) first drew the comparison with the system of lays operating on contemporary European whaling ships. A good description of the variations of the system used on mid-nineteenth century sandalwooding vessels in Melanesia is given by Shineberg (1967:85-6). However, the Macassan system goes rather further than these by the integration of credit into the contract.

From this passage, it is clear that Earl understood the outline of the Macassan system, though assuming that the system was the same as later, it seems unlikely that the price of the trepang was determined before the voyage. A pre-arranged price would remove an important stimulus to maintaining quality.
Secondly, it is a misunderstanding to regard the ordinary crew members as oppressed, exploited and ground down by a perpetually increasing burden of debt. In fact despite their debt and certain resultant liabilities, they enjoyed an annual income in the 1880s at least of about 100 guilders (£8 sterling) plus a basic food ration for nearly half the year. Indeed the man most worried about debt was probably the master. In addition to his own indebtedness even before setting out, he had a direct interest in the behaviour of a crew of gambling sailors, probably no more responsible than their colleagues in any port.

Thirdly, there is the striking feeling of interdependence between the various parties. All bear some risk, even the outfitter and owner stand to lose their whole investment in the event of disaster. Similarly, all benefit in fixed proportion from a successful voyage. As Tobing (1961) points out, this spirit of co-operation has deep roots.

Finally, there is the quite remarkable equality of all members of the crew under the master. From the contracts, the only apparent advantage of seniority is the right to a larger credit, but then this privilege rebounded at the end of the season with a smaller cash payment or yet larger debt. On a legal basis, all the crewmen or sawis as they are called, stand in the same relationship to each other and over them is the master or punggawa (the Malay term nachoda is also commonly used to refer to the master). It is difficult to believe that the actual situation on board a prau was so simple. Certainly the maritime code for trading voyages as described by Tobing envisaged a number of men with special functions and special privileges under the master. Similarly, on the prau described by Wallace (1869,2:159-75), there was a range of distinctions. It might be argued that these were not collecting voyages,
and certainly the term *djuragang* or sea-going merchant (Matthes 1859:418) which applied to a distinct individual on Wallace's prau, is used more loosely to describe the master in some documents actually carried on Macassan praus (SAA 790/1884/177). However, even with the Macassans there is some evidence of special functions, if not special rewards. In 1828 at Raffles Bay, Smyth visited a prau with its master 'and personally presented the whole of his crew with a cotton handkerchief each, and to the Officers (Durumoodies) a pair of scissors' (HRA III, 6:803). *Djuru-mudi* in Macassarese means steersman. Searcy mentions 'the Serang's houses' on a prau at Mallison Island in 1884 (SAA 790/1884/445). From the context it is quite certain that the master is not meant, and the term usually means a boatswain. The next year he describes a man as 'second in command', though this is not a good example as the individual had previously been a master (Searcy 1907:121). From appendix 10 it is clear that Aborigines were aware of terms for some specialists. Indeed it is hard to imagine that any crew of perhaps more than thirty men could function without specialization and delegated responsibility. It would be remarkable if this did not involve some form of differential return, however disguised.

One possibility is suggested by a comment of Searcy's that 'each prau carries two serangs and they each carry their own stores and trade upon their own account' (SAA 790/1883/3 319). Perhaps this was a privilege only permitted to certain members of the crew. This point is further discussed in chapter 3.

In addition to those already mentioned a number of other people had some interest in the trepanging fleet. Most obviously there were the Aborigines, particularly those who travelled back to Macassar (see chapter 11). Perhaps they can be best regarded as passengers paying their way with a certain amount of work.
Then there were various officials. The second contract from 1886 was signed by the Captain of the Macassarese, the harbour-master and an interpreter, presumably for the latter. The function of the first official is made clearer in the first contract discussed above. This is signed by the gallarrang or headman of Maloku, a kampong on the outskirts of Macassar. He certifies that he has examined the crew members in respect of moneys received and expenses incurred. In other words, there was a trustworthy witness to the agreement between master and crew, which was no doubt all the more necessary when many of the individuals were illiterate.

The harbour-master signed the contract as evidence that it had been registered at his office. By this device, the voyage was officially brought to the notice of the Dutch administration. In the nineteenth century at least, the masters were very conscious of their Dutch registration. This was very clear at the end of the century when they carried various ship's papers for the South Australian officials who met them, but even in 1803, when there was no prior expectation of meeting anyone on the Northern Territory coast, one of the praus met by Flinders first answered the English colours with a Dutch flag (Brown 1802-3). There are various other references to praus flying Dutch colours, though sometimes they also displayed other additional flags such as the blue one seen by King (1827,1:74) or the red flag, edged with a double border of blue and white noted by

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9 It is just possible that records from this office still exist, but brief searches in Macassar, Djakarta and the Netherlands have not located them. They would provide most valuable information not only on the Australian trepang industry but on all native trade. See chapter 12 for those records of ship movements which are known.

10 Another useful addition to Flinders' account.
Dumont d'Urville (1884:29) (cf. Dumont d'Urville 1846: plate 114). Forrest (1792: preface) observed that 'the Buggess flag is generally blue, with deviations according to what district it belongs.'

The praus of the Macassan trepanging fleet were described and drawn by many of the early Europeans in northern Australia, who, very often seamen themselves, were intrigued by these unfamiliar craft. In the context of native shipping in Indonesia, they are easily recognizable. The general appearance of a prau is seen in the sketch by Westall in 1803 (plate 11,2), and a list of the most important illustrations of praus as seen in Northern Territory waters is given in appendix 10. A useful verbal description is that of Roquemaurel describing those seen in Raffles Bay in k839.

The praus used for trepang fishing are large vessels, fifty to sixty meters long [?, perhaps 50 to 60 feet is meant] 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 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 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 rudders.

The prau has no deck but above the water hold and trepang bunker, from the poop up to the foremost, there is a floor of bamboo rods, covered with a mat roof, thus forming a sort of between-decks for the 30 or 40 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 site 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. It is quite impossible for vessels like this to take to the great oceans, but the Timor, Molucca and Sunda Seas are veritable lakes where the frailest of vessels can venture without great danger (after Dumont d'Urville 1844:259-60; cf.51-2).

As this prau was at anchor when Roquemaurel visited it, his description omits the feature which most impressed other observers, the great rectangular sails. Searcy (n.d.: 17-8 n.1) for example, in one of his descriptions, gives the following details.

The sail is of matting stretched on two bamboo yards of immense length and of 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.

Whatever impression European observers obtained, there is no doubt that these vessels were very seaworthy, though it would be easy to imagine from the mention of bamboo,
rattan and other local materials used in the rigging and superstructure that they were insubstantial. Certainly this was not true of the hulls. As long as they were given a regular coat of a lime preparation to check worms, they remained sound for many years (Collins 1945; Harney n.d.: 118). Collins (1937 b:20-1) says that the life of a prau in the nineteenth century was between thirty and forty years.

A major change in the design of the praus, which can be followed throughout the nineteenth century, was the replacement of the rectangular sail or sails by schooner rig.

As early as 1838 we are told that:

...improvements in their [Bugis] naval architecture are being gradually introduced; and many of the merchants engaged in the trade with Java possess topes, or luggers of 100 tons burthen constructed after a European model (Sydney Monitor 1838).

The first sign of this change on Macassan praus is the addition of a proper bowsprit and several jib sails. A single jib appears on the praus seen by Dumont d'Urville's artist in 1839 and one of the models of praus made for Matthes before 1859 includes two jibs. More recently praus such as those shown in appendix 11 (p.9) have had full schooner rig with three jibs. However there is no record of such a complete transformation on any of the Macassan praus. From my observation of South Celebes praus in 1969, only the very largest have full schooner rig even now. The term for these, pinis (derived from pinnace, or one of its cognates), is not found in any Australian records. Medium sized praus, like those used by the Macassans, still retain the traditional rigging.

Naturally, there were minor variations between different praus and some indication of these is evident in the names and tonnages given in various sources. Just as with European vessels, each prau had properly a name consisting
of a generic description and a particular title. The latter were usually florid or romantic such as the Ta-malate, or Never-fading One, mentioned in a contract. Kern (1933:245, 247) notes that this was also the name of a former royal palace of Goa. The prau in the contract published by Nederburgh (1896-8) sounds even more alluring, as it was called the Suruga, or Heaven. The generic names were more prosaic. A term for a rather large prau was paduwakang, while a palari, or racer, seems to have been a little smaller, though it still had a poop deck. Collins (1937 a: 40 and plate opposite 32) describes a padjala, which is a low, undecked prau without a poop or bowsprit. The praus drawn by Westall who was with Flinders in 1803, seem to have been of approximately this type.11 According to Collins (1937 b:12) a padjala can be converted into a palari by raising the sides and adding a deck and poop. He suggests that these features were copied from European models. Two other words refer to the relative proportions of a prau: a bondeng is short and wide, while a lambere is long and narrow (Collins 1937 b:19). The way these names were used is seen in the lists in appendices 4 and 8.

The question of tonnages is more difficult, perhaps partly because of various conventions used by different observers, as well as the problem of making an accurate assessment of an unfamiliar craft. Flinders (1814,2:230) estimated that the praus he saw were of about 25 tons and King (1827,1:74) gives a similar guess of 25 to 40 tons. Earl (Overland Route Minutes 1843:4) gave a range of 20 to 70 tons with an average of 50 to 60 tons. The convention

11 In 1969, I spent a day sailing on the padjala Galesong (master, Muis daeng Tarrang), a fishing prau from near Maros, just north of Macassar. This fitted Collins' description and looked remarkably similar to those drawn by Westall. This prau, which had on one occasion sailed to Borneo, was impressively efficient and seaworthy.
in all these is probably gross tonnage. The largest figure
given as the result of direct observation of a specific
Macassan prau is that of about 60 tons, estimated by Robinson
for a prau in Port Essington during 1882 (SAA 790/1882/346).
This is clearly a guess at gross tonnage. The figures given
for the praus listed in appendix 8, give a more exact idea
of the size of the praus. These range from 9 tons to 38
tons, and as they were being used for the assessment of
licence fees, they probably refer to registered tonnage, that
is the cubic capacity available for cargo. As the sources
often give a very precise figure, it is possible that some
form of registration paper was consulted. In a general way,
and allowing some increase from registered to gross tonnage,
these figures agree with the estimates of Flinders and King.

It is difficult to see any pattern of change in the
size of praus from the evidence available, though Collins
(1937 b:211) thought that there had been some reduction in
the size of Macassarese - Buginese praus in general since
the mid-nineteenth century. However, he may have been
misled by taking Wallace's figure of 70 tons for the prau
he sailed in to the Aru Islands, as an average figure,
since even if this tonnage was correct as the gross figure,
that was clearly a particularly large, trading vessel, as
were those of 100 tons mentioned above as trading with Java.

A question of the first importance is to determine how
many praus were engaged in the Macassan trepang industry at
various periods. Again Flinders has the earliest useful
information. In 1803, he was told by Pobassoo that 'there
were upon the coast, in different divisions, sixty prows'
(Flinders 1814, 2:229). Brown (1802-3) only says 'about
60.' Of these, eleven were definitely sighted. There is no
reason to doubt Flinders' figure, since the other figures in
his account are clearly correct. Pobassoo was very much
aware of his part in the total fleet and it is difficult to
find any reason why he would mislead his guest.
Less than three months later, Baudin's vessels near Cassini Island off the Kimberley coast discovered a fleet of 24 or 26 praus from Macassar. They too said that they were only one of several such fleets which came to these coasts (Freycinet 1816:247).

It is uncertain how these two accounts relate to each other. Possibly the fact that the 60 praus reported by Flinders were said to be under one commander makes it unlikely that a part of it would have gone to what was later regarded as a very different destination. This figure may therefore only apply to the Northern Territory coast. On the other hand, since both groups came from Macassar, it is possible that the informants on the Kimberley coast, when they referred to other fleets, had in mind the Northern Territory and other destinations.

No first-hand source suggests any greater number of praus visited the Northern Territory than the fleet reported by Flinders. Thus, although King (1827,1:135) was told in Kupang that 200 praus came annually, he himself doubted this figure. Another visitor to Kupang in 1826 was told that 200 or 300 praus annually leave Macassar, but this may include those going to other destinations (HRA III, 6:683). Even Earl (1837:390) before he had any personal experience of the area, says that there were from 80 to 100 praus. Two very different estimates of about the same period, but which pose problems as to what exactly they refer to, are Barnes' figure in 1823 of 30 to 40 praus going to the Gulf of Carpentaria (HRA III, 5:738) and the statement of Daeng Riolo to Smyth in 1828 that he had left Macassar with 41 other praus of whom 14 were bound 'thro' "Bowens" Straits and to the Eastward' (HRA III, 6:790). There are in fact surprisingly few direct estimates of total numbers, since most observers contented themselves with describing the group of praus they actually saw. However, the numbers are
still quite large. In 1829, a total of 34 praus visited Fort Wellington (appendix 4) and there is no reason to suppose that this constituted the total fleet on the coast, though it may have been a large proportion of it. Earl asserted that in 1842 the Cobourg Peninsula was visited by 'upwards of forty prahus, which is the largest number I have known to visit ... during one season' (Overland Route Minutes 1843:4). Bearing in mind the length of the coast and the concentration of observers at the western end of this, an estimate for an average season during the first half of the nineteenth century, of between 30 and 60 praus on the Northern Territory coast, seems reasonable and may even be rather conservative.

By the 1870s there had been a slight decline. 'About thirty proas' were reported in 1876-7 (SAA 790/1877/435), and two years later Cadell stated that the fleet comprised 23 praus (SAA 790/1879/83). The next year Foelsche 'obtained from the natives [at Port Essington] the names of the Captains of 21 proas, who are regular visitors to this coast' (SAA 790/1880/371). In December 1881, Robinson expected 30 praus (SAA 1374/A5167) but it is unlikely that so many arrived. The decline thereafter is set out in table 13.1, and discussed in chapter 13.

There is some extremely tenuous archaeological evidence to support this picture of decline throughout the course of the nineteenth century. This assumes some positive correlation between the number of fireplaces on a site and the size of the group using that site, and between the size of a single group and the size of the total fleet. Thus apparently later sites such as Dhudhuninya in Arnhem Bay

12 In his journal for 1.4.1829, Barker (1829) mentions that 60 or 70 were involved in the industry that year, but the context is very vague.
(site 20b) or even the north beach orientation at the Anuru Bay site (site 9), are rather smaller than apparently earlier sites such as Waminari Bay (site 10bi) or the south front orientation at the Anuru Bay site. The same conclusion emerges from the comparison of the sites in area 32 (chapter 7).

At least before the imposition of South Australian dues, there is no obvious cause of this decline, and it is perhaps best seen as part of a slow stagnation of native shipping in Indonesia in the face of increasing European dominance. At all events, the reasons are likely to be very complex.

Considerable detail is available on many other aspects of life on the praus. Next to the untidiness, perhaps the most obvious feature would have been the crowd of men on board. The size of an average crew was about 30 men, though this varied considerably. Earl (Overland Route Minutes 1843) estimated the range as being between 25 and 50, but some cases are known even beyond these limits. The main determinant was the size of the prau, though as suggested in chapter 13, a larger crew may have been thought to ensure a larger cargo.

From the size of the crew and the number of praus it is possible to estimate the total number of men visiting the Northern Territory in a year. For most of the nineteenth century, this cannot have been less than about one thousand, which is a considerable figure. This estimate can be checked against the figure of 1056 men entered on the list of praus that visited Raffles Bay in 1829 (appendix 4). It is possible that in some years up to almost double this number of men came. 13

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13 One important source is rather contradictory on this matter. Flinders (1814,2:230) reports about 20 to 25 men on 60 praus making a total, according to what he was told, (continued on p. 51)
There are no documentary references to women ever travelling on Macassan praus.\textsuperscript{14} However Berndt \& Berndt (1954:214) claim, apparently from information supplied by Aborigines, that a few women did come. (This is quite separate from the question of Baiini women, discussed in chapter II.) This evidence, though necessarily rather vague, cannot be ignored, but it must be pointed out that such a practice was very untypical. Perhaps some non-Macassarese-Buginese crews were involved, such as the Bajaus, though even with these people, Sopher (1965:145) says that one group of Turijene, influenced by Macassarese practice, left their women at home on long trips.

Many of the crew were probably quite young, and this is specifically confirmed by Brown (1803), as well as by Aboriginal stories (e.g. Berndt \& Berndt 1954:41).

The clothing worn by the crew was relatively simple. If the crew of Wallace's prau can be taken as comparable, they wore trousers only, with a handkerchief to protect the head, and at night added a thin cotton jacket (Wallace 1869, 2:163). Plate 2.2 illustrates the general effect. Few changes were needed when trepanging began. Dumoulin (in

\textsuperscript{13} (continued from p. 50)

of about 1000. Yet Brown (1802-3), who also has these figures, once more adds further information. On Pobassoo's prau he observed 26 men, and he thought some of these might have come from other praus. On the other hand, Pobassoo stated that his crew consisted of 40 men. This figure is more consistent with the 300 men who, according to Brown, were on the original six praus. Brown does not say how this figure was obtained, but he is well aware that it is wildly inconsistent with the total figure of 1000. Both these figures were probably obtained from Pobassoo or one of the other masters. Clearly there is some confusion, but it is impossible to tell which figure is wrong.

\textsuperscript{14} Earl (1837:443) says that some of the 'Bugis' who were induced to come and settle at Fort Wellington in 1829 (only to find the settlement deserted), brought their families. The fact that this is mentioned shows that it was exceptional.
Dumont d'Urville (1844:52) describes some divers as almost naked. Clothing ashore was more varied. Searcy (1907:21-2) gives details at a camp in Bowen Strait early in 1883.

Of Malays there were about one hundred... Some had only scant clothing, others wore their gay saarongs, and all had gaudy handkerchiefs twisted round their heads. A large number of aborigines... most of them in a state of nature, were also present... One of the masters... was, for a Malay, a tall, broad, well-built man, and very stately... his brilliant saarong hanging from his shoulder across his chest added to the magnificence of the man.

There are many other records of the masters dressing to impress, and succeeding.

Some idea of the food carried on the praus can be gained from the list of stores given above. The staple is clearly rice, and this is confirmed by observers of the Macassans at work. Vosmaer (1839:156) gives a figure of 2 piculs per man, which is reckoned to keep him comfortably for six months. This agrees very well with the estimate from the figures in the early 1880s (see chapter 13). The only other food item mentioned in the list above is tamarind seeds. These were no doubt used to flavour the rice, and would have proved a useful anti-scorbutic. The most apparent evidence for their widespread use are the many splendid tamarind trees marking Macassan processing sites around the Australian coast. Another possible use for such quantities was to preserve fish (Forrest 1792:129-38). Flinders (1814,2:232) also saw coconuts, dried fish and fowls on the praus. Some of the dried fish was probably collected for sale, but no doubt a considerable quantity of fish was consumed as well and would have provided a useful supplement to the diet. King (1827,1:95) observed a canoe fishing rather unsuccessfully, but nonetheless was presented with two small fish. As Flinders notes, the fowls were probably kept for the masters (though see also chapter 4).
Other food resources of the sea seem to have also been used where offering, and in this respect there would have been little that was unfamiliar to the Macassans in the environment of northern Australia. Some of the shell-fish on processing sites may have been eaten by Macassans rather than Aborigines, though the quantities are not substantial when the numbers of the former are recalled. Similarly the bones of dugong on various sites suggest an occasional feast. The evidence for turtle is a little less certain as no remains have been found in a Macassan context. Flinders (1814,2:232) says they were eaten occasionally and three were presented to Smyth at Raffles Bay in 1829 (HRA III, 6:800). Yet most of the turtles caught for their shell, were hawksbill and not the more palatable green-back turtle. Moreover they were often obtained by Aborigines. Forrest (1779:119) mentions that the Muslims in his crew did not eat turtle, and the same prohibition may have been observed by the Macassans.

It is reasonable to assume that various other minor food items were brought on the praus. For example, Aborigines particularly noticed various sweet preparations. Thus Moyle (pers. comm.) has recorded the Indonesian word wadjik, meaning a sweet, sticky rice cake, on Groote Eylandt. The basic ingredient was probably gulah or syrup derived from the nipa palm. Similarly the use of betel, if one can regard that as a food, was probably common and it is not surprising to find traces of this on the teeth of a Macassan (appendix 9:220-1). There is only one reference to Aborigines using betel (SAA 1374/A755). The case with tobacco is very different. This is one of the most popular items which Aborigines obtained from the Macassans. The case of the prau mentioned in the contract of 1886 which carried a picul (133 lbs) of tobacco has already been mentioned (Nederburgh 1896-8 (1919:146)). However, this is rather in excess of the average amount for which duty was
paid. Thus in 1885-6, 16 praus carrying 457 men imported 1144 1/4 lbs or an average of 2.5 lbs per man. In 1887-8, the figure is 3.2 lbs per man and there is no great change in the succeeding years (see appendix 7 for the source of these figures). This quantity of tobacco could have been entirely used by the crew in the time available, but it would seem that a considerable amount was given to Aborigines.

Cooking facilities on a prau were limited to 'a large iron pan with a quantity of sand in it' carried on the stern (Searcy 1907:25). The most obvious use for the globular earthenware pots found on campsites is boiling rice, and it would have been rather easier here than on a crowded prau.

Some pots, particularly the large stoneware jars, might also have been used to store water. However, Flinders (1814,2:232) noted that joints of bamboo were used to carry a month's supply. There is unlikely to have ever been much difficulty in replenishing this on the Northern Territory coast, though it was a major consideration in the Kimberleys (Freycinet 1816:247).

A final item of consumption carried on the praus was a quantity of spirits. This is not commented on very much by early observers, perhaps because it was an all too familiar commodity. Moreover, its importation was discouraged even at the Port Essington settlement. McArthur (Copies or Extracts 1843:21) thought that 'the only mischief they [the Macassans] may ever do us will be by landing their arrack, which is of a most pernicious quality; but they have strictly complied with my interdict.' Searcy (1907:35) also thought it 'awful stuff.' In the documents from the end of the nineteenth century, the most common description of the liquor is arrack, which probably indicates a native spirit derived from palms. Some brandy is also mentioned. Most of the bottles found on Macassan camp sites originally contained
Dutch gin, but of course that does not mean that they necessarily contained this when brought to Australia. However, it was, no doubt, not unfamiliar as the chief drink of Europeans both throughout the archipelago and in the Northern Territory. Both Flinders (1814,2:229) and King (1827,1:94) noted that the Macassans they met were ready enough to partake of their wine.

The word remembered by Aborigines on Groote Eylandt for liquor is anidja (Worsley 1954:16), but although clearly derived from the Macassanese anisi' meaning anisette, it may not have been used very precisely.

Even the approximate quantity of spirits carried on a prau cannot be estimated with much certainty, and there was probably great variation. One estimate was about six cases (probably each of a dozen bottles) per prau (SAA 790/1883/698), but in next season the quantities shown in the manifests for 3 praus vary between 84 bottles of arrack, 72 bottles of arrack and 15 bottles of arrack together with 12 of brandy (SAA 790/1884/177). What the distinction drawn between crew supplies and export is in this context, or how the quantities relate to what was actually on board, is difficult to say. The estimate by Robinson of 200 gallons on one prau in 1882 can be confidently ignored (SAA 790/1882/346). Certainly in the few years during which duty was collected on spirits there was trouble with smuggling (see chapter 13 and Searcy 1907:97). Although the official records are less informative than they might be, Brown, the Customs Officer dealing with the praus from 1900, is said to have received a 'gift' of 'a case of gin' (Harney n.d.:121).

The incidence of disease among the crews would no doubt shock our more modern experience, but in its context, it does not seem to have been particularly high. Earl (1846:98) mentions a few places where the Macassans suffered from malaria (now non-existent in the area), but otherwise lists
only minor colds and some ague. Skin disease however was probably fairly common, and aggravated for some by constant diving (Searcy 1907:28). Evidence for more serious infectious diseases is given in chapter 11, and some idea of the mortality from these can perhaps be obtained from the number of men listed in the table in appendix 4 who just 'died on the passage.' It is unlikely that the 'reputed Doctor' from one of the praus, who was permitted to treat a sick child at the Raffles Bay settlement in 1828, could do much to protect or cure his colleagues (HRA III, 6:801).

However it was possible to guard oneself against more apparent attack. Flinders (1814,2:230) noted that each man 'wore a short dagger or cress by his side', though these may have been of as much magical as practical reassurance and it is not surprising that Searcy (1907:25) was unable to buy any. Muskets of a rather primitive type were also carried (see plate 2.2). Brown (1802-3) remarks that they 'had the appearance of large French pieces and seemed in tolerable order.' It was presumably for this that Pobassoo requested and obtained of Flinders some powder and flints (Brown 1802-3). Even the crewmen that King talked with, borrowed a musket to attract the attention of their companions, and asked for gunpowder (King 1827,1:95), which Cunningham (in Lee 1925:375) says they were given. On occasion these were used with effect against Aborigines. Searcy (1907:46) records the case of the master of a prau wrecked on Melville Island in December 1886 who 'kept the niggers at bay with an old carbine while four canoes were launched and fitted out.'

The pride of the praus of the more important captains were the small cannon mounted in the bows. Among the praus seen by Flinders (1814,2:229) only 'that of Pobassoo carried two small brass guns, obtained from the Dutch.' King (1827,1:94) obtained similar information but failed to see the actual cannon, and there are occasional further references throughout
the century. The only account of their use is rather circumstantial. Searcy (1907:83) was told of an incident in which shots were fired at Aborigines from the cannon.

There are two guns extant which may conceivably have come from Macassan praus, though the evidence is extremely tenuous. They have been designated S127 and S128 in the list of miscellaneous Macassan artefacts and are described in chapter 10.

The annual fleet prepared to leave Macassar during the month of November, with the onset of the northwest monsoon. Thus the papers relating to the voyages of three praus preserved in SAA 790/1884/177 were signed by the harbour-master of Macassar on 27, 28 and 29 November 1883. However, the actual date of departure was usually in December or even early January (appendix 4). When forwarding a list of praus on 8 January 1885, the Dutch authorities pointed out that it could not be compiled earlier (SAA 1374/7826).

It is apparent that at least the masters of the praus were aware of the remainder of the fleet setting out at about the same time for the Northern Territory, and probably for other distant and exotic destinations as well. Such information was no doubt the subject of a good deal of gossip. Indeed, there may even have been a more or less formal command over the fleet as a whole. Pobassoo, who was in charge of one group of praus, told Flinders (1814,2: 229) that he had a commander in chief named Salloo. In his log, Flinders (1801-4) adds that Salloo 'held a rank next to that of rajah.' Perhaps he was a Karaeng. Brown (1802-3) was also shown by Pobassoo 'a written order from the Raja addressed to Salloo directing him to return to Macassar with the fleet under his command by a certain time.' King (1827,1: 136-7) obtained essentially similar information at Kupang in 1818, though in this case the arrangements for returning were more informal.
There is little mention of such extensive organization in later sources. Thus Wilson (1835:82) describing the situation only a decade after King, writes that:

...a considerable number of proas commonly proceed in company, under the command of the most experienced chief, whom they recognised as a leader only while it suits their convenience, as they disperse whenever they consider it more conducive to their advantage. When they are in the fleet, however, they all follow the motions of their leader.

This agrees with the general impression given by Earl of the control exercised by Bapa Padu over five proas at Port Essington in 1839 (see appendix 4).

At the end of the century, masters seem to have been almost entirely independent, though naturally several proas often worked together. It is possible that there had been some changes since Flinders' observations, but the sources are really too fragmentary and unreliable to be sure. What is certain however, is that at all periods there was a general atmosphere of co-operation among the masters and crews. For example, wrecked crews were picked up by other proas and when in 1839 three proas arrived in Raffles Bay only to find other Macassans at work (as well as the French expedition), they moved on after exchanging pleasantries (Dumont d'Urville 1844:51).

The area of the Northern Territory visited by the Macassans was known to them as Marege'. The origin of this name is obscure, though it is recorded in many sources. Matthes (1859:255) says that it really applies to the Aborigines and this usage is recorded by direct observers (King 1827,1:138). Wilson (1835:319) gives two variations of the word: one applying to the Aborigines, the other being the place name. Searcy (1907:26) says the word means 'blackfellow's country or unknown land.' Crawford (1920,3:441) gives the Chinese equivalent as Lam-hai.
Marege' was clearly distinguished from the Kimberley coast, which was known as Kayu Djawa (Vosmaer 1839:154; Earl 1842:139; Cense 1952:252-3). However the route to both was rather similar. From Macassar it lay around the southwest corner of Celebes, down past the island Salajar and then southeast towards Timor and the islands fronting it. Vosmaer (1839:156-7) notes that the dugout fishing canoes were often obtained from the island of Tanahdjampea, which was passed on the way. The anchorage on the south of this island is still known as Labuan Marege'. The usual route to the Northern Territory passed around the northeast end of Timor, where the praus sometimes called to fill up with fresh water (Earl 1853:122), or to collect from the neighbouring island of Kisar, a supply of bamboo and rattan (Searcy 1907:25). Evidently they could stay some time as Searcy was told that some had planned to spend at least six days there (SAA 1374/A6591). It was very important before setting out on the next long stage across the open sea to ensure that the northwest monsoon was blowing constantly. Thus in 1839 which seems to have been a remarkably late season, several praus were reported to have passed through between Leti and Moa, presumably having just left Kisar, as late as the end of February (Earl 1846:55). Even with due care, one could never be quite sure what would happen. Vosmaer (1839:157) says that sometimes praus making for the Kimberley coast around the western end of Timor were blown eastwards to the Northern Territory. In fact, he gives the

Vosmaer (1839:158) says that the Aborigines in the Kimberley were also called Mareges. It is possible that if, as seems likely, this word has a primary meaning of 'uncivilized' or something similar, Vosmaer's informant was using it rather loosely. A similar situation arises with his account of the route as discussed below. Stokes (1846,2:185) records the use of the name for an Aborigine he took to Kupang. He was told there that the word meant man-eater, though he was sceptical of this being its literal meaning.
regular route to both destinations as lying around this end of the island, but is almost certainly generalizing from a few cases only. Several later instances are mentioned in chapter 13. Another prau in January 1901 reported that due to the light and variable winds experienced, it had sighted the Point Charles lighthouse, on the western side of Port Darwin (SAA 1374/10241).

However there were more serious dangers than being blown off course. Probably the most feared was attack by pirates. Earl (see appendix 4) quotes a case in 1840 and elsewhere notes calmly that the Macassan praus 'are cruised for [by pirates] in the neighbourhood of Timor, where, owing to the contraction of the channel, they are picked up more easily [than further north]' (Earl 1853:120). This danger may have decreased towards the end of the nineteenth century with growing European control.

Once clear of Timor, however, there were other risks. There are many accounts of praus foundering in rough weather, many of them being driven on to Melville Island. Jukes (1847,1:358) mentions that four vessels were lost outside Port Essington in 1845 and later examples are listed in chapter 13. Nor was the danger restricted to the outward trip, as a prau was wrecked in 1899 when about half way back to Timor (SAA 1374/9505). In the following season, we hear of the possible loss of a prau by fire (SAA 1374/9505). Things could be serious enough, even without the total loss of the prau. On the outward voyage at the end of 1889, prau B, a very regular visitor, was struck by lightning which broke the mast, killed one man and injured three others. The prau is not heard of again in later years (appendix 8; SAPP 1890/28:18).

One constant fact was the help that any other crew would offer to those in distress. Even the most arrogant Europeans would do what they could in case of disaster, though the Aborigines were not above taking advantage of the situation.
Daeng Sarro says that the crossing from Timor to Melville Island, just over 300 miles across the open sea, took four days (Cense 1952:262). Given no unusual circumstances, the most frequent landfall was somewhere along the north coast of Melville Island or the Cobourg Peninsula. From here the praus turned eastward with the wind still well behind them. The location of the Revenue Station in Bowen Strait was thus remarkably suitable to catch the praus as they passed through the channel between Croker Island and the mainland. Even if they made the outer point of Croker Island or further east, it was still not impossible to beat back into the strait.

At this point, and for the British settlements nearby in Raffles Bay and Port Essington, there are many exact dates of arrival. The earliest is 14 December 1889, which Robinson particularly remarks on as the earliest in his experience to date (SAPP 1890/28:18). A more normal time was towards the end of the month or into January. Jukes (1847,1:358) records two praus in Port Essington at the end of January 1845, one of which had taken ten days to arrive from Macassar, the other fifteen days. The total distance could not be less than 1000 miles, giving an average speed for the faster prau of almost 4 knots, and that assumes no stopping at all. This must be regarded as an exceptionally quick trip and the average was perhaps more like a fortnight. It is interesting to note that the prau on which Wallace (1869,2:159-75) travelled to the Aru Islands maintained a similar speed for some days.

Speed over short distances and under favourable conditions was naturally somewhat greater. The best documented example is given by Cunningham (in Lee 1925: 362-3) who records a fleet of praus sailing from Sims Island to Malay Bay, nearly 40 nautical miles, in about 5 hours. This is a speed of about 8 knots. Although his account differs in detail, Roe (1817-18) confirms these calculations.
groups in which they worked and what was actually done are considered in chapter 4. However, it is relevant to consider here the limits of Macassan activity.

It will be seen from the gazetteer that Daeng Sarro's account of the route followed around the coast agrees remarkably well with the other archaeological, documentary and ethnographic sources available. Even in a fairly restricted area such as Groote Eylandt, his route around the north and east coasts leads past the areas of greatest archaeological interest and agrees with Aboriginal traditions (Worsley 1954:15). There are naturally some exceptions, among which the lack of documentary references to the Anuru Bay site (site 9) is perhaps the most important, but there can be no doubt that virtually the entire coast between the Cobourg Peninsula and the Pellew Group was visited regularly. The adjacent areas on either side, that is on the west, Bathurst and Melville Islands and on the east, the Wellesley Islands or even slightly beyond, also saw some activity. In Western Australia, the area visited is to the south of Cape Londonderry. Indeed the coast immediately east of that cape is particularly inhospitable.

This leaves a gap of some 300 miles across Joseph Bonaparte Gulf, or approximately the area under the lee of Timor, which was not visited. This is not to say that other vessels, or even an occasional Macassan prau caught in a storm, were not cast up in the area, but it did not form part of the regular trepanging ground. In 1889 Searcy conducted an unsuccessful search from Darwin to the Fitzmaurice River with the specific object of discovering whether the area was visited. He points out that Anson Bay and Port Keats are 'the only two practicable fishing places upon our west coast', but like Mulvaney who visited the area in 1965, his only discovery was that 'right from Cape Ford to Port Keats is a forest of old tamarind trees.'
From this evidence, Searcy wonders whether the coast 'had perhaps seventy or eighty years ago been visited' (SAPP 1890/28:12; see also Searcy 1907:188-99). In the absence of any detailed work on the regeneration of these trees in this area, it is impossible even to hazard a guess as to the time needed to account for the spread of these trees, but Searcy's estimate seems far too short. Nor are they necessarily the result of a trepanging voyage from Macassar. In the absence of other evidence, it would seem easier to account for them by far earlier and far more casual contact, perhaps not even involving man.

The eastern shore of the Gulf of Carpentaria is even more unpromising as a trepanging ground, and there is no suggestion of Macassan activity there. However there are four pieces of evidence which could be interpreted to imply that the Macassans visited the Torres Strait area. The first three can be summarily dismissed. Cense (1952:254) has already shown that the statement by Lion (1855:5), that the Macassans visited various localities on the east coast of Queensland, is based on a misreading of Flinders. Secondly there is a statement by Davidson (1846:58) that the Bugis visit 'Torres Straits, and numerous islands in that neighbourhood, for the purpose of gathering beche-de-mer and tortoise-shell.' However this passage was written from memory many years after Davidson's contact with the Bugis in Singapore and is certainly not based on first hand observation in the area. In context, it could well be a mistake for the Gulf of Carpentaria. Thirdly Wilson (1835: 82) says that the Macassans who called at Raffles Bay in 1829 'proceed, according to their own report, as far east as Cape York.' However this detail is not mentioned by anyone who actually met these people. Wilson probably meant the base of Cape York Peninsula. Finally there is the evidence of the Badu song cycle collected by Berndt from the
Aborigines of northeast Arnhem Land. As pointed out in chapter 11, this awaits further work before a proper assessment can be arrived at.

On this very limited evidence, it appears improbable that Torres Strait was visited, even sporadically, by the Macassans or people similar to those who came to the Northern Territory. If it were, then this would be a considerable extension of Macassarese-Buginese voyaging.

Another similar matter is the question of whether the Macassans sometimes came by a more easterly route via the Aru Islands and then south to the Wessel Islands. Berndt & Berndt (1954:54-5) relate a strange account by an Aborigine of a voyage from the Wessels to perhaps the Arus and back again on a Macassan prau, and Barnes in 1823 says that he was able to obtain information about the Australian industry 'in consequence of their vessels being obliged to go to leeward, and to proceed to the Aroos' (HRA III, 5: 738). However a glance at the map will show how far this is out of the regular route, and it is difficult to know how to assess these two pieces of evidence. Even if one prau did sail north from the Wessels, its landfall is highly dubious and it returned the way it had gone. Barnes evidence is more puzzling, but it is possible that he did not understand that the fleet for the Arus, and the fleet for Marege' were distinct from each other. Certainly he might have heard of the latter among the crewmen in the Arus. On balance, this route seems unlikely to have been used. 16

Little need be said about the return voyage. When the wind changed to the southeast in about April, the praus began to move back along the coast and then retraced their

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16 There is also a comment by Laws in Wilson (1835:155) saying that 'Malays of Macassar and Arroe Islands' come over to Port Essington. In context, this is clearly just casual writing.
outward route through the islands to Macassar. Cadell (SAPP 1868-9/24:10) remarks that a prau he saw on 18 May 1867 off De Courcy Head, heading westwards at great speed was 'evidently the last of the fleet.' Once the wind was right, the date of leaving the coast probably depended largely on the success of the season.

With the work of the voyage over, there would be no reason to delay returning home as quickly as possible.17 No doubt the return voyage was as dangerous as the outward one, but at least the comparative security of Macassar lay ahead. This was a return to civilization. In the 1851 contract mentioned above, there is a clause prohibiting the crew from dispersing about their own business until the prau was actually laid up (Nederburgh 1896-8(1919:149)). The procedure, which is probably unchanged, is described in detail by Collins (1945). With the trepang sold and the accounts settled, this was the last duty of the voyage.

17 The only evidence for Macassan praus camping on the Australian coast over a dry season is Warner's (1937(1964: 448)) statement, based on Aboriginal information, that occasionally a prau remained behind to reap the benefit of the first harvest of trepang and Aboriginal trade in the following season. While not impossible, there is no recorded example, and there would seem to be considerable logistic, economic and perhaps contractual difficulties in the undertaking.
Chapter 3

The Economics of the Industry

It cannot be emphasized too strongly that the purpose of Macassan visits to Australia was commercial. The chief hope of profit lay in the trepang industry and it is this which must be first examined in order to understand the economic basis of the voyages.

The return on a voyage for trepang depended upon the quantity obtained, its grade or quality and the price at which it could be sold. Each of these will be treated separately.

The question of the quantity of trepang collected is best looked at on the basis of a single prau. In 1803, Flinders (1814, 2:231) was told that 100 piculs make up the cargo for a prau. The French expedition at Raffles Bay in 1839 was given figures which work out to a similar quantity per prau (Dumont d'Urville 1844:55).¹ However many estimates are somewhat larger. The most egregious error is that of Barnes who estimates the average burthen of the praus to be 100 tons (HRA III, 5:738), a mistake which did a great deal to inflate the value of the supposed trade for a British settlement. Earl (1846:84) is perhaps a more reliable witness, though he also had reasons to maximize his estimates. He hazarded one guess of 20 tons (340 piculs) per prau. This figure seems large, but is not beyond the range of those recorded towards the end of the century.

¹ On page 260 of this work, the figure of 1000 piculs is given. That this is a misprint for 100 piculs is suggested both by the former passage and by the equivalent which is given as 6,259 kilograms (c. 104 piculs).
The average figures per prau for most of the years 1885-1905 are given in table 13.5. They range from 8.5 tons (c. 145 piculs) per prau in 1884-5 to 22.7 tons (c. 386 piculs) in 1887-8. A few particular cases confirm these figures. For example, a prau lost in 1889 is said to have carried more than 300 piculs of trepang (SAA 1374/9505) and Robinson estimated the joint cargo of two praus in 1895 as about 500 piculs (SAA 790/1895/175). The conclusion from these figures is that the original estimate of 100 piculs is rather conservative and although great variation occurred, the expectation for a voyage would often have been rather higher, particularly later in the nineteenth century.

Although to combine these figures with those for the annual number of praus as discussed in chapter 2 may seem like compounding uncertainty, the result is of some interest. If one assumes that 40 praus each collected 150 piculs of trepang, the total production for a season would be 6,000 piculs (c. 353 tons). The same result is obtained from Flinders' figure of 60 praus each with 100 piculs. This would seem to be a reasonable estimate, or at least in approximately the correct order of magnitude, for the first half of the nineteenth century. Later, the increase in the size of cargoes was not offset by the decline in the number of praus, so that the total production fell. However, as shown in table 13.1 it was still about 200 tons (3,400 piculs) in the late 1880s.

It is necessary, before leaving this theme, to stress the great variability of seasons and the decidedly doubtful nature of the early figures. As an example of the variation between directly comparable sources, one can take Earl's statement (1846:84), using his estimate of 20 tons of trepang per prau, that 600 tons was annually exported. Only a few years later, and presumably on more or less the same
evidence, McArthur at Port Essington writes, 'we have sixteen praus here with about four hundred men - and they expect ten more vessels in a few days: Mr Earl's statement in his last publication, of the quantity of Tre pang annually conveyed from this coast is so inconsistent with the fact that I conclude there must be some typographical error: something above one half of his calculation may be true for this very successful season - He says 300 tons - I made particular enquiry and find 150 tons the utmost to be arrived at' (McArthur 1849).

Before discussing the price of trepang, something must be said concerning the quality of Northern Territory trepang. As mentioned in chapter 1, there are a very large number of types of trepang, both on scientific distinctions, and more importantly in this context, in the categorization of buyers. At first sight, the evidence on this point appears to be rather contradictory. Early in the nineteenth century, the types of trepang collected by the Macassans appear to have been quite high on the list of preferences. Flinders for example seems to have actually handled both koro and batu, which are both relatively valuable (Flinders 1814, 2:230-1). About 1826, a prau captain in Kupang declared Australian trepang to be 'of the best kind' (HRA III, 6:689), while in 1839, Stanley was told that Australian trepang was better than that from the Aru or Tanimbar Islands (Stokes 1846, 1:463). Yet by the end of the century, the trepang being collected was clearly of rather lower quality. Dashwood (1902:13-4) declared that the Bowen Strait trepang was of inferior quality and valued it at between £40 and £50 a ton, compared with trepang of about three times that value from Torres Strait.

2 I have to thank Dr F.J. Allen for this reference. I have not seen the publication of Earl referred to.
However, further investigation removes some of this difficulty. In the lists of Crawfurd (1820, 3:442-3), Kolff (1840:172-4), Vosmaer (1839:162) and Matthes (1859:336-7), which are all basically similar, a variety called *tre pang Marege* or Northern Territory trepang appears in about the middle range, below both *batu* and *koro*. Vosmaer (1839:171) in more detailed notes mentions that *tre pang Marege* is very similar to other forms of white trepang, and elsewhere (p.161) even says that the Marege' fishermen themselves assert that only white trepang is found in Australia. While this is not absolutely true, all authorities agree on the preponderance of 'chalkfish' in Northern Territory waters. Mr Fred Gray, an experienced trepanger from the 1930s, remarked on this in conversation, and certainly most of the trepang I have seen, particularly around Groote Eylandt, was of this type. Searcy (1907:27) also comments that 'grey' trepang 'is the only variety found on our coast.' As an example of an exception to this general statement, Ana, an old Japanese trepanger from the 1930s, told me of a small patch of better trepang (worth about £200 per ton at Thursday Island) located in the vicinity of McCluer Island.

However the quality of the finished trepang is not determined solely by the size and species: the method of preparation can also be a significant factor. At the simplest level, it would appear from the sources quoted in chapter 4, that Australian trepang was often dyed. Just as important probably was the care taken to ensure thorough processing and uniform grading. This was an art at which the Macassarese were masters (Vosmaer 1839:154), and it seems to have been largely this skill which led to the early accounts of higher quality trepang. Whether the apparent decline at the end of the century represents a real falling off in the quality of preparation, perhaps
associated with larger cargoes, or whether it is only a product of the inability of European trepanggers to match Macassan skill, it is difficult to decide.

It is now possible to discuss the actual price of trepang. The prices that Flinders (1814, 2:231) was given by Pobassoo, 40 dollars a picul for baatoo and 20 dollars for koro, are rather high, but then one would expect that for these grades, or at least the better sizes in these grades. Flinders also gives us some idea of the increase in value after one stage of marketing, when he records (p.257) that the corresponding prices in Canton are 60 dollars and 40 dollars. King also seems to have been given top prices when he was told that trepang was worth 40 to 50 dollars a picul in 1818, and even his revision to 25 dollars in 1822 is quite high (King 1827, 1:138). It is worth noting in passing however that these are more or less average figures. For the highest grade Kolff gives a maximum value of 120 dollars per picul in China (Kolff 1840: 174; cf. Crawfurd 1820, 3:444).

However, a feature of the market was the wide range of prices. The lowest average price recorded for Northern Territory trepang appears to be that quoted to the French in 1839. They were told that the price in Macassar was 15 rupees per picol or about 6 dollars (Dumont d'Urville 1844:260; for exchange rates, at 1836 levels, see Earl 1837:61n., 432n.). This is within the range of prices quoted in many other sources and some even go considerably below this. The lowest figure of which I am aware, is MacGillivray's (1852, 1:117) minimum price in China of £5 per ton or about 1.3 dollars per picul. His maximum price is £200 per ton or about 53 dollars per picul.

The majority of trepang, though, fell somewhere between these extremes. It has already been noted that Crawfurd places trepang Marege' about half way down his
list of grades and this is priced at 19 dollars a picul. His trepang batu ranges from 54 to 14 dollars depending on size (Crawfurd 1820, 3:443). Vosmaer (1839:178-9) gives very similar figures and he infers the value of trepang Marege' to be about 14 to 16 dollars per picul. These prices can be compared with those Kolff observed in the 1820s at various places in eastern Indonesia. In the islands east of Timor, traders were buying trepang at 20 to 25 guilders (8 to 10 dollars) per picul and mixed grades were available in the Arus at 10 to 15 dollars per picul (Kolff 1840:122, 175). Even Barnes when writing up the trade potential of the area only uses the figure of 14 dollars per hundredweight or about 15.5 dollars per picul (HRA III, 5:738). Lastly there are the average prices from the end of the century, as set out in table 13.1. Allowing about 5 dollars or 12.5 guilders to the pound sterling, these figures are very similar. For example the average price per picul in 1891-2 was 40/7½ or about 10 dollars or 25 guilders.³

On the basis of these figures for quantity and price, it is possible to approach the problem of what return could be expected from a voyage. For the sake of simplicity, this is best restricted to the return from the trepang covered directly in the contract. Returns from the pabisa-lima may have increased this by a few percent and, as discussed below, other items besides trepang may have added somewhere between 10 and 20 per cent.

³ In 1903 Brown stated that 'the price of Trepang per picul is 32 dollars, equal to two pounds eleven shillings in English money; this is not a good price by any means, but it is a general one' (SAA 790/1903/438). The word 'dollars' is either a mistake for 'guilders' or the dollar had suffered a rapid devaluation.
On a rather gloomy basis, one might take the example of a cargo of 150 piculs of trepang sold at an average price of 10 dollars per picul, making a gross return of 1500 dollars. Applying the system outlined in chapter 2, this means that the owner of the prau and the outfitter would receive 250 dollars each, or 500 dollars if the one individual. From the remainder, perhaps 600 dollars can be deducted for equipment expenses. Assuming a crew of 30, this means that each crewman would receive 12.5 dollars (c. 31 guilders) to meet his advance, and the captain 37.5 dollars (c. 94 guilders). It is clear that even allowing for other supplementary income, many of the crewmen who had received advances of the size suggested in the previous chapter, would have incurred a slight debt.

However, if one increases the assumed cargo to 200 piculs selling at 15 dollars the picul, the gross return per prau is doubled to 3000 dollars. Because the cost of equipment is the same, the return to a crewman is more than doubled to 44 dollars or 110 guilders, which would certainly mean a handsome surplus over any advance. If one averages the prices given to Flinders at 30 dollars a picul combined with his quantity of 100 piculs a prau, the same result ensues.

These hypothetical cases can be checked against a few direct estimates. In June 1888 Robinson estimated that the 8 praus which had worked that season in the Gulf of Carpentaria had averaged a cargo of trepang worth about £1000 (or about 4500 dollars), 2 at Goulburn Island could each hope for £700 (c. 3150 dollars) while the cargo of a prau which had stayed at Croker Island was valued at only £400 (c. 1800 dollars). It had been a good year indeed (SAA 790/1888/165). As shown in table 13.6, the average annual figure at the end of the century rarely dropped below £400, though perhaps rather larger crews than those
indicated above had to receive their share. The prau
for which the French explorers give figures in 1839
appears to have been singularly unsuccessful, with a cargo
worth only about 3000 francs (c. 562 dollars), but it has
already been mentioned that this gives an unusually low
price for trepang, so perhaps there is an error.

At this stage of calculations, there are too many
imponderables to be able to come to any firm conclusions
on the total value of trepang exported each year from
the Northern Territory, before the first direct figures in
1885. It has already been pointed out that the estimate
of Barnes in 1823 can be safely ignored, but it is worth
calculating the result using Earl's very generous figures.
He suggests 600 tons of trepang at just under £7 per picul,
a total of about £70,000 (Earl 1846:84). Alternatively,
the figure of 1500 dollars suggested as a conservative
return for a prau would mean that a fleet of 30 praus,
the same number as used by Earl, would only earn 45,000
dollars or about £10,000. This is, in fact, the maximum
figure given in the South Australian figures, but it was
earned by only 11 praus in 1887-8. It would be surprising
if the average annual gross return earlier in the century
was not somewhat greater. It is of interest here to recall
that in 1824 van der Capellen estimated the average
annual export of trepang from Macassar to be worth
about £28,000 (chapter 1).

Up to this point, the discussion has been confined to
trepang. However money was also to be earned by a number of
other pursuits, the most important of which was the
collection of tortoise-shell. This comes from the
hawks-bill turtle which is relatively common around the
coast. The turtle is hunted by Aborigines for the sake of
its meat and although Macassan-derived dugout canoes have
usually been employed during the period of ethnographic
observation, other methods were probably used before the
introduction of these canoes. A good description of
Aborigines capturing turtles is given by McCarthy & McArthur (1960:185). Today, the turtles are often shot.

Tortoise-shell has been an object of commerce much longer than trepang, and often appears in early trade lists. For example Schrieke (1955:68) quotes a 1625 source referring to the tortoise-shell being brought to Macassar from the eastern islands. It appears to have been used always for small personal items such as combs.

No doubt some turtles were caught by the Macassans themselves, whenever the opportunity offered. Vosmaer (1839:161) even says that as a result of good prices for tortoise-shell, a few Tau-ri-djene (Sea Nomad) praus came with the specific intention on concentrating on this (see chapter 2). However the bulk of the tortoise-shell seems to have been obtained initially by the Aborigines and bartered to the Macassans. Searcy (1907:26) mentions that 'the natives who procured the shell saved it all for the Malays, because they could always get spirits in payment.'

The actual quantity obtained is difficult to estimate. The South Australian figures at the end of the century are probably not very reliable, and in later years none at all is reported. However, for the first decade of this period about 2500 lbs per year is usually recorded in the Customs figures, worth about £1000. (These figures are in the same lists as those for the export of trepang, discussed in chapter 13 and appendix 7.) In 1839 Bremer noticed that 3 praus in Port Essington had on board 'as much as will in all probability fetch £500 at Singapore' (Overland Route Report, 1843). Even compared with trepang, tortoise-shell was extremely valuable for its size and weight. Crawfurd (1820, 3:444) gives the price in Macassar as from 300 to 350 dollars the picul. Earl (1837:432n) says that in 1836 it was quoted at 700-1000 dollars per picul, but this
astronomical price may have been due to the fact that, as he notes, none was available. The South Australian valuations work out at about 8 shillings per pound or 120 dollars per picul. The general picture is confirmed, though rather late, by Brown in 1903. 'The captain of each Proah thinks himself fortunate if he obtains in the season one hundred-weight of turtle shell, which is worth in London from four shillings and sixpence to fifteen shillings per pound. This year each proah has only a few pounds weight' (SAA 790/1903/438). In 1969 the price of tortoise-shell on Barrang Lombo near Macassar was said to be about Rp. 3,000 to Rp. 4,000 per kilogram, or roughly ten times the value of good trepang. It was sold there in bundles consisting of the shell from one turtle.

Although no specific figures are available, apparently another relatively large item of export was timber. Earl has a passage which lists some of the various uses. 'The Macassar trepang-fishers find that the timber [of the Cobourg Peninsula], generally is well adapted for repairing their Prahus, and also for the construction of masts and wooden anchors. The latter are made from a tough and heavy description of timber that has received the name of iron-wood, and these are so highly prized at Macassar, that many are carried away by the Prahus every year. The bark obtained from the roots of the mangkudu (Morinda Citrifolia;) which yields a red dye, together with an inferior kind of sandal-wood found upon the coast, are also exported by the Macassars whenever their Prahus are not too deeply laden with trepang' (Earl 1846:77-8; see also J.F.B. & Earl 1853:68). As discussed in chapter 4, the mangkudu bark was used for dyeing trepang, but it was also used to preserve fishing nets and lines. Searcy (1907:28) records that the lines were boiled with the trepang, and in 1969 at BantaEng, South Celebes, all
fishing nets seen had been, or were being boiled with the bark. The mention of sandalwood is intriguing. At Raffles Bay, Wilson (1835:81) had already heard from the Macassans of an island in the Gulf of Carpentaria 'abounding with sandal wood' and the botanists with Flinders found two species of Santalum in the Pellew Group (Flinders 1814, 2:171). Two species are also recorded for northern Australia by Specht (1958b:453) but both are unique to the area. Australian sandalwood is of very low quality.

In 1882 Robinson confirmed that wood was still being taken. 'All the best timber fit for jetties or building purposes is cut and taken to Macassar, where there is a ready market for it' (SAA 790/1882/552). Searcy suggests that much of this was cut by Aborigines (SAA 790/1883/319). At Djalan Ali Malaka 27, in Kampong Maloku, Macassar is a two-storey house in which the main posts, about 15 cm. in diameter and at least 5 m. in height, are reputed to be from the Northern Territory. They are said to be over a century old and may first have been part of the house at Djalan Maïpa 18 referred to in chapter 11. The wood appears to be cypress pine (plate 3.1).

More glamorous commodities were pearl shell and even pearls. Searcy has a number of references to Macassans taking these, or procuring them from Aborigines. However, when looked at closely, it would appear that often his most telling information was, at best, second hand. For example in 1883, he actually saw a bottle containing one catty (1.3 lb) of pearls which was said to be worth 1500 rupees (c. £120). He was only 'informed that last season one prow had eleven catties of pearls' (SAA 790/1883/319). In the published account, his information extended to 35 catties in the previous season (Searcy 1907:32). Similarly, he never actually saw any large quantity of shell, though at Mallison Island in 1884 he records having 'procured a fine pair of
pearl shells found here by one of the malay drivers' (SAA 790/1884/445). (These might even be the very fine pair still in the possession of his daughter, Miss C. Searcy.) Daeng Sarro remembered obtaining pearl shell and other commodities from Aborigines near Cape Wilberforce in return for tobacco and strong drink (Cense 1952:263).

No such quantities of pearls or large amounts of pearl shell are recorded earlier. In fact Crawford (1820, 3:444-5), who gives some details of the trade in these items at Macassar, specifies the Sulu archipelago as by far the most important source of supply. A direct rebuttal of the importance of pearl shell is provided by Brown who points out that there was little value in most Northern Territory shell. 'Also there are tons of it lying on the beach and the Macassars won't pick it up' (SAA 790/1903/438). In more recent years, there has been some pearling around the coast of Arnhem Land, but it has never been a major ground and the balance of the evidence suggests that the Macassans never entered the industry very seriously, either by diving themselves or by buying from Aborigines.

There are two puzzling references to the Macassans taking metal ores. Earl (1842:141) says that part of the coast in eastern Arnhem Land 'is apparently the termination of a granite range, and is said by the Macassars to be abound in minerals, among which they mention tin; the only specimen I have ... appears to me to be antimony-ore, which will yield perhaps two-thirds of its weight in metal.' In 1884 at Melville Bay, Searcy (1907:94) records that 'at the smoke-house we found specimens of quartz and ironstone, in one of which a speck of gold could be distinctly seen... There was also a stack of manganese, which commodity for some reason the Malays took to Macassar.' Recent mineral prospecting has demonstrated that much of this information is very possibly correct, though the discovery of these minerals by the Macassans
seems incredible. The recognition and use of manganese is particularly puzzling. It seems most unlikely that any great quantities of minerals were shipped.

An item which from its present importance might be expected to take a larger role than appears from the sources, is dried fish in various forms. Brown (1802-3), accompanying Flinders on Pobassoo's prau 'observed dried sharks tails hanging on board these they told us they sold to the Chinese.' Crawfurd (1820, 3:440-1) mentions fish-maws and shark's fins as well as common dried fish as being articles of commerce, though only the first two, together with trepang, were exported. One difficulty was the high duty at Macassar on 'the most insignificant articles, even the salt fish brought from Port Essington' (Earl in Copies or Extracts 1843:44). Today dried fish is one of the staple items of trade on Barrang Lombo near Macassar. However there is no further evidence that it was prepared by the Macassans, though a small quantity might have been neglected by observers.

A number of other commodities can be passed over briefly, as they were clearly of minimal importance. In 1882, Robinson lists 10 hundredweight of buffalo horn valued at £12 as part of the average cargo of a prau (SAA 790/1882/552). Again this commodity seems to be mentioned by Daeng Sarro (Cense 1952:263). However Brown attacks the suggestion that either buffalo horns or hides were being taken (SAA 790/1903/438). A further item in Daeng Sarro's account is bezoar stones (Cense 1952:263). These are 'hard concretions found in the bodies of animals, to which antidotal virtues were ascribed' (Yule and Burnell 1903:90). Mills (1930:117) and Burkill (1935, 1:1182) mention a type derived from trepang, which is perhaps that meant here, though there is so much curious information on the subject that one hesitates to express an opinion.
Lastly, in the 1885 edition of his Macassarese dictionary, Matthes lists *batu - Marege* or a sort of stone from which anchors were made in South Celebes. Certainly stones were used, and still are, to weight anchors and perhaps a special variety was collected in the Northern Territory.

One further activity which may occasionally have yielded a little profit was direct trading with the early British settlements or later with the South Australian Customs officers. Both the apologists and detractors of the Port Essington settlement mention that a little trade in rice, fowls and a few other items was actually carried on. (Letter of Bremer dated 2 January 1842 in Overland Route Report 1843; Earl 1846:66; Jukes 1847, 1:363). In 1882, Robinson noted that a prau which 'had some things for me' had been wrecked (SAA 790/1882/346).

The evidence relating to Aborigines working for the Macassans in collecting and preparing trepang, is discussed in chapter 11, but if only from the size of Macassan crews, this cannot have been very great. However the Aboriginal involvement in the collection of other items, particularly for barter, was much greater. No doubt the amount of this trade depended greatly on the degree of Aboriginal acculturation, as well as the particular relations existing between the parties on any given occasion.

From the contracts discussed in chapter 2, it is clear that the proceeds of a season's trepang were shared among the crew. The position with other items, acquired either directly or by trade, is not specified. One might expect this also to be a co-operative venture, but Searcy states that at least the two serangs on a prau 'carry their own stores and trade upon their own account' (SAA 790/1883/319). Furthermore, in the trading contracts discussed by Tobing (1961), the idea of individual trade is certainly present.
This point is important in assessing the relative value of these supplementary items, compared with trepang, and its effect on the total budget for the voyage. On a subjective impression of the evidence, I would guess that these smaller items were usually worth about \( \frac{1}{5} \) of the trepang cargo, perhaps a little less if one includes those items communally collected or bought with general stores in the official contract cargo. If the profit from this were available to the master and senior members of the crew alone, it would help to offset the apparent disadvantage suffered by them in taking comparatively large advances. In fact, perhaps the large advances were needed to buy the stores for trading. However if this situation did pertain, and the evidence is very tenuous, it means that the majority of the Macassans had no interest except the collection of trepang. This serves to emphasize yet again the central importance of trepang.

Observing two Macassan praus in Port Essington at the end of January 1845, Jukes (1847,1:358) surmised that 'the voyage can hardly be a very profitable one.' Yet others wanted to found a second Singapore upon it. The actual figures we possess on the value of the industry and associated trade are again and again incomplete or unreliable. However, despite all limitations, enough exists for us to be able to perceive the underlying economic rationale. A trepanging voyage to the Northern Territory was unlikely to yield vast riches, but with good luck and hard work, all members of the crew, as well as the owner and financier at home, could expect to receive a very reasonable income. It is instructive to compare the suggested income for an ordinary crewman of very approximately 100 guilders or about £8 and considerable keep with other nineteenth century figures. For example, a European shepherd in the Western District of Victoria about 1841
could be paid as little as £20 (Kiddle 1961:135). Given his very different circumstances, a Macassan was not a poor man.

Yet neither was he necessarily a wise one. 'The time that these men spent on shore after returning from the regular voyages entailed by this fishery, is used by them to gamble away the little money that they have amassed' (after Dumont d'Urville 1844:219).
Chapter 4

The Camp on the Beach

In February 1885, the government steamer Palmerston was threading its way through the Pellew Group towards the mouth of the McArthur River. 'As we rounded one of the islands, we suddenly opened out a very charming picture. Four praus were at work, on the shore were the usual smoke-houses, backed up by high hills covered with deep green foliage. Between us and the Malay vessels were a number of dredging canoes at work, all under sail' (Searcy 1907:120). What more detail can be found to fill out this picture?

The reasons for choosing a particular site at which to work can only be inferred from observing the features common to those archaeologically located. In practice, it is now relatively simple to predict from aerial photographs or a detailed map where archaeological remains are to be expected. The first essential is a sheltered beach, protected either from the northwest monsoon as on Copeland Island (site 7a), or more frequently from the southeast monsoon as on the north beach of Entrance Island (site 13b). In fact, most sites receive some shelter from either monsoon. Secondly the site must not be too far from the relatively shallow water in which the trepang could be collected. In most cases, the collecting ground associated with a particular site or group of sites is quite apparent. For example the sites on and near Hardy Island (sites 20a-d) clearly depended on the shallow water between them and the mainland to the west. Another important resource was an adequate supply of firewood, notably mangroves. However there are cases such as Wobalinna Island (site 25a) or Äningmerrunguwa
Island (site 32g) where the bulk of the timber must have been brought from elsewhere. The last important criterion was that the site should be to some extent isolated, or at least have clear approaches. Presumably this was for reasons of security. The best solution was a small island as in Raffles Bay (site 5a) or Mungaruda sandbank (site 8b), but a promontory as at Braithwaite Point (site 12a) or an open beach as at Gunjangara in Melville Bay (site 23c) was also satisfactory. It is worth noting that in the abundance of the wet season, the availability of fresh water does not seem to have been a relevant factor.

The more important Macassan camp sites, such as that at Anuru Bay (site 9) or those discussed in chapter 7 (area 32), show an almost ideal combination of the features listed above. However, the wealth of smaller sites around the coast demonstrates just how often an acceptable situation could be found. In fact this provides a clue to understanding why people came so far and in such numbers to find trepang. As has been pointed out to me by Mr Sambono, now a resident of Darwin but originally from the Tanimbar Islands, the Northern Territory coast offered a long series of suitable anchorages conveniently parallel (more or less) to the direction of the monsoons and relatively free from unwelcome government control. It was a fortunate co-incidence that the area around Darwin and to the west, which was least suitable geographically (though there is some trepang there), was also the area of initial interest by the South Australians.

In general, praus worked in small groups of between 2 and 6 vessels, though later in the nineteenth century single praus are often reported. At the end of the season, as the fleet sailed westwards, rather larger grounds formed. This would seem to be the explanation for the fleet of 15
or 16 praus seen by King (1827, 1:74-95) in April 1818, or the 20 praus Dumont d'Urville (1844:29) observed leaving Raffles Bay at the end of March 1839. No doubt specially favoured anchorages also accommodated some larger groups. However, at a typical camp, about three or four praus, containing upwards of 100 men, might be found together.

On arrival in a bay, the first thing to be done was to set up the camp for processing the trepang. The most convenient site was often distinguished by stone fireplaces remaining from a previous camp and either known to some member of the crews or easily found. Tindale (1925-8:131) mentions that some of the old anchorages were marked with stakes, and these may have been sailing guides like those in Cadell Strait (see under site 16).

To collect the trepang, each prau carried a number of lepa-lepa, or dug-out canoes. There were six of these belonging to a prau visited by the French expedition at Raffles Bay in 1839 (Dumont d'Urville 1844:52). For a number of years at the end of the nineteenth century, canoes were individually licensed, and exact figures are available. About half a dozen is the average number per prau. The estimate of fifteen canoes by Howard (SAPP 1866-7/79:1) is clearly impossible if, as he says, each was manned by a crew of six or seven men.

There were three common ways of collecting the trepang; spearing, diving and dredging. The first merely entailed walking around in shallow water or on areas exposed at low tide and collecting what was available by hand or with a short spear. The most commonly reported method of collection was by diving. Flinders (1814,2:231) mentions only this method and says that where the trepang is abundant, a man might bring up 8 or 10 trepang at a time. Vosmaer (1839:155) even says that owing to the dirty water found in Australia, diving was the only practicable method
here. He also (p.161) estimates that a good catch per dive was 8 to 10 animals. The observation of Dumoulin that divers brought up one or two in each hand was perhaps more realistic (Dumont d'Urville 1844:52). The estimates of the depth reached by diving range up to about 10 fathoms, but half this depth was more normal. Searcy (1907:28) describes how many of the divers suffered from the attacks of small fish and Vosmaer (1839:153,161) confirms that it was a highly dangerous occupation. One possible compensation is hinted at in a not very reliable source. In 1883, when the Dutch consul was making a case to the South Australian government that Customs duty should not be charged on rations (see chapter 13), he said that 'spirits are drunk when fishing whilst in the water' (SAA 790/1883/698). Certainly the suggestion is not unreasonable. However the most spectacular method of collecting was with a dredge. McArthur in 1849, the last year of the Port Essington settlement, says that this method was newly introduced, and attributes it great success (McArthur 1849). Searcy (1907:23) saw 'twelve large dredging canoes coming down before the wind, and hauling the great trepang dredgers. What a chance that would have been for a marine artist. The twelve canoes, which were almost in line, had their immense mat sails hoisted on the triangular mast, and were gliding through the rippling water ..., while just beyond the canoes were four proas at anchor, close to the beach, on which the Malay camp was formed.' It is probable that these larger canoes are more accurately described as balolang or even soppe', rather than the smaller lepa-lepa. These larger types of vessel commonly have double outriggers, while a lepa-lepa usually has only one or none at all.

A fourth method of collecting trepang which may sometimes have been used, particularly by any Bajau trepangers, was with the ladung. This is a heavy weight with spikes projecting below and is let down on a rope from a canoe
over the trepang. However this method is not specifically mentioned in the sources for the Australian industry.

Some idea of the conditions of work was given to me by Mangngellai. About 5 a.m. a meal was served on the prau or nearby on the beach and then the canoes set out, each containing about 4 men of whom one was in charge. These returned around the middle of the day, when the cooking process began. This was carried out by a separate set of about half a dozen men. Dumoulin (in Dumont d'Urville 1844:54) describes how the Macassans he saw started early and finished diving at about 2 p.m., (though perhaps this is not quite a typical situation). Jukes (1847, 1:359) at about the same period, describes how the canoes returned at sunset, which sounds rather late. No doubt the brightest part of the day was best for diving, but spearing or hand collecting could be done at any time. In 1828 at the Raffles Bay settlement, the Macassans gathered trepang from the shallows at night (HRA III,6:801). Vosmaer (1839:153) also records this as fairly normal elsewhere.

However it was collected, the trepang had to be processed within an hour or so at the most. For this it was brought back to the camp. The actual process used to preserve the trepang has been described by numerous observers of the Macassans, as well as by those dealing with the industry in other areas. Much useful information can also be obtained from more recent trepangers and their Aboriginal assistants in the Northern Territory. All these accounts differ in detail, but the main principles are quite clear. Furthermore, the three major phases of the process leave highly distinctive archaeological manifestations.

The first of these phases involves placing the trepang in boiling sea water and usually gutting the animals with a longitudinal cut. There are many variations on the exact
procedure. Jukes (1847,1:360) says the trepang were first cut and gutted before any boiling, though it then required a preliminary boiling before the main period. A more common procedure was to boil it for a short time first. Yet the estimates of the time of this preliminary boiling range from about 2 minutes (Dumont d'Urville 1844:53) to about half an hour (Earl 1846:83). Alternatively, my informants Mangngellai and Ana both said that the trepang were cut after one or two hours boiling and that was all which was required. Saville-Kent (1893:233) writing of the Queensland industry, advocates a similar procedure with only 20 minutes boiling. At Port Essington, McArthur (1849) observed a method which increased the individual weight by not cutting the animal at all. Under such a system, however, most of the trepang would probably have exercised their remarkable ability to expel their own intestines.

The greatest estimate of total boiling time is that by Jukes (1847,1:360) who continues his account (after describing the gutting and preliminary boiling): 'having thus prepared [the trepang], they boil the whole in the iron pans in salt water, together with pieces of red mangrove bark. Two men are kept constantly at work, attending to eight or ten pans, stirring up the trepang with wooden ladles, adding fresh water, and feeding the fire. It is boiled in this way the whole night, or from eight to ten hours.'

The addition of mangrove bark is frequently mentioned. An Aboriginal informant indicated the right type of tree for this near the Anuru Bay site (site 9) and a specimen from it was identified as Ceriops sp. Kolff (1840:173) specifically mentions this procedure in connection with trepang Marege', and says that the bank of the kayu bankudu (Morinda citrifolia) was used. Vosmaer (1839:169) also includes trepang Marege' in his types which are boiled with the bark.
The purpose of this staining is usually said to be to deceive the Chinese buyers as to the grade of trepang. (Searcy 1907:27; Harney n.d.:136). A more probable reason given by Kolff (1840:173) is to assist preservation by a degree of tanning. As some confirmation, Searcy (1907:28) notes that fishing lines were also boiled with trepang. (See also the remarks on Morinda citrifolia in chapter 3.) Harney (n.d.:135-6) mentions that he dyed the trepang in a final boiling after smoking.

The rows of stone fireplaces constructed to support the cauldrons in which the trepang was boiled are the most outstanding archaeological witness to the Macassans. A very great number of these stone lines, as they are called, have been recognized on the sites described in part II, and several excavated. The usual number of bays for the individual cauldrons ranges from about 3 to as many as 7 or 8. An excellent description of these stone lines, with details of the wooden framework to give added support to the cauldrons, is given by Brown in 1802 and quoted in chapter 5 under site 36. The only direct illustration of the stone lines in use by Macassans is the engraving by Le Breton (Dumont d'Urville 1846: plate 115; reproduced in appendix 11:13 and Mulvaney 1969: plate 6). However, a photograph by Dr Mervyn Holmes of what is almost certainly a European trepanger's stone line, also gives a reasonably accurate impression (plate 4.1). An idea of the shape and size of the cauldrons can be obtained from the one described as S 129 in chapter 10 (plate 10.3). The stones used to construct the fireplaces always appear to have been collected in the immediate vicinity, a principle clearly illustrated on Aningmerrunguwa Island (site 32g). In some cases, such as the Mungaruda sandbank (site 8b), they must have been brought in canoes from a nearby reef or South Goulburn Island with considerable labour. The
concept in the mind of the builders appears to have been remarkably constant, though differences arise from the various material at their disposal. For example the plates in chapters 6 and 7 show the differences between stone lines built from the roundish lumps of dark brown sandstone or ironstone at the Anuru Bay site (site 9), and those constructed from flat slabs of paler sandstone at Lyäba (site 32a). Rather rarely, a form is also found in which each bay is made up of a separate 'horse-shoe' arrangement. Examples occur at Ngugarud (site 10a) and Junction Bay 2 (site 12b). A feature which sometimes occurs is a mound, containing a great deal of charcoal, backing against the rear wall of the stone line. A section through such a mound is conveniently shown in section 2 on Wobalinna Island (site 25a) (plates 5.9 and 5.10). A somewhat similar phenomenon is seen in stone line 1 at the Hardy Island West site (site 20d) (plate 5.6). Here two rows of fireplaces are separated by a kind of platform. These mounds may be the result of cleaning out the fireplaces by shovelling the accumulation of ash and charcoal over the rear wall.

The great importance of stone lines on Macassan sites is emphasized by the fact that they were modelled by Aborigines at both the stone picture sites described in appendix 10. It is also suggested there (p.7) that a possible Macassarese name for these stone lines was taring. Although Matthes (1859:329) seems to be describing a much simpler arrangement of three stones, this word was invariably given by informants in Macassar when shown either the illustration in Dumont d'Urville (1846) or photographs of stone lines in Australia. The name of the cauldrons is quite clear. Aborigines usually refer to them as gawa, which is the Macassarese kawa, and Matthes (1859:62) in his note on this word, specifically says that such cauldrons were used for cooking trepang.
The second major stage in the preparation of trepang is to bury it for some time in sand. However, this whole phase is often omitted, and many informants do not know of it. Vosmaer (1839:169) mentions it only in connection with white trepang, though he seems to include Australian trepang in this category. The most detailed description of this phase is that given to me by Mr Fred Gray. After being boiled for about half an hour, the trepang is placed in a pit and the hot water poured over it. About a foot of sand is then piled over it. When a pit is first used, the trepang is not ready to be dug up for about 24 hours, but this time is subsequently reduced until a new pit has to be dug. When the trepang is removed from the pit, it must be washed in salt water to remove a chalky skin. A very similar account was given by Philip Mugulnir when discussing the pit between stone lines 1 and 2 at the Anuru Bay site (site 9).

The only direct historical reference to the Macassans burying trepang is by McArthur (1849). He says that it was buried for '4 or 5 days, when the skin will scrape off,' though it has still to be boiled again. However Kolff, describing the procedure used in the Aru Islands, says that the skin is removed by boiling the trepang with pawpaw leaves and that the trepang is only buried overnight. When dug up 'it is washed repeatedly to deprive it as much as possible of the disagreeable taste of coral which it possesses' (Kolff 1840:174).

The exact reason for the burying is not clear, but it may be associated with removing the small carbonate spicules found in the flesh of the trepang.

No surface indication of the burying pits has been observed on Macassan sites, but a total of at least seven has been revealed by excavation (site 9 has 3, site 32a has 3 and site 32f has 1). They consist of a trench, roughly a
metre wide and several metres in length, usually lying parallel to the back of a stone line. The depth is between about 30 cm. and 80 cm. In section or plan, the dark deposit filling the pit stands out against the original clean sand (e.g. plate 7.5). It is difficult to explain in detail how the lenses of dense ash and charcoal in the pit have been formed. They are certainly not in position of burning and perhaps the best explanation is a combination of throw-out from nearby fireplaces and the effect of heavy rain in transporting light material into a hollow.

The final stage in preparing trepang is thorough drying, often associated with some smoking. The simplest form of drying is to lay the trepang out on mats in the sun. However, at some point in the process, most accounts also include some smoking over a slow fire. The fullest description of a smoke house temporarily erected for this purpose and the drying itself is given by Jukes at Port Essington early in 1845.

"[The Macassans] erect, a little behind the beach, a shed, made of bamboo and "atop" mats, about sixteen feet long and eight feet wide; this is covered by a gable-shaped roof of atop mats, the eaves of which are about five feet from the ground, at which height a stage or platform of split bamboo is spread from one end of the shed to the other. The ground inside the shed is excavated to the depth of two or three feet, so that the flame of the fire lighted in it may not catch this bamboo platform nor the sides of the shed... [After boiling, the trepang] is spread out in a single layer on the platform of split bamboo, and the fires being lighted below, it is then dried and smoked till ready to be packed away. Each piece is then much shrivelled and shrunk up, and has acquired a dirty, reddish hue. The whole shed is kept carefully covered in during the process, the only entrance being by a small door at one corner, and each end of the gable is protected
earth. Beneath the centre of the depression is a thick band of pale grey ash. Perhaps the clearest example is that excavated at the south end of Yaranya Island (site 31a), though many others such as that sectioned at Galuba (site 23a) or smoke houses A and F at the Anuru Bay site (site 9) have been used for a greater period of time. The discovery of several large lenses of grey ash at Lyába (site 32a) which are interpreted as smoke houses, suggests that on some sites at least, there may be no surface indication of where the smoke houses once stood. More detailed descriptions of the excavations on smoke houses are given in chapter 5, 6 and 7. It is unfortunate that with a few doubtful exceptions, no post holes could be recognized. Perhaps this is not particularly surprising given the usual nature of the ground and the fact that the bamboo posts would have been withdrawn when the camp moved on, but it would be a worthwhile archaeological exercise to excavate a site which would reveal a pattern of post holes.

When finally dried, the trepang had to be kept in that condition, by no means an easy task at sea in the wet season. There are several references to the need for re-drying. For example, Flinders (1814, 2:231) was told that it required 'frequent exposure to the sun.' On some occasions it may also have been convenient to postpone a really thorough drying until a more suitable camp was reached, or to redry the entire cargo before the voyage home.

From the variety of methods mentioned above and from the final unprepossessing appearance of the dried trepang, it might be thought that considerable latitude was possible in its preparation. However, this appears not to be the case. Considerable skill and judgement were needed to produce the best quality possible. Vosmaer (1839:165-73) gives precise details for preparing the various types he
distinguishes. Mr Fred Gray has also recounted to me how he experimented for some time to find the best possible methods and at last was shown by Aborigines who remembered Macassan practices. It has already been suggested in chapter 3 that the skill of the Macassans in preparing trepang was an important factor in ensuring the profitability of the Australian industry.

As well as considering the various different features and their particular functions, it is necessary to take an overall view of a site as a unit in itself. Although in practice, each particular location, or the circumstances under which a site was occupied, have resulted in many variations, an ideal pattern of site can be distinguished. It is possible that this standard concept was even more or less explicit in the minds of the Macassans. The first aspect of this, that is the position of the site itself, has already been discussed. A more regular aspect is the relative disposition of the various features. Thus with few exceptions, stone lines are arranged in a row along the beach, each line of fireplaces being at right angles to the beach. Trepang pits, where they have been observed, run parallel with and behind the stone lines. Further back from the beach are the smoke houses. Pottery is found in the greatest concentrations between the features and to some extent in the trepang pits, though this may only be a function of the greater depth of deposit in the pits. In the 1820s, several camps in Port Essington are described with a light fence defining their perimeter (see under sites 3 and 3c). The suggestion that the fence was intended as defence against Aborigines (HRA III, 6:712-13), seems a little improbable, but it may have served to limit their approach.
A number of questions arise from this overall view. The first is the relationship between the various complete sequences of units—stone line, perhaps trepang pit, and smoke house—found on most sites. For example, on the Junction Bay 1 site (site 12a) there are four pairs of stone line and smoke house. The most plausible explanation of this situation is that each set of features was used by the crew of a single prau, though this principle cannot be applied at all rigidly. For instance, on many sites there appear to be more stone lines than smoke houses and the frequency of trepang pits is unknown. An indication of an actual situation is provided by the information that the prau mentioned in the 1886 contract carried 12 cooking cauldrons (Nederburgh 1896–8(1919:145)). This suggests the use of at least two stone lines. My informant Mangngellai suggested about 6 cauldrons as a more usual number.

Thus a site with about 5 or 6 stone lines, such as Äningmerrunguwa Island (site 32g), was probably used by at least 3 or 4 praus at one time. This agrees, in general terms, with the evidence mentioned above relating to the number of praus working together.

Secondly there is the question of the re-use of sites. There can be no doubt that most sites were frequently re-visited, perhaps even several times in a season by different groups of Macassans. For example, the French visitors to Raffles Bay in 1839 specifically record seeing praus leaving the bay as they themselves arrived, and while they were there, another group of Macassan utilized stone lines which may have been erected by the previous prau, but were probably older. Finally yet more praus arrived, but passed on when they found others at work (Dumont d'Urville 1844:29,48-9, 51). Extensive re-use of sites can also be inferred from archaeological evidence such as
the build up of deposit on Wobalinna Island (site 25a) or the complex section of the smoke house at Galuba (site 23a). However some sites, such as that at the south end of Yaranya Island (site 31a), appear to have been only briefly occupied. The relative poverty of the surface collection from this site serves to emphasize the amount of activity that the major archaeological sites must have witnessed.

The first limiting factor in the time for which a site could be occupied by one group was probably the supply of trepang. Indeed, the only other important consumable resources were wood and fresh water, both of which were often in almost infinite supply. Some estimates are made by Daeng Sarro of the time spent at various camps: one or two days at Mooroongga Island (site 14f); about a fortnight at Takkerena (site 16b) to process trepang; a few days to a fortnight or longer at Manunu (site 22); five to ten days outside Melville Bay (site 23); and a fortnight on Isle Woodah (site 28) (Cense 1952:262-3). The picture of moving up and down the coast, stopping for a few days or weeks in each anchorage until circumstances suggested a move, is clear from many sources.

If the supply of trepang was the main limiting factor on the time for which a site could be occupied, then its rate of regeneration determined when the site could be revisited. Unfortunately very little is known about this subject, even at the most basic biological level (Hyman 1955:236-7). The opinion of practical men is divided, and Dashwood was given conflicting replies when he asked them about the danger of over-fishing. For the Torres Strait area, one witness thought the trepang very scarce and advocated closure of the grounds for several years to allow recovery; another asserted that the trepang returns after only 3 or 4 days (Dashwood 1902:77-9, 62; see also Qld Report 1908:lvii-467). Brown and Tingha, who both worked at Bowen Strait, gave rather equivocal answers; the trepang in their area was decreasing,
perhaps because they worked it for most of the year, yet the Macassans further along the coast were now collecting greater quantities per prau than previously, and even in the Bowen Strait area, there was room for a few more European trepangers. Tingha thought the trepang increased quickly (Dashwood 1902:42-3). Nonetheless, these opinions did not prevent Brown from using the argument of over-fishing to secure a two year closure of an area in 1903 (see chapter 13).

In this uncertainty, a number of points are clear. The most important is the vast amount of trepang around the Northern Territory coast. Even if a figure such as 6,000,000 animals exported per year, which is what the statistics given by Flinders (1814,2:230-1) represent, sounds large, this is unlikely to have made much impression on the total population. No doubt some effect was noticeable in a small, heavily-worked area, such as Bowen Strait, but as an example of the quantities available from one limited situation, Harney (n.d.:131) says that he has seen 25 tons of dried trepang come off one bank in Port Bradshaw. In fact the very continuation of the industry at a more or less consistent level for such a long period confirms that over-fishing cannot have been a serious problem. Perhaps a limited area might be cleaned out for a season by several weeks work, but it seems likely that by the following year it would repay another visit, and thus another reoccupation of the nearby site.

From the account given above of the process for preserving the trepang, there was an obvious need for large quantities of firewood. Both the boiling and the smoking process required fires to be maintained for long periods. The most apparent result is the vast amount of ash and charcoal on Macassan sites, both in specific lenses and in widespread dark sandy deposit. To fully
appreciate the extent of this burning, it is necessary to return black from a day's digging and regard the modest outcome of a large camp fire maintained for several weeks. The firewood was, if possible, obtained in the vicinity of the site, although occasionally it had to be brought some distance. For example, Searcy found on Entrance Island (site 13a) 'large stacks of timber ... brought from the mainland' (Searcy 1907:82). The most suitable wood, particularly for smoking, was various species of mangrove. Saville-Kent (1893:233) mentions Rhizophora mucronata and Burkill (1935,1:1182) notes that 'mangrove wood is preferred for the fires.' There are many comments on the excellent firewood obtained from mangroves (Searcy 1907:82; Sopher 1965:41). This is doubtless the explanation for the repeated observations of cut stumps at various places around the Australian coast. The most detailed description is that by Brown, quoted under site 36, who found about 1\(\frac{1}{2}\) to 2 acres of cleared mangrove in the Pellew Group.

Fieldwork has produced further possible confirmation. In chapter 6, an area of what appears to be mangrove clearance is described. Some pieces of charcoal were also collected from the hearths of several stone lines, particularly stone line 8 at Lyäba (site 32a), and it was hoped that it would be possible to identify the species of tree from which these had come. Although some cellular structure can be distinguished and it is possible to say that at least the pieces examined come from relatively thin branches, no specific identification can be established. However, there is nothing to indicate that the samples did not come from mangrove wood.¹

¹ I wish to thank Dr Helena Świerczkowska-Reeve, Department of Biogeography and Geomorphology, R.S.Pac.S., A.N.U. for advice on these charcoal samples.
More tentative evidence is that derived from the present distribution of various species of mangrove. It is suggested in appendix 5 that recolonization of areas which were formerly cleared can be detected by the different species of mangroves still found in those areas. In other words, complete natural equilibrium has not yet been restored after a considerable disturbance of the environment. It must be emphasized that this evidence is still extremely dubious, and the problem invites intensive ecological study. Another slightly more secure argument in chapter 7, relates the accumulation of a ridge of clean sand around the front of the site at Lyäba (site 32a) to the clearance of the protecting mangroves.

So far the camp on the beach has been considered only as a site for the preparation of trepang. It was also a place where men lived, at least for short periods. Most observers remark on the animation of the scene, which was all the more pronounced by contrast with the pervading loneliness of the coast in general (Dumont d'Urville 1844:48-9; Searcy 1907:26-7). Particularly for the Aborigines, whose involvement is discussed in greater detail in chapter 11, the scene was full of interest and excitement.

The food eaten by Macassans on the praus has been described in chapter 2. The diet ashore was probably much the same: rice, fish, tamarind, coconuts and perhaps occasionally other forms of meat and delicacies such as various sugared preparations. The staple food, rice, was cooked in earthenware pots, probably often on a spare corner of a stone line fireplace, though there is also mention of it still being cooked on board the praus (Searcy 1907:28; SAA 790/1884/455). The scatter of broken sherds is an indication that at least some cooking pots were brought ashore, and stayed there. As detailed in
chapter 9, most of the earthenware pots appear to have been for cooking, though some were more probably water containers. The import ware items described in chapter 8 appear to have been either for eating or in the case of coarse fabric ware jars for storing various commodities. Some of the large items were almost certainly water containers, perhaps brought ashore to be filled at a well. The large conch shells found on some sites such as the rather dry Junction Bay 1 (site 12a) might also have been used to store water, at least temporarily, as they were by Aborigines (Wilkins 1928: plate opposite 170). Tindale (1925-8:131) reports finding stone-lined wells at Agbenamanja (site 30a) and one of the wells on Entrance Island (site 13a) could be Macassan. Several wells on the beach at Port Essington were indubitably Macassan, and one was lined with bamboo (see under sites 3 and 3c). There are specific references to the Macassans watering on Sims Island (site 8r). A special category of containers are the case bottles which once held Dutch gin. What these actually held when brought to Australia is uncertain, but it was probably some form of spirits. An interesting confirmation of the extent of fishing activity is provided by the metal fish-hooks found on some sites.

The most apparent result of the Macassans' diet however, are the many fine tamarind trees which have sprung from the seeds in the beans they brought. The distribution of this magnificent tree, Tamarindus indica, in Arnhem Land and on Groote Eylandt clearly indicates that it has been introduced and this is acceptable on botanical grounds (Specht 1958b:458). This is not to say that every tamarind marks the site of some Macassan activity. They are now propagating freely in favourable locations and many occur in situations where the Macassans are unlikely to have camped. Some of these, for example in the Crocodile Islands, may be the result of Aboriginal dispersal of seed. However the occurrence of the tree on definite Macassan sites (as
listed in part II) is still sufficiently distinctive to encourage the field archaeologist to regard them as a site marker, and several sites were in fact discovered in this way.

It is perhaps rather surprising that there are no other botanical introductions, but is must be remembered that the Macassans were essentially temporary visitors to any single locality. This fact, as well as lack of significance in the pattern of distribution, suggest that the few coconut palms and various species of bamboo (if indeed they are not indigenous) found in Arnhem Land and adjacent areas must be attributed to other agents. A similar case is wild cotton, *Gossypium hirsutum*, which according to Dr N. Burbidge (pers. comm.), has been introduced into the Pellew Group.

As well as the mundane tasks of preparing trepang and getting enough to eat, the Macassans, like all people, had certain ceremonies and customs which they performed as the situation demanded. The sources supply only vague hints as to what these were. On a quite trivial level, the rip around Cape Arnhem seems to have been given considerable respect (see site 24g). Wallace (1869, 2:166) relates how a particular point on the coast of South Celebes commanded similar circumspection from the crew of his prau. Possibly more significant customs were related to Searcy by Aborigines. 'Before commencing at a fresh camp they [the Macassans] lowered to the bottom of the sea a new plate containing portions of the best food they had on board. When leaving a camping-place some ceremony was gone through for the purpose of making wind' (Searcy 1907:80-1). In 1967 my informants Mun-gurrwuy and Mawalan also remembered stories of ceremonies. Details are given under site 25e of a Karei rock to which the Macassans were said to have taken food as a present. Mun-gurrwuy also supplied the words of a song which he said was used by the Macassans in the course of a ceremony, involving dancing with knives.
and guns, at completion of trepanning in one area. This, and several similar examples, are discussed in chapter 11.

Although the details of these ceremonies are obscure, the general picture is fully consistent with similar ceremonies and ritual in South Celebes. Even today, orthodox Islam has by no means fully eradicated many traditional beliefs and practices. Collins (1937a; 1937b) has detailed descriptions of some of these. He also shows how an apparently straightforward practice can have unsuspected overtones. A cock was taken aboard the praus he saw, in order to frighten the monsters of the deep (Collins 1945:54). Perhaps that, rather than the desire for an occasional leg of chicken, is the explanation for those fowls seen on Macassan praus.

No doubt one occasion for some form of ceremony was a man's death and burial. Wallace's description of the funerals of those who died at Dobbo in the Aru Islands during 1857 probably applies more or less to what happened in Australia. '[The dead] were buried in a little grove of Casuarinas behind my house. Among the traders was a Mahometan priest, who superintended the funerals, which were very simple. The body was wrapped up in new white cotton cloth, and was carried on a bier to the grave. All the spectators sat down on the ground, and the priest chanted some verses from the Koran. The graves were fenced round with a slight bamboo railing, and a little carved wooden head-post was put to mark the spot' (Wallace 1869,2:278). The archaeological manifestation of a Macassan grave is described in appendix 9.

The evidence so far used in this chapter has been taken from all periods without differentiation. As stated at the beginning of chapter 2, this assumes a unity in the industry. While this is certainly true in general, it might be asked whether there was any progressive change or
development. For most aspects, the evidence is quite inadequate to supply detailed answers. Only scattered clues are available, such as McArthur's comment in 1849 that dredging for trepang had only just been introduced.

However, there are possibly a few artefacts for which there is sufficient archaeological evidence to suggest that they were not always in use. The most important of these is glass. The difference is striking between a site as Äningmerrunguwa Island (site 32g) with an almost complete absence of glass, and one nearby such as Ilyaugwamaja 6 (site 32f), where there is more glass than earthenware. It is shown in chapter 10 that the majority of Macassan glass must be from the nineteenth century. Given a time range for the industry of at least two centuries and the apparently uniform function of the sites, the hypothesis immediately suggests itself that the relative quantities of glass and earthenware pottery on a site offer a very approximate indication of date. The smaller the proportion of glass, the older the site. To take, for example, a very simple case, the main site at Waminari Bay (site 10b i) which appears to have been used only once, may possess some relative antiquity since no glass was found there at all. The folly of applying this hypothesis at all rigidly need not be elaborated. However, some support can be found from the sites described in chapter 7 and particularly from the Anuru Bay site (site 9) described in chapter 6. In future archaeological work on Macassan sites, the hypothesis would be worth testing as a ready indicator of approximate age.

Of much less importance is the suggestion in chapter 6 that metal fish-hooks were not in use when area 2 at the Anuru Bay site (site 9) was occupied. Certainly there is one reference to Macassans using 'a coarse pearl-shell hook and line' at Port Essington in the 1820s (Campbell
1834:166), but it would be rash to infer from this that all metal fish-hooks are later. Even more tentative are the suggestions at the end of chapter 8 about the relative age of different types of porcelain. However neither of these classes of artefacts is likely to prove of great practical importance in dating sites, because of their comparative rarity.

Our overall picture of a Macassan camp is by no means clearly in focus for every detail, but a surprising amount emerges by drawing together various forms of evidence. Thus, to take the most obvious example, our knowledge of the process of preparing the trepang is relatively thorough. But even this information is usually generalized rather than specific. This characteristic of archaeological evidence is well known, but it also applies to the record of outside observers, in this case Europeans or Aborigines. Because they can only pass on what they saw and heard, without fully knowing the Macassan attitude to events, we can go no further than their observations. To take a specific example, the Macassans who found the French expedition in Raffles Bay in 1839 may have been apprehensive and thus hurried to move on. Thus it may be invalid to accept this as a typical camp. However, we do not know this, and it seems reasonable to accept the French report at face value.

Only occasionally can we glimpse the interplay of personalities and circumstance in a particular situation. For example, Searcy at Melville Bay in 1884 attempted to arbitrate between two captains, Using and Daeng Matona, and the Aborigines, particularly a man named Cadado, who were being excessively provoking. The exasperation of the captains is evident (Searcy 1907:95; SAA 790/1884/445). It is at this level that the Macassans are most elusive, and most real.
PART II: GAZETTEER AND ARCHAEOLOGY

Preliminary Note

The arrangement and description of material within this part require some explanation. The gazetteer, chapter 5, sets out the archaeological and other forms of evidence relating to Macassan sites area by area. Chapters 6 and 7, which deal with areas of major archaeological significance, have been extracted for ease of reference. Although the exact provenance of each artefact is given in these chapters, it is convenient to describe the artefacts in groups, as set out in chapters 8, 9 and 10. This procedure is possible because of the essential similarity of all collections of artefacts from Macassan sites.

Two numerical series have been used to register the more notable artefacts. The first applies to all types of pottery, both the import ware described in chapter 8 and the earthenware of chapter 9. One number has been allotted to each import ware item. In the case of earthenware, only 'useful' sherds have been numbered, though this rule has been applied less stringently to those collections not in Canberra. Sherds from the same item, whether import ware or earthenware, have been designated by a single number and different lower case letters (e.g., 1273a and 1273b), though in cases where the sherds cannot be fitted together, this has sometimes meant a rather arbitrary choice. The following table sets out certain particulars of the sherds in this series.
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<tr>
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<th>Provenance</th>
<th>Present Location</th>
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</tr>
<tr>
<td>200-314</td>
<td>Site 8 b</td>
<td>Western Australian Museum</td>
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<tr>
<td>374-392</td>
<td>Site 26b</td>
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</tr>
<tr>
<td>436-470</td>
<td>Site 25a</td>
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<tr>
<td>500-598</td>
<td>Site 8 b</td>
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<td>600-603</td>
<td>Site 8 b</td>
<td>Possession of Mrs C.W. Holmes</td>
</tr>
<tr>
<td>604-699</td>
<td>various</td>
<td>Canberra collection</td>
</tr>
<tr>
<td>700-738; 740-805</td>
<td>various</td>
<td>Australian Museum</td>
</tr>
<tr>
<td>806-1123; 1125; 1127-1278; 1280-1380</td>
<td>various</td>
<td>Canberra collection</td>
</tr>
</tbody>
</table>

In addition, the numbers 315-323 have been assigned to some of I.M. Crawford's sherds from the Kimberley coast, held in the Western Australian Museum. There are thus no sherds corresponding with the following numbers: 324-373, 480, 739, 1124, 1126 and 1279.

The other numerical series, which is indicated in the text by the prefix S and on the artefact by enclosing the number in a square, applies to all other types of artefacts collected, as described in chapter 10. These are all in the Canberra collection, with the following exceptions:

- **S 12-22**: Social Welfare Branch, N.T.A., Darwin
- **S 23**: Department of Anthropology, University of Western Australia
- **S 54-6**: Possession of the Reverend H.U. Shepherdson
- **S 127**: Hydrographer, R.A.N., Sydney
- **S 128**: H.M.A. Naval Dockyard, Garden Island
- **S 130**: Queensland Museum
The final location of the material referred to as the Canberra collection, that is mainly the artefacts amassed by myself, has not been decided. It is officially covered by the provisions of the Native and Historical Objects and Areas Preservation Ordinance 1955-1960 of the Northern Territory. The collections of F.J. Allen are in a similar situation.

To the best of my knowledge, all artefacts ever recovered from Macassan sites are mentioned, and the vast majority of notable items included in the two numerical series. The only major collections I have not personally handled and which have not been included in the numerical series are those in the United States National Museum listed under sites 24 f, 25a and 30 a. When describing large quantities of earthenware sherds or glass fragments, the total weights of earthenware and glass, including numbered items, have usually been given. This measurement, apart from being easy to obtain, is the most convenient for comparing various sites or parts of sites since it is least dependent of the local circumstances of preservation. However in a few cases, it was not possible to weigh the collections, and the number of pieces has been given.

In this part of the thesis, the following abbreviations and conventions have been used in addition to those normally employed.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iw.</td>
<td>import ware. See chapter 8</td>
</tr>
<tr>
<td>Ew. or ew.</td>
<td>earthenware of the type described in chapter 9</td>
</tr>
<tr>
<td>m. rims</td>
<td>miscellaneous rims, that is those ew. rim sherds not assigned a sherd number.</td>
</tr>
<tr>
<td>m. bases</td>
<td>miscellaneous bases, that is those ew. base sherds not assigned a sherd number.</td>
</tr>
<tr>
<td>m.b.s.</td>
<td>miscellaneous body sherds, that is all other undecorated ew. sherds, mainly from the body of globular pots.</td>
</tr>
</tbody>
</table>
ring part or whole of the top lip of a bottle.
frag. or fraggs fragment(s) of glass
m. frags miscellaneous fragments of glass
utilization evidence on glass fragments of their use as scraping or cutting implements, presumably by Aborigines in the main.
Label the symbols actually written on the more important artefacts collected from a particular site.
S.L. stone line(s)
S.H. smoke house(s)

All map references are to the 1:250,000 series for Australia (see bibliography).
The staff in site photographs is marked in 20 cm. division, while smaller scales show 1cm. and 10cm. divisions. A legend of special symbols used on maps and sections appears before the section of figures.
Chapter 5

Gazetteer

This gazetteer lists all the evidence known to me relating to Macassan activities at specific locations along the coast of northern Australia between Bathurst Island and the head of the Gulf of Carpentaria. This evidence is partly documentary, partly ethnographic and partly archaeological. A number of references to Aboriginal or other non-Macassan activity have also been included, where these seemed relevant to an understanding of the history or the field archaeology of an area. It is intended that, as further information comes to light, it can be incorporated into the gazetteer by addition to existing information on a site or by increasing the number of sites in an area.

Sheet 1 indicates the area covered by the gazetteer and shows the approximate location of sites. The question of visits by Macassans or similar groups of trepangers to other sections of the Australian coastline is discussed in chapter 2.

Unless otherwise indicated, all collections described are held in Canberra at the time of writing. For the location of artefacts, see also the preliminary note to this part.

1. Bathurst and Melville Islands

The Macassan name for Melville Island is said to be Aimba Mootiara (HRA III, 6:713,790) or Amba (Campbell 1834:155).

Cense (1952:262) records in Daeng Sarro's account the following names: Lembang Lantang (meaning Deep Day - Lembang = Lembang), Karaeng Mangngemba (a personal name), Lembana i Ma'ne'
(meaning The Bay of Ma'ne') and Lemba Kusissili' (meaning Sandfly Bay). These places appear to lie somewhere on the N coast of Melville Island. Willie located Karaeng Mangngemba near Soldier Point, and Lembang Lantang just S of Cape Don.

A number of praus are known to have been wrecked on Melville Island, one in about January 1882 (SAA790/1882/346) and two in December 1886 (SAPP 1887/53:11). The only contemporary record of processing sites on the islands is given by Searcy (1907:46) who says that 'old fireplaces and smoke-houses have been found' on the N side of Melville Island. Mr J. Morris and Dr F.J. Allen (pers. comm.) have found a few sherds of ew. pottery, similar to that used by Macassans, at Fort Dundas, but a single pot might easily have been brought by Europeans. There are also a few ew. sherds from the same place in the Arnold Pilling Collection (11-4435), Lowie Museum, Berkeley, U.S.A. However the settlement at Fort Dundas was certainly not in the area regularly visited by the praus. Various excuses are given: it was 'out of their customary track' (HRA III,6:717); there were 'the known difficulties of the entrance and a dread, which the Malays have, of passing through narrow Straits' (HRA III,6:689); its reputation as the haunt of pirates (HRA III,6:713,790); and a comparative lack of trepang (Campbell 1834:147). Indeed Campbell (1834:155,161) says that the praus were specifically forbidden to go near Melville Island.

Morris (n.d.) has recorded some Aboriginal traditions of Macassans sailing around the islands, and perhaps very occasionally trepangning, but in general his information creates the impression of Tiwi hostility to outsiders. This is confirmed by contemporary sources. Searcy (SAA 790/1884/177) writes that 'it was reported that one or two [praus] intended going to Melville Island but I do not think that such is the case because the natives there are very
antagonistic to the Malays' and Daeng Sarro comments specifically on the contrast between the hostility of the Aborigines of Melville Island and friendliness of those on Cobourg Peninsula (Cense 1952:262).

The only relatively certain example of cultural influence is the use of dug-out canoes, and these could have been obtained from wrecks.

Extreme caution is needed when considering evidence of influence in this case both because of the possibility of contact with other non-Macassan visitors and because of the difficulty of recognizing information introduced by Iwaidja Aborigines from the Cobourg Peninsula in the late nineteenth and early twentieth centuries.

2. Western Cobourg Peninsula

a. Popham Bay

The Macassan name is Limbamammo (Searcy 1907:135). On 25 April 1818, King (1827, 1:93) observed a camp and four praus at anchor on the E side (see also Cunningham in Lee 1925:374). There were also some praus here in April 1883 (SAA790/1883/319). It probably saw a little European trepaning activity. Robinson remarks that it 'was only a trepan station' (Searcy 1905:47).

b. Blue Mud Bay

The Macassan name is Lemba Peo, meaning Mud Bay (Cense 1952:262; Searcy 1907:135). Earl (1846: opposite 72) marks Limba Apiu on the W side of the bay and MacGillivray (1852, 1:145) gives Limbapyu as the name of the Aborigines in the NW Cobourg Peninsula. See also under site 2 c.

In 1839, Stokes (1846, 1:402) describes 'a snug boat or small craft harbour, much frequented by the Malays, who call it Blue-mud Bay.'
In 1967, Lindner (pers. comm.) noted at 505.561 a tamarind tree and green glass frags. He collected 1 thick ew. sherd. Immediately N is a date palm. On a later occasion he saw more pottery and was told by Aborigines of a Macassan grave in the area.

c. Trepang Bay

Vallack (1840) gives the name Limbabayo, but this almost certainly refers to Blue Mud Bay. See under site 2 b. On 15 April 1818, King (1827, 1:92) saw a camp of some tents or bamboo huts on the beach with several praus at anchor (see also Cunningham in Lee 1925:374). At least one prau was here in 1829, from which a man deserted (Wilson 1835:75). In the 1870s, there was probably some activity in this area by European trepangers. See chapter 13. Lewis (1922:136), in about 1875, reports finding the remains of a camp which he thought was European. On 12 February 1882, one prau was in the bay with some of the survivors from a wreck on Melville Island. Various fights among drunken Aborigines occurred. On 23 February, the prau moved to Port Essington, but returned on 25 March (SAA790/1882/346). Several praus were also in the bay in April of the next year (SAA790/1883/319). In April 1895, a single prau was seen here (SAA790/1895/175).

i. Trepang Bay West. The Macassan name is Limba-Bunang Tunang (Searcy 1907:135). In 1967, Lindner (pers. comm.) noted at 507.559 a large tamarind tree and scattered pieces of rock.

ii. Trepang Bay East. The Macassan name is Lemba Binangaja, meaning River Bay (Cense 1952:262), rendered Limbabeenunga by Searcy (1907:135), and applied to the whole bay by Earl (1846:opposite 72). In November and December 1883, a group of Malays from Darwin were trepanging here in
the Lepanto, Peit master, and camped about four miles from Vashon Head. Searcy visited them on 7 December (SAA790/1884/177; Searcy 1907:49).

On 8 July 1967, Macknight visited a site at 518.566. Here there is an exposed sandy area behind a beach facing WSW and backed by a creek with mangroves. Among a scatter of shells about 20 m. x 8 m. is 1 S.L. and perhaps another. Nearby is a small tamarind tree and about 100 m. S, a possible well in a clump of pandanus surrounded with large conch shells. The following artefacts were collected (Label-Trepang Bay 1): Glass, 1 square base, green frags from at least 2 bottles, total 304 gm., 1 utilized frag.

3. Port Essington

The Macassan name is Lembu Muttiaraja, meaning Pearl Bay (Cense 1952:262). Corruptions of the name, from which the identification is made, appear in many other sources and it is first recorded in 1828 (HRA III, 6:713); it seems to apply to the whole port.

This area has been sporadically visited and settled by Europeans from the time of King's first survey in 1818. In addition to the specifically located references listed below, the following information is available.

In May 1827, a party from Fort Dundas visited Port Essington to search for evidence of Macassan visits. On the E side of the port, perhaps on Record Point, a recently deserted camp was discovered.

Three Miles beyond the Fresh Water Stream, came to a spot of Ground adjoining the sandy beach, on which the Malays had evidently lately encamped; it is Fiftyeight paces by Twentythree, enclosed with Sticks placed perpendicularly, from one to two feet apart, and of unequal lengths, say from Ten to Fourteen Feet; a few have Stocks lashed across them by thin Strips of Bamboo. Inside the enclosure are six rows
of Fire places, about Twenty feet long and running parallel to each other, and each capable of containing five pots, for boiling the Trepang; Hurdles are erected, apparently for the purpose of drying it upon; Outside are four or five holes not more than Three feet deep and Two feet in diameter, whence they procure water. One of them is lined with split Bamboo to prevent the sand from falling into it.

The fresh appearance of the Materials used by the Malays in the Settlement, the Wood made up in Piles for fuel being green and sappy when broken, the recent cuts of the Axes on the trees, the beaten track contiguous to it, the Water being still Three or Four Inches in depth in one of the Wells, and the moisture at the bottom of the others, the few articles which I picked up and brought for your inspection, all conspire to convince me that the Malays have been on that part of the Coast at no very remote period.

On the western side of the Bay there are remains of a Malay settlement, but it does not appear to have been occupied for a considerable length of time.

(HRA III, 6:692-3)

The area was also visited by Smyth in July 1872 (HRA III, 5:820).

In 1828, some time before 1 April, the vessel Anne coming from Raffles Bay to Fort Dundas, called at Port Essington. The master reported finding there 5 praus of about 20 tons each, with a total of 130 men. It was said to have been 'used as a fishing place for many years.' A camp with bamboo huts and boiling places was surrounded by a fence of bamboo 14 or 16 feet high as a defence against the Aborigines (HRA III, 6:712-3).

From 1838 to 1849, there was a British settlement, Victoria, in the port and its history and archaeology have been described by Allen (1969). No complete list of the praus that visited or worked in the area during that period is available, and detailed work on the manuscript sources would probably extend considerably the following list. Indeed it seems that the settlement was visited by at least some praus in each year of its existence.
In March 1839, some of the 20 praus seen leaving Raffles Bay visited Port Essington (Dumont d'Urville 1844:41). References to 5 or 6 of these are listed under site 3 a, but there may have been more. Between 24 March 1840 and 4 May 1840, 13 praus visited the settlement (Earl 1846:65-6). The total for the year was 30 praus (Copies or Extracts 1843:10). Describing his visit in 1841, Stokes (1846, 2:356) mentions that 14 praus came in one season, but does not specify which of the possible 3 seasons. In 1841-2, McArthur recorded 17 praus (Copies or Extracts 1843:37).

European activity in the area began again in the early 1870s. See chapter 13. Although there was some trepang under European supervision, the precise location of the camps is not known.

On 26 March 1875, a photograph was taken, probably by Foelsche, of a trepang camp in the area (SAA 10836 NT). From the surrounding vegetation, the camp seems to be located in the southern part of the harbour. Both Aborigines and Malays are among the men visible, though the latter are more probably from Darwin, rather than Macassans.

On 24 March 1883, Searcy interviewed 1 prau going into Port Essington and on 2 April returned to find another 3 praus there. On this occasion, he also visited some smokehouses (SAA790/1883/319; Searcy 1907:35). On 12 January 1887, he again visited various camps, but they were not necessarily Macassan (SAPP 1887/53). In 1903, Brown reported 4 praus in Port Essington as well as 3 more local boat owners (SAA790/1903/438).

a. Vicinity of Victoria

In March 1839, 5 praus 'anchored for the night under Point Record, and in the morning moved into the sandy bay to the south of the settlement, where in a few hours they had erected a number of sheds, covered over with large mats,
in which to cure the trepang' (Earl 1846:56). Stokes (1846, 1:388) mentions 6 praus on 28 March 1839 and says others came later. Dumont d'Urville (1844:69) found the Macassans leaving on 7 April 1839, and Earl (p.58) says they only stayed three weeks. On 28 January 1845, 2 praus (another arrived on 30 January 1845) set up a camp with 1 S.H. and 1 S.L. in 'Garden Bay, just above the settlement.' This is probably the same site as that occupied in 1839. Trepang was collected in 'the bays and coves of the harbour' (Jukes 1847, 1:358-61).

The beach S of the settlement was the centre of activity by the Coburg Cattle Company and others later in the century. From 24 February 1882 to 25 March 1882, Robinson had a prau 'within 200 yards' (SAA790/1882/346). He was also doing some trepanging himself about this time (Searcy 1907:19-20).

Although there are now many large tamarind trees along this beach, a careful search by both Mulvaney and Macknight on their respective visits in 1966 failed to locate any Macassan artefacts. There are also several tamarind trees behind the cove to the W of the settlement, but no artefacts. Allen (1969, 1:190-1) has found 8 ew. sherds, including 1 rim (Allen's Item 100 : Macknight sherd number 599) and 2 m. rims, in the area of the settlement itself. (These sherds remain with Allen's collection.) They probably date from the 1838-49 period. A few of the many other sherds, particularly of stoneware and of Chinese porcellaneous ware, found here may also have been derived from the Macassans (Allen 1969, 1:400).

b. Middle Head

In 1883, Searcy (1907:38) noted Macassans collecting trepang in this vicinity. About 1914, Jimmy Kafoa, a
Polynesian, was trepanning near here (Masson 1915:128). Macknight visited the area in 1966 and saw several tamarind trees and some European pottery.

c. Record Point

The Macassan name is Limba Caraja (Searcy 1907:135). It is first recorded in 1828, though applied loosely to the whole port (HRA III, 6:790). Vallack (1840) confirms the specific identification of Record Point. MacGillivray (1852, 1:145) gives Limbakarajia as the name of Aborigines living at the entrance to Port Essington. On 22 September 1824, Roe observed that 'a large Malay encampment had recently removed from this spot, leaving their fire-places and temporary couches, and large piles of fire-wood to season, in readiness for their next visit' (King 1827, 2:235-6). On the same occasion, Bremer noted a well, fenced with bamboo and 'many other signs' (HRA III, 5:771).

Macknight searched the area in 1966, but could find no artefacts. In August 1967, a large iron cauldron (S 129) and 1 ew. m.b.s. were found on the beach at 540. 546. The main part of the cauldron is in the possession of Mr C. Patterson of the Historical Society of the Northern Territory, but a small fragment and the sherd are in the Canberra collection.

d. Knocker Bay

e. Curlew Point

There is said to be a tamarind here.

f. Smith Point Beach

At 536.567, there is an open dune behind the beach facing NW with easy access to a lagoon. Some finds collected by Macknight and others in 1966, were recovered over quite a wide area, but most were near the main group of casuarina trees. The collection comprises (Label-SPB): Iw. 604 a,b, 605; Ew. 606, m.b.s., total 78 gm; Glass, prunt S1 (from near Black Point), 2 rings, frags of at least 13 bottles, mainly green, total 250 gm, much utilization. At least some of the glass and perhaps the transfer ware sherd (605) could be derived from the occupation of Black Point at the time of the British settlement, possibly transported by Aborigines (see Allen 1969, 1:407).

A large ew. dish (607 a,b) was also found on the headland between Black Point and Smith Point, and an Iw. sherd (1375) from the rocks near Smith Point.

The Macassan name Pa'banderanga meaning the place of the flag (Cense 1952:262) may refer to the beacon on Smith Point (see Allen 1969, 1:144). On 5.2. 1886, Robinson visited a trepang camp of the E side of Smith Point, but this was not necessarily Macassan (SAA790/1886/356).


g. Coral Bay

In 1967, Lindner observed 2 small piles of stones behind the beach here. From photographs, they could possibly be Macassan graves, but this is highly dubious.

h. South coast of Cobourg Peninsula

Earl (1846:opposite 72) locates the name Bijna Lombo, along the S shore of the Cobourg Peninsula just E of the
bottom of Port Essington. MacGillivray (1852, 1:145) gives
a smaller name, Bijenelumbo, for the Aborigines inhabiting
this area. The word looks Macassan and occurs with others
which certainly are.

4. Port Bremer

Searcy (1907:135) says the Macassan name is Limba
Mootara, but this is almost certainly a mistake for Port
Essington. See under site 3. In April 1895, one prau was
seen here (SAA790/1895/175).

a. Port Bremer 1

On 15 July 1967, Macknight visited a site at 552.562,
on an open sandy flat behind a sheltered beach with deep
water approach. A wet season lagoon is immediately behind
the site. There are 5 S.L., 4 S.H. and 1 tamarind, as shown
in fig. 5.1. The surface has been disturbed by some
movement of sand and much animal trampling. The following
artefacts were collected (Label-PBM 1): Iw. 609 a,b, 610;
Ew. 208, m.b.s., total 34 gm; Glass: 1 ring, mainly green
frags from at least 12 bottles including 1 probably Gaelic
Old Smuggler whisky, one frag. marked E, another M, total 1012
gm, some utilization; clay pipe S2 a,b; Metal, iron knife
blade with brass ring S3, flat iron piece 250gm; Stone, 3
introduced pieces.

Lindner has made another collection, almost certainly
from the same site, consisting of: Iw, 609c, 1376, total 40
gm; Glass, 1 ring, mainly green frags from about 7 bottles,
including 1 probably Gaelic Old Smuggler whisky (see above),
total 440 gm; Clay pipe S4, Metal, flat iron pieces 450 gm.

b. Port Bremer 2

There is a site at 551.559 which Macknight visited on
15 July 1967. On a sandy area behind a small sheltered beach
facing WSW and with deep approaches, there is 1 S.L. with 4 bays facing N and about 20 m. to both N and S another possible S.L. The collection comprises (Label -PBM 2): Glass, 2 green bases, both utilized; Metal, a square iron spike, a roughly shaped semicircle of can metal.

At 551.560 Macknight collected a prunt, S7, and 3 small frags of green glass.

c. Port Bremer 3

On 15 July 1967 at 552.559, about 300m. SE of site 4b, Macknight observed 1 well preserved S.L. with only 2 bays facing E, near a gap in the thin line of mangroves along the S facing shore. About 10m. N there is an ashy area and for some 60m. E a scatter of shells and dark sand. Only a sample of the artefacts spread over this area was collected. This consists of (Label-PBM3): Tw. 1377; Glass, 2 rings, 2 bases, frag. of Lea and Perrins bottle stopper S6, many other frags all apparently recent, total 1036 gm, some utilization; Claypipe S5; Metal, pieces of sheet copper, lead and can metal, iron ring 5.5 cm.diameter, broken iron chain link; Stone, broken quartzite point.

This seems to be an exclusively European trepanging site, and provides a good check on the sort of intrusive material found on sites also used by the Macassans.

5. Raffles Bay and Palm Bay

Daeng Sarro remembered the name Anggarisi' Toaja meaning the Old Englishman (Cense 1952:262), which Searcy (1907:135) identifies as Raffles Bay. The name may be a reference to the British settlement of Fort Wellington in the bay from 1827 to 1829. It is convenient to mention here all the references to praus in the general area during this period; that is for the seasons 1827-8 and 1828-9.
1827-8. On 17 February 1828, 4 praus were 'making to the South Bay' and next morning proceeded through Bowen Strait. On 20 February a single prau arrived in Palm Bay and next day was towed into Raffles Bay. Two days later it proceeded through Bowen Strait (HRA III, 6:789-90). By 17 March 5 more praus had apparently passed through the strait (HRA III, 6:713). On 29 March 3 praus, including the one which had previously visited the bay arrived. On 6 April, 2 more praus were in the neighbourhood but did not arrive at Fort Wellington until 8 April. The 5 praus then present were: Mannie Mannie No.337, Deing [Daeng] Riolo master; Kadaro No.324, Geo [? Pua] Kasiepa (also called Bappa Kaseipa) master; Roelong No.336, Bappa Logo master; Toola No.291, Geoa [? Pua] Sarakia master; Geela No.298, Solemang Tieka master (the son of Pua Sarakia). On 10 April the last 2 which were those that arrived on 8 April, departed and the other 3 left the next day. On 18 April 6 praus sailed out of Bowen Strait 'where they had been fishing', but the settlement was only visited by 4 canoes (HRA III, 6:800-6). That makes a total of 11 praus seen returning westwards in March and April, although Daeng Riolo said that 14 'were destined for this part of the coast' (HRA III, 6:790).

1828-9. During February 1829, 9 praus sailed eastwards through Bowen Strait (HRA III, 6:826). A complete list of 34 arrivals at Fort Wellington between 23 March and 11 May is given in appendix 4. Only the prau Kararou and its former master Bappa Kasiepa can be identified with confidence from the previous year. There is no way of telling what proportion of the total Macassan fleet in either season called at or were observed from Fort Wellington.

On 17 March 1839, Dumont d'Urville saw 20 praus leaving Raffles Bay. On 2 April 1839, 4 more praus arrived (see below) and the next day another 3 called, but immediately moved on (Dumont d'Urville 1844: 29,47,51).
a. Island in Raffles Bay

On 17 June 1827 Stirling reported 'we found Trepang upon the shores, and on a small island some machinery which had been established by the Malays for curing that article, consisting of four or five sets of stone-built furnaces with frames of wood over each, each set containing four fireplaces. This place had the further recommendation of being known to be the resort of the Malays; their Praos can find shelter here when they came down in the westerly Monsoon; they obtain here easily a supply of excellent water, and it is convenient to Bohun's Straits, through which they pass on their annual visit to this coast. Captain King...saw a hundred of their canoes at one time in this Bay' (HRA III, 5:811-2, see also p. 809).

In 1828, Smyth erected on the island a flag pole, which some Macassans at first destroyed, but then, realizing their mistake, re-erected with a sign-board (HRA III, 6:800-2).

On 2-3 April 1839, Dumont d'Urville and his associates record the visit of 4 praus to this island and give a detailed description of events (Dumont d'Urville 1844: 47-56, 251-2, 259-61). They mention S.L. and the erection of S.H, though it is specifically stated that the latter were not used. An engraving from a drawing by Le Breton (Dumont d'Urville 1846: plate 115, reproduced in appendix 11 p.13) shows 2 S.L. and 4 S.H, though this may not be precisely accurate.

On 15 July 1967, Allen and Lindner visited the small island at 569.558. On the SE corner facing the mainland, there were about 8 S.L, 1 S.H. and probably a grave (pers. comm.) Allen's sketch map is redrawn as fig. 5.2. As the area was covered in dense grass, they collected only 2 small ew. sherds.
b. Macassar Flat, Fort Wellington

On 30 March 1828, Smyth allowed the masters of 3 praus at Fort Wellington to 'make their arrangements on the Beach for the curing the Trepang....I...furnished them with 2 Tents some saws, hammers, and an axe each; in a few hours 10 Boilers were fixed and a number of well constructed sheds of Bamboo for drying the Beech de Mer and sleeping in.' Next evening, they collected trepang directly in front of the settlement (HRA III,6:800-1).

In 1966, several members of the Historical Society of the Northern Territory visited Fort Wellington and surveyed the remains including those described below (Historical Society of the Northern Territory 1966). Macknight visited the area on 10-11 July 1967. At 569.556, there is an open sandy flat between the beach and the settlement proper, 2 S.L. are arranged as shown in fig. 5.3. Two pits, A and B, (each 40 x 60 cm) were dug in a slight depression to look for S.H. ash. However, here and elsewhere, there is only a grey discolouration of the top 10 cm. of sand. S.L. 2 is of unusual design being 3 separate bays, not connected along the back. This, and its unusual orientation parallel with the beach, suggest that it could be of non-Macassan construction. Some of the finds also indicate later European activity in the area.

Both Allen and the members of the Historical Society have collected artefacts from the general area. The following artefacts were collected by Macknight on the sandy flat around the S.L.: Ew. 4 small sherds, 10 gm; Glass, green, brown, violet and clear frags including Worcester sauce bottle frag., another green frag. marked KEN over AM, total 465 gm, very little utilization; Clay pipe mouth S8; Bullet case S9; a piece of flat iron. Pit A produced many frags of a green bottle marked Buchanan (probably whisky) and a sliver of clear glass. Pit B did not produce any artefacts.
6. **Bowen Strait**

The Macassan name, Tarrusanga meaning the sea strait (Cense 1952:262), is an obvious description of the strait. MacGillivray (1852,1:145) says the Aborigines in this area are called Terrutong, which is temptingly similar. The strait is often described as forming part of the regular route of the praus (e.g., HRA III,5:809). See also under area 5.

a. Most of the following references to camps only specify the location as being on the N side of the strait. It is uncertain whether exactly the same site is referred to in each case, though the spot known locally as White Cliffs (see below) does appear to be the most satisfactory camp site along this stretch of coast. It is the only site in the area associated by the local Aborigines with the Macassans and there are no tamarind trees along the shore except at this place.

Searcy (1907:135) gives for 'Crocker [sic] Island, calling place, revenue station' the Macassan name Oojountambanoonoo. Udjung means cape and Tambanunu is the name of a fish, probably a sheat-fish (Cense pers. comm.). Other references show that this name does not apply to site 6b (e.g., Searcy 1907:66). The Aboriginal name is said to be Adjaka (Searcy 1907:23).

On 16 April 1818, King (1827,1:81-2) saw 4 praus sail out of the western end of the strait and another 11 'at anchor close to a sandy beach on the north shore.' 20 canoes were fishing on the opposite side of the strait. Next day, all departed westwards. In his entry for 17 April 1818, Cunningham (in Lee 1925:367) gives a total of 16 praus.

In 1878, Robinson and probably Wingfield 'settled at Adjaka, Crocker [sic] Island, for the purpose of trepangning. They formed a comfortable homestead and cultivated a patch
of ground' (Searcy 1907:21; for the date see SAA 790/1878/461). Wingfield was murdered at the end of 1879 (SAA 790/1880/1) and Robinson moved to Port Essington (see chapter 13).

On 26 March 1883, 4 praus were at anchor close to a beach on which there was a camp. 12 canoes were at work nearby. On 28 March 4 more praus were met coming through the E end of Bowen Strait (SAA 799/1883/319; Searcy 1907:23,32); on 26 December 1883, 3 praus paid their dues here (SAA 790/1884/177; Searcy 1907:66-70). The area appears to have been worked occasionally by the Macassans thereafter though local trepanging was more important. In 1903, Brown reported 2 local owners here and remarked that the Macassans had not worked in the area for some time (SAA 790/1903/438). About 1905, Bradshaw (1905:14) noted that on Croker Island, opposite Mr Brown's settlement [i.e., site 6b] are several macassar huts, formerly used as a Malay trepang station, but now occasionally occupied by...natives.'

On 12 July 1967 Macknight visited the site known locally as White Cliffs. (There is a white cliff immediately to the N.) At 582.556 on a sandy strip behind a fairly open beach facing W, there are 2 tamarinds. 1 S.L. is also visible and another may be exposed in the side of a washway. There is a considerable amount of dark sand, particularly near the S tamarind. Just over a wet season creek to the N is a recent Aboriginal camp. A collection was made comprising: Ew. 1m. rim, m.b.s., total 20gm; Glass, 1 ring, 2 bases, m. frags, total 218 gm, some utilization; Metal, piece of curved flat iron, pieces of primus stove, 2 mouth organ plates. In 1968, Dr H. Groger-Wurm collected: Ew. 2 small sherds; Glass, m. frags, 55gm.

There are also 2 reputedly Macassan graves nearby and a wooden post with several carved facets (Dr H. Groger-Wurm and Mr N. Peterson pers. comm.). The name Pebu is associated with the graves and post.
b. Revenue Station

This is situated on the S side of the small bay on the SW side of Bowen Strait. In 1829 a party from Fort Wellington named the bay, Barker's Bay (Wilson 1835:105-6), but at the end of the century it was known as Buffalo Bay. E.O. Robinson moved here from Port Essington in 1884 and set up a camp. For the subsequent history of this, see chapter 13. The Macassans seem only to have called to pay their dues and did not work in the immediate vicinity.

The site was visited by Macknight on 12 July 1967. At 584.544, the beach W of Irqul Point opens out into a wide sandy area. Here there are the remains of an old shed, a blitz truck and an extensive scatter of shells and glass. The first two are probably the result of recent timber getting activity nearby. A jeep track leads off to the W up a rise past a tamarind tree. About 300m. further on, there is a clearing which extends almost up to the brink of a small cliff over the beach, commanding a good view to the N across Bowen Strait. In the middle of the clearing is a rectangular concrete floor. The house faced N and comprised a central room with heavy posts at the corners and slab walls. Right around this was a verandah, the outer edge of which was lined with large stones now removed. About 10m. E of the front of the house, there is what looks like a Macassan S.L. with 4 or 5 bays facing N. About 10m. to the S is a possible S.H. depression. This is a very strange position for a Macassan processing camp. It probably represents an attempt by Robinson and Brown to copy Macassan methods of preparing trepang. The following artefacts were collected, mainly from the beach area, but they are only a small sample of the available material: Tw. 1378-80; Glass, 3 rings, 2 bases, green, brown, violet and clear frags, total 750 gm, some utilization; Metal, piece of sheet brass; 2 cowrie shells.
c. Point David

The Macassan name is Udjung Garonggong (Cense 1952:262), Udjung means cape and Garonggong is a name for noise (Cense pers. comm.). Searcy (1907:135) says the name applies to the second camp on Croker Island, but the more exact location was known by Sam and another Aboriginal man on Croker Island.

d. Searcy (1907:135) lists a first camp on Croker Island with the Macassan name Batueja. This is clearly the Macassarese Batu Edja meaning Red Cliff (Cense pers. comm.).

7. Mountnorris Bay

The Macassan name Lembana i Djawa meaning the Bay of Djawa may apply to the bottom of this bay from its position as given by Daeng Sarro (Cense 1952:262).

On 12 April 1818 King (1827, 1:76-7) saw a fleet of praus here. Cunningham (Lee 1925:363) and Roe (1817-8) put the incident on the previous day. There is a fine watercolour of the incident by King, showing the Mermaid, 7 Macassan vessels and the N cliffs of Copeland Island (Mitchell Library Mss 592/2 item b). Detail reproduced in appendix 11 p.10).

There has been considerable cypress pine logging all over the mainland in this area, mainly at first by Chinese. See SAA 1374/A6113 (16 Chinese sawyers landed there in June 1883), A6178, A6249, A6323, A6467 (all 1883). In early 1884, 2 Chinese were killed by Aborigines, bringing things to a halt (SAA 1374/A6686). Activity recommenced for about a decade from 1898, and about 1900 there was a sawmill in Malay Bay (Bauer 1964:182).
a. Copeland Island

Searcy (1907:135) says the Macassan name is Cara Peepeepee. Both King and Cunningham visited the island in 1818, but do not mention any evidence of Macassan activity. A note to Cunningham's account (Lee 1925:363) saying that the island was used by the Macassans, appears to be by Lee. At some time between 30 January 1866 and 10 March 1866, 2 praus set up S.H. and boilers on the island. Each prau had about 15 (?) canoes (SAPP 1866-7/79:1). On 16 May 1867, Cadell visited the island and reported that it was used for boiling and drying trepang. 'From the number of...fireplaces it seems to be an important station' (SAPP 1868-9/24). In 1883 Searcy describes it as 'a Malay camping place' (SAA 790/1883/319).

There is only one possible site on the island which was visited by Macknight on 12 July 1967. This is behind a small bay on the E side of the sandy spit projecting S from the island. This is well sheltered from the NW monsoon. Although the site was heavily grassed when visited, 5 S.L. and 3 S.H. were located (fig. 5.4). The main area of occupation is above the slight rise of about 50 cm. which may have been the top of the beach when the site was in use. In addition to the 4 clumps of tamarinds indicated, there are another 2 and a possible well about 100m. N. Although there may not be any great depth of deposit, the site is in an excellent state of preservation, particularly S.L. 1 and S.H. B. The following artefacts were collected (Label - Cope): Iw. 613; Ew. 611-2, m.b.s., total 201 gm; Glass, prunt S10, 2 square bases, 5 rings, various green frags, total 950 gm, some utilization; the base of a scabbard (?) S11.

b. Malay Bay

Searcy (1907:135) gives the Macassan name as Limba Raja. This is probably the same as Limba Rajaing (Searcy n.d.:161)
and Limba Rajou (Earl 1846: opposite 72). Daeng Sarro mentions a place Lemba Sialloa meaning One Day Bay (Cense 1952:262), which appears to be in this area.

On 11 April 1818, King (1827, 1:75) says a fleet of 15 praus put in here for the night. Cunningham (in Lee 1925:363) and Roe (1817-8), who date this on the previous day, say that the fleet had arrived by mid-morning. In 1903, Brown reported one local trepang boat in the area and added that there had been no Macassans there for some time (SAA 790/1903/438).

c. Grant Island

Daeng Sarro mentions an uninhabited island Liukang Kangkonga meaning Spinach Island, from which water and vegetables were obtained (Cense 1952, 262). Grant Island is the most obvious identification.

d. Croker Island Mission

According to the Reverend Lazarus Lamilami, the spring here, at which there are some tamarinds, was used by Macassans.

e. De Courcy Head

On 18 May 1867, Cadell and party saw one prau sailing W past here (SAPP 1868-8/24:10; Napier n.d.: 30).

8. Goulburn Islands

In 1882 'a great number of prows' were seen in the general area (SAA 790/1882/346).

a. North Goulburn Island

The Aboriginal name, Waira, is mentioned by Daeng Sarro (Cense 1952:262; cf. Jennison 1927:183, 188). Thomson (1949b: 58) gives a name, Dawulingo, for the island, and records its reputation as a point of arrival. On 6 April 1818, Cunningham
(in Lee 1925:361) found some huts with bamboo and nets nearby. He thought these could be Macassan, but was rightly doubtful.

b. Mungaruda sandbank

Ngoliman and Guadbu at South Goulburn Island mission supplied this Aboriginal name for the sandbank which, they said, was all that remained of a small, sandy island which had had a Macassan camp on its S side. Searcy (n.d.:161,164) (? = Hungaroo of Searcy 1907:135) and Jennison (1927:184) do not localize the name more exactly than to the Goulburn Islands. Willie at Elcho Island mission also knew the name as applying to South Goulburn Island, and said that the corresponding Macassan name was Lau.

Searcy reporting a visit on 15 March 1884, mentions that an old camp on 'a small sandy Island to the E of the S. Goulburn' had been washed away (SAA 790/1884/445). Either this site or site 8c may have been in use by the 'numerous Malay fishing-boats off the east coast of Goulburn Islands and in the bays to the eastward' reported in March 1866 by Howard (SAPP 1866-7/79:1).

Macknight visited the site at 690.506 on 8 August 1967. The sandbank, which is exposed only at low tide, is at the S end of extensive shallows with deep water to the S. It is recognizable by a stake and by several scattered groups of stones. These appear to be the remains of about 6 S.L. The diversity in the types of stones may indicate that they were brought to the sandy island from various surrounding points. Artefacts were found over an area c. 100m. x 40m. with the longer axis EW. The site can be roughly reconstructed as a series of about 6 S.L. arranged in the usual way behind a S facing beach.

Various extensive surface collections have been made as set out below. Although Macknight collected everything visible
at the time of his visit, the action of the sea will undoubtedly turn up further artefacts. The label for the site is GOU, but only collections 6 and 7 have been so marked.

GOU 1. In April 1967, this collection was seen in the museum of the Department of Anthropology, University of Western Australia. It appears to have been collected by the Reverend Lazarus Lamilami at some time between 1958 and 1964. It consists of sherds 1-199 and 393-399, all of which are ew. except the following Iw. 166, 195-199 and 393-9. In addition there are Ew. 396 m.b.s. and 9 pieces of stone.

GOU 2. The details of this collection are the same as for GOU 1, but it was probably made on another occasion. It consists of sherds 400-435, all of which are ew., except Iw. 423. There are also clay pipe base S23, 3 pieces corroded metal with a hollow square section, 1 flat copper ring, a sail eyelet and 1 stone point in coarse grained red quartzite, length 13 cm.

GOU 3. In April 1967, this collection was seen in the Western Australian Museum. It had been presented by Professor R.M. Berndt and was presumed to come from this site. It had not then been registered. It consists of sherds 200-284, all ew., plus 254 m.b.s. and 3 pieces of stone.

GOU 4. This collection, which was also seen in April 1967, is registered in the Western Australian Museum as Nos A15577 to A15606. The museum register and box labels read 'Location: Bathurst Is., N.T.; Source: Berndt, R.M.; Date coll. 1963/4.' Efforts were made to confirm this location which seems improbable. However it was not possible to do this, and in view of the similarity in the condition of the
sherds to others from the Mungaruda sandbank and the fact that at about this date Professor Berndt was receiving various collections from the Reverend Lazarus Lamilami (who says that all sherds he has collected for Professor Berndt come from this sandbank), it would appear almost certain that the Mungaruda sandbank is the correct location.

The collection consists of sherds 185-314. (These numbers have not been written on the sherds as they run in parallel order to the museum numbers.) All are ew. sherds except Iw. 189, 300-2, 390-10.

GOU 5. This collection is held by the Social Welfare Branch, N.T.A., Darwin, where it was seen in the office of Mr E.C. Evans during September 1967. The material was collected by the Reverend Lazarus Lamilami about 1965. It consists of sherds 500-598 of which all are ew. except Iw. 563-5, 573, 575. In addition there are 281 m.b.s.; Copper, fishhooks S12, S13, S14; needles S15, S16; wire S17, S18; spatula S19; Clay pipes, S20, S21, S22; Iron, 38 corroded frags; Stone, 1 axe of dark grey, (?) volcanic rock, 1 point of dark grey slate, length 13 cm., 1 point of coarse brown quartzite, length 9 cm., several other miscellaneous pieces.

GOU 6. The following artefacts were collected by Mulvaney on a visit to the site in August 1965: Iw. 648; Ew. 614-647, 15m. rims, 308 m.b.s., 75 gm chips, total 5861 gm. (Thin sections 1-10 come from sherds 614-617 and 6 other m.b.s.); Glass, prunts S24, S25, 2 rings, other green frags many of which are flat, total 365 gm, some utilization.

GOU 7. The following artefacts were collected by Macknight and party on 8 August 1967: Iw. 675-686, 176; Ew. 649-673, 18m. rims, 4m. bases, 240 m.b.s., 105 gm chips, total 4432 gm; Glass, prunts S27, S28, S29, 3 rings, 1 round base, 9 square bases, 1 frag. marked RS over AM, m. frags
mostly green, total 2249 gm, some utilization; Copper fishhook S26; Iron, corroded flat iron 98 gm; Stone, 1 coarse quartzite point, 1 broken point in slate, various miscellaneous pieces; Bone, ? dugong bone.

GOU 8. In August 1967, four sherds, Ew. 600-603, were seen in the possession of Mrs C.W. Holmes, Darwin. She also kindly gave Macknight one of two large lumps of green stone, said to come from here.

In any comparison of the size of the collections from this site with those from elsewhere, it must be remembered that probably a much larger proportion of the total amount of pottery on the site has been collected here than on other sites. Furthermore the size and separation of the collections, together with the corrosion of the pottery surface by sea water, has made the task of joining parts of the same pot very difficult. Because of this, and because the Perth and Darwin collections were recorded more fully than that in Canberra, the proportion of numbered sherds is unusually high. Overall, the site does not seem to have been as big as the Anuru Bay site (site 9) or Lyäba (site 32a), and only a little larger than, say, Copeland Island (site 7a), Junction Bay 1 (site 12a) or Melville Bay 1 (site 23a).

c. McPherson Point

The Aboriginal name for the area is Wigu. Howard may have seen activity there in 1866 as described above under site 8b. On 15 March 1884, Searcy (SAA 790/1884/445 which is clearer than 1907:80) found 2 praus in Mardbal Bay. Their most likely camp is on McPherson Point. On 21 January 1885, Searcy (SAA 790/1885/423; 1907:102) searched 3 praus 'at the Goulburn Islands camp.'

In 1915 and probably earlier, a European trepanger, McPherson, was working here. However he had died by June
1916 and is buried somewhere nearby (Ellemor n.d.:15). At various times since then, the mission has carried on some trepanging in the general area (Chaseling 1957:5; Ellemor n.d.; Wilkins 1928:134). The last attempt was in about 1965 (Reverend B.A. Clarke pers. comm.).

The site was visited by Mulvaney during August 1965 and by Macknight on 29 July 1967. On the S side of the tip of McPherson Point, 689.506, behind a small rocky cove, there are 2 large tamarinds and numerous depressions over an area c. 120m. x 30m. In the bottom of several of these, there is some ash and charcoal, suggesting that some at least were probably S.H. There is no evidence of any S.L., which may indicate that the major part of the site is post Macassan. The surface collection confirms this to a large extent. The large quantity of shell on the site is probably Aboriginal debris.

About 100m. W of the site, behind a sheltered beach, there is a shed used in recent trepanging attempts. In a clump of pandanus about 150m. NE of the site, Mulvaney was shown a well which was said to predate the mission. He was also told of Macassan burials on the W edge of the site.

The collections made in 1965 and 1967 comprise (Label - McP): Iv. 687, 1369-71; Ew. 688a,b, 1364 (Thin section 18), m.b.s. total 180 gm; Glass, prunt S30, 1 round base marked 'Gaelic Old Smuggler' (whisky), 3 other round bases, 1 square base, 3 rings, 1 frag. marked EN, another OK, mauve lamp glass, 1 clear facetted point, other frags of many colours, total 890 gm, some utilization; Metal, 2 iron nails, 1 copper nail.

In the intertidal zone in front of the site, there is a collection of pieces of some hard green stone, apparently imported to the site. Several chips were collected. The stones may have been used as ballast, but their origin is unknown. Similar stone is also found on Mungaruda sandbank.
d. About 1/2 mile N of McPherson Point, at 689.507, is a long open beach facing E to the Mungaruda sandbank. Mulvaney and Macknight both visited the area on the same occasions as McPherson Point and collected the following artefacts on the grassy ridge behind the beach (Label - WIGU): Ew. 689, m.b.s., total 81 gm; Glass, green frags, total 105 gm.

e. South West Bay

In 1818, King (1827,1:64-7) saw recent traces of Macassans here: bamboo water carriers, cordage, a coconut, and a Macassan canoe. Macknight visited the area on 20 July 1967, and although there is a fine beach with good water available, no archaeological remains were found. There is no obviously suitable location for a processing camp.

f. Sims Island

On 2 April 1818, Cunningham (in Lee 1925:358) noted 'bamboo joints and broken earthen vessels' on the island. On 10 April 1818, King (1827,1:73-4) saw 2 praus at anchor and the rest of a fleet coming up, making a total of 15 praus with 300 men. The Macassans were only getting water, not camping. A watercolour by King confirms the exact location on the W beach of the island (Mitchell Library C767 P.P. King Album). Cunningham's account differs by putting the event a day earlier and by specifying 16 praus in all, behaving rather differently (in Lee 1925:362). Roe (1817-8) confirms Cunningham's date, but mentions only 15 praus. He also has a small sketch of the fleet. On 13 August 1819, Bedwell found a disinterred skeleton, probably Macassan, and some bamboo. The burial had probably occurred some months previously (King 1827,1:264-5). On 25 August 1820, King (1827,1:394) found water here in holes apparently dug by Macassans.
Macknight visited the island on 20 July 1967. The watering place is quite obvious in a large depression surrounded with pandanus, behind the W beach. In the middle of this beach ridge, just N of a washaway, is a rectangular stone arrangement that could just conceivably be a Macassan grave. The only artefact collected was 1 small frag. of green glass.

g. The name Kampena i Pandjang meaning Pandjang Bight, given by Daeng Sarro (Cense 1952:262), apparently refers to Aurari Bay.

9. The Anuru Bay site

See chapter 6.

10. Other sites near Anuru Bay

a. Ngugarud

This small site on the W side of Anuru Bay (679.496) was visited by Macknight on 20 July 1967. The name was supplied by Ngoliman and Mugulnir. On the S side of a small point, there is 1 S.L. aligned N-S with 6 or 7 bays facing W. The bays are constructed in the unusual 'horse-shoe' fashion. The only artefacts collected were: Glass, prunt S31, and other green frags probably from the same bottle, one marked N & C, another H, total 69 gm.

b. Waminari Bay

(i) This site was discovered by Macknight on 21 July 1966 and revisited on 23 July 1967. At 686.492 on an open shelly area beside a creek with mangroves and about 100m. back from the sea, there are 8 S.L., though they are much less substantial than usual (fig. 5.5). To the S of the washaway, various other scatters of stones could just conceivably have been S.L., but it is now impossible to tell.
A section dug across S.L. 3 revealed a thin band of fine charcoal, c. 2 cm. thick and just below the surface of clean shells. This extended on the N side only of the S.L. for about 2m. and indicates that the bays of S.L.3 faced N. The direction of other S.L. as indicated was determined by observing the side on which charcoal could be found just below the surface.

The S.L. appear to have only been used once, but a considerable number of men would have had to be present if all 8 S.L. were in use simultaneously. The small size of the S.L. may be attributable to the lack of stone nearby. The site also appears to have been subjected to considerable weathering.

The following pottery was collected, mainly from the area to the W of S.L. 1-8 (Label - W/C): Iw. 690-1, 699; Ew. 692-8, 4m. rims, m.b.s., total 1367 gm.

(ii) About 400m. S, the following artefacts were collected (Label - WA/C): Iw. 1372; Glass, prunt S 32, and other frags from the same bottle, frag. of ? Brookes Lemos bottle, frags of Beenleigh Rum bottle, frag. with dragon mark, total 280 gm. Some of this collection is probably associated with the Aboriginal settlement another few hundred metres S.

(iii) On the point to the N of this beach (688.492) was found: Glass, 1 ring and frags of the same bottle, 95 gm; Stone, 1 pink quartzite point.

(iv) At 688.494 behind a very rocky shore, were two very dubious scatters of stone and about 100m. N were 2 frags of green glass.
11. **King River Area**

a. **Mouth of King River**

Searcy (1907:135) gives the Macassan name as Marago Chukee. In 1965, at 108.485, Mulvaney found an ew. rim (806). The area was frequented by later European trepangers. An example in 1913 or 1914 is mentioned by Masson (1915:161). Mulvaney was told by Guadbu, who worked for McPherson, that McPherson had operated here and at site 11b, as well as at site 8c.

b. **Guion Point**

On 5 May 1896, a prau and 5 canoes were working 1/2 mile NE of Guion Point. There also seems to have been a camp on shore (SAA 1374/6875). Between 9 February and sometime in April 1903, R.C. Spencer had a trepang station in 'a small bay eight miles east of the King River.' In April 2 praus arrived and set up a S.H. There was a small affray (SAA 1374/12557; see chapter 13).

On 24 August 1965, Mulvaney visited a reputed site at 122.490, but saw only one tamarind tree. The Aborigines present alleged that there were several Macassan burials in the area, and said that about 50 years before, when McPherson had been trepanging there (see site 11a), considerable areas now covered with mangroves, had been clear.

12. **Junction Bay**

The Macassan name for the bay is Limbalachlumbo (Searcy 1907:135) or Limba Luchumbo (Searcy n.d.:164). In 1903, Brown reported that there was one local trepang boat owner in the area, and that there had been no Macassans for some time (SAA 790/1903/438).
a. Junction Bay 1

This is probably the site known as Pua' Rengga', meaning the Father of Rengga' (Cense 1952:262 and pers. comm.). My best informant on the site, Jockey Bundi Bundi knew the name as a Milingimbi alternative to the regular local name, Goomarda, meaning the whole Braithwaite Point area. Various other informants located the name in the general vicinity.

On 1-2 July 1967 Macknight visited the site at 154.491 on the southern tip of Braithwaite Point. There are visible 4 S.L., 4 S.H. and 3 tamarinds, arranged as shown in fig. 5.6. The features are fairly well preserved despite the exposed situation. There is a considerable scatter of shells including several large conch shells.

Surface collection (Label - JB1): Iw., 816; Ew., 807-815, 2m. rims (? from 809), 3 body sherds (? from 815), m.b.s., total 539 gm; Glass, m. green frags, total 315 gm, slight utilization; Clay pipe stem, S33; Metal, 5 pieces curved flat iron from ? boiler, base of tin can with impressed letters (illegible) diam. 5 cm., total 236 gm; Stone, 1 broken and 1 complete quartzite point, 1 lump introduced quartz.

b. Junction Bay 2

This is probably the site at which Jim Campbell was working when killed c. 1913-4, as a creek features in the story (Masson 1915:160-78). See also under site 12d. On 1-2 July 1967, Macknight visited the site. Immediately S W of the entrance to a tidal creek at 152.491 is an open beach giving on to an extensive flat, sandy area with several clumps of pandanus. This has long been a favoured campsite and objects attesting Aboriginal, Macassan, European and Japanese occupation are widely scattered. About 100m. up the creek on a small point fringed with mangroves, there is a single S.L. of 4 bays facing SW. The bays are of the unusual 'horseshoe'
and to the SE, there is a spread of shells from Aboriginal occupation and about 150m. behind a small cove is an area that Jockey says was used by both Macassan and European trepangers. He also says a European trepanger called Mooradja was killed here, but the name cannot be identified. However the incident could be that described under site 12b. There is 1 S.L. with 3 bays facing S in this area.

Surface collection: Glass, 40 gm including 2 utilized frags; Metal, large piece of iron probably from a 44 gallon drum, sheet copper with snip marks, galvanized nail. A considerably variety of recent material on the site was not collected. My field notes also mention a few Macassan ew. sherds, but these have been lost.

e. Rolling Bay 1

On 1 July 1967, Macknight visited the site behind a small, sheltered cove facing NW at 174.474. Just behind the single tamarind is a S.H. depression with a large pile of charcoal, probably from boiling fires, immediately to the N. About 15m. further N is another S.H. depression with an associated S.L. of which only 2 or 3 bays are visible facing N. There is also a scatter of shells, probably Aboriginal refuse, on the sandy ridge behind.

Surface collection: Ew., m.b.s. total 34 gm; Glass, total 76 gm, some utilization. The finds were found over a wide area and the glass in particular may have been spread by Aborigines.

13. Entrance Island and the Liverpool River

The Macassan name for Entrance Island is Lee Monie Monie (Sarcy 1907:135). This is perhaps a corruption of Lembana i Ma'ne'or similar, though it is clearly not the place of this name known to Daeng Sarro (Cense 1952:262). In 1866, Bob White, a Port Essington Aborigine, said he had been in the area with the Macassans (Howard in SAPP 1866-7,79:2). In
1867, near the Liverpool River, 'Malay erections for preparing beche-de-mer were found, and several dry wells' (Napier n.d.:27).

An old man living at Maningrida in 1967, Old Johnny Godawa, has seen up to 4 praus together in the area and tells stories of clashes with the Macassans (see also Searcy 1907:82-3). In his mind, the N beach on Entrance Island is associated with the boiling of the trepang, while the S beach was used as a place to bury it. This sounds like the result of selective remembering.

Mr G. Mason of Maningrida has made a small collection of artefacts from Entrance Island. He kindly gave the following part of it to Macknight in 1967: Tw. 819; Ew. 820 and 3 m.b.s., total 74 gm; Glass, prunt S36.

a. South beach, Entrance Island

On 17 March 1884, Searcy (1907:82) found and removed 'large stacks of timber from Entrance Island.' This account can be equated with another (Searcy n.d.:166) where he describes a site on the S beach of the island. 'The fireplaces were there, the remains of smoke houses, and near at hand great stacks of timber all ready for use.' The timber amounted to 'quite ten tons' (Searcy n.d.:170). However, 'from what I can learn, the Malays do not make this a regular calling place as the natives are very bad' (Searcy in SAA 790/1884/445). In 1885, Carrington (SAPP 1886/53:9) reported that 'a small sandy beach at the south-west extreme of Entrance island...is a camping ground for the Malays when curing trepang.'

The site has been visited by Mulvaney on 1-2 August 1965 and Macknight on 3-6 July 1967. It lies behind a sheltered beach with deep water close in and facing S. The present HWM is 15-20m. in front of a steep slope c.1.5m. high leading up to an open sandy beach ridge. Judging from the undercutting of a well established tamarind in the middle
of the beach, the steep slope probably indicates some recent erosion. An occupation deposit of some 20-30 cm. is found on this upper area in the vicinity of the tamarind (fig. 5.7). At the W end of the beach immediately behind the rocks at HWM is a carefully dug well c. 2m. deep and 50 cm. in diameter. This would hold water in the wet season, though the supply might be slightly brackish. The well is said to be of Macassan origin. In the swamp between the S and N beaches, there is another well of the usual Aboriginal type.

In 1965 the following artefacts were recovered. (All useful artefacts from the site are labelled EN 1/ and appropriate suffix.) Surface collection: Ew. m.b.s. 90 gm; Glass, varied frags, 56 gm, some utilization. At 70m. E of the tamarind were found: Ew m.b.s. 101 gm; Glass, 1 green frag. with applied gold lines, 5 gm. Some sieving just W of the tamarind produced: Ew. 1m. rim, m.b.s., total 69 gm. In October 1965, Miss B.R. Clews of Maningrida found a fine clay pipe bowl S37 among the roots of the tamarind.

Mulvaney also excavated a small area as shown on fig. 5.7. This was dug in 2 spits, though no stratigraphic distinction was observed in the grey deposit over clean sand. The top 3 inches yielded: Ew. m.b.s. 40 gm; Glass, green frags, 24 gm, some utilization; Stone, 1m. piece. The lower spit, 3-7 inches, produced: Ew. 821-824, m.b.s., total 107 gm; Glass, 2 small green frags; Stone, 1 piece pink quartzite. Three samples for radiocarbon dating were collected but have not been submitted: number 1 from the centre of the excavation at 4-7 inches below the surface; number 2 from a small extension on the E side of the extension on the NE corner of the excavation and at 2-6 inches below the surface (Ew. 1m. rim, m.b.s., total 46 gm; Glass, 1 green frag. which were closely associated, are retained with the sample); and number 3 from the same place at a depth of 6-10 inches (Ew. m.b.s 10 gm retained with the sample).
In 1967, work on the site produced: Surface collection:
Iw. 825; Ew. 826, m.b.s., total 79 gm; Glass, 1 green ring.
A considerable quantity of very recent material is also to
be found on the site, which is often visited from Maningrida.

An area of almost 6 sq.meters was excavated as shown on
fig. 5.7. The undifferentiated grey sandy deposit, c. 30 cm.
deep, was sieved in separate square metres. There had been
much disturbance from burrows, roots and the loose nature of
the sand. The various square metres yielded:

A3: Ew. 10 gm; Glass, 6 gm.
A4: Ew. 18 gm; Glass, prunt S38, various frags,
total 18 gm.
A5: Ew. 2 gm; Glass, 8 gm.
B3: Ew. 2 gm.
B4: Iw. 827; Ew. m.b.s., 6 gm; Glass, 1 green
frag., 1 blue ring; Metal, 160 gm, mostly
several large spikes.
B5: Ew. 2 gm; Glass, 1 green frag.; Metal, rim.

Despite the time spent on this site, the material
recovered is disappointing meagre. It is best interpreted
as a relatively small site from which the front of the main
working area (with perhaps a S.L.) has been eroded away by
heavy waves. If there was a S.H. in about the position of
the tamarind, it has not been located.

b. North beach, Entrance Island

The site is located on an open sandy beach, fully exposed
to the N W and sloping up quite steeply from HWM. Very high
waves probably come well up this slope. Along the top of the
beach are perhaps 10 S.L. (though 1,2,8,9 and 10 are possibly
doubtful) (fig. 5.8). A rather dubious S.H. is also marked
on the plan. The exposed nature of the site appears to have
caused some surface sand movement, which may have covered
some artefacts. However a thin band of the usual dark
occupation deposit is still to be found over parts of the site.
On 1 August 1965 Mulvaney collected (all useful artefacts from the site are labelled EN2/ and appropriate suffix): Ew. m.b.s. 171 gm. On 5-6 July 1967 Macknight visited the site. The surface collection on this occasion consisted of: Ew. 1m. rim, m.b.s., total 87 gm; Glass, 1 square base, 1 ring, various coloured frags, total 199 gm; Metal, 2 small pieces. In the stippled area on the plan, some uncontrolled dredging produced: Ew. 1m. rim, m.b.s., total 506 gm.

In order to confirm the function of the rather vague stone features which were thought to be boiling fireplaces (S.L.), S.L. 3 and S.L. 5 were investigated in more detail.

S.L.3. A trench about 80 cm. wide and 2.9m. long was excavated as shown in fig. 5.8, to give a section across the S.L. The resulting section can be seen in fig. 5.9 and plates 5.1 and 5.2. The mid grey deposit found only on the N side of the S.L., confirmed that the stone stones had in fact been used as a fireplace and that the S.L. faced N. Below this, part of a separate and completely buried S.L. was uncovered. Although the orientation and direction of this lower S.L. appear to be remarkably similar to those of the upper example, the lower one only being about a metre to the north, this similarity may be fortuitous. A minor difference was that whereas the upper S.L. was almost half made up of coral lumps, only a few were present in the part of the lower S.L. exposed. The disposition of the stones in the lower S.L. suggests that the sides of the trench had cut through two bays, with the wall between them projecting N in the centre of the trench (plate 5.2). Thus the dark grey stratum on the N side of the S.L. would represent the fireplace charcoal in situ (though it seems slightly high), and the lower dark grey deposit on the S side would represent other charcoal which had spilled over the S.L. Carbon samples were taken from both these strata to date the use of the lower S.L. The one on the S side of the S.L. was submitted,
as this is clearly not associated with the upper S.L. It gave a result of 830 ± 80 B.P. (ANU-242). The only finds from the trench were 2 small ew. sherds and a few tiny fragments of corroded metal.

S.L.5. After removing grass and leaves from the area, the sand around the visible stones was brushed away to either side of the S.L. in order to reveal the feature in plain. Many more stones were thus revealed by the removal of c. 10 cm. of overlying sand and the expected plan became quite apparent. Plate 5.3 shows 3 bays in the middle of the S.L. Both the plan and the heavier concentration of charcoal on the S side, indicate that the S.L. had faced S.

The date from the S.L. below S.L.3 is the oldest yet obtained for any Macassan - or indeed any non-Aboriginal - activity in Australia. This site therefore merits considerable further work both to expose fully this S.L and to locate other buried examples. A similar date from another S.L. would be a powerful confirmation of the date already obtained. There is, of course, no way of reliably establishing by other means the time needed to build up a deposit such as that burying this S.L. However it is not unreasonable to say that the depth of the deposit, some 50 cm., (and one must assume that a similar depth has built up all along the beach), indicates some antiquity.

c. Southeast beach, Entrance Island

On an open sandy area behind this beach there is extensive evidence of Aboriginal occupation in the form of concentrations of shells. The various artefacts collected all appear to have been brought to the site by Aborigines. In 1965 Mulvaney collected: Ew. 31 gm; Stone, 4 small flakes. In 1967 Macknight collected (Label-EN/East): Ew. 828, 1 m.b.s., total 20 gm; Glass frags of various colours, total 80 gm, slight utilization; Stone, a small hammerstone and a large
stone artefact of unknown use, 31 x 8 x 3 cm. with considerable working along the edges.

d. Eastern and other Northern beaches, Entrance Island

In 1967, various bottles and several 44 gallon drums were found around this part of the coast, but all, with the possible exception of one green square bottle base S39 and one other green glass fragment, are post-Macassan and much of it Japanese, probably dating from 1930s. Seven of these recent bottles or parts of them were collected.

e. Vicinity of North East (Juda) Point

In 1965 Mulvaney was told of a site south of North East Point at which there was pottery, but this has not been investigated. Mrs B. Hiatt visited a well to the east at about 193.465 which was reputed to be Macassan. Various fragments of large water pots have been found at different points on the east side of the Liverpool estuary, but they probably date from the period of Japanese activity. One such set of sherds is held by Mr G. Mason of Maningrida.

14. Crocodile Islands

a. near Cape Stewart

On 26 September 1876, a party sighted what may have been a wrecked prau. Next day, in almost the same place, a Macassan axe and tomahawk were found in an Aboriginal camp (SAA 790/1876/74).

b. Milingimbi Island

Archaeological interest on this island has usually centred on the remarkable Macassar Well. Almost everyone who has done anthropological or archaeological work in Arnhem Land this century has visited the site, but despite
extensive investigations, no Macassan artefact has been recovered. The origin of the name is unknown, though one might guess that it is an early Mission name. The site has considerable significance in Aboriginal thought, but there does not appear to be any particular connection with the Macassans. Much has been made of the magnificent grove of tamarinds around the well, but the seeds of these might as well have been brought by Aborigines camping on the site as by Macassans fetching water. Certainly there are many other tamarinds throughout the Crocodile Islands flourishing in extremely favourable situations, and it is difficult to believe that Macassans were responsible for dropping the seeds of many of these.

The sandy ridge behind the beach, on which the older part of Milingimbi mission now stands, also supports numerous magnificent tamarinds. From the scatter of shells along the ridge, it is probable that the area was an Aboriginal camping spot before the Mission was established in 1923.

Mountford (1949:757) says that 'a few Malay potsherds were picked up along the beach' by members of the American-Australian Expedition in 1948, but there is no mention of these by McCarthy & Setzler (1960), and the sherds are not now to be found. No further sherds have been found in the area.

On 11 July 1966 Macknight visited some of the many remarkable shell heaps on the island. A green fine grained dolerite, edge-ground axe and a hammer stone were recovered from Garrki mound. Small shell samples were also taken here and at an isolated mound in the mud flat on the SE corner of the island (Mulvaney 1969:77).
c. Mardaraingup (or First) Island

Macknight visited this island on 7-9 July 1966, when he was taken to the site by Aborigines. On the NW extremity of the island at 274.455, a small, sandy peninsula projects into the dense mangroves. On this are two clumps of tamarinds, the northernmost of which is shown on fig. 5.10. Just to the S of these tamarinds there is a single S.L. and to the E, several rocks in no apparent relationship. An informant suggested that there was a grave under the E end of the S.L., but this may have been a confusion with these stray rocks. There are 2 recently used wells in the general area and another old one.

Most of the open area on the site has some occupation deposit containing shells and charcoal, though in places this is overlain by up to 10 cm. of clean sand or vegetable debris. Despite this however, a surface collection yielded (Label - F/): Iw. 829; Ew. 830-834, 4 m. rims, m.b.s., total 652 gm; Glass, varied frags, 25 gm; Metal, 3 pieces corroded flat iron; Stone, misc. imported pieces.

As shown in fig. 5.10 and plate 5.4, a trench 1m. x 5m. was laid out. The shaded portions only on fig. 5.10 were excavated in the units indicated.

Area 1, 0-2 cm. Light sandy deposit with many roots and much vegetable debris. Glass, 2 small frags; Stone, 5 pieces including 2 quartzite flakes; Bone, at least 1 fish, 1 large lizard, 1 small bird, 2 flying fox (Pteropus sp.) and 5 crab claws.¹ (N.B. Some individuals may be represented in more than one spit.)

12-24 cm. Firm dark midden, with many roots. Iw. 1365; Ew. m.b.s., 30 gm; Glass, 10 gm; Metal, 1 small corroded

¹ Mr Peter Thompson kindly identified these and the other animal remains from this site.
piece; Stone, various pieces and some ochre; Bone, at least 1 fish (Coris), 2 mammals (one wallaby) and 5 crab claws.

24-36 cm. Firm dark midden with many roots. Ew., 3 tiny sherds; Bone, 1 large fish.

Dark midden continued for about another 10 cm. below 36 cm., but the deposit was not excavated. A radiocarbon sample was collected in this area, immediately below 36 cm., but has not been submitted.

Area 2, 0-20 cm. Most of this consisted of the rocks of the S.L. Between them was much vegetable debris and some dark sand. Ew., 2 tiny sherds; Glass, 2 frags, including 1 utilized piece; Bone, at least 1 fish, 1 bird, 1 flying fox (Pteropus sp.) and 4 crab claws.

Below this, firm dark midden continued, but the base of the S.L. appeared to be at about this level. A further radiocarbon sample was collected immediately below 20 cm., but it has not been submitted.

Area 3, 0-5 cm. Fine, light grey sand. Ew., 2 small sherds; Metal, 1 corroded piece; Ochre, 1 piece; Bone, at least 1 mammal and 4 crab claws.

5-18 cm. Dark grey sand. Ew., 1m. rim and m.b.s., total 96 gm; Glass, 1 tiny frag; Stone, misc.; Bone, at least 1 fish.

Grey sand also continued for another few cm. below this.

Although it is unfortunate that circumstances did not permit more work on this site, it is fairly clear that there has been independent Aboriginal occupation of the site both before and after (and probably concurrently with) Macassan occupation. This in area 1 for example, the only significant number of sherds was found from 12-24 cm. below the surface. The animals represented among the excellently preserved bones
collected are perhaps more likely to have been part of an Aboriginal, than a Macassan diet. Samples of the lateritic ironstone and coarse quartzite used to build the S.L., are similar to samples collected at the S end of the island, and it is extremely likely that the stones for the S.L. were collected from there or other nearby islands. With the present growth of mangroves around the site, it is extremely difficult to approach from the sea, and it is likely that when the Macassans used the site, the mangroves were either cleared or naturally less extensive.

d. Buyurigi Island

On 10 July 1966 Macknight visited the small cove on the SE end of the island. Several large tamarinds were noticed, but a very hurried search located no other features. However, the following sherds indicate some Macassan activity (Label-B): Ew. 835 and m.b.s., total 184 gm.

e. Rabuma Island

No certain Macassan site is known on this island, though there are several tamarinds. On 10 July 1966, Macknight found one ew. rim, 836, near an Aboriginal camp on the beach ridge on the W side of the S point of the island (273.458). This was probably transported by Aborigines.

On the E end of the more northerly of the old beach ridges at 277.459, there is a spread of the usual Aboriginal occupation debris. The following artefacts were collected: Glass, 1 green frag.; Stone, 4 chips of green, fine-grained dolorite with evidence of grinding, presumably from axes, 1 piece pale quartzite.
f. Mooroongga Island

Cense (1952:262) records a large settlement at a place called Morongga, which fits the location of this island. The name is Aboriginal.

15. Castlereagh Bay

The Macassan name is Limba Tudea, meaning Shell Bay (Cense 1952:262). Searcy (1907:135) renders this Limba Tordee. Some sources give the name a more precise location. Thus Carrington (SAPP 1886/53:8) says the Goyder River [that is the river on the SW side of Banyan Island] is called Limba Toddy by the 'Malays'. Thomson (1949b:map) marks Limba Tarde inland from Milingimbi. Various Aboriginal informants have located the name in the vicinity of Milingimbi.

'In sinking a post hole at Balbo at the mouth of the Goyder River some of the crew of the yacht White Star unearthed pieces of broken pottery at a depth of two feet, but these were considered to be of Macassar origin' (Bradshaw 1905:16). The crew were looking for Portuguese pottery. The location of this find is complicated by the uncertainty as to which inlet is meant by the 'Goyder River'.

Thomson (1949b: map) marks a Macassan site called Karrama in the middle of Banyan Island. Various Aboriginal informants have mentioned some tamarinds on the S side of this island and possibly some processing sites.

16. Elcho Island and Cadell Strait

The Macassan name for Cadell Strait is Salla' La'bua, meaning the Long Strait (Cense 1952:262). The earliest reference to this name is by Earl (1842:141) who very sensibly deduced the existence of the strait. He translates the name in an alternative fashion as the Anchoring Strait.
Searcy (1907:135) gives the name Sallalaboo for his third camp in Cadell Strait. The Aboriginal term Djelalapu (Berndt & Berndt 1954:50) covers all Elcho Island.

Napier (n.d.: 53-4) with Cadell in 1867 says, 'the Malays visit the strait, as the remains of their fire-places for preparing bêche-de-mèr were visible in several places; and in the middle of the channel, towards the north end, we found two stakes, painted white on top, evidently their guide marks,' Other references to Macassans sailing through the strait are in SAA 790/1876/74: 3 October and Searcy (1907:88). Searcy (SAA 790/1884/445) also mentions a camp occasionally used by the Macassans at the E end of the strait.

Warner (1937 (1964:474)) records Mahkarolla's memory of Macassans in the area at the beginning of the twentieth century, and in 1967 Gunbeya at Elcho Island told Macknight that he had seen several praus there. More specifically Warner (1937 (1964:448)) mentions a site on Elcho Island at the E end of the strait as a major centre of Macassan influence. Thomson (1949b:map) marks a Macassan site named Kulkora in about this position. The position of this name was confirmed by Gunbeya in 1967. He also mentioned a place called (Batu Edja), (clearly the Macassarese meaning is Red Cliff), on Napier Peninsula. In 1965 Mulvaney visited a cove here at 385.468 and found some shell and ash, but no definite evidence of Macassans.

a. Abbot Island (Dalmana)

Mr V. Johnston has a stoneware sherd from here, though this is not necessarily Macassan.

b. Takkerena

This apparently Aboriginal name was remembered by Daeng Sarro, who says that it was a processing site and that red
pigment was found there (Cense 1952:262-3). The name refers to the immediate locality of Galiwin'ku Mission on Elcho Island and is first mentioned by Jennison (1927:183). Chaseling (1957:93) mentions Elcho Island as a source of red ochre.

At the S end of the beach here (348.460) there appears to have been a trepang processing site. In 1967, Burramurra said that he remembered about 6 stone lines where the creek now enters the sea. No sign of these now remains. Mulvaney visited the area in 1965 and made a collection on the sand hill immediately S of the creek. A little further S he noticed 2 graves, one with a grave post. These may just possibly have been Macassan, but one was eroding and Macknight could not find either in 1967.

The following artefacts have been collected (Label-ELCHO): Mulvaney 1965 - Iw. 837, 838a,b,c, 1139; Ew. 839-40, 3m. rims, m.b.s., total 482 gm (Thin section 15 on a m. rim); Glass, 3 bases, 2 rings and m. frags, mostly green, total 253 gm (at least 17 bottles can be distinguished), slight utilization; Stone, 5 chips of green, fine-grained dolorite, all with partially ground surface, 2 other flakes. Macknight 1967 - Ew. 18 gm; Glass, 44 gm. A considerable quantity of imported pieces of stone was not collected.

Reverend H.U. Shepherdson possesses 3 coins (S54, S55, S56) which are said to have been found along this beach.

c. Elcho Island, south

At the wet season landing place (352.459) there is a small beach which appears suitable for trepanging. The area is now much disturbed. Macknight visited the site on 27 June 1967 and collected a few tiny ew. sherds (5 gm), 2 cream stoneware sherds (1366a,b), 2 frags of green glass and several pieces of flat iron and sheet copper. Only the ew. is certainly Macassan.
At 347.458, Macknight found a single large ew. rim sherd beside a path along the top of a low cliff. This seems a clear case of a sherd being transported by Aborigines. A tiny fragment of green glass was found on a midden scatter nearby.

Searcy (1907:135) gives the name Morrungoo for the first camp in Cadell Strait, but this is clearly Moooroongga Island (see site 14f).

d. Elcho Island, Bob Mair's camp

The Macassan name is probably Oojounlamburon (Searcy 1907:135).

At 373.467 at the narrowest part of Cadell Strait, there is a sandy beach ridge facing SE to S with some gaps in the mangroves. In 1965, Mulvaney observed an area c. 200 x 100m. with a spread of shell and ash, and several very dubious S.H. depressions. According to Aboriginal informants, the main focus of European activity on the site has been towards the W.

In 1967, Burramurra told Macknight that several S.L. had been washed away from this site.

Mulvaney collected (Label - CADELL): Iv. 841-2, 843a,b, c; Ew. 844-8, 7 m. rims, m.b.s., total 420 gm (Thin section 17 on one m. rim); Glass, 4 bases, 2 rings, other green frags, total 286 gm, some utilization; Stone, 1 quartzite point, 1 piece of coke slag, probably flotsam.

17. Wessel Islands

From the description given, the name Tjampalea mentioned in Cense (1952:263) would seem to refer to Alger Island. This identification was confirmed by Djinggulul in 1967 and is given by Jennison (1927:179). Cense (pers. comm.)
says that the name relates to a kind of shell fish found at the mouth of rivers (cf. Matthes 1859:387).

According to Djinggulul, there was a Macassan trepanging ground in an inlet called (Lemba Pauwerri) at 433.509 and the name of Marchinbar Island, which has no trepang, was Pota Maraki. Berndt & Berndt (1949:214) say that this name was a general one for all camps on the coast. Burramurra says that the inlet at 434.512 on Ragarala Island opposite (Lemba Pauwerri) was called (Limba Djopara). Both these names were also known for the general area by Ngoliman.

On 29 October 1803, at the S end of Marchinbar Island, perhaps about 463.533, Flinders (1814, 2:345) found the wreck of a prau on the beach.

18. Buckingham Bay

Searcy (1907:135) gives the Macassan name as Paringa.

The only possible site known is at 385.446 where Burramurra says there was a Macassan landing place, now called Birrin-kurramama.

19. Ulunourwi Bay

a. Burmbi-lal

On 16 June 1967, Macknight visited a site called Burmbi-lal by Burramurra and Barrnyurnyur c. 403.453. Behind an open beach on the SE side of Flinders Peninsula there is 1 S.L. with 6 bays facing NE, 1 ?S.H. and 1 tamarind. 4 glass frags, (2 green, 2 purple) were collected, total 61 gm (Label-AB1).

b. Djirrunga

About ¾ mile S of site 19a, c. 403.452, at a place called Djirrunga by Burramurra and (Djirrunyura) by Barrnyurnyur,
Macknight on 16 June 1967 found 2 S.L. facing NNE, that is at 45° to the line of the rather exposed beach. No artefacts were collected.

c. There is said to be another site near the rocky point called Bulman-nga by Burramurra c. 399.447, and there may well be other small sites in the area. However the trepanning ground does not seem good enough for there to be a major site here.

d. Beya

Searcy (1907:135) gives this name, spelt Beir, to the whole of Ulunourwi Bay. However the name, which is well known to all local Aborigines refers only to the small island c. 396.439 (cf. Thomson 1949b:map). On his visit on 26 March 1884, Searcy probably did not actually land on the island (Searcy 1907:90; SAA 790/1884/445).

Macknight visited the site on 16 June 1967. On the NW side of the island, there is a small spit and beach, behind which, on a flat shelly area are 1 S.L. and several stunted tamarinds. There are also a few depressions, but they do not look much like S.H. The island is certainly waterless at all seasons and is unlikely to have supported many, if any trees. In sum, it is remarkably uninviting and can only have been used for reasons of caution. The following collection was made (Label-AB3): Iw. 1367, 1368a,b; Ew. 2 m.b.s.; Glass, green frags, one marked KE and 1 base, total 125 gm, some utilization.

20. Arnhem Bay

The Macassan name is Limba Katona (Searcy 1907:135) or Limbakationu (SAA 790/1884/445).
On 25-6 March 1884 Searcy visited various sites in the area. 'We anchored about a mile from an island on the West side [of Arnhem Bay]...reached the camp after a long and trying wade through soft black mud and decomposed shell and coral.

The camp had to all appearance not been used for years, the old fireplace being overgrown with weeds and creepers. Close by is the grave of a master of one of the proas who was murdered here about 5 years ago....This camp must be a very old one judging by the great size of the tamarind trees under which it is formed. They occur at every camp yet visited but are none so large as these at Arnhem Bay.

We then crossed to the mainland and whilst wandering about Mr Robinson found a number of mangroves recently cut.... Something having suggested itself that a camp might be formed on a small sandy Isld marked on the chart as a rock, we stood down the next morning...and there sure enough was a camp seemingly just deserted' (SAA 790/1884/445; see also Searcy 1907:89-90). The first site mentioned can be tentatively identified as 20d below, and the second rather more confidently as 20b.

In 1904 R.C. Spencer was killed by Aborigines at his trepang camp on 'a small sandy island in Arnhem Bay', most probably in the Hardy Island area. The name of the island was Coondaccomoora (Searcy n.d.:302-4). However Bartlett (1954:207) says that he was killed on Mallison Island.

a. Wakanhu

Thomson (1949b:map) appears to be wrong in locating this name, which was known to Burramurra and Barrnyunyur, on Hardy Island. The site is on the S side of Everett Island, c. 407.432, about 100m. W of the S point on which there are several tamarinds.
About 11 S.L. in poor repair are found on an open sandy area behind dense mangroves. An unusual feature of the site is that all but the most southerly S.L. (which faces N) face W into the mangroves and are not at right angles to them. A possible explanation of this may be the obvious line of approach to the site from the S. The S end of the site is opposite a patch of lower mangroves which just possibly may indicate an area of former clearance (plate 5.5). There are several tamarinds on the site. Macknight visited on 16 June 1967 and collected (Label-AB4): Ew. 849 and 4 small sherds; Glass, 1 blue-green frag.; Stone, 1 fine grained, green dolorite, edge ground axe, 1m. piece fine grey quartzite from which flakes have been struck.

b. Dhudhuninya

This is a small island, about 200m. long at 406.431 between Everett and Hardy Islands. The name was supplied by Burramurra and Barrnyurnyur. At the N end are 3 or 4 S.L., aligned approximately at right angles to the beach, and many tamarind trees. Macknight visited on 16 June 1967 and collected (Label-AB5): Ew. 850-1, 852a,b, 2m. rims, m.b.s., total 300gm; Glass, green frags from at least 4 bottles, one marked 'A & C' and another with part of a letter, total 40gm, some utilization; Metal, small piece galvanized iron sheet.

On an open sandy area towards the SW of the island, with a scatter of stones, was found a 'pirri-like' point in fine, grey quartzite, length 4.7 cm.

c. Hardy Island, north beach

At 406.429½ there is a fine beach, with several large tamarinds around which is a considerable scatter of Aboriginal occupation debris. Fred Gray is said to have worked here, but there is no archaeological evidence of this.
Macknight visited the site 16-9 June 1967 and collected (Label-AB7): Ew. 1 m.b.s.; Glass, brown and green frags, total 35 gm, some utilization; Stone, 1 large, fine-grained, green dolorite, edge-ground axe, 1 piece utilized fine grey quartzite.

Another small ew. sherd was found in the intertidal zone several hundred metres S towards site 20d.

d. Hardy Island West

My informants could not supply a name to this place with any certainty, though (Bengura) was a possibility. The site is located on the W coast of Hardy Island or Lunngudja, c. 406.429, on a beach ridge behind dense mangroves. Macknight was taken to the site on 17 and 19 June 1967 by Aborigines, though he had previously been told of it by Fred Gray. About a dozen tamarinds extend along several hundred metres, but the site itself only covers an area c. 100 x 20m. in the centre of this distance (see fig. 5.11). There are 2 S.L., though S.L.1 is really 2 rows of fireplaces back to back (plate 5.6). The depression marked A is almost certainly a S.H. To the N of this is a puzzling mound with a pile of stones on top, and another depression, which are probably associated. The feature may be grave. The site was divided into 8 squares, 10 x 10m. which were collected over separately, along with material from the N and from the S of the area. Useful artefacts from the site are labelled AB6/ and appropriate suffix. The collection yielded:

**SQ.1.** Ew. 1 m. rim, m.b.s., total 105 gm; Glass, green and violet frags, total 51 gm; Metal, bullet S48, bullet case S49, pieces of chicken wire, misc. fragments of galvanized iron, pressed can and copper.

**SQ.2.** Ew. 853, 2m. rims, m.b.s., total 60 gm; Glass, prunt S50 and other frags, mostly green.
SQ.3. Ew. 854, 2m. sherds; Glass, green and violet frags, total 44 gm.

SQ.4. Ew. 855, 3m. rims, m.b.s., total 284 gm; Glass, 3 square bases, frags marked LEA & P[ERRIN] S51 and m. frags, total 110 gm; Metal, 2 pieces flat iron, 1 piece galvanized iron.

SQ.5. Ew. m.b.s., total 60 gm; Glass, m. frags, total 20 gm; Metal, frags; Clay pipe stem S52.

SQ.6. Ew. 1 sherd; Glass, 1 clear frag. marked ME.

SQ.7. Ew. 856a,b and 1 other sherd; Glass, 4 green frags; Metal, several pieces flat iron and galvanized iron.

SQ.8. Iw. 857; Ew. 858, m.b.s., total 51 gm; Metal, small piece.

North collection Ew. 3 small sherds; Glass, 2 green frags; Metal, pieces of flat iron and galvanized iron.

South collection Ew. 2m. rims, m.b.s., total 250 gm; Glass, 1 green frag.

Uncontrolled collection Ew. 859, 2m. rims, m.b.s., total 313 gm; Glass, prunt S53, 1 ring and green, violet and clear frags, total 155 gm; Metal, several pieces galvanized iron and flat iron; Stone, 2 quartzite flakes, 2 chips fine-grained green diorite.

Two small pits were dug. The first (a + b), consisting of 2 square metres was in the centre of a slight depression thought to be a possible S.H., but only c. 10 cm. of grey sand, overlying clean sand was found. The deposit was clearly much disturbed as is suggested by the bullet case from below 10 cm. The finds were:

a, 0-10 cm. 1 ew. sherd, 1 flake green glass, 1 frag. violet glass, clay pipe stem S40, 3 bullet cases S41-3, bead S44, brass fragment with hole S45, pieces of chicken wire, 2 other metal frags, 1 fish vertebra.
a, below 10 cm. Ew. m.b.s, 25 gm; Glass, 3 frags; Turtle shell, 1 frag.

b, 0-10 cm. Insignificant frags of ew., glass, bone and metal, cartridge case S46.

b, below 10 cm. Ew 1 sherd, bullet case S47, 1 piece flat iron, 1 large fish vertebra.

Another pit (c) of \( \frac{1}{2} \) sq.m. was dug to investigate a scatter of stones, but only normal deposit of c. 10 cm. grey sand was found. 57 gm of misc. ew. sherds were obtained.

There is a little utilization on the glass from the site.

Directly in front of the site is a distinct break in the thick belt of fringing mangroves. There is no apparent environmental cause for this and it may be the result of Macassan clearance (plate 5.7). On the other hand, it is difficult to account for the initial choice of this precise location as a site on any other grounds except that there was some break in the mangroves. The two arguments are not necessarily exclusive, and some initial gap may have been expanded. The case for some clearance is strengthened by a difference in species between the higher mangroves on either side and the ones in the gap. This is discussed further in appendix 5.

From the finds, it is apparent that the site has seen both Macassan and European visitors. As Fred Gray pointed out, the site is adjacent to good trepaning grounds to the W. The number of bullets found, of no less than 5 calibres, is quite extraordinary and may indicate visits by various different groups of Europeans. These could include Searcy, Spencer, Gray and probably more recent parties in the 1930s and 1940s.
e. Dawarrku (stone picture site)

See appendix 10.

f. Gundaykunga

According to Burramurra, there is a good spring of fresh water in the intertidal zone c. 401.424, which was used by the Macassans. Chaseling (1957:136) probably referring to this site, describes how a tree trunk was wedged in the spring to allow watering directly into canoes at high tide.

21. Cape Newbald

The main site in this area is called Limba Djippa (Searcy 1907:135; Thomson 1949b:map). The most probable location according to Aboriginal information, is on one of the islands between the mainland and Mallison Island.

On 26-7 March 1884, Searcy found one prau there, 'in a nice little cove, the smoke-houses being out of sight' (Searcy 1907:91). He also noticed the remains of a prau 'wrecked here some ten years ago' (SAA 790/1884/445). When Mahkarolla told Warner (1937 (1964:468-9)) that he remembered the Macassans coming to the clan territory of the Wangurri, he may have been thinking of this site.

22. The English Company Islands

According to Stokes (1846,2:356) the Macassan name of Cape Wilberforce is Udjung Turu, meaning Bearaway Point. See also under site 25e.

The following identifications of names in this area given in Cense (1952:263) have been collected from Aboriginal informants.

Parku or Pua’Duda’ - Inglis Island (Willie, Djinngulul, Burramurra). The more precise location is difficult, but the name certainly applies to the S side of the island. A better
rendering of the Aboriginal name is Baraku. Djinngulul says
he was taken here as a small boy and saw several praus which
stayed for two or three nights. He also knows the name
Kapalabippi for the area. Burramurra thought the name Baraku
might also refer to the anchorage between Pobassoo and Cotton
Islands where Flinders met the fleet (see below) and mentioned
another similar name which is perhaps that of a site at 439.459.

Manunu - This name is associated with the N side of the
promontory ending in Cape Wilberforce (Burramurra, Djinngulul),
though again the precise location can only be fixed by a visit.
Willie distinguished Limba Manunu, a beach with a camp in the
bay on the N side, from Udjung Manunu, Cape Wilberforce itself.

Kulira - Truant Island (Willie, Djinngulul, Burramurra).
All were quite sure of the identification, though the
details given by Daeng Sarro suggest somewhere near the
entrance to Arnhem Bay. Willie also said that there was a
particular type of large rat found on Truant Island, which
had been brought by the Macassans. A few were to be found
on the mainland but they were not so big.

Burramurra knew of two further sites in this area which
he associated with Macassans, Burrukulu, on the mainland
opposite Inglis Island at about 439.459, and Giwurrurraya on
the S side of Malay Road at 452.469. The first of these may
be the same as a processing site Fred Gray remembers having
seen somewhere in this vicinity on the mainland opposite
Inglis Island.

On 17-9 February 1803, Flinders (1814, 2:228-33) met 6
praus, and then another 5, c. 456.475 between Pobassoo and
Cotton Islands. The first canoe seen was working off the E
side of Cotton Island. The anchorage appears to have been
mainly a rendezvous for watering from a supply on the ? N
side of Pobassoo Island.
On 28 March 1884 Searcy found somewhere in this area 'a timber from some proa and the mast, yard and sail of a fishing canoe complete' (SAA 790/1884/445; see also Searcy 1907:93).

On 27 May 1896, on the W side of Truant Island, 'some wreckage belonging to a Malay prow' was seen (SAA 1374/6875).

23. Melville Bay

The Macassan name is Lembana Panrea, meaning the Bay of the Smith(s) (or Carpenter(s)) (Cense 1952:263). Various corruptions of this are given in other sources. Daeng Sarro (in Cense) identified this with the Aboriginal name Mannjarranga, though Mawalan, perhaps rather doubtfully, said this was in Dalywoi Bay. The 'outside' of the bay, perhaps meaning the northern side of the peninsula ending in Dundas Point, is named Lembana i Ruku' (Cense 1952:263). This may mean Grassy Bay or more probably Ruku' is a personal name. Thomson (1949b:map) locates this name on Drimmie Head. Searcy (1907:135) gives Limba Jona for Melville Bay, outside.

Cense (1952:263) lists a number of islands or rocks in the vicinity: Liukang Paramataja (means Jewel Island and may be the island known as Baramuda or Barramatta at 483.435), Liukang Pullando' (means Chevrotain Island), Namboac (means the Shallow Place), Togo-Togo Sombala' (meaning unknown, though Sombala' means sail), Liukang Pempeng (means Double Island) and Tambitjina (perhaps an Aboriginal name: Mun-gurrawuy thought it might be East Woody Island).

Between 13 and 15 February 1803, Flinders (1814, 2:226) found here traces of Macassans including partitions of frame work and part of a large earthen jar. On 29 March 1884, Searcy interviewed 2 praus in the bay and saw at least one S.H. (SAA 790/1884/455; Searcy 1907:94-5). On 25 February 1885, he saw a single prau here (SAA 790/1885/423). On a visit in June 1886, he seems to imply that there was only
one camping place and this is clearly on the mainland (Searcy
1907:144).

In May 1900, J. Cleland found a prau anchored off
Drimmie Head (SAA 790/1903/438, 461).

Berndt & Berndt (1954:plate 5) have published a drawing
by Mawalan of Melville Bay showing praus and settlements. It
is difficult to interpret in detail, but follows in general
the material given in Berndt (1964a). The largest settlement
shown is clearly at site 23 c.

a. Galuba

Berndt (1964a:285) records this name twice (nos 200,202)
and says that it refers to a Macassan captain. Both Baiini
and Macassan activity in the area is noted. The site, which
Macknight visited in 1967, is in the immediate vicinity of
the Aboriginal settlement at 482.431. There are visible 4
S.L., at least 5 fairly definite S.H. and a tamarind (fig.
5.12). Mun-gurrawuy pointed out the location of another 2
S.H. (F and G), but there were no surface indications. A
narrow trench was dug across S.H. C to obtain a section,
and a thick stratum of fine, grey ash confirmed the
interpretation of the depression as a S.H. (fig. 5.13). A
surface collection in the area produced (Label-MB1): Iw.
874-5; Ew. 860-73, 4m. rims, m.b.s., total 1190 gm (the
decorated sherds 871-3 are particularly noteworthy); Glass,
1 small green frag.

About 100m. N, that is inland from the site, is a well
said to have been used by the Macassans. 2 large ew. sherds
were collected near it, including 876 with interesting
decoration.

About 200m. E on the beach ew. sherds and 2 frags of
green glass were collected.
Recent port development works on this peninsula have probably obliterated much of the above sites.

b. A small cove at the end of a peninsula running NW from Drimmie Head, c. 483.439. This would be about the spot called Ngalila by Berndt (1964a:285), said to be a Baiini place for cooking trepang. Macknight visited the area in 1967 and saw several depressions, though these were not necessarily S.H. The following artefacts were collected: Iw. 1373; Glass, 2 green frags.

c. Gunjangara

Cense (1952:263) describes this as a large camp and this is confirmed in the Aboriginal information recorded by Berndt (1964a:285). The site is confidently identified from Berndt's map and by informants in 1967 when Macknight visited it. It is situated on the beach of a fine cove facing W at 484.438.

i. At the N end of the beach, on the N side of a dry creek, the following artefacts were collected on an open sandy area (Label-MB2/N): Ew. 1m. rim, m.b.s., total 150 gm; Glass, 1 green frag.

ii. A little N of the centre of the beach is one well-preserved S.L. with 6 bays facing N. Behind it is a S.H. depression, and a small hole showed that there was the usual lens of fine grey ash in the centre. To the N of these are 3 heaps of soil with much charcoal, which may represent some form of functional equivalent to a S.L., and about 8 depressions at least some of which may be S.H. There are also 4 tamarinds. A surface collection yielded (Label-MB2/S): Ew. 877, 1m. rim (2 pieces), m.b.s., total 290 gm; Glass, 1 green frag.; Clay pipe S57 (2 pieces).
d. At 483.438, in the cove immediately N of the old RAAF jetty on Drimmie Head there is an area with various types of remains. The most recent is considerable material dating from the RAAF occupation of the area during the Second World War. There are also several rows of stones laid out to form paths which probably date from the same period. There is said to be a cemetery in the vicinity in which Mun-gurrawuy says his mother is buried. Berndt (1964a:285) locates a site Galwoboi about here, at which the Macassans are said to have worked.

The evidence of Macassan activity at the site are 2 S.L. both facing S, both having about 5 bays, and one tamarind. In 1967 Macknight collected (Label-MB8): Iw. 878a,b; Ew. m.b.s., 119 gm; Glass, green frags, 61 gm.

In 1963 Mulvaney and Golson visited the site, saw the tamarind tree and collected a stoneware sherd, Iw. 879.

e. Drimmie Head Point

In 1967, Macknight saw a tamarind tree about 100m. W of the extreme point of the head, c. 483.436. On an open sandy area about 150m. E of the point, he collected (Label-MB9): Ew. m.b.s., 98 gm; Glass, green frags, 271 gm, some utilization.

f. At 484.437 in the middle of an open beach, Macknight in 1967 observed one tamarind and collected (Label-MB10): Ew., 1 tiny sherd; Glass, 1 ring (slightly utilized) and 1 other green frag.

Berndt (1964a:285) has recorded traditions of two Macassan settlements, extending along almost all the E side of Drimmie Head. Macknight was not able to visit the whole of this shoreline, but there does not appear to be any major archaeological site there.
g. There are undoubtedly sites on some of the small islands in the bay and possibly at other points around the shores of the bay, but these have yet to be properly investigated. Informants mentioned several S.L. and tamarinds, though too vaguely for confidence.

In the Australian Museum, Sydney there is a collection of 91 sherds (Register No. E59379) said to come from the island opposite the wharf in Melville Bay. After joining several sherds from the same vessels, the resulting 84 sherds have been recorded as: Iw. 879, 795-6; Ew. 728-38, 740-88, 790-4, 797-804, 8 m.b.s. Some doubt surrounds their provenance, both from the rather vague description given and also from the fact that most of the sherds bear a red number which was probably applied when they were held in the museum of the Anthropology Department, University of Sydney. These numbers interleave with similar numbers on the collection referred to as PB 1 in the museum of the Anthropology Department, University of Western Australia, which also came from the Sydney department.

Two of these sherds are illustrated in Berndt & Berndt 1947a (800 as plate IV A/fig. I C and 802 as plate IV B/fig. I D) and although no exact provenance is given they would appear to come from Port Bradshaw. Furthermore sherd 800 is almost certainly from the same pot as sherd 1023, which Macknight collected on Wobalinna Island in Port Bradshaw (site 25 a). However there is no means of telling whether this confusion applies to all, or only part, of the collection.

24. Melville Bay to Cape Arnhem

a. Bemer Island

According to Searcy (1907:135) the Macassan name is Coolacorra. The island was also identified by various informants with the name Pulula in Cense (1952:263). This
appears to be an Aboriginal name (Cense pers. comm.), though Mathaman for example thought it was Macassan and said that the Aboriginal name was (Dambalea). This latter name is the one commonly used (e.g., Chaseling 1957:25). However it appears to be really Macassan, as discussed under Alger Island (site 17), to which it is also applied.

Berndt (1964a:283-4) mentions several places on Bremer Island traditionally associated with both Macassans and Baiini.

b. Coast opposite Bremer Island

Cense (1952:263) mentions an area called Bapa' Pi', meaning Father Bird-lime. This may refer to the white cliffs of Mt Dundas (see photograph in Mountford 1956:288E).

c. Miles Island

Cense (1952:263) mentions a place called Kormar. Various Aboriginal informants identified this as Miles Island. See also Berndt (1964a:278-9) for traditional material.

d. Wurrawurrawoi (stone picture site)

See appendix 10.

e. Dalywoi Bay

Wilkins (1928:210-1) mentions a Captain Lough trepanning in the area sometime before 1925. Berndt (1964a:272-3, 277) gives traditional material. Mr Fred Gray says that he saw a Macassan camp at 509.422 in the thirties. This was visited by Macknight on 11 June 1967. On a flat sandy area behind the mangroves, about 300m. inside the S point at the entrance to the creek, were 2 definite S.L. The S one had about 4 bays and the N one, in a big clump of pandanus, rather more.
About 50m. to the N was another very doubtful S.L. A little glass and pottery was collected in the general area of the S point, but most came from near the S.L. This comprised (Label-Dal.B): Iw. 1374; Ew. 880a,b, 881, 2m. rims each in 2 pieces, m.b.s., total 620 gm; Glass, 5 frags of various colours; Metal, 1 piece flat iron.

f. McCarthy & Setzler (1960:287) mention pottery found at Yirrkala, but give no description of the site. Among the specimens from this expedition, the register of the United States National Museum lists 'stoneware and thin potsherds from a beach site near Yirrkalla (1 lot).' (Accession 215, 944, Cat.No. 419664; I wish to thank Dr R.B. Woodbury, Curator, Office of Anthropology, U.S.N.M. for this and other information relating to the 1948 collections in that museum.)

g. Cape Arnhem

'Come around Cape Arnhem, found a terrible Tide rip. Some of our darkies who had been down here before with the Malays, cautioned us to be silent and not speak if any Maccassar men (Malays) should appear, a good many Praus having been lost in this tide rip' (SAA 790/1876/74:9.10.1875).

Willie gave the Macassan name for the cape as (Udjung Durro).

25. Port Bradshaw

Cense (1952:263) records the name Lembana i Bapa', meaning Bapa' Bay, in which there was a settlement called Karkar(a)nga, a compression of the Macassarese Karaeng Karaeng, meaning Many Karaengs. This latter name is also applied by informants such as Mawalan and Birrigidji to the whole inlet, though Mun-gurrwuy thought of it as a specific spot somewhere N of Port Bradshaw. Searcy (1907:135) writes the
According to Mawalan, Fred Gray worked on the island for 2 years in the 1930s before moving to the site described under 25b. He was followed by another European trepanger, perhaps called Cochrane - though this was not W.B. Cochrane of Darwin. In the same year as this man worked on the island, 3 Japanese boats were there.

The Berndts obtained some pottery from here in 1946-7, but their description of the site is very vague (Berndt & Berndt 1947a:134). They also say that pottery was obtained from sites described under 25d and 25e, but it is not now possible to distinguish which sherds are meant. Although probably originally one collection when held in the Anthropology Department, University of Sydney, it is now convenient to distinguish 2 collections resulting from the Berndts activities.

i. PB 1 - seen in the museum of the Anthropology Department, University of Western Australia during April 1967. Ew. 436-70, 3 m.b.s. Sherd 470 and what is probably sherd 442 are illustrated as plate III A/fig. I A and plate III B/fig. I B respectively in Berndt & Berndt 1947a.

ii. PB 2 - seen in the South Australian Museum during April 1967 and 1968. The sherds are registered as A 37608-35 and there are another 5 unregistered sherds. They were presented by R.M. Berndt on 27 September 1948. In a note by Tindale and in the register they are said to come from Wadang Island in the mouth of Port Bradshaw, which I take to be another name for Wobalinna Island. They comprise: Ew. 471-9, 481-99 and 5 m.b.s. The sherd numbers follow the same order as the register numbers except that 2 m.b.s. have been registered and are neglected. Another 2 unregistered sherds have been numbered 498-9. In both 1967 and 1968 the sherd presumably registered A 37618, which would be number 480, was missing.
A further collection, which may be similar to those just described, has been dealt with under site 23g.

On 23 July 1948, Setzler visited the site and he has published a brief description with 2 photographs and 2 maps (McCarthy & Setzler 1960:227-9). These sketch maps are most misleading, though the description is basically correct. The artefacts collected on that occasion are now divided:

i. PB 3 - seen in the Australian Museum, Sydney, during February 1968. There are 67 sherds (though only 60 are mentioned in the register) marked 'E 59481 Pt. Brad.' being Ew. 708-27 and 47 m.b.s.

ii. Various lots held in the United States National Museum. Accession 215.944, Cat. No. 419663, 1 lot ew. consists of sherds from site 30a and here. It is illustrated in McCarthy & Setzler (1960:291 plate 18). Cat. No. 419665 is similar and illustrated on p.289 plate 16. Cat. No. 419666 is all from this site and illustrated on p.290 plate 17. Cat. No. 419668 is described as potsherds (1 lot) from 'Island in Port Bradshaw'. Cat. No. 419669 is described as potsherds and bottle glass (1 lot) from 'Island in Port Bradshaw'.

Another illustration in McCarthy & Setzler (1960:288 plate 15) apparently pictures sherds in this museum from site 30a and this site, though it is not clear under what catalogue number these are entered. Among the sherds in this plate, there is one marked PBI which appears to be part of the rim of a thin, partially glazed stoneware vessel and another ew. sherd with impressed and incised decoration exactly similar to that on sherd 1022 from this site.

On 7 June 1067, Macknight visited the island. The main site is in a cove on the NW corner of the island. This cove provides excellent shelter from the SE monsoon. 5 S.L. and 5 S.H. and 1 dubious grave were seen and a dense scrub of tamarinds surrounds the site (fig. 5.14). Plate 5.8 gives a
general view of the cove. A comparison with Setzler's map shows that the site is basically unchanged since 1948, though immediately prior to that a hurricane from the NW is said to have eroded away the front of the site. The small cliff formed at this time is now fairly stable.

A large collection of pottery was made from the surface of the site, and it is rather surprising that previous collections have been relatively so poor. In this collection, two areas were distinguished.

A. The top of the beach and the area behind the small cliff (Label-PB/L): Iw. 883-95; Ew. 896-936, 34m. rims, 2m. bases, m.b.s., total 5686 gm; Glass, 1 ring, 1 base, m. frags, mainly green but also some mauve and clear, total 264 gm; Metal, flat iron pieces, 40 gm, a large piece of galvanized iron just behind S.H. D was not collected.

B. The intertidal zone of the beach. As will be seen, there was a great deal of material in this area, particularly in the central part. These artefacts, together with rocks, presumably from S.L., have apparently been eroded out of the front of the site. There does not seem to be much, if any, material further out below the low tide level. The collection comprises (Label-PB): Iw. 937-954 (also 10 additional pieces of 952); Ew. 955-1023, 28 m. rims, 7 m. bases, m.b.s., total 16,584 gm; Glass, 13 rings, 10 bases, 1 frag. marked Av, m. frags mostly green, total 2,327 gm; Metal, corroded iron pieces including at least 3 large spikes, total 820 gm; Stone, 9 pieces of various types; Misc., 1 brick S126, 1 cartridge case S131.

Two small sections of cliff were tidied up as shown on fig.5.14. Section 1 showed a deposit, about 80 cm. deep, of the usual grey sand with small bands of ash and charcoal. Four ew. sherds were recovered (882, 1m. rim, 2 m.b.s., total 130
Section 2 beside S.L. 5 revealed a deposit, about 1.2m. deep, with very distinct bands of charcoal (plates 5.9 and 5.10). 2 small ew. sherds were found.

A notable feature of the site is the degree of relief around the S.L. and S.H. This is clearly visible in plate 5.11. This appears to have misled Setzler into describing the S.L. as depressions. Over most of the site there is a thin scatter of shells, with a concentration of small pearl shells and a few oyster shells behind S.H. D and S.L. 3. It is not possible to decide to which period of occupation these relate.

This was clearly a very important trepanning site and would repay further archaeological work. It is unfortunate that difficulties of time and transport did not permit this in 1967, since a number of questions about the site can only be answered by excavation. The most important of these is whether the great depth of deposit in section 2 can be divided into significant strata continuous over a reasonable area and recognizable in a S.H. aspect as well. Allied with this is the question of whether the general layout of the site has always been the same with a S.L., such as S.L. 5, being gradually built up as deposit accumulated, or whether there are other S.L. and S.H. now completely buried. Both of these questions further relate to the possibility of getting a stratigraphic sequence extending over some considerable period of time.

However there are a number of factors which tend to suggest that the potential of the site is perhaps not as great as appears at first sight. The most important of these is its considerable relief. Thus the depth of section 2 is in no way representative of the site as a whole, since it cuts through a distinct mound behind S.L. 5. In contrast, the smokehouse depressions probably cut quite deeply into any deposits in other areas and the total stratigraphy is
almost certainly very confused. Section 1 seems to have a more representative depth of about 80 cm. Even this is considerable and the ends of the section exposed in the cliff do not show any such depth (see left of S.L. 5 in plate 5.9 and plate 5.11 foreground).

This depth of deposit is perhaps partially explained by the restrictions imposed on the site by the limits of the cove. Not only would this have produced a more crowded site at the time of operation and thus greater concentration of deposit, but it may also have resulted in a greater degree of turning over the same soil, particularly for trepang burial pits, thus mixing charcoal down to greater depths. Finally there is Napier's evidence for the use of the site in the mid nineteenth century and every reason to suppose that it was used in the following 40 years by Macassans and thereafter on a number of occasions by other trepangers. The considerable recent use of the site is also supported by the quantity of glass found. Indeed the site is so suitable that it is difficult to imagine anyone working in the northern part of Port Bradshaw not using it, as long as they had adequate labour to transport fuel from the mainland. Although it is impossible to estimate how many seasons activity would be required to build up a given depth of deposit on this or any other site, it would be surprising if much of the deposit here were not the result of activity in the nineteenth and twentieth centuries. There is no reason to suppose therefore that the greater depth of deposit indicates a greater antiquity than on much shallower sites such as that at Anuru Bay (site 9) or Lyäba (site 32a).

In 1969, Dr Carmel White excavated an area of just over 3 square metres S of S.H. A, and found about 30 cm. of deposit. Various Macassan artefacts were recovered.
There are several other features of interest on the island. On top of the central and largest of the 3 masses of granite which form the island are several rock pools and a number of artificial races built from loose stones for the purpose of channelling rainwater into them. Around the largest pool there were found several fragments of green and clear glass, total 45 gm. Nearby on a flat area of bare granite, loose stones had been arranged to form the letters J.F.C. These may be the initials of the (?) Cochrane 37 mentioned by Aboriginal informants.

In a thick tamarind grove behind a beach on the SW side of the island is an enormous scrub turkey nest. On this were found 6 ew. sherds including 1m. rim and 1m. base, total 93 gm (Label PB/TM). It is possible that they were left by Macassans nearby, but more probably they were derived from the site several hundred metres away.

b. East side of Port Bradshaw

Chaseling (1957:130) mentions successful attempts by Aborigines to keep Macassans away from the highly sacred lagoon c. 492.402. For the importance of Djanggawul associated with this lagoon, see Berndt R.M. (1952).

On 8 June 1967 Macknight visited an area behind a small break in the mangroves, c. 493.404, said by Mawalan to be where Fred Grey had worked trepang in the 1930s. Several depressions were apparent: one with several stones was said to be a boiling place and the others S.H. A shallow well was nearby. About 50m. N, several low ridges are visible from a garden cultivated 'in Rev. Chaseling's time', and another well. Mawalan's drawing of the area (Berndt & Berndt 1954:plate 2) shows Gray's lugger in this vicinity.
c. North end of Port Bradshaw

Fred Gray saw the remains of at least one wrecked prau in this vicinity in the 1930s. Both Mun-gurrawuy and Mawalan claimed to have seen it when working for Gray at the time, but could not find any trace in 1967. The prau was said to be that of (Deinkatjing) (see chapter 11).

d. Rocky coves on west side of Port Bradshaw

Mun-gurrawuy and Mawalan provided a certain amount of information about this region, but it should be regarded as tentative as the sites were not visited with them. The place called Kurrumiya, marked as a Macassan site by Thomson (1949b:map) about 484.400, appears to be on the beach in approximately this location, but has no Macassan associations or relics. To the E of this is a tamarind and Karei rock at (Karburna) and a site with tamarinds and S.L. called (Kulumeiwi). On the N side of the entrance to Holly Inlet (Ulmari Creek) is a site with tamarinds called (Miritjanei) from which Berndt & Berndt (1947a:134) say pottery is obtained.

On 24 July 1948, McCarthy & Setzler (1960:228) visited a site with 'a small grove of large tamarind trees' and at least 1 S.L., probably about 487.400. McCarthy & Setzler (1960:230) also quote Harney who mentions a trepang camp in this area owned in 1916 by Captain Luff (?Lough, see under site 24e) at which a part-Aborigine and a Malay were killed (see Harney n.d.:137-8).

e. South Head, Port Bradshaw

Mun-gurrawuy and Mawalan supplied the following information about this area, though this needs checking by a visit. The most important site is Gulungura about 486.396 on the E side of the promontory projecting into Holly Inlet. It is said to have 4 or 5 S.L. and several tamarinds. Berndt &
Berndt (1947a:134) mention it as a pottery site. Of the two other sites listed in this reference, Dania at 488.396 is less important and Kalwokboi is not known. (A fourth site is dealt with under site 25d.) There are also said to be tamarinds and 1 S.L. at 488.398.

There is reputed to be a wrecked prau in the vicinity of Dania of which (Deindaranka) or (Wonaiuadjing) was master. These names may refer to Using (see chapter 11) who was one of two masters wrecked in the storm of 13–4 March 1895. One of these two men lost his prau 'in an inlet inside Sir Rodericks Rocks' (SAA 790/1895/175). Though it cannot be regarded as certain, the identification of this reputed wreck with Using's Bondeng Patola is temptingly probable.

The S headland of the entrance to Port Bradshaw, about 490.395, appears to have had some ceremonial significance for the Macassans as the site of a Karei rock and for Aborigines as a place from which to watch for the arrival of the praus. Four names are applied to the area (Oujountulu), (Bungabarro), (D jungadjunga) and Nangeiba. The first is obviously Macassan, probably another Udjung Turu' or Bearaway Point as under site 22. The meaning is possibly associated with the fact that in either monsoon, care would be needed when proceeding along this part of the coast. For the meaning of Turu' see Matthes (1859:333). The last of the four names above is given in Berndt & Berndt (1954:45) as the name of a Karei rock in the area, but the other name given there, Djungawi, was not known.

f. Borngolo

In 1969, Dr Carmel White excavated in this shelter on the N head of the entrance to Port Bradshaw. Some of the artefacts recovered are said to be associated with the presence of the Macassans in the area.
26. **Caledon Bay**

The Macassan name given in Cense (1952:263) is Lembana Karaeng Mangngellai, meaning the Bay of Karaeng Mangngellai. This name is confirmed by various Aboriginal informants, though some such as Mun-gurrawuy and Mawalan locate it more exactly as Gray's Bay. Searcy (1907:135) and Tindale (1925-8:131) say the Macassan name for Caledon Bay is Mungoola (Mungula), which might possibly be a corruption of that given above.

Daeng Sarro supplied Cense with the names of 3 specific camps. Clearly he thought the area important as he gives the name of a headman and mentions a stay of a month. These further names are: Tjampa Lompoa, meaning the Big Tamarind; Kampong Renggang, the name of a section of central Macassar; and Kampong Dompu, also the name of a section of Macassar, where previously people from Dompu on Sumbawa lived (Cense 1952:263, pers. comm.). Of these 3 names, only the second is identifiable and this is shown on the map as Camburinga, on the E side of Gray's Bay. See site 26a below. However Mawalan knew the third name in its original meaning as part of Macassar.

During February 1803, Flinders (1814,2:213) found 'bamboos and partitions of frame work' in Gray's Bay and noted various signs of contact between the local Aborigines and Macassans. On 13-4 March 1895, a prau 'anchored in the mouth of a creek at the head of Caledon Bay...was washed ashore anchors and all' (SAA 790/1895/175). Tindale (1925-8:97) mentions an attack on a party of trepangers here in 1916, several of whom were killed, but this sounds very like the incident mentioned under site 25d.

In the 1920s and 1930s various European and Japanese trepangers were working in the area. Berndt & Berndt (1954) give a detailed account of events at this time.
Dr Carmel White visited three sites in the area during December 1968, and has kindly supplied the following information.

a. Camburinga (see above for the derivation of the name). At 467.373, there is 1 S.L. about 30m. behind the beach. There is also 1 tamarind tree here.

b. Panganganimeriwi. On the S point at the entrance to Nanjiwoi Creek, c. 469.370, there are about 4 or 5 S.L. and a heap of stones, possibly a grave. The following pottery was collected: Ew. 374-392, 13m. rims, m.b.s., total 5458 gm; 5 pieces baked clay, perhaps pieces of brick.

c. On the site of the present Aboriginal camp, a further 4 or 5 sherds were collected. These are held by Dr White together with the other Aboriginal artefacts collected here.

Informants also mention various sites with S.L. and tamarinds on the W side of Gray's Bay, though Dr White did not see any on a brief visit.

27. Trial Bay

The Macassan name is Lembana i Djawa', meaning the Bay of Djawa' (Cense 1952:263). This identification was made by various Aboriginal informants and in December 1885, Carrington reported 'the outer bay...is annually visited by the Malays, to whom it is known as "Limba Jawa"' (SAPP 1886/54:10). Berndt & Berndt (1954:51) mention 2 other places associated with Macassans in this area, Djalargitjbi and Pupabaidju. At the first of these and on 2 islands called (Rukkunu) and (Wirringirr), Birrigidji and his son Gawarin, claimed there were tamarinds and S.L. One of these sites may be the place called Biring-Temboka, which seems to mean Reef
Wall, at which Daeng Sarro told Cense that trepang was collected. This area was the furthest extremity reached by the single prau of the 1906–7 season (see chapter 13).

Berndt & Berndt (1954) describe events in the area during the 1920s and 1930s.

28. Arrowsmith Point to Cape Barrow

Cense (1952:263) gives 3 names in this area. Daeng Muntu', a personal name, is apparently Isle Woodah (Berndt & Berndt 1954:51). Bapa' Paso', another personal name literally meaning Father Nail, and Lemba Berua, meaning New Bay, though known to some informants, could not be precisely located. According to Mangngellai, this last name was given by his father, Using. Searcy (1907:135) and Tindale (1925-8:131) give the name Churapee (Jirapi) for Blue Mud Bay, though this is very similar to Daeng Sarro's version of Djaragba (see site 33) and may be a mistaken location.

Birrigidji and Gawarin knew of 2 sites in the area with tamarinds and S.L. : (Baradjala) about 454.316 and (Tudeimirawi) about 430.326. The latter has the 'big name' (Balana) and is associated with a Macassan called (Djungi). The former is in the area referred to by Carrington. 'This portion of the bay is frequented by Malays, and the natives speak the Macassar tongue' (SAPP 1886/54:10). The same source (p.9) also mentions 'a camping place - frequented by Malays - in a bay lying west from Morgan's isle.' The Reverend E.J. Hughes (pers. comm.) says that there is a tamarind tree, and there used to be a coconut in a sheltered bay with a large billabong c. 403.260. The Nunggubuya name of the place, Ambugamba, is perhaps the same as Umbakumba (see site 33).

For post-Macassan activity in the area, see Berndt & Berndt (1954).
29. **Bickerton Island**

Cense (1952:263) gives 2 names which informants at Umbakumba, and Mun-gurrawuy and Mawalan said were on this island: Guru Le'len, meaning the Black Guru and Batjo' Oni. Batjo' is a common Macassarese name for boys, but the meaning of Oni is not known. Harney (1943:170) gives Bosswanie as the name of the island, which looks like a corruption of Batjo' Oni. The name, Boswini Bay, used by Mountford (1956:20) for South Bay is another variation.

The name of a rocky island, Aroro, which Daeng Sarro said is N of Groote Eylandt is not known there and my Umbakumba informants and Malgari thought a place called (Arorona) on Bickerton Island was meant (see under site 33). Informants also said that there were 2 Macassan graves on the W side of the island, but no exact location was obtained.

30. **Bartalumba Bay**

The name Bartalumba (Badelemba etc.) is clearly derived from Batu Lompoa, meaning Big Stone (Cense 1952:263), a reference to the striking cliff of North West Bluff. Tindale (1925-8:131) says the area of Bartalumba Bay is called Dailumpu. This is apparently a mistake for site 34.

Cense (1952:263) gives two other names in this vicinity, Waripa, an Aboriginal name, and Lemba Bingkurua, meaning the Bengkudu Bay. The latter is probably site 30a, which has dense mangroves nearby.

Berndt & Berndt (1954:45) mention a Karei rock in the area called Walkangi Karei. This name was not recognized by informants.

a. Agbenamanja (Albunamadji, Argburnamadja, Arbunamadje, etc.), Winchelsea Island. This may be the site called Lemba Bingkurua (see above) and the identification is strengthened
by the statement of Daeng Sarro that his father was buried at the site (Cense 1952:263), where several graves have been excavated.

The site is first mentioned by Warren (1918:13) who landed there on 4 December 1916 and describes it as a large camp, with many large tamarind trees, plenty of fresh water and a small burial ground. About 5 years later, it was visited by Tindale (1925-8:109 fig. 53, 131) who describes and illustrates several graves with grave-posts. In a general description of sites in this area, he also mentions stakes to mark anchorages, shelly middens, the remains of drying ovens (? S.H.), fireplaces (? S.L.) and stone lined wells.

The site described by Harney (n.d.:130-7) at which he and Foster worked in the twenties is probably here, though the name Upramudja sounds more like the Uburamudja marked just S of Umbakumba. They re-used Macassan fireplaces.

Between 2 and 7 June, 1948, McCarthy and Setzler (1960: 220-3) camped on the site. They excavated 3 boulder formations and recovered 3 skeletons. The present location of these skeletons is unknown. They also mention the remains of S.L. Several trenches were dug in midden material and a number of pounding stones collected. The pottery gathered on that occasion is now divided.

i. Seen in the Australian Museum, Sydney during February, 1968. The sherds are marked 'E 59480 Winch Is.' The register mentions 30 sherds, but these can be reduced to 26 by joining, numbered: Ew. 700-7 and 18 m.b.s.

ii. Various lots held in the United States National Museum. Accession 215, 944, Cat. No. 419661 is 1 blue and white porcelain sherd from a saucer with a foot ring. The dating of this sherd is discussed in chapter 12. Cat. No. 419662 consists of 3 stoneware sherds described by Mrs
Aga-Oglu in McCarthy & Setzler (1960:293-4). The museum register entry reads 'A.D. 1618-1644 Similar to Yiieh Chekiang Province T'ang to Sung dynasty'. (Yiieh = ? Yueh). However they can be safely regarded as undated for all practical purposes. A photograph (Neg. No. 42843 - c of U.S.N.M. reproduced here as plate 8.9) shows all these 4 sherds to be similar to many others since collected. Cat. Nos 419663 and 419665 are each 1 lot ew. from site 25a and here, illustrated by McCarthy & Setzler (1960:291 plate 18 and 289 plate 16 respectively). The former lot was probably the ew. sent to Mrs Aga-Oglu (McCarthy & Setzler 1960:293). Cat. Nos 419667 and 419670 are each 1 lot ew. from this site. Another illustration in McCarthy & Setzler (1960:288 plate 15) apparently pictures sherds in the U.S.N.M. from site 25a and here, though it is not clear under what catalogue number these are entered.

Macknight visited the site on 25 May 1967. At 460.249 there is a clear break in the dense mangroves leading in, over a shallow muddy bottom, to a beach c. 100m. long. This break could well be the result of clearing. Behind the beach is an open area with many fine tamarinds and backed by a freshwater swamp with magnificent paperbarks. This open area is covered with considerable midden material, including an unusual amount of bone. At the tope of the beach, and partially eroded by wave action are about 6 S.L., though all are ruinous. Malgari said there was a S.H. in the vicinity, but there was no evidence of it. A rough section across one of the piles of stones taken to be a S.L., showed charcoal in the expected position. A small pit dug some metres away showed 2 dark bands in section. No pottery was recovered from this pit. These dark bands are probably related to those mentioned by McCarthy & Setzler (1960:223). If they represent former occupation levels by either Aborigines or Macassans, they are not necessarily of great antiquity, since
the presumed clearing of mangroves in front of the site may have allowed a rapid accumulation of clean sand. At the W end of the site on the top of the beach ridge is a large depression with several stones nearby. This is probably the position of the graves dug by McCarthy & Setzler, though much closer to the beach than 75 yards. A further surface collection was made, mostly from the vicinity of the S.L., and yielded: Iw. 1024: Ew. 1025-6, 2m. rims, m.b.s., total 535 gm; Glass, 4 frags.

b. There is a dense grove of tamarinds on the beach at North West Bluff c. 450.245 but a search produced no Macassan artefacts.

c. A similar search beneath some of the many tamarinds on the W coast of Winchelsea Island, c. 455.254-5, failed to produce anything of interest. Mr Jerry Blitner claimed to have seen a S.L. there about 1940.

d. There are also tamarinds and a beach c. 462.244, but the area was not visited.

31. Northwest Bay

a. Yaranya Island

This may be Liukang Ratjunga, meaning Poison Island (Cense 1952:264). On 2 December 1916 Warren (1918:12) recorded that 'the boys told me that the Malays once had a house there. Noticed several large tamarind trees about.'

i. Site 1. Mr Fred Gray remembered seeing a Macassan site on the island when working in the area, and the site was well known to various informants on Groote Eylandt. Macknight visited it with informants on 28 May 1967. It is situated on a narrow peninsula composed of lateritic pebbles and shells.
projecting from the S tip of the island, at 468.248. The only break in the dense mangroves surrounding the site is on the SE, though it is not now possible to get a boat through this. 4 S.L. and 6 S.H. are clearly visible as shown in fig. 5.15. To the N and S of these features are some other minor irregularities. S.L. 1 and S.L. 2 are considerably eroded and could be a single S.L. The following artefacts were collected on the surface (Label - YAR 1): Iw., 1027-8, 1031 a,b, 2m. rims, 1m. base, m.b.s., total 630 gm; Glass, green frags, one marked MA over 2 illegible letters, 2 bases, total 224 gm, slight utilization.

The section of a trench dug across S.H.C reveals the following sequence of events (fig. 5.16; plate 5.12). A depression was dug in the original ground surface, which is defined by a stratum of some dark sand and charcoal, either from nearby Macassan activity or from other causes. The relatively clean sand and pebbles from this excavation were thrown out around the perimeter, overlying the original surface. A fire, producing fine, grey ash was lit in the depression (presumably inside the S.H.), and as this ash accumulated, it was raked out over the lip of the depression, together with more pebbles and sand from the centre. The final dark grey layer in the depression represents post occupation wash in. The sharp pit of fine grey ash may be a post hole from one of the supports from the S.H. The ash fill is perhaps explained by assuming that it piled up around a presumably bamboo post as it was being raked out, and then fell into the post hole when the post was withdrawn. This is the most convincing example of a post hole so far excavated. 2 ew. sherds were recovered from this trench.

The shallowness of the deposit over the site, the small surface collection and the simple stratigraphy in the section of S.H.C all suggest a fairly short occupation of the site, perhaps even only a single visit. The Aboriginal knowledge
of the site, the high relief and the proportion of glass collected may indicate that this occupation was comparatively recent.

ii. Site 2. In the middle of the W side of Yaranya Island about 100m. S of the end of the laterite cliff, at 468.249, is a beach with a line of about 8 tamarinds. In front of the beach there is a muddy area relatively free from mangroves, but this may be natural and there is no open access to the sea. The site was covered in dense grass and no features were seen. The following artefacts were collected by Macknight on 28 May 1967: Ew., 3 small sherds; Glass, green frags, 55 gm, some utilization.

b. Derramerengmaja

In the middle of a sheltered cove at 469.256, where Macknight camped on 25 May 1967, there is 1 S.L. and 1 large tamarind. The S.L. has 6 clear bays facing N (plate 5.13). About 3m. N of the S.L., a small test pit revealed a deposit of about 20 cm. of grey sand. The following artefacts were collected: Iw. 1032; Ew. 2 small sherds; Glass, mainly green frags, are marked HO over SCH, another Van over ROT, the edge of a prunt, total 81 gm.

c. Angaminamaja

This seems to be the area referred to by Daeng Sarro as Lembana i Mangko', meaning the Bay of Mangko' (Cense 1952:264). Informants at Umbakumba supplied the name Lembah Mankuru for Winchelsea Island, which may be the same. They also thought the name Makkanatjapa' applied somewhere in this area (see under site 33). The island Pattannanngang Pallu Toaja, meaning the old place where cooking hearths are set up, is hard to identify with certainty. A brief search on Finch Island failed to locate any Macassan artefacts.
On 27 May 1967, Macknight walked around the bay from 468.259 to 469.258. Several tamarinds and 3 dubious S.L. were seen at various points on the sandy area behind the beach and the following artefacts collected: Iw. 1033; Ew. m.b.s., 75 gm; Glass, green frags, 65 gm.

32. **Chasm Island to North Point Island**

See chapter 7.

33. **Port Langdon**

Daeng Sarro in Cense (1952:164) gives a list of names, mostly Aboriginal, relating to locations and islands around the end of the Jarragba peninsula on Groote Eylandt, though most of them have not been precisely identified. These are Sonsonga, Makkamatjapa' meaning Loose Talk in Macassarese, Tjarapi which is perhaps a version of Jarragba, Nalia, Aroro, Wandamadje which informants at Umbakumba identified as Jagged Head, Warpulmadje and Iningalkumadje. (For Aroro and Makkamatjapa' see also under site 29 and site 31c respectively.) Daeng Sarro also mentions Lemba Mangngiwang meaning Shark Bay, which both from his description and by informants is identified as Little Lagoon. The name Umbakumba appears to be derived from the Malay *ombak-ombak* meaning little waves.\(^1\)

Berndt & Berndt (1954:45) mention 2 Karei rocks named Warari and Dumondi in this area.

In 1925, Wilkins (1928:231-2) met 'two young Australians' near Umbakumba who had been trepanging there for 2 years. They were almost certainly Harney and Foster (Harney n.d.: chapter 4).

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\(^1\) I have to thank Dr Sutjipto Wirjosuparto for this suggestion.
The Australian Museum, Sydney, possesses several sherds from the area, collected by McCarthy in 1948. These are:

Iw. 805 marked E 55360 and illustrated by McCarthy & Setzler (1960:292 plate 19/3) (this was found on the open beach of Hempel Bay (McCarthy pers. comm.)): Ew. 2 m.b.s. marked E 55361 and illustrated by McCarthy & Setzler (1960:292 plate 19/1,2) are said to come from Umbakumba. A third ew. m.b.s. marked E 55360 is on display, but not registered. It is marked as coming from Umbakumba. The bottom of a Dutch gin bottle, registered as E 55362 (the last figure could be in doubt), cannot now be found. There is no provenance given, but it is probably from this area.

In the Queensland Museum there is an iron axe-head, S130, found well buried in sand at Umbakumba by Mr Fred Gray. It is probably Macassan.

Mr Jerry Blitner claims to have seen a site with pottery E of Umbakumba, but Mulvaney could not find it in 1967.

34. East and south coasts of Groote Eylandt

Daeng Sarro in Cense (1952:264) mentions Lemba Kurotong meaning the Bay of a type of black, speckled fish with an unpleasant smell, and this is identified by men at Umbakumba as Angurugubira Lake. Harney (1943:199) also gives a name Limba-Greeta in this area. Continuing Daeng Sarro's account, there is the island Daeng Lombo meaning the Great Daeng, which is presumably one of the islands in Dalumbu Bay to which it has given the name. Two places here are called Kare Bilu' and Kare Turu'. Cense (pers. comm.) thinks that these were names given in fun to Aborigines. Kare is a minor Macassarese title; Bilu' means to sail against the wind; Turu' means to sail before the wind (see also under sites 22 and 25e). A stretch of shore is called Kalotoro, which may be an Aboriginal name. Daeng Sarro says that the chief of Daeng Lombo was an Aboriginal man called i Bangkala'.
35. Cape Barrow to Maria Island

N.d. Barrow (1925-8:13) gives the Macassan name of Cape
meaning cape (Mathews 1859:660). This looks like the Macassarese Udjung
Barrow as Ochong. Both Searcy (1907:158)
and Searcy (1908:135) give Waeka which is probably
the same. This name does not appear to be Macassarese and

This entire area would certainly repay detailed
investigation.

There are reports from informants of a number of
Macassan sites around Dalumbu Bay. The most convincing is at
Gulambang, 493,199, where there are said to be tamarinds.

Some of the small islands off the South Coast of Groote
Eilandt are reputed to have Macassan burial caves on them
with associated objects (Worsley pers. comm.). The same
stories are still to be heard in 1967. Mr Jerry Blnter
has seen 2 lines of stones on one of these islands, leading
to a well.
Reverend E.J. Hughes (pers. comm.) suggests that it is connected with the Nunggubuyu word Wagiya meaning south. The name was vaguely located down near the Rose River by Mun-gurrawuy at Yirrkala.

Flinders (1814:2:183) found 'pieces of bamboo and other traces' somewhere on the mainland opposite Groote Eylandt, probably c. 398.240.

Harney (1958:134) refers to a post-Macassan trepang camp called Unrookie, S of Cape Barrow. This is probably the place, Angurrgi, c. 394.228, where there is a river and much trepang. This and two other sites, Miwul, a billabong at 388.215 (spelt Miwai on map) and Gulurruh, a creek with a well at 375.195 (spelt Kularrutty on map), are reputed to have been visited by Macassans, but the nature of their activity there is not clear (Reverend E.J. Hughes pers. comm.).

Tindale (1925-8:131) mentions traces of Macassans on Maria Island.

36. **Sir Edward Pellew Group**

Daeng Sarro in Cense (1952:264) lists several names in this area: Punggondang which is probably Macassarese but no meaning is apparent, Bapa' Tamboro' meaning Father Drum, Bangko Tattilinga meaning the Leaning Mangroves. Further E are Salla'na Pua' Asang meaning the Strait of Hassan's Father, Daenna i Si'de' meaning the Brother-in-law of Si'de', Gurua meaning the Guru, Mangngalle-njawa meaning the Taker of Life, Lembana i Sampu meaning the Bay of Sampu and Karaeng Mangngemba, a personal name. The first two of these names were vaguely located by Mun-gurrawuy at Yirrkala as near Borroloola. Searcy (1907:121,135) knows the fifth name as Denna See or Dinna See. Paradise (1924:20) gives the name Lumberjardi for the SE portion of North Island. The Macassarese is probably Lemba Tjadi meaning Little Bay, and the name may refer more exactly to Cabbage Tree Cove.
In December 1802, Flinders (1814, 2:172-3) found extensive Macassan remains throughout the group, but does not give exact locations. He mentions earthenware jars, cut timber, bamboo lattice work, palm leaf hats, trousers, an anchor with one fluke, three rudders, and one S.L. Brown, who was also on the Investigator, is more specific.

'On the 22nd we walked across [North Island] and near the entrance of a large bight in the opposite [i.e., western] side met with several no very ancient traces of the same people, parts of whose vessels we had formerly met with. In the place they seemed to have built one or more small vessels. About 1½ or 2 acres of mangrove (all Rhezop Angulata) were cut down, the trees remaining trunks which in general were from 4 to 5 inches diameter exclusive of the bark. Were all of them denuded of their bark and were pulled up by the roots with the greatest care. Hence we conjectured that they had been cut at least 3 or 4 years and probably much longer. Not far from the cut mangroves, abreast of a small beach, we found fire places formed in the same manner as those seen by C. Flinders on Island. They were generally in 3 or 4s, divided by stone partitions and all of them appeared to have had frames which were formed by perpendicular branches of trees somewhat higher than the stone work and forked at their upper extremity. They were disposed one at each side of every partition and at each end. Across these were laid trunks of Pandanus and these again were connected at their extremities to each other by small branches. The whole seemed well enough calculated for heating [?] wood, an operation practised in ship building.

The number of fire places was 38, most of them placed in rows as before described parallel to the beach and but a few (about 20 or 25) years from it a few at right angles to the former, but not more distant from the beach.
About these fire places were four pieces of bamboo, coconut shells, small fragments of the striped calico, a few old baskets and various small pieces of wood cut by an edged tool and apparently not long since.

The fuel used in these fire places seemed to have been small chips of wood the burnt remains of which were heaped together in the neighbourhood. The quantity of shell fish or fish bones &c. was comparatively very small.' (Brown 1802-3. Punctuation and spelling have been amended.) The site may be in Macassar Bay c. 498.028.

The next day Brown found '24 bamboo water vessels, none of them much decayed, some of them yet perfect' and a piece of a wreck somewhere on the W side of Vanderlin Island. Nearby 'in the bight 100 yards from the shore, a pole, the upper extremity of which had been cut by an edged tool was stuck up in the sand, its height about 12 feet.'

On 8 February 1885, Searcy found 4 praus with 16 canoos at work and 'the usual smokehouses' (Searcy 1907:120; SAA 790/1885/423). The location seems to be in a cove somewhere on North Island and is the place called Dinna Seeda.

On 21 February 1889, Stretton failed to find any trace of Macassans in the group that season, but on 'the west side of North Island and in a very secluded and safe inlet' he visited 'a very large and important trepang curing establishment. I counted (48) forty eight fireplaces or ovens built up with stones and situated under some immense tamarind trees' (SAA 1374/462). This may be the same site as that visited by Brown.

In 1897, Nash at Borroloola reported that 'the Malays... have not been here for some years' (SAPP 1897/45:26). He is presumably referring to the Pellew Group in general.
Mr F.C. Stevens of Mimets Development Pty Ltd has kindly informed me of two sites noted by his staff. At the first, on the south side of Little Vanderlin Island, c. 525.996, there is at least 1 S.L. and several S.H. At the second in Cabbage Tree Cove (Survey Bay) c. 501.028, there is at least 1 S.L. almost buried in sand. Tamarind trees are found at several other locations.

37. Wellesley Islands

Daeng Sarro, in Cense (1952:264), mentions a channel, 3 days' sailing eastward from the Pellews, which can only be somewhere near the Forsyth Islands. Its name is Dje'ne' Tattunggenga meaning the Upside Down Water. A box of provisions was left there for emergency use. Stokes (1846,2:356) says that the Wellesley Islands are called Pulo Tiga or the Three Islands, and that they were the usual southern limit of Macassan voyages.

Mangngellai also said that three islands lay at the furthest extreme of Macassan voyaging, though he was vague about their actual location. The name he knew for them was Pulona i Salasa, meaning Tuesday Island.

In November 1802 on Sweers Island, Flinders (1814,2:147) found 7 skulls and many bones together with a piece of teak. These are doubtfully Macassan. However on Bentinck Island he saw trees cut with an iron axe and some earthenware sherds which must have been Macassan in origin.

In 1856, Lieutennant Chimmo found the wreck of a prau on the W side of Sweers Island. (Information from Mr F.P. Woolston quoting Chimmo, Journey of H.M.S. The Torch 1856, but I have not seen this reference.)

In 1880, Pennefather (1880:1) reports a number of tamarinds in the area. Those at the site of Carnarvon on Sweers Island may be from that settlement, but those 'growing and bearing luxuriantly' on Fowler Island may be derived from the Macassans.
Chapter 6

The Anuru Bay Site
(Area 9)

This is the most complex, the most informative and the most completely preserved of the major Macassan trepang preparation sites yet discovered. The single, prominent tamarind tree, which guides the visitor from some distance out in the bay, does not prepare him for the impressive sight of serried ranks of stone lines (if the grass has been burnt), or the seemingly endless discovery of further features (if it has not been). Some idea of the comparative richness of the site can be gained from the fact that just over 17 kilograms of ew. pottery have been collected on the surface alone, and a slightly greater quantity from the rather modest portion of the site excavated (155 square metres or very roughly about 2.5 per cent of the possible area that would repay digging).

The site is located at 682.492 on the end of a small peninsula projecting from the eastern shore of Anuru Bay. The only name associated with it is Malara, supplied by Ngoliman and various informants at Maningrida, but as other Aborigines, such as Dayngumbu, say this word means the vessel for boiling trepang, the name may be descriptive. That is, this is the place at which there are, or were, malara, or trepang boiling vessels, or even merely stone lines. There are no documentary references to Macassans at the site. The abbreviation used for the site in labelling artefacts and for tabulation is A/.

In 1965, Mulvaney was taken to the site by Aborigines. He made a small surface collection (see below), but otherwise left the site for future work. Subsequently Macknight spent
the periods 14-26 July 1966 and 20 July to 8 August 1967 in
the area, mainly working on this site.¹

From Mulvaney's first visit, it was realized that the
site had considerable potential for an investigation which
would throw light on the operation of a trepang preparation
camp. With this general purpose in mind, the particular aims
of archaeological work on the site were:

(a) to make a detailed map of surface features on the
site;
(b) to make a controlled surface collection;
(c) to excavate certain features in order to confirm
their supposed function;
(d) to locate possible buried features; and
(e) to recover as many artefacts as possible by
controlled excavation.

The Site

The site is located on the S side of an isolated outcrop
of hard, dark sandstone, which forms the end of the peninsula
projecting into the bay (fig. 6.1). An area, very roughly
100 x 200m., on the top of this and high enough to be clear
of sand, supports a patch of open eucalypt scrub.

A pronounced, high sandy beach ridge leads off from this
to the NE, and at this point there is a small area of monsoonal
jungle. To the S of this beach ridge and across the base of
the peninsula, is an area of open salt marsh drained to the
southwards by a tidal creek with dense mangroves. There are
several ancient beach ridges running across this salt marsh

¹ I am grateful for assistance in 1966 to Dr F.J. Allen and
Mr Stephen Nayandili and in 1967 to Miss Mirabel FitzGerald,
Mr Rodney Keys, Mr Johnny Marali and Mr Charlie Irawala.
Both parties gave very ready help under difficult working
conditions.
and a sandy ridge on its S edge where it meets the sea today. The approach to the site from the land is thus comparatively open, and would have been substantially improved by any clearance of mangroves along the S side of the peninsula for firewood.

To the N, the sandstone outcrop extends as a long reef and this affords protection, particularly from the swell during the SE monsoon, to a steeply sloping beach facing W. This beach is bounded on the SW by a smaller extension of the outcrop, and it is on this and eastwards to the beginning of the beach ridge along the S edge of the salt marsh that evidences of Macassan occupation are to be found (plate 6.1).

In 1965 and 1966 the site had already been burnt off when visited, but in 1967 the dry grass from the preceding Wet still obscured all features. It was necessary therefore to burn this before any work could begin.

The general map (sheet 2) shows the surface features on the site, the areas excavated and the features discovered by excavation. The site can be divided into two areas. Area 1 comprises the major portion of the site towards the W, in which is found S.L. 1-14, 20-1, S.H. A-G, the grave and the single tamarind tree. Various speculative schemes are suggested below to subdivide further this area. Area 2 is quite distinct. This is the area towards the SE containing S.L. 15-9 and 2 dubious S.H.

The following table gives further details on the S.L.
<table>
<thead>
<tr>
<th>S.L.</th>
<th>Bays open to</th>
<th>Number of bays</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.L.1</td>
<td>W</td>
<td>?</td>
</tr>
<tr>
<td>S.L.2</td>
<td>E</td>
<td>7</td>
</tr>
<tr>
<td>S.L.3</td>
<td>W</td>
<td>c. 5-6+</td>
</tr>
<tr>
<td>S.L.4</td>
<td>W</td>
<td>c. 4+</td>
</tr>
<tr>
<td>S.L.5</td>
<td>E</td>
<td>c. 4 (may be 'horseshoe' bays)</td>
</tr>
<tr>
<td>S section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(perhaps separate S.L.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.L.6</td>
<td>?W</td>
<td>2+</td>
</tr>
<tr>
<td>S.L.7</td>
<td>W</td>
<td>c. 7</td>
</tr>
<tr>
<td>S.L.8</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>S.L.9</td>
<td>?E</td>
<td>c. 4-5</td>
</tr>
<tr>
<td>S.L.10</td>
<td>E</td>
<td>c. 6-7</td>
</tr>
<tr>
<td>S.L.11</td>
<td>SE</td>
<td>5</td>
</tr>
<tr>
<td>S.L.12</td>
<td>SSE</td>
<td>c. 4</td>
</tr>
<tr>
<td>S.L.13</td>
<td>SE</td>
<td>c. 3-4</td>
</tr>
<tr>
<td>S.L.14</td>
<td>ESE</td>
<td>c. 3-4</td>
</tr>
<tr>
<td>S.L.15</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>S.L.16</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>S.L.17</td>
<td>W</td>
<td>3+</td>
</tr>
<tr>
<td>S.L.18</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>S.L.19</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>S.L.20</td>
<td>N</td>
<td>?</td>
</tr>
<tr>
<td>S.L.21</td>
<td>NE</td>
<td>c. 2</td>
</tr>
</tbody>
</table>

All S.L. are built of lumps of the hard, brown sandstone underlying the site and obtainable at various small outcrops. However the large quantity of stone on the site suggests that some at least was obtained further afield around the bay, perhaps particularly from the low cliffs across the inlet to the S.
Field Methods

The method used to map the site, and the system of horizontal reference employed, need to be briefly described. Two survey points were established as shown, and from them a grid was laid out dividing the site into 10m. x 10m. squares. The top of a yellow wooden peg a few centimetres above ground level at the W survey point (WSF) also served as a height datum. The lines of the grid were assigned numbers and squares were referred to by the intersection in the SW corner (assuming the line joining the 2 survey points to run E-W). The easting reference precedes the northing reference as with the standard grid system. The division of each 10m. unit into separate metres could be indicated, where necessary, by the use of the first decimal place.

This system was conveniently put into effect with a tape and a tripod-mounted dumpy level fitted with a movable circular scale. The intersections of grid lines were marked by small pegs and the lines themselves scratched on the ground. Several check points were also surveyed by normal triangulation. When the grid was reconstructed from the original survey marks in 1967, a considerable number of the pegs from the previous year were still in position as a check on accuracy. Detailed sketch maps of each 10m. square were drawn on squared paper at a scale of 1 inch = 2m. and the original of the final map prepared by redrawing these together at a scale of 1 cm. = 2m.

Surface Collections

Sheet 3 records those artefacts collected from the surface of the site. In each square is shown the total weight of ew. recovered in grams and in brackets the part of this which was found in 1967, the numbers of numbered sherds (both Iw. and Ew.) and information about other finds. It should be noted that the weights of ew. are not precisely comparable
due mainly to weighing at different stages of drying, but the error is not more than 5 per cent.

A number of conclusions can be drawn from this chart. The most apparent is that the area of marked squares approximates to the area where most pottery is found, and hence probably to the main area of occupation. The separation between area 1 and area 2 is also clearly seen in the small quantities of pottery recovered in squares 19-20/9-10. A number of generalizations can be made about the effectiveness of such a surface collection. Firstly, it is clear that even after the thorough search of 1966, a considerable amount of pottery could be found the next year. It is perhaps significant that this was mainly from the W end of the site where digging, with resulting dust, foot traffic and spoil heaps, was concentrated in the previous year. Secondly, the amount found on the surface of a deposit 20-30 cm. deep might be only about 1 per cent of what is below. The exact figures can be seen by comparing the weights in this chart with those given below for the pottery recovered from the excavation of individual square metres. However this does not mean that such a small percentage of the pottery is represented. Each pot is broken into many sherds which are then distributed over a fairly extensive area and at different depths, as shown by pieces of the same pot being recovered in different locations. Since, particularly in the case of ew. rims, only a small section is needed to describe the whole, a much larger proportion of the pottery is in fact represented than the collected proportion of the total by weight. However, assuming repeated use of the site, it would be reasonable to expect some bias towards more recent sherds in a surface collection.

It needs to be particularly remembered on such an open site that little reliance can be placed on the significance of the location of any individual sherd or other movable
artefacts. Not only is there the possibility of movement after deposition, (a factor illustrated by the scattered location of pieces of the same pot), but there is the fact of wide use of the site. That individual pots were broken away from the main area of use is illustrated by the finding of 130 gm ew., all from one pot, in an isolated location about 30m. N of A/23/10 intersection. Such anomalies are not apparent when other pottery is present.

Excavations : Area 1

Excavations in A/7/7 around S.L. 1 and S.L.2

A series of square metre pits was dug in a line running approximately N-S through squares A/7/7 and A/7/8. This line was referred to as A/T and square metres numbered along it from the N. The excavations discussed here comprise 4 square metres dug in alternate metres from A/T/16 southwards, and various others in the same orientation to the W of this line. The square westwards from A/T/20 was designated A/T/20A, the next A/T/20B, and so on. A/T/16, 18, 20 to 20D, and 22 were dug in 1966; the remainder in 1967.

Excavation was initially undertaken in this area to confirm the supposed function of S.L.2 and perhaps establish a stratigraphic link between it and S.H.A. The latter aim was soon seen to be impossible, but the discovery of the trepang pit behind the S.L. stimulated further investigation of that and its relationship to S.L.1. A section through S.L.1 also confirmed it as a genuine feature.

The most important features revealed by excavation can be seen in sections 1 and 2 on sheet 4, and in plates 6.2, 6.3 and 6.4. The following table sets out information on artefacts recovered. Most square metres were dug in 2 spits: spit 1 being 0-10 cm., and spit 2 being from 10 cm. to clean, sterile sand. The depth dug in each square metre can be approximately estimated from the sections.
<table>
<thead>
<tr>
<th>Square metre</th>
<th>Iw.</th>
<th>Specific ew. sherds</th>
<th>Total ew. weight grams</th>
<th>Other artefacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/T/16 - 1</td>
<td>-</td>
<td>1137a, lm. base</td>
<td>100</td>
<td>S64 bronze ring</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>lm. rim, lm. base cut for thin section 16</td>
<td>104</td>
<td>S65 iron clip, iron nail</td>
</tr>
<tr>
<td>A/T/18 - 1</td>
<td>-</td>
<td></td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td></td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>A/T/20 - 1</td>
<td>-</td>
<td></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td></td>
<td>5</td>
<td>tiny pieces of metal</td>
</tr>
<tr>
<td>A/T/22 - 1</td>
<td>-</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>A/T/20A</td>
<td></td>
<td>(few bones only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/T/18B - 1</td>
<td>-</td>
<td></td>
<td>36</td>
<td>S69 needle</td>
</tr>
<tr>
<td>(W 75 cm. only dug in this square)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/T/20B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/T/18C</td>
<td>-</td>
<td>1143a,b, 2m. rims</td>
<td>424</td>
<td>glass, 5 gm</td>
</tr>
<tr>
<td>A/T/19C - 1</td>
<td>-</td>
<td>1143c, lm. rim</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1143d,e 1146</td>
<td>294</td>
<td></td>
</tr>
<tr>
<td>A/T/20C - 1</td>
<td>-</td>
<td>1137g, 1138b</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1146b,c, 1150b, 1151b, 1152b</td>
<td>393</td>
<td></td>
</tr>
<tr>
<td>A/T/21C - 1</td>
<td>-</td>
<td></td>
<td>41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1143f,g</td>
<td>403</td>
<td></td>
</tr>
<tr>
<td>A/T/17D - 1</td>
<td>-</td>
<td></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1137e, 1138a, 1143d, 2m. rims</td>
<td>290</td>
<td>S66-7 fish-hooks</td>
</tr>
<tr>
<td>A/T/18D - 1</td>
<td>1145a</td>
<td></td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td></td>
<td>236</td>
<td>1 piece ochre</td>
</tr>
<tr>
<td>Square metre</td>
<td>Iw.</td>
<td>Specific ew. sherds</td>
<td>Total ew. weight grams</td>
<td>Other artefacts</td>
</tr>
<tr>
<td>---------------</td>
<td>--------</td>
<td>---------------------</td>
<td>------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>A/T/19D - 1</td>
<td>1144b</td>
<td>lm. rim</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>- 2</td>
<td></td>
<td>1137f, 1147-8, lm. rim</td>
<td>490</td>
<td></td>
</tr>
<tr>
<td>A/T/20D - 1</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>- 2</td>
<td>1156b</td>
<td>2m. rims</td>
<td>165</td>
<td></td>
</tr>
<tr>
<td>A/T/21D - 1</td>
<td>-</td>
<td>-</td>
<td>37</td>
<td>S75 fish-hook</td>
</tr>
<tr>
<td>- 2</td>
<td>1156a</td>
<td>-</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>A/T/17E - 1</td>
<td>-</td>
<td>-</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>- 2</td>
<td>1137c, 1140a</td>
<td>-</td>
<td>195</td>
<td>S68 bead, iron spike, 1 piece ochre</td>
</tr>
<tr>
<td>A/T/18E - 1</td>
<td>1037d</td>
<td>-</td>
<td>40</td>
<td>glass 5 gm S70 bead</td>
</tr>
<tr>
<td>- 2</td>
<td>-</td>
<td>1044b, lm. rim</td>
<td>86</td>
<td>S71 cut bone</td>
</tr>
<tr>
<td>A/T/19E - 1</td>
<td>1144c, 1149</td>
<td>-</td>
<td>17</td>
<td>S74 bead</td>
</tr>
<tr>
<td>- 2</td>
<td>1144d</td>
<td>-</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>A/T/18F</td>
<td>1140b, 1144e</td>
<td>-</td>
<td>137</td>
<td>S72 fish-hook</td>
</tr>
<tr>
<td>A/T/18G - 1</td>
<td>-</td>
<td>lm. rim</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>- 2</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>A/T/18H - 1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>- 2</td>
<td>1145b</td>
<td>-</td>
<td>4</td>
<td>S73 brass wire</td>
</tr>
<tr>
<td>Wall cleanings A/T/20A-D</td>
<td>-</td>
<td>lm. base</td>
<td>54</td>
<td></td>
</tr>
</tbody>
</table>

Discussion: The section through S.L.2 westwards from A/T/20 confirms, by the position of the charcoal lens in A/T/20B, that there was, as expected, a fire in at least one of the bays of S.L.2. Charcoal from the position indicated on section 1, sheet 4 was submitted for radiocarbon dating.
and gave a result of 125 ± 57 B.P. (ANU-61). This 'modern' date should only be interpreted to mean that the fireplace was in use sometime during the eighteenth or nineteenth centuries. Indeed, apart from a small drift of cleaner sand against its E side, this S.L. is exceptionally well preserved.

The use of the bays as fireplaces is also supported by the increasingly dense charcoal on the W side of A/T/16, 18 and 22. It is not surprising that very little pottery was found either in or directly in front of the fireplaces. Only A/T/16, at the end of the S.L., produced more than a few body sherds.

The section dug through S.L.1, which revealed a black, sandy deposit and charcoal to the W of the main line of stones, confirmed that this too was a line of fireplaces. Although no stratigraphic connection could be established between the two S.L. or the pit between them, S.L.1 is much more dilapidated and therefore perhaps older than S.L.2. It would seem that originally there must have been more stones in this S.L., and these may have been robbed to build others. Surface scuffage would also have helped to obliterate the bays, though careful excavation in plan might still reveal traces of these. Again, little pottery was recovered from the fireplace area, although the area excavated was small.

No surface feature indicated the presence of the long pit between the two S.L. This pit is about 5m. long, 1m. wide and up to 60-70 cm. deep in the centre, though rather shallower at either end. From about 30 cm. below the surface it is cut into the most irregular deposit of hard consolidated sand which underlies the loose surface sand over much of the site, and at the bottom it exposed some of the brown sandstone which forms the base for the whole site. When this pit was first discovered in 1966, there was some doubt as to its function, but the discovery of several similar pits in the same relationship to S.L. and a better
understanding of the process for treating trepang, suggest that this was a regular feature used to bury the trepang after boiling. This use was suggested at the time by Philip Mugulnir, who was the most knowledgeable informant to examine this, or any of the other similar pits. The stratigraphy of the deposit in and around this pit was too confused to allow any but the most general conclusions. This confusion probably results from repeated use of the pit. Thus some of the cream or lighter deposit on either side of the pit appears to be throw-out from the clean, sandy bottom of the pit. For the interpretation of the lenses of charcoal and ash, see chapter 4. It is difficult to associate the pit by direct stratigraphy with either S.L.1 or S.L.2, but the distinct lenses of charcoal linking the fill of the pit with S.L.2 probably indicate that it was most recently used in conjunction with that S.L. However it is also possible that the pit was first associated with S.L.1 or that at some stage both S.L. were in use together. It will be noted in the table of finds that a considerable quantity of pottery was found in and adjacent to the pit, particularly below 10 cm. In addition, scattered bones of a dugong and various fish bones were found in the same area. This food could have been eaten either while the site was in use by Macassans or by Aborigines shortly afterwards (see below).

Excavations around S.L.4 and S.L.5

The excavations described here are a trench across S.L. 4 and S.L.5, and another at right angles between and parallel with S.L.5 and S.L.6. The exact area dug is indicated in the list of square metres in the table below. After the discovery of the trepang pit in A/7/7, it appeared that the deep deposit in A/9.9/8.4, which had been dug early in the 1966 season, might indicate another such trepang pit. The trench across the two S.L. was dug to test this hypothesis,
and in fact confirmed it. The apparent orientation of the two S.L. was also shown to be correct. The long trench down the hill was intended to explore the general nature of the deposit.

The section provided by this long trench (section 3, sheet 4) shows how the deposit rests on consolidated sand from about /8.4 to /8.8, but lower down the slope directly overlies the hard sandstone. There appears to have been a considerable amount of movement down the slope, and it is unlikely that all artefacts found at the bottom are in their original position.

The area between /8.0 and /8.4 has been much disturbed by burrows. This has further confused the distribution of artefacts and it was not possible to obtain a carbon sample from S.L.5 which was demonstrably free of contamination. However, one sample was collected from S.L.4 and two from the trepang pit, as shown on section 4, sheet 4. Another sample was collected from the SE corner of A/9.9/8.4 at a depth of 30-35 cm. None of these samples has been dated.

The following table sets out the artefacts recovered. The increase in the amount of pottery found near the trepang pit should be noted, though this is probably partly a function of the greater depth of deposit.
<table>
<thead>
<tr>
<th>Square metre</th>
<th>Iw.</th>
<th>Specific ew. sherds</th>
<th>Total ew. weight grams</th>
<th>Other artefacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/9.7/8.3 - 1</td>
<td>-</td>
<td>-</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>- 2</td>
<td>-</td>
<td>1m. rim</td>
<td>72</td>
<td>-</td>
</tr>
<tr>
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The Excavation of S.H.F

This excavation was undertaken in an attempt to reveal a smoke house in plan. It was wholly carried out in 1967 when the general form of such a feature could be fairly well predicted, though this excavation provides a fuller picture than that of any other S.H.

The initial depression can be seen in fig. 6.2 and plate 6.5. The area was divided into quadrants along the lines 8.6/ and /10.6, and the NE quadrant left untouched for future reference. The basic plan was to clear away all the deposit accumulated since the S.H. was last in operation, and thus expose the surface of the ground as it was when the last party to use the S.H. departed. This ground level, more easily defined in concept than in reality, is referred to as the working surface. It was hoped that at this level a pattern of postholes might be visible, but despite the most painstaking attempts, no posthole could be recognized.

In order to preserve as many sections as possible, by which the level of the working surface might be judged, a general checkerboard pattern of excavation was adopted. In addition, four small test pits, in the SE corners of squares A/8.5/10.8, A/8.5/10.6 and A/8.5/10.3 and in the NE
corner of A/8.8/10.5, were dug to obtain a complete view of the stratigraphy at those points, against which to check progress elsewhere.

Over most of the area excavated, it was possible to perceive the working surface. However to the W of the line 8.4/, the deposit, which was much softer, perhaps because of the greater amount of sand blown in from the beach, had been extensively disturbed by burrowing. Thus the squares in this area were excavated down to the underlying clean cream sand. Further W, another feature, S.L.21, was exposed. The relationship of this to S.H. F is problematical (see below), but its excavation is conveniently dealt with here. It was excavated to a presumed working level, defined by much charcoal, and 2 bays open to the NE were uncovered. No stratigraphic connection between the S.L. and S.H. F could be established because of the intervening disturbances.

The appearance of the excavation when the working surface had been exposed as accurately as possible, is shown in plates 6.6 and 6.7. Fig. 6.3 is a plan of the same stage. Some pillars were left standing in various squares along the 8.5/ line to indicate the original surface level, while some other areas along the same line have been excavated more deeply to investigate successive layers of rakeout (see below).

Finally trenches were dug to allow the sections along 8.6/ and /10.6 to be drawn in full (sections 5 and 6, sheet 4). The following table lists the artefacts found in all these various excavations. Where possible, those artefacts found above the presumed working surface are distinguished from those found below it. Several large bones, probably dugong, were also found in the area.
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Discussion: From this excavation, the original form of the S.H. is fairly clear. The depression which today has a vertical relief of about 25 cm., was considerably more pronounced with a relief of about 40 cm. However the sides were still not particularly steep. The shape of the deeper depression appears to have been very roughly rectangular, with the long axis running almost true N-S. In the bottom of the depression there is an area of fine white ash up to 15 cm. thick and derived from a slow burning fire in the centre of the S.H. The main ash area is about 1m. in diamater, but around the edge of this there is a quantity of charcoal, perhaps derived from incompletely burnt embers on the edge of the fire. This is shown most clearly about the intersection of 8.7/10.6 from where an undated carbon sample was collected as shown on section 6, sheet 4. A similar, though more scattered sample, was collected from pieces of charcoal visible on the working surface in the three quadrants exposed.

Around the edge of the deposit (and on the SE side almost on the present surface) were other areas of grey ash, about 5 cm. thick. These seem to be the result of raking out the accumulating ash to maintain a depression in the centre of the S.H. This rakeout ash is usually associated with lenses.
of fairly clean sand which may be derived from that below the central ash. As might be expected, there is more of this rakeout material along the side and end walls of the S.H., than around the corners.

This pattern of ash does not offer any information on how often the S.H. was used. Such a quantity of ash undoubtedly represents a prolonged fire, but this might well have built up in one lengthy visit. However the depression, once established, would also have invited re-use by later visitors.

On the S and E edges of the working surface of the S.H., there was a considerable number of cone shells which could only have resulted from human activity. What this might have been is not clear, and the shells are not necessarily in situ.

Various small stones were also found scattered over the working surface, but no pattern was apparent and they must be assumed to be random.

It will be seen from the table of finds that comparatively little pottery was recovered in the area, particularly in the centre of the smoke house. This is hardly surprising as one would not expect any pots to be left lying inside, and any deposit in the area before the erection of the smoke house appears to have been shovelled away in order to make the depression. The deposit blown or washed in later, which is thickest in the centre of the depression, is also not likely to contain many artefacts. It is only in the squares along /10.3, that is on the side of the S.H. facing the main part of the site, that any quantity of pottery was found. The fact that this is found both above and below the working surface may mean that this area was in use both before and during the period(s) of S.H. use, but the difficulties of locating a definitely 'pre-smokehouse' level in this area are too great to allow any detailed deductions.
<table>
<thead>
<tr>
<th>Square metre</th>
<th>Iw.</th>
<th>Specific ew. sherds</th>
<th>Total ew. weight grams</th>
<th>Other artefacts</th>
</tr>
</thead>
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<td>-</td>
<td>-</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>A/T/8</td>
<td>-</td>
<td>-</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>39</td>
<td>36gm rusted flat iron</td>
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<tr>
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<td>-</td>
<td>1m. rim</td>
<td>20</td>
<td>28gm clear glass</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1059d</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>A/T/10</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1179</td>
<td>44</td>
<td>-</td>
</tr>
<tr>
<td>A/T/11</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1180a</td>
<td>27</td>
<td>-</td>
</tr>
<tr>
<td>A/T/12</td>
<td>-</td>
<td>1040b</td>
<td>4</td>
<td>45gm iron spikes</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>25</td>
<td></td>
</tr>
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<td>-</td>
<td>-</td>
<td>57</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1080b, 1m. rim</td>
<td>81</td>
<td>-</td>
</tr>
<tr>
<td>A/T/14</td>
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<td>-</td>
<td>21</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>42</td>
<td>-</td>
</tr>
</tbody>
</table>

The very pronounced lens of fine, white ash under the centre of the depression confirms the feature as a S.H. The rakeout of ash from the centre is less distinct than in S.H. F, but some of it can be seen in the section of A/T/9, and a number of small lenses of ash observed in the excavation of A/T/14 were probably also produced in this way. Although the trench was only 1m. wide, the circular plan of the ash lens was apparent and a smaller band of ash showed in the W section. The small quantity of pottery, particularly in the top 10 cm. of deposit washed or blown into the centre of the depression, confirms the points made in this regard for S.H. F. Although no certain postholes were observed, some of the indentations in the consolidated cream sand on the floor of A/T/13 and 14, may have been produced in this way.
Judging from the amount of ash in this S.H., it appears to have been in use slightly longer than S.H. F, possibly because it is closer to the main S.L. Again, there is no evidence concerning the frequency of use, but from the size and pattern of the ash deposit, it seems probable that it was used on at least several occasions.

The Grave

For a description of these burials see appendix 9.

Since publishing this article, several further points have arisen. Dr Sutjipto Wirjosuparto (pers. comm.) has pointed out that, at least the lower and later skeleton, which was facing W, was aligned in accordance with Muslim practice by which a body is laid to face Mecca. It is difficult to account for the orientation of burial 1, though it is clear that in a number of ways, it was buried much less carefully. Dr A.A. Cense (pers. comm.) has also drawn attention to the orientation of the skeletons and has confirmed the suggested function of the stones beside burial 2. The usual Muslim practice is to place the body in a niche in the side of the grave and then close this with stones to protect the body (cf. Kennedy 1953:113). In this case, the sand was too loose to allow a more distinct niche.

On re-examining various photographs of the stone arrangement above the grave, it seems possible that the stones were originally in the form of a rectangular outline, rather than a solid rectangle which their disrepair originally suggested.

An additional photograph of skeleton 2 as finally exposed is shown in plate 6.8. The fish-hook recovered from the excavation is S95.
Other Excavations in Area 1

Apart from the excavations already described, which were primarily undertaken to investigate particular features, a number of other minor excavations were intended to obtain a general picture of the site. The initial technique was to select a single square metre in each 10m. square, by means of a random number table. Successive pairs of digits were used to give easting and northing within each square in the main part of area 1. The resulting scatter of small pits can be seen on the map of the site, sheet 2. This procedure was extremely successful in sampling a large area. It revealed the unsuspected presence of two trepang pits (between S.L.4 and 5, and in A/8/8), even though these were not fully explained until later; it provided test pits through S.H.E and G, and S.L.7; it gave some idea of the varying depths of deposit over the site and quite a good impression of the wide range in the quantity of pottery to be found on different parts of the site. It is also worth noting that this is an easy means of obtaining a statistically useful random sample of a site, and the percentage level of the sample can be simply increased by choosing further square metres in the same way. However, the great variability revealed in this case throws excessive doubt on any attempt to utilize this particular sample to estimate, for example, the total quantity of pottery on the site.

It is interesting to observe on the map of the site how the application of a regular system of pits on a 10m. modulus, might have given misleading results, due to its approximate concurrence with certain moduli inherent in the site itself, such as the distance between S.L.

A number of the square metres chosen in this way have already been mentioned: A/9.9/8.4, A/10.2/9.0 and A/8.9/10.3. The remainder, and some minor extensions undertaken to
investigate problems raised by the single square metre, are described below. Unless otherwise stated, all were dug in 1966.

A/5.6/7.1 - 1 70 gm ew.
  - 2 19 gm ew.
Depth of deposit c. 25 cm. above clean sand between underlying brown sandstone.

A/6.4/7.9 - 1 20 gm ew.; 11 gm green glass
  - 2 33 gm ew.; 3 gm green glass
Depth of deposit c. 30 cm.

A/6.6/8.4 - 1 24 gm ew.; including 1039b.
  - 2 60 gm ew.; including 1m. rim.
Depth of deposit c. 25 cm., though shallower in corner near beach. A marked band of oyster shells at 10 cm.

A/7.7/8.0 - 1 335 gm ew., including 1137c,d
  - 2 112 gm ew., including 1137b,
    1181a,b.
Depth of deposit c. 20 cm.

A/7.5/9.0 - 1 110 gm ew., including 1182, 1183, 1m. rim
  - 2 397 gm ew., including 1185, 1186a,b,
    1191e, 1m. rim
Depth of deposit c. 30 cm. In SE corner, a band of oyster shells at 12-16 cm. below the surface overlay a charcoal and then an ash layer. See plate 6.9. The charcoal and ash may be derived from S.H. A or B as rakeout. For discussion of the oyster shells as food remains, see below.

A/8.2/7.3 - 1 43 gm ew., including 1059e
  - 2 10 gm ew., 9 gm iron frags
Depth of deposit c. 20 cm.

A/8.1/8.2 - 1&2 Iw. 1054d; 75 gm ew., including 1057b,c,
  (dug 1967) 1154b, 1187, 1188; S89 fish-hook
See A/8.2/8.2

A/8.2/8.2 - 1 26 gm ew., including 1189; S90 fish-hook
  - 2 Iw. 1054c; 45 gm ew., including 1m. rim
The deposit over most of this square metre was c. 25 cm. deep resting on consolidated sand. However on the W side, there was a pit containing much charcoal. This was later conjectured to be another trepang pit and the adjacent square metre (A/8.1/8.2) was excavated to test this hypothesis. This revealed such a pit, about 60 cm. deep, running approximately N-S, and filled with deposit identical to that found in the other two trepang pits investigated on this site.

Both this and the preceding square metre are slightly SW of their proper position.
A/8.1/9.5 - 1 131 gm ew., including 1190a,b,c, 1m. rim;
   2 gm glass
   - 2 56 gm ew., including 1190d, 1m. rim
Depth of deposit c. 20 cm.

A/8.5/9.8 - 1&2 8 gm ew., 6 gm green glass; 2 ?dugong
(dug 1967) vertebrae
Depth of deposit c. 20 cm.
This square was not filled in. See below under soil
movement experiment.

(dug 1967)
   - 2 58 gm ew.

A/9.7/8.9 - 1 484 gm ew., including 1065c, 1194b,
(dug 1967) 1195a-c
   - 2 Iw. 1196; 84 gm ew., including 1195d

A/9.7/9.0 - 1 435 gm ew., including 1191a, b
   - 2 625 gm ew., including 1191c, 1192a, 1198,
       1199

A/9.8/8.9 - 1 497 gm ew., including 1197a-e, 1m. rim;
(dug 1967) S91 fish-hook
   - 2 395 gm ew., including 1195e, 1197f,g; S92
       lead ball

A/9.8/9.0 - 1 589 gm ew., including 1184, 1191d, 1193b,
(dug 1967) 1194c; S93 bead
   - 2 499 gm ew.

A/9.8/9.1 - 1 220 gm ew., including 1193a, 1194a
(dug 1967) - 2 237 gm ew., including 1192b

The depth of deposit in all the above 6 squares
was about 25 cm. They were dug primarily to increase the
pottery sample.

A/9.1/10.1 - 1 20 gm ew., including 1200; 21 gm glass
   - 2 7 gm glass
Depth of deposit c. 15 cm.

A/9.4/11.5 - 1 30 gm ew., including 1113d,e
   - 2
Depth of deposit c. 15 cm.

A/9.1/12.6 - 1 2 gm ew.
   - 2 15 gm ew., 8 gm iron nails
Depth of deposit c. 30 cm. Towards the SE corner there
was a layer of ash at c. 12-15 cm. below the surface.
This was probably part of the central ash lens of S.H. G.

A/10.7/8.4 - 1 56 gm ew., including 1201; 10 gm metal;
   several ?dugong bones
   - 2 10 gm ew.
Depth of deposit c. 25 cm.
A/11.4/8.9 - 1 13 gm ew., S94 fish-hook
   - 2 9 gm ew.
Depth of deposit c. 25 cm., but deeper and very rich in charcoal towards the SE corner. Here a carbon sample was collected at about 30 cm., below the surface. This dates the use of S.L.7. The sample has been dated as 500 ± 75 B.P. (ANU-316).
A/11.1/9.7 - 1 -
   - 2 2 gm ew.
Depth of deposit c. 25 cm. There is no clear sign in this square of the ash from S.H. E.

Excavations: Area 2

In 1966, the almost buried S.L. in this area were noted, but some doubt was felt as to their true function as S.L. Excavations in 1967 were therefore first directed towards deciding this point. Two long trenches were also dug in the hope of locating other features, and to increase the sample of excavated pottery from this area. These excavations are indicated on sheet 2.

The northern half of S.L. 17 which was cleaned down to an approximate working level, consists of 2 clear bays and this, together with the darker deposit in the bays and for some distance westwards, confirms it as a S.L. (plate 6.10). An idea of how little of this S.L. was visible before excavation can be obtained from the foreground of plate 6.11, which shows the unexcavated S portion of the S.L. Remarkably, one tiny sherd in A/25.6/8.6 was the only artefact recovered in this region. A sample of charcoal was collected from the S wall of this excavation at a depth of 13-16 cm., that is from the next unexcavated hearth in the S.L. There can be no doubt that this dates the use of the S.L. The date of this sample is 740 ± 70 B.P. (ANU-240).

It is assumed that the excavation of S.L.15, 16 and 18 would reveal a similar picture and perhaps provide a similar date.
The two long trenches revealed a generally uniform deposit of light grey sand, about 30 cm. deep, overlying loose clean sand. The artefacts recovered are listed in the following table.

<table>
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<tr>
<th>Square metre</th>
<th>Iw.</th>
<th>Specific ew. sherds</th>
<th>Total ew. weight grams</th>
<th>Other artefacts</th>
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<td>2</td>
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<td>-</td>
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<tr>
<td></td>
<td>2</td>
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<td>10</td>
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<td>10</td>
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<td>Total ew. weight grams</td>
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</tr>
<tr>
<td>- 2</td>
<td></td>
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</table>

In the two locations marked on the map, a faint stratum of white ash suggested the position of S.H. These are in fact approximately the positions relative to the S.L., where S.H. might be expected. The example in A/25.4/9.0 can be seen in plate 6.11. In the other case, A/26.2/8.8 was dug to try to clarify the interpretation, but this proved impossible. Some slight support for regarding these as S.H.
is derived from the table of artefacts recovered. The decline in the quantity of pottery from these areas is comparable with that in other S.H. (It is also relevant that the presumed S.H. at Lyäba (site 32a) are no more distinct than these.)

The true function of the feature which in 1966 was designated S.L.19, remains doubtful. It is separated from the other S.L. and the small excavation undertaken there in 1967 failed to reveal any clear pattern (plate 6.12). It is not a grave because there is certainly no pit beneath the stones. Although there is little evidence of a fire, the feature is probably best interpreted as a small S.L. of about 3 bays open to the W. 26gm of ew. were recovered in this excavation.

Miscellaneous Features at the Anuru Bay site

i. Area of Mangrove Clearance

Some four or five hundred metres to the SE of the main site and just across the entrance of a tidal creek is an area in which numerous mangrove stumps, about 40 cm. high, are found amid the fully regrown trees (fig. 6.1). The area stretches for about 200m. along a shallow depression some 20m. wide, between the open grassy sand ridge bordering the salt marsh behind and a more recent beach ridge covered in mangroves immediately adjoining the sea. The stumps seem to have been preserved as a result of occasional inundations by salt water at extreme high tide. From the density and position of the regrowth and of the stumps, it would appear that at some period the area was completely cleared. The new mangroves have since regrown to the same size and density as the original trees (plate 6.13). The marks of a fairly blunt axe are still evident on most of the stumps, both exclusively downwards and alternate methods of chopping being used.
Plate 6.14 shows the crowns of two of these stumps which were sawn off.

The identification of the modern species growing in this area, as detailed in appendix 5, supports the hypothesis that the area was cleared.

Closer towards the main site, a number of other cut stumps were observed, but there is no consistent pattern of clearance as described above. It is relevant however that most stumps in other areas would be less subject to conservation by salinity.

It seems probable that these trees were cut by the Macassans for use as firewood. The regrowth indicates a considerable period of time since clearance and there is no reason why the stumps should not have survived for a century or more. Allen (1969) has shown how the wood in the jetty at Victoria has lasted for more than 120 years under similar conditions. It is difficult to think of any other purpose for such a clearing in this area, and there is no evidence of any European trepanning activity in the immediate vicinity.

ii. Well

In square A/23/9 there is very clear circular depression about 80 cm. in depth. From the steepness of its sides in the loose sandy deposit, it would appear to be a fairly recent well, and indeed it had been dug out a little further by visiting Aborigines between the 1966 and 1967 seasons. Its recent use by Aborigines was confirmed by the presence of several tin cans in the vicinity. It is of a type quite common in Aboriginal contexts along the coast and although dry for most of the year, no doubt provides a watering point during the wet season. This is the most convenient position for such a well to serve the camp site under the tamarind tree on the end of the peninsula.
It is, of course, still quite possible that the well was originally dug by the Macassans.

iii. Aboriginal Beach Camp

Various places around the shores of Anuru Bay are occasionally visited today by small groups of Aborigines from the mission on South Goulburn Island. One such locality is the north beach and tamarind tree on the site, and the shady area directly under the tree showed signs of such visits. (The Aborigines collect the fruit.) It was also utilized by ourselves as a camp in 1966 and as a resting place in 1967.

However, between these two visits, a temporary camp had been made on the beach to the north of the tree in square A/5/8. Four posts had apparently supported several sheets of bark to form a shelter and on either side a small fire had been lit probably to provide smoke to repel insects. A few metres further north, a somewhat larger fire had probably been used for cooking (plate 6.15). This latter hearth contained noticeably more charcoal than the former two, so that the situation presents a marked parallel with the differential use of fire in S.L. and S.H. by Macassans. A small section dug across the more northerly of the two smoking fires showed an accumulation of white ash, just as in a S.H. (plate 6.16). In both cases the pure ash represents a slower-burning, smokier fire. The much greater amount in a S.H. emphasizes the size and duration of the fire in such a structure.

iv. Soil Movement Experiment

In order to obtain in the future some idea of the influence of rain, wind, vegetation and other disturbing factors on the site, a small experiment was set up as shown in fig. 6.3 and plate 6.17. The square metre A/8.5/9.8 was
dug to a depth of about 25 cm. down to consolidated clean cream sand and the spoil left in a conical heap about 1m. to the south. Along the line /10.0 each metre was marked by a short post about 2.5 cm in diameter and driven about 12 cm. into the ground. The five posts on odd numbers were then withdrawn and laid beside the hole. The purpose of this was to produce a 'posthole-like' disturbance. Between each of these posts a conical shell marked with a red band of paint was laid to test lateral displacement.

Interpretation of the Site

Although Anuru Bay appears to be reasonably satisfactory as a trepang collecting area, except for this site, there are few places around its shores well suited as preparation sites for the Macassans. On the western side of the bay there is one other small site (site 10a), but the remarkable natural advantages of the present site have doubtless attracted most masters to it.

These advantages are:

a) the steep, sheltered beach on the N which provides one of the easiest landings for small vessels in western Arnhem Land, while still being relatively easy to approach or leave in either direction along the coast;

b) a fairly clear approach from the landward side;

c) a convenient supply of considerable quantities of firewood;

d) proximity to the trepang collecting areas; and

e) an openness to as much breeze as possible.

Fresh water, which usually seems to be an unimportant criterion, could be obtained in the swamps across the inlet to the S or in any of a number of lagoons around the bay.
It is therefore not surprising to find the evidence of so much activity on the site. However, there are a number of problems relating to the precise way in which the site has been used, which merit attention.

The most basic of these concerns the relative and absolute dates for the use of various parts of the site. It has been suggested above that an important distinction can be drawn between area 1 and area 2. This is based on the distance between S.L.14 and S.L.15, and the distribution pattern of surface pottery. It is further strengthened by a difference in the apparent date of use for the two areas. Although the effect of the lower, sandier environment is hard to estimate, the sand cover over S.L.15 to 19, the absence of any S.H. depressions and the general uniformity of surface and deposit all suggest a greater age for area 2 than that indicated by the relatively 'fresh' condition of many features in area 1. Compare the features shown in plate 6.11 with the condition of S.H. F before excavation (plate 6.5) or the condition of S.L.11 (plate 6.18). In addition, the absence of glass in area 2\(^2\) can be taken as a possible indication of some antiquity, though the amount and distribution of glass in area 1 is also limited (see below). Similarly, it may be significant that no fish-hooks have been recovered from area 2, though there are many from area 1. Thus there are some typological grounds for expecting that the carbon date from S.L.17 (740 ± 70 B.P.)

\(^2\) There are two exceptions to this statement: in A/23/10 a modern moulded brown bottle ring was collected; and in A/22/8 a complete bottle with an aluminium screw top had been washed up on a high tide. Moulded in the brown glass of this bottle are a splendid dragon and Chinese characters indicating the strengthening quality of the original contents. The same characters and others of a similar nature are stamped on the screw top. The bottle is almost certainly post-Macassan. See under site 12b for another identical specimen.
would be older than those from S.L.2 (125 ± 57 B.P.) and S.L. 7 (500 ± 75 B.P.), and of course the actual dates suggest a very marked age difference between the two areas.

Area 2 appears to be a fairly unified site with about 5 S.L., conforming fairly well to the general pattern of sites. Area 1 however however is much more complex, as it appears to have been used in a number of different ways on various occasions. Looking at the plan of this area with the typical arrangement of sites in mind (see chapter 4), two overlapping axes of orientation can be vaguely discerned: the north beach and the south front. The long and most impressive line of S.L.1 to 14, S.H. A to E behind them and the three trepang burial pits so far discovered are all aligned with reference to the south front; S.L.20, 21, and perhaps S.L.2, together with S.H. A,B,F and G relate to the north beach. The ambiguity in the roles of S.L.2 and S.H. A and B is unimportant since our concern is with the general pattern. In any case there is no reason why these features could not have served both orientations. The association of the grave is similarly doubtful.

Even the south front orientation presents a complicated picture. The S.L. range from those in a fair state of repair such as S.L.2 or 11, to the most vestigial such as S.L.1 or 9. The S.H. are concentrated at the W end and indeed there is very little deposit on the rather rocky slope between S.L.8 and S.L.14. It would appear that this orientation has been used on many visits, by groups of differing sizes. At some stage a party of sufficient size worked on the site to require the construction and simultaneous use of at least most of the 14 S.L. However, if the crews of individual praus worked as separate units, this need only imply a fleet of about 14 praus, by no means an impossible number. The absence of S.H. may only mean that on such a busy occasion a number of crews at least, chose to dry their trepang in the
sun. When smaller parties visited the site, they naturally chose to work at the W end of the S front, thus building up the very considerable occupation deposit and complex of features in this area. The variation in the repair of S.L. is probably partly due to the robbing of redundant examples by later visitors.

The north beach orientation is much simpler, and may represent only limited activity. S.L.21 is small and S.L.20 can hardly be much bigger. Their covering of sand is derived directly from the beach and does not imply any substantial antiquity. The association of S.H. A,B,F and even G with these S.L. is problematical since they appear to represent considerably greater activity. Thus it is quite possible that S.H. F and G were in fact associated with the S.L. along the south front, and that their unusual position is due to the sloping stony nature of the ridge between the two axes.

Any estimate of the relative chronological relationship between the use of the two orientations must naturally be extremely hypothetical and there may well have been considerable overlap in their use. However three possible indicators suggest that at least the major use of the south front preceded that of the north beach. The first is the relatively early carbon date (500 ± 75 B.P.) for S.L.7, which even without the later date for S.L.2, could hardly be taken to indicate the most recent use of the area. Secondly, there is the distribution of fragments of green glass. These are found in greatest quantities along the north beach and only as far E as about S.L.7. If they can be used to indicate relative recency of use as suggested in chapter 4, then this applies only to the north beach and the W end of the south front. The third possible indicator is the present difficulty of access to the E end of the south front, and is discussed below. This order of south front before north
beach must not be applied too rigidly. Indeed what seems to be the most recently used S.L. on the site, S.L. 2, may belong to the south front orientation.

A factor not apparent in the photographs of the site, (which are all taken after it has been burnt off), and relevant to the re-use of various parts of the site, is the growth of grass in the wet season. It must be remembered that the visitor at that season, having no idea of the extent of the site, would see little of the S.L. and other features which are so obvious without the grass.

One further line of reasoning, that relating to certain environmental changes, remains to be presented. It needs to be emphasized at the outset that in the absence of detailed specialist studies of the site, the suggested hypotheses are advanced very tentatively. They do however, draw attention to a number of difficulties in the reconstruction of the past as outlined above and point to areas of useful future investigation.

The basic problem can be most clearly seen in respect of area 2. At the present time, there is an almost impenetrable wall of mangroves between this area and the shallow sandy shore beyond. Nor are there any other apparent factors to recommend the precise location. Why then was the site chosen in the first place and, as a corollary, why was the change made to area 1? In the light of the considerable time scale suggested by the carbon date from S.L. 17, the possibility of environmental change can be seriously considered. Even without that date, one could still estimate a time span of about two centuries.

The major cause of such change would seem to be steady silting up along the whole south side of the site. This has led to an extension of the areas of mangrove growth. Thus when the first trepangers arrived in the bay, the front of
area 2 was much deeper and as a result largely free of mangroves. The point of area 1 was perhaps unduly exposed for a site.

The situation is rather similar with the E end of the south front in area 1, which is now hidden behind mangroves. However in this case it must be remembered that any trepangers landing on the point could be expected to clear much of the shore eastwards. The great variety of mangrove species found along the south front as described in appendix 5, is probably partly associated with the comparatively recent mangrove colonization with increasing siltation and partly a result of clearance. The argument is saved from becoming circular since the important factor is depth of approach rather than mangrove cover. It may be that the north beach, which now seems so ideal, only came to be used when the even more protected S side of the site became too shallow.

The hypothesis of silting thus explains a number of puzzling features of the site. The only direct evidence of its validity however is the present appearance of the location, where a series of parallel beach ridges appear to be developing similar to those found to the SE of the site (plate 6.19). It is also relevant to note that the ridge of clean sand along the seaward edge of area 2 appears to have been built up subsequent to the use of that area.

Two final interrelated matters are the food remains present on the site and the evidence for Aboriginal occupancy contemporary with the Macassans.

Throughout the deposit there are various types of food remains: shells of a number of species of local shellfish, dugong bones, fish bones, etc. These are often concentrated in small areas, suggesting an individual occasion on which the particular food was eaten. No detailed analysis of this material has been undertaken, but all these types of food were available in the immediate vicinity, either from the sea
or the mangroves. It is not possible to judge what proportion of this food, if any, was consumed by Macassans, but it seems likely that certain items in particular, such dugong and fish, would have been eaten by them. On the other hand, such a location would probably accumulate more than an average amount of such debris, particularly shell fish, from normal Aboriginal use. The extent of this can be judged from that found in a comparable location, such as the point listed in the gazetteer as site 10b iii.

Even if some of this food debris can be thought of as Aboriginal, the problem with it, and with the few other Aboriginal artefacts found on the site such as several pieces of pale quartzite and a flake of green dolorite, is whether the Aborigines responsible occupied the site contemporaneously with the Macassans. From the general picture of contact described in chapter 11, it is likely that some Aborigines were present when the Macassans were using the site, but the evidence of more recent camps around the tamarind tree, the beach camp, the well as well and specific information from Aborigines themselves, show that it has been used at other times as well.
Chapter 7

A Strait Very Rich in Trepang

(Area 32: Chasm Island to North Point Island)

To the east of Chasm Island on the northern coast of Groote Eylandt lies a wonderful archipelago of small, sandstone islands. Behind and between these islands, relatively sheltered, shallow water offers an easy anchorage. White, sandy beaches are bordered by patches of dark mangrove and backed by green scrub. Eroded cliffs of pale sandstone and tumbled boulders fall directly into the clear water, while a few clearly defined outcrops of a much darker sandstone or ironstone stand out in strong contrast.

This seems to be the area referred to by Daeng Sarro when he says, 'sailing northwards from here [? Finelh Island], one came to Pantjana Strait (Salla' Pantjana), which was very rich in trepang' (Cense 1952:264; appendix 12:184). Certainly a great deal of trepang is to be seen today in the sheltered bays of the area. It is hardly surprising therefore that very considerable evidence of Macassan trepanging activity should also occur here. This is concentrated in the more sheltered eastern end of the area, around a narrow channel which dries at low tide, between the island Ilyaugwamaja and the Jarragba Peninsula of Groote Eylandt.

Since all these sites are very close together and depended on virtually the same trepanging ground, they can be regarded as one large unit, which, in sum, represents an even greater amount of activity than that at the Anuru Bay site. The exact position and the relationship of the various sites are most conveniently shown in plate 7.1.
The area was first visited by me on 26-7 May, 1967, with three Aboriginal companions, among whom the oldest and most knowledgeable informant was Malgari. He supplied the various Aboriginal place-names used here both at that time and later to Miss J. Stokes who transcribed them. Clearly the main site in his memory was Ilyaugwamaja 3.

The site at Lyâba was suggested as an alternative when it was discovered that the tide was too low to reach the former site in the dinghy. Ilyaugwamaja 2, Ilyaugwamaja 4 and Ilyaugwamaja 5 were also located on this first visit. The discovery of the site on Aningmerrunguwa Island was the result of my urging the inspection of a likely location on which several tamarind trees were visible.

In view of the apparent potential of the area, a more extended visit was arranged from 10-29 August, 1967. The greater part of this time was spent at Lyâba where a base camp was established.¹ The other sites described below were discovered during this latter period in the course of exploratory trips without guides.

a. Lyâba or Ilyaugwamaja 1 (Label - L)

The exact position of this site is shown on plate 7.1. It is easily distinguished from the seaward side by the tamarinds showing over the fringing mangroves and by several small breaks in those mangroves (plate 7.2). A relatively deep channel allows boats to come quite close inshore from the south, though the approach from the north is limited by the bank which dries at low tide right across the strait. Furthermore, the highly irregular and unpredictable tides make it risky to take a boat into such shallow water.

¹ Those assisting with the work for all or part of the time were Miss Mirabel FitzGerald, Mr Rodney Keys, Mr John Mulvaney, Mr Wesley Kaididja and Mr Aaron Namarira.
The circumstances of discovery and work on the site have already been described. In general, the aims of the investigation were similar to those at the Anuru Bay site. However due to the rather less complicated nature of the site at Lyäba, a rather larger area was excavated with the chief purpose of recovering artefacts, though the location of further S.H. was also of concern. For comparison with the figures from the Anuru Bay site, about 29.5 kilograms of ew. were recovered from Lyäba, of which more than three quarters came from the 200 square metres excavated (about 7 or 8 per cent of the total site area).

The most obvious features on the site are some 15 S.L., arranged in a wide arc around the curving shore line (sheet 5). Further details on these S.L. are as follows.

<table>
<thead>
<tr>
<th>S.L.</th>
<th>Bays open to</th>
<th>Number of bays</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>?S</td>
<td>c. 3-4</td>
</tr>
<tr>
<td>2</td>
<td>SW</td>
<td>c. 4-5</td>
</tr>
<tr>
<td>3</td>
<td>SW</td>
<td>6-7</td>
</tr>
<tr>
<td>4</td>
<td>W</td>
<td>6-7</td>
</tr>
<tr>
<td>5</td>
<td>SE</td>
<td>2</td>
</tr>
</tbody>
</table>

(see below for discussion of this S.L.)

<table>
<thead>
<tr>
<th>S.L.</th>
<th>Bays open to</th>
<th>Number of bays</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>NE or SW</td>
<td>?</td>
</tr>
<tr>
<td>7</td>
<td>?N</td>
<td>?5</td>
</tr>
<tr>
<td>8</td>
<td>N</td>
<td>7</td>
</tr>
<tr>
<td>8a</td>
<td>The use of this collection of stones is extremely doubtful (see below).</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>SW</td>
<td>c. 4-5</td>
</tr>
<tr>
<td>10</td>
<td>N</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>12</td>
<td>NE or SW</td>
<td>?</td>
</tr>
<tr>
<td>13</td>
<td>SE</td>
<td>5-6</td>
</tr>
<tr>
<td>14</td>
<td>SE</td>
<td>c. 5</td>
</tr>
<tr>
<td>15</td>
<td>NW</td>
<td>c. 4</td>
</tr>
</tbody>
</table>
The main stone used to build these S.L. is the local pale sandstone which weathers into flat rounded slabs. However most of the S.L. also contain a few dark brown sandstone or ironstone lumps, for which the most obvious sources are a low cliff on the other side of the strait and a little to the N, or perhaps Aningmerrunguwa Island. Some stones, for example at the SW end of S.L. 15, had an incrustation of oyster shells, indicating that they had been collected from the intertidal zone.

In addition to those tamarinds shown on the plan, there are several other large specimens to the N and SW.

Field Methods

These were essentially similar to those used on the Anuru Bay site. One notable difference between the sites was the much looser consistency of the deposit of Lyāba. This is probably the result of the greater prevalence of quartz sand, derived from the pale sandstone. Not only did this make it more difficult to obtain a good section, but it seems to have caused less clear stratigraphic definition. In other words, there has been considerably more disturbance by scuffage and treadage.

In addition, the occupation deposit at Lyāba was generally a little shallower than at the Anuru Bay site.

As a consequence of these two factors, it was possible to excavate certain areas of the site by a 'dredging' technique with little risk of destroying significant information. The areas dug in this way are specified in the tables below by the abbreviation Dr. Using this technique, the sandy deposit was transferred directly into a sieve lying in the previously excavated area behind the digger. Thus the spoil filled the excavation at the same rate as the digging advanced. Naturally this technique precluded any but the immediate inspection of the exposed sections, though it is likely that any major anomaly would have been noticed.
Surface Collections

These are set out on sheet 5. The upper figure gives the weight in grams of the earthenware collected, while below are noted the numbered sherds and details of other finds. No very clear pattern emerges, but this is probably largely due to the unfortunate collection of so much pottery without proper control. It is difficult to account for the relatively heavy scatter of pottery in square 5/5 and along the sandy ridge to the SW, though it is possible that this fairly open area was used in some specialized way by the Macassans. There are several large tamarind trees in this same direction, under one of which the party established its camp.

Excavations

Excavations near S.L.8

This S.L., which is among the first seen by any visitor, is one of the largest, most central and best preserved examples on the site. Two central bays, even before excavation, show very clearly their method of construction (plate 7.3). The S.L. was conveniently divided by the line 9.0/, and the area to the W of this line was cleared to provide a section. This is shown on sheet 6, section 1. The actual area dug is given in the table below, but not all square metres were fully excavated. Thus the 8 square metres, 8.6-8.9/9.2-9.3, had only about 10cm. removed to clear the S.L. down to an approximate working level. At this depth, a stratum containing a very great deal of charcoal was revealed, particularly on the N side of the S.L. This is as would be expected from the orientation of the fireplaces, and indeed the charcoal was rather deeper immediately in front of these.

2 This was collected by the Aborigines on my first visit to the site, while I was asleep!
A sample for radio carbon dating was collected in 8.9/9.3 in a clearly defined fireplace and the stratigraphic position is indicated on the section. This sample gave a result of 430 ± 70 B.P. (ANU-317).

To the S of the S.L., a further 9 square metres, 8.7-8.9/8.9-9.1, were cleared first to a depth of 40 cm. This revealed, in plan, a pit, presumably for burying trepang. A narrow trench 50 cm. wide was then dug to expose a complete section through the pit (plates 7.3 and 7.4). A carbon sample from the position marked was collected, but has not been submitted.

To the N of the S.L. a collection of stones was designated S.L.8a. The function of these stones is problematical. Although there is a little charcoal shown in the section to the N, no fireplaces can be perceived in the arrangement of the stones, some of which appear to have been placed flat on top of existing dark deposit, while others are standing on edge. Perhaps the most satisfactory explanation of the feature is that it had been a normal S.L., but that a subsequent use of the very close S.L.8 led to its stones being displaced in order not to impede activity on this later occasion.

<table>
<thead>
<tr>
<th>Square metre</th>
<th>Iw.</th>
<th>Specific ew. sherds</th>
<th>Total ew. weight grams</th>
<th>Other artefacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>L/8.9/9.9 - 1</td>
<td></td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>L/8.9/9.9 - 2</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>L/8.9/9.8 - 1</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>L/8.9/9.8 - 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.9/9.7 - 1</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>L/8.9/9.7 - 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.9/9.6 - 1</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>L/8.9/9.6 - 2</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>L/8.7/9.5 - 1&amp;2</td>
<td></td>
<td></td>
<td>27</td>
<td>1 chip white quartz</td>
</tr>
<tr>
<td>Square metre</td>
<td>Iw.</td>
<td>Specific ew. sherds</td>
<td>Total ew. weight grams</td>
<td>Other artefacts</td>
</tr>
<tr>
<td>--------------</td>
<td>-----</td>
<td>---------------------</td>
<td>------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>L/8.8/9.5 - 1&amp;2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.9/9.5 - 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 2</td>
<td>1278</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.7/9.4 1&amp;2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.8/9.4 1&amp;2</td>
<td></td>
<td></td>
<td></td>
<td>16gm metal chips</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- 2</td>
<td></td>
<td>lm. rim</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.6-8.9/9.2-9.3</td>
<td>1273b, 1280</td>
<td>1277d, lm. rim</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>L/8.7/9.1 - 1&amp;2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.8/9.1 - 1&amp;2</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.9/9.1 - 1&amp;2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.7/9.0 - 1&amp;2</td>
<td></td>
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<td></td>
<td></td>
</tr>
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<td>L/8.8/9.0 - 1&amp;2</td>
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<tr>
<td>L/8.9/9.0 - 1&amp;2</td>
<td></td>
<td>1281</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>L/8.7/8.9 - 1&amp;2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.8/8.9 - 1&amp;2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/8.9/8.9 - 1&amp;2</td>
<td></td>
<td>1211b</td>
<td>330</td>
<td></td>
</tr>
<tr>
<td>L/8.8-8.9/8.9-9.1 below 40 cm.</td>
<td></td>
<td></td>
<td>35</td>
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</tr>
</tbody>
</table>

Excavations in squares 7/10, 8/10, 9/10 and 7/9

These long trenches were dug to locate features not visible on the surface. The artefacts found in them are listed below. On sheet 5, two S.H. are tentatively located. These were primarily identified by a lense of white ash in section, that in square 7/10 being rather clearer than the one in square 7/9. The absence of any surface depression or more detailed stratigraphy is perhaps a result of the loose sandy nature of the deposit. Although the difference
from the other areas is not particularly striking, it will be noted that the quantity of pottery found in the vicinity of the two S.H. is not great, which is as expected from other examples.

In the north section of 8.7-8.8/10.0, a small pit was visible which, from what can be seen of it in plan, may be the end of a pit for burying trepang. The considerable quantity of pottery found here may be used as rather doubtful supporting evidence.

At the end of this trench, in 9.4/10.0, the section shows very plainly how the black surface exposed at the time when the site was in use, is overlain by the clean sand of the beach ridge (plate 7.6). This matter is discussed below.

<table>
<thead>
<tr>
<th>Square metre</th>
<th>Iw.</th>
<th>Specific ew. sherds</th>
<th>Total ew. weight grams</th>
<th>Other artefacts</th>
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</tr>
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</tr>
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<td>L/8.9/10.0 - 1</td>
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<td>51</td>
<td>8</td>
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</tr>
<tr>
<td>L/9.0/10.0 - 1&amp;2</td>
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</tr>
<tr>
<td>L/9.1/10.0 - 1&amp;2</td>
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</tr>
<tr>
<td>L/9.3/10.0 - 1&amp;2</td>
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<td>46</td>
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</tr>
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<td>L/9.4/10.0 - 1&amp;2</td>
<td></td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Excavations near S.L. 4 and S.L. 5

The initial excavation in this area was a trench, 7.2-7.8/6.9, to the N of S.L. 4. This located a clear trepang pit running across the trench at an angle, but parallel with the S.L. The considerable quantity of pottery found in 7.4/6.9 supports this identification. This trepang pit can be seen cleaned out, and in section, in plate 7.7.
Attention was then given to S.L. 5 which presents a number of anomalies: it has only 2 bays; it is not at right angles to the beach; it appears to be associated with a marked surface concentration of shells to the NE; and it is constructed by piling the sandstone slabs on top of each other, rather than placing them on edge as usual elsewhere. This is particularly evident across the back of the structure as shown in plate 7.8. A small excavation in 8.8-8.9/7.5 and in part of 8.7/7.5 showed the usual dark hearth in one fireplace (plate 7.8). It was observed that the hearth was resting on clean shelly sand, while the overlying, clean, wind-blown sand contained much more quartz. No artefacts were found.

Behind S.L. 5, the 3 square metres, 8.3-8.5/7.5, were also excavated by dredging. The sections in this trench demonstrated that the concentration of shells was clearly a surface feature, while below it in the NW corner was an ash lens, probably another S.H.

This trench was then joined to the trench behind S.L.4, in order to clarify the stratigraphic relationship between various features. Another small trench was opened up beside this link to confirm the interpretation. The result is conveniently expressed in a schematic diagram (sheet 6, section 3). Two occupation levels can be distinguished by separate grey surfaces. The lower is associated with S.L.4, with the trepang pit behind S.L.4, with another possible trepang pit located by the linking trench, and perhaps with the S.H., though there is no direct stratigraphic evidence for this last association. On this lower surface there is also a layer of shells, though its area could not be defined. After the build up of some relatively clean sand, a second stratum of grey sand is associated with S.L. 5 and the shells on the present surface, though some areas of the present
Trench across S.L. 13

This trench was dug at an angle to the main grid system in order to section the S.L. at right angles. The square metres were numbered from S to N L/T/3 to L/T/9. Although few finds were recovered, this section provides the simplest and clearest picture yet obtained of the functioning of a S.L. and its associated burying pit. The west wall of this trench can be seen in plate 7.9 and on sheet 6, section 2. On the S side of the S.L., in a well defined fireplace and for a metre or so in front, there is a rich deposit of charcoal. A sample for carbon dating was collected from this deposit and in the stratigraphic position marked. It gave a date of 780 ± 75 B.P. (ANU-241). To the N behind the S.L. there is a clear pit running parallel with the S.L. A further carbon sample collected here has not been submitted.

In L/T/7 two samples of the relatively clean sandy deposit were collected from the W wall in the stratigraphic positions marked. The upper sample is clearly from the deposit which has built up since the S.L. was last used: the lower represents the material on which the S.L. was built. The apparent difference between these two, the upper having much more quartz sand and the lower more shell, is borne out by a simple laboratory test. When the samples were washed in 1N hydrochloric acid, the lower sample lost 49 per cent of its weight due to the removal of carbonate, while the upper sample lost only 9 per cent. The significance of this difference is discussed below.

In view of the apparent age of this S.L., it is unfortunate that so little pottery was recovered. However those sherds that were found are indistinguishable from those found elsewhere on the site.
<table>
<thead>
<tr>
<th>Square metre</th>
<th>Iw.</th>
<th>Specific ew. sherds</th>
<th>Total ew. weight grams</th>
<th>Other artefacts</th>
</tr>
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<tr>
<td>L/T/4</td>
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<tr>
<td>L/T/5</td>
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<tr>
<td>L/T/6</td>
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<td>L/T/8</td>
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<tr>
<td>L/T/9</td>
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<td>-</td>
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</table>

Other excavations

Of the other areas marked on the main site map as dug, the only one requiring special mention is the area of 2 square metres 7.0/11.8-11.9. In the E wall of this excavation, a distinct lens of white ash indicated another S.H. Part of this is shown in plate 7.10.

The following table lists the artefacts recovered in these remaining areas. In general the dredged area was extended in directions where the most pottery was to be expected, though the separate northern trenches were also attempts to locate further S.H. In order to give some visual impression of the distribution, each complete 100 gm of ew. is shown in its appropriate square on the site map by a dot. There is no apparent reason for the areas of concentration, though it would not be unreasonable to assume that they represent areas of circulation between other features.
<table>
<thead>
<tr>
<th>Square metre</th>
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<td>L/5.0/12.9 Dr</td>
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<tr>
<td>L/5.0/12.8 Dr</td>
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<td>L/5.4/12.9 Dr</td>
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S108 fish-hook
Interpretation of the site

The most striking feature of this site is the semi-circular sweep of S.L. from N to S. Although there appears to have been some later disturbance in the central area, it is possible to estimate that about 15 S.L. were in use at the period of greatest activity. Furthermore, this period of greatest activity seems to be the earliest use of the site. From its position towards the N end of the S.L., S.L.13 probably belongs to this phase and the early date associated with it, indicative of the age of the S.L. on the S end as well. However the small quantity of pottery associated with S.L.13 suggests that this activity was not particularly intense. From the location of those S.H. and trepang burial pits discovered, it would appear that these lay in the usual relationship, located respectively between and behind the S.L.

Later visitors to the site used the most obvious central S.L., or at least S.L. 8. The carbon date from this S.L., is significantly later than that for S.L.13, and in general appearance, this S.L. is rather less covered by sand and has noticeably more charcoal, possibly indicating greater use. If, as seems likely, this S.L. was also used at the same time as S.L.13, this later carbon date may represent a mixture of charcoal from this earlier period and later use, producing an average age. This date therefore cannot be cited as a terminus ante quem. This explanation would account for the rather fresh appearance of the S.L. and the relative newness of some of the artefacts recovered in the area. The most important of these is the coin, S97, dated 174(2) which would seem to indicate at least some use of the site in the second half of the eighteenth century.

It has already been suggested above, that S.L.5 is even more recent and it is relevant that this would be analogous
to the suggested separate use of S.L. 8 and perhaps other central S.L.

Because of the smaller extent of the site and the looser, shallower deposit, it is even more difficult here than at Anuru Bay, to place much reliance on the differential distribution of artefacts. Thus, for example, small chips of corroded iron are found in almost all parts of the site, though one would expect the original points of distribution to be limited. (Only the more important quantities are noted in the tables.) However the small fragment of bird wire found in 7.6/6.9 is no doubt derived from the visit associated with the recent use of S.L.5.

The question of the distribution of glass is complicated by the evidence for the use of the site by Aborigines. In general there is little glass on the site, which is in conformity with its absence in contexts associated with comparable dates at the Anuru Bay site. Moreover, many of the small fragments found here were utilized, and it is possible that at least some of them were brought on to the site by Aborigines from other nearby sites such as Ilyaugwamaja 3. Some independent evidence for Aboriginal visits to the site is provided by the pieces of white quartz, some of which appear to be flakes, and the deposits of dense shell in square 8/7 and nearby. The attraction of the site in later times may have been the fruit of the flourishing tamarind trees.

The position of this site in relation to the area as a whole is discussed in a later section, but it is appropriate to mention here the evidence of the immediate environment. Around the front of the Lyäba site there is a pronounced ridge of clean, quartzitic sand which clearly overlies the dark Macassan occupation stratum and the shelly sand on which that rests (see plate 7.4). This is confirmed in the section
of 9.4/10.0 described above (plate 7.6), by the section in front of S.L. 5 and by the difference in the sand samples from behind S.L. 13. The S end of S.L. 4 is also covered by the edge of this ridge demonstrating again that this is a recent phenomenon (plate 7.7).

This ridge appears to be associated with the gaps in the mangroves in front of the site. It is most easily explained as a result of the Macassans cutting down a previous fringe of mangroves, which exposed the front of the site to the effect of the SE monsoon. This wind picked up the more easily transported quartz particles from the drying beach and deposited them over the more shelly surface normally found behind the mangroves and still to be seen to the N and S of the site. The thin covering of clean sand found over most of the site appears to have originated in this way, as well as the main ridge. Even though there may always have been some small break in the mangroves at about this point, the deposit of clean sand is clearly related to a larger break than exists today. The evidence of a difference in the species of mangrove found directly in front of the site from those to the N and S provides some confirmation for this hypothesis (see appendix 5).

Further support is supplied by the small washaway in square 4/13. The creation of a ridge around the front of the site led to a wet season accumulation of water behind it. It then broke through at this point, removing both the overlying ridge and the Macassan surface.

b. Ilyaugwamaja 2 (Label - IL2)

The position of this site is shown on plate 7.1. It was discovered by chance while walking around the coast. On a small, flat, sandy area, there is a single S.L. with about 4 bays facing S. It is constructed from pale sandstone slabs similar to that immediately adjacent. There is a scatter of
shells over the area and an animal scrape in one bay of the S.L. had revealed a deposit of charcoal. A surface collection yielded: Iw. 1304a,b,c,d,e; Ew. m.b.s. 76 gm; Glass, green frags, 10 gm.

Between this and the following site, there are several Aboriginal stone arrangements consisting of rock piles and lines of slabs placed on end in cracks. Malgari said that the latter were associated with the definition of the Jarragba country. Two ew. sherds were found in the tidal zone near here, presumably derived from one of the neighbouring sites.

c. Ilyaugwamaja 3 (Label - IL3)

The position of this site can be seen on plate 7.1, and the circumstances of its discovery are described above. It is situated on a sandy area behind a small cove. 3 S.L., probably 3 associated S.H. and several tamarinds are arranged as shown on sheet 6, section 4. There has clearly been some wave erosion since the Macassan use of the site and the E end of S.L. 1 has been destroyed. A rather varied collection of artefacts was made from the surface of the site and from the inter-tidal zone of the cove. This comprised: Iw. 1305-8, 1309a,b, 1310a,b, 1311-3, 1314a,b,c, 1315a,b,c,d; Ew. 1316, 1317a,b, 1318a,b, 1319a,b,c,d, 1320-7, 10m. rims, 4m. bases, m.b.s., total 2816 gm; Glass, S112 prunt, 12 marked frags from at least 3 green bottles. 2 of these are probably A Van Hoboken/Rotterdam, 1 other clear frag, marked C, 7 rings, various square and round bases, many other small frags, total 2634 gm, some utilization; Metal, S113 pieces of sheet copper, S115 hoop iron, several pieces of flat iron, 1 iron nail, misc. pieces, total 414 gm; Stone, S114 sharpening stone, 1 large flake of coarse quartzite, 1 tip of quartzite point. Among the rocks on the S side of the cove was also found a
very heavy bar, 119 cm. long and about 5-6 cm. in diameter, though very corroded. One end is slightly flattened. (This bar was left at Lyäba.)

Immediately N of the main area of Macassan activity on this site, there is considerable evidence of Aboriginal occupation in the form of a midden scatter. This would be expected, irrespective of the Macassan site, but the presence of some worked glass shows that there has been some connection. One small area containing many tiny fragments of glass probably represents an actual working floor.

d. Ilyaugwamaja 4 or the Beach of the Fight (Label - IL4)

To the N of the previous site, there is a beach several hundred metres long facing NE (plate 7.11). According to Malgari, this was the scene of a clash between Macassans and Aborigines after everyone had become very drunk.

On various visits to this beach, a considerable quantity of material was collected right along the pronounced beach ridge: Iw. 1328; Ew. 1329a,b, 1330-2, 4m. rims, m.b.s., total 723 gm; Glass, S116 prunt, 4 square bases, 3 round bases, other frags, (all green except 1 brown round base and 1 other clear frag.), total 813 gm, some utilization; Metal, S117 musket casing, S118 shovel nose spear head.

It is a remarkable chance that these last two items should be found to confirm Malgari's story of the fight. Using perhaps a little more imagination than is justified, one can say that here is the archaeological expression of the weapons used by both sides, and in the fragments of empty gin bottles, the evidence for the circumstances leading up to the fight.

At the SE end of the beach ridge is a small stone arrangement, which is almost certainly that described and illustrated by Mountford (1956:91,93). Malgari confirmed
its association with 'sugarbag' or wild honey. It is relevant to note that the name of the island Ilyaugwamaja means the place of ilyaugwa or sugarbag.

On the rocks between this site and the previous one, there was a concentration of glass and a few ew. sherds. This contained: Ew. 13 gm; Glass, S119 prunt, 17 green frags with markings from at least 2 bottles, one of which is A van Hoboken, 2 rings, and other frags, total 719 gm, a little utilization; Metal, 2 pieces of brass eyelet.

e. Ilyaugwamaja 5 (Label - IL5)

The position of this site is shown on plate 7.1. There are no visible features, but the Aboriginal guides thought of it as associated with Macassan activity. This may have been connected with the easy watering hole in the adjacent creek. The following artefacts were collected over quite a wide area: Iw. 1333; Ew. 1334, m.b.s., total 192 gm; Glass, 1 clear frag. from 'Brooke's 'Lemos' Cordial' bottle, frags of 3 other green bottles, total 211 gm, some utilization. The cordial bottle probably dates from European activity in the area about 1930.

f. Ilyaugwamaja 6 (Label - IL6)

This site, also marked on plate 7.1, was discovered by chance during the second visit to the area in 1967. It lies behind a good beach facing SW and commands an excellent view of the sheltered water described above (plate 7.12). The 3 S.L. and 3 associated S.H. are shown on sheet 6, section 5. When the site was in use it clearly fronted straight on to the beach, since the creek which has cut through from the NW has destroyed the ends of S.L.1 and S.L.2 (plate 7.13). The surface collection consists of: Iw. 1335-6, 1337a,b,c,d, 1338, 1340; Ew. 1339a,b,c, 1341-7, 4m. rims, 2m. bases,
m.b.s., total 931 gm; Glass, S120 prunt, S121 prunt, 2 marked frags probably from Blankenheym & Nolet bottles, 4 rings, various bases, other green frags, total 1321 gm, some utilization; Metal, pieces of flat iron, 92 gm.

Two small excavations were carried out.

A) A section dug across the marked depression of S.H. A revealed the usual marked lens of white ash, confirming the function of the depression (plate 7.14). The finds were Ew. 1348-9, m.b.s., total 135 gm; Glass, 1 green ring; 2 fish bones with teeth.

B) A single square metre dug behind S.L.3 revealed the edge of the usual trepang burial pit in this position. The finds were: Ew. 3 gm; Glass, S122 marked frag. from Blankenheym & Nolet bottle, other green frags, total 9½ gm, no apparent utilization; Metal S123 fish-hook.

Several hundred metres west on the SW point of the island, a further 70 gm of ew. m.b.s. were recovered.

g. Äningmerrunguwa Island (Label - AN)

This site is on the NE side of the tiny island off the S end of Ilyaugwamaja, from which it is divided by a shallow channel about 50m. wide. It was first visited by me in May 1967 as described above, and later by the party from Lyäba.

The arrangement of the 7 S.L. and other features is shown on sheet 6, section 6. The following list gives further details on the S.L.

S.L.1: 4 bays facing NE. This S.L. is built exclusively from lumps of dark brown sandstone, some of which are incrusted with oyster shells and were presumably collected on the adjacent beach. The bays are distinctly square, rather than round, in plan.
S.L.2: About 4 bays facing NNW.

S.L.3: About 5 bays, probably facing SE.

S.L.4: 4 bays facing NW, and possibly more have been eroded at the E end (plate 7.15). Both S.L.3 and S.L.4 are overgrown by a well established tamarind.

S.L.5: 5 or 6 bays probably facing SE.

S.L.6: It has been much disturbed by the washaway to the E. However the charcoal apparent in the section suggests that it faced S.

S.L.7: A few pieces of pale sandstone projecting from the beach sand. It is probably aligned EW.

This site presents an interesting example of the principle that stones for a S.L. were obtained from the closest possible source. The island consists of distinct beds of dark brown and pale sandstones. The former forms the basal rock at the S end of the site while the latter underlies the N end. S.L.1 therefore is constructed entirely of the dark brown rocks, while only the pale sandstone is apparent in S.L.7. The intervening S.L. contain differing proportions of the two in a very rough gradation.

The surface collections from both visits have been amalgamated. These consist of: Iw. 1293; Ew. 1291, 1292b,c, d,e, 1294a,b, 1295-7, 1298a,b,c, 1299-1303, m.b.s. particularly a number of heavy sherds from one large pot, total 10,634 gm, Glass, green frags including 1 ring, total 55 gm; Stone, 1 chip of green dolorite with ground surface (see site 32i).

A number of small excavations were undertaken as shown on sheet 6, section 6. The finds are tabulated below. Two possible S.H. were located by their lens of white ash, but in general the deposit was shallow.
<table>
<thead>
<tr>
<th>Square metre</th>
<th>Tw.</th>
<th>Specific ew. sherds</th>
<th>Total ew. weight grams</th>
<th>Other artefacts</th>
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<td>10</td>
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<td>4</td>
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<tr>
<td>AN/A7</td>
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<td>1m. base</td>
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<td>AN/A8</td>
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<td>2</td>
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<td>1290b, c</td>
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<td>13gm metal</td>
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<tr>
<td>AN/B7</td>
<td></td>
<td></td>
<td>4</td>
<td>5gm metal</td>
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<tr>
<td>AN/B8</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>AN/C1</td>
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<td>AN/C5</td>
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<td>155</td>
<td>S111 coin</td>
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</table>

This site is of medium size, but it does not appear to have been used intensively. There is no reason to suppose that the coin, S111, dated 1780, does not provide an approximate date for at least one use of the site. However, the diversity of use on larger sites shows that it would be rash to assume that even this date is a fixed terminus post quem for the whole site.
h. Magbemaja (Label - MAG)

In the position marked on plate 7.1, there are a number of fine tamarind trees behind an open beach. Although no definite site was discovered, a fine Iw. sherd, 1363, was found together with 25 gm green glass frags and a piece of corroded flat iron.

Further N, opposite Lyäba, another 10 gm of green glass and a quartzite flake were found.

i. Jarragba (Label - JAR)

On the extensive sandy area across the strait from Ilyaugwamaja 4, a considerable scatter of artefacts was found, particularly behind the beach on the W side (plate 7.1). As no precise local name was collected, the area is most easily referred to by the name of this whole peninsula of Groote Eylandt. There are several tamarinds in the vicinity, especially around the sheltered cove near the densest concentration of artefacts. However no evidence of a preparation site was located. The surface collection comprises: Iw. 1350, 1351a,b,c,d,e, 1352a,b,c; Ew. 1353a,b, 1354-60, 1361a,b, 1362, 3m. rims, m.b.s., total 1161 gm; Glass, S124 prunt, 2 marked frags, 4 rings, various frags mainly green, total 1150 gm, some utilization; Metal, 1 iron spike, 1 screwdriver shaft, other small pieces, total 42 gm; Stone, 2 pieces of white quartz, 1 quartzite flake, 1 other ? part of point, 1 chip of fine-grained green dolerite, perhaps from an axe. There is reputed to be an axe quarry at an igneous extrusion, near Central Hill, from which this may have come, but the quarry has not been visited. Otherwise such stone must have been imported from the mainland.
j. North and west coasts of Ilyaugwamaja

Apart from the sites on this island discussed above, there are a number of other forms of evidence relating to Macassan activity which are to be found here.

At the place marked i on plate 7.1, at the mouth of a creek, a prunt, S125, and other green glass frags, totalling 40 gm, were found. On other Aboriginal campsites nearby, 4 other green frags, 24 gm, and a piece of flat iron were collected.

About half way along the N side of the large inlet on this side of the island, there is a rock outcrop with 2 small Aboriginal paintings of men in canoes. This place is marked ii on plate 7.1.

There is a larger painting site in two adjacent shelters at the place marked iii. The most important subjects are fish, dolphins, etc. but there is also quite a good prau with 7 men in the rigging. A large piece of flat iron was found on the slight occupation deposit in front of one shelter and 20 gm of green glass frags a few metres to the S.

In the rugged sandstone country along the N coast of the island, a number of shelters were visited which had some paintings in them. The subjects included animals, men and hand stencils. The style of all these paintings is identical with that recorded elsewhere on Groote Eylandt and its outlying islands. Two rather weathered frags of green glass were also picked up in this area.

General Interpretation

The dispersal and variety of sites in this area raise a number of points of general interpretation. The most obvious of these is that the amount of evidence of Macassan activity in the area shows that this was a favourite and often visited
location. Tre pang is abundant in the shallow water nearby, and mangroves for firewood and plentiful fresh water are never very distant.

Unlike Anuru Bay, there are many suitable places for processing the tre pang. It would be possible to argue that the choice of Äningmerrunguwa Island indicates a need for protection against surprise attack which compensated for the slight inconvenience of bringing freshwater and firewood to it by canoe, but this argument can hardly be used for Lyäba or Ilyaugwamaja 3, and the position of the island in the middle of the tre pang beds was probably more important in determining its choice.

There is considerable evidence of Aboriginal occupation in the area, and much of this was probably contemporary with the visits of the Macassans. In this respect, the site of Ilyaugwamaja 6 stands out as showing little evidence of Aboriginal utilization on a considerable quantity of glass fragments. It is difficult to offer a convincing explanation for this, though perhaps the site was in use at a time when relations were strained.

The intensity of Macassan activity and the probability that Aborigines would transport artefacts, no doubt explain the presence of a few artefacts some distance away from the main sites. It is unlikely however, that such arguments can explain the quantity of material on Ilyaugwamaja 4 or Jarragba, which are unusual in having no apparent features testifying to their use as tre pang processing sites. The exact nature of activity on these sites cannot be determined.

It is extremely difficult to assess the relative ages of even the major sites. Certainly the old carbon date from S.L.13 at Lyäba leads one to suspect that this site, except for S.L.5, may have been used before some others. This inference is supported by the dearth of more recent artefacts and by the later, but still early date from S.L.8. The site
on Äningmerrunguwa Island may also date from about this time, at least for its main period of activity. This conclusion is suggested by the small amount of glass found there, the erosion or obliteration of the S.L. and the levelling of the S.H. depressions. The presence of the coin dated 1780 is discussed above.

None of these arguments can be applied to sites Ilyaugwamaja 3 and 6. Except where destroyed by relatively sudden erosion, the S.L. on these sites are in reasonably good repair and the S.H. depressions are very clear. None of the identifiable brands of gin bottles are earlier than the beginning of the eighteenth century, though these actual bottles could be much later. At least we can conclude that the use of these sites probably dates from the eighteenth and/or nineteenth centuries.

Even if it is correct to link these two pairs of sites in the way described, there still remains the problem of why the new sites were chosen. One possibility, in the case of Ilyaugwamaja 3, is that it served the trepang grounds at the northern end of the strait which had not been worked before, or if they had, it was then easier for the canoes to return to Lyäba over the shallows in the middle of the strait. However this last suggestion would require fairly large scale alteration in tidal movements, for which there is no evidence.

In post-Macassan times there was also some trepanging activity in the area. The matter of S.L. 5 at Lyäba has been discussed above. More definitely however, Malgari pointed out an area about half way between Lyäba and Änimmerrunguwa Island where Mr Fred Gray is said to have had a S.H. and to have employed about 10 or 12 men in the 1930s. Perhaps the cordial bottle from Ilyaugwamaja 5 dates from this period, as may some of the material from Jarragba.
This area, which must often have presented such an animated scene, today lies uninhabited and little visited. Given proper protection, it would well merit development as an open air museum of the trepang industry.
Chapter 8

The Import Ware

This chapter describes and briefly discusses that pottery found on Macassan sites in the Northern Territory which was originally imported into the eastern archipelago, mainly from mainland Asia, though there is some of European manufacture. In addition, a few pieces deriving from European activity in the Northern Territory have been included on the same principle as that used in the gazetteer.

The material has been ordered into categories for the purposes of description. These categories have been determined on a purely subjective assessment of the collection and no claim is made that they necessarily represent categories recognized by the makers or users of the vessels, nor that they are applicable to other collections. However, for purposes of comparison, the correspondences between this scheme and that established by Allen (1969) have been indicated. The following table sets out the particular items in each category and acts as a key to the general provenance of the sherds. More detailed information on provenance, particularly when more than one sherd remains from an item, will be found in chapters 5, 6 and 7. An asterisk denotes that the sherd is illustrated.
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Description

A. Fine fabric ware or porcelain and china

Categories la, lb and lc correspond with Allen's first 3 types in the class of Porcelain. They are best regarded as varieties of essentially similar ware.

1a. **Undecorated Porcelain**

39 items are listed in this category, though in the absence of decoration, the matching of sherds from the same item is particularly difficult. A few sherds are very small and could be from the undecorated areas of items properly belonging to the two following categories. The items consist of a hard, off-white fabric, very well potted,
covered with a lighter glaze. Some finer sherds are translucent. The glaze usually retains a high gloss, but on some items from sites 8b and 25a this has been dulled by exposure to the sea. Some variations in the colour of the glaze occur such as pale grey (944), pale blue-green (1202, 1260) or dead white (691, 945). All determinable shapes are bowls of various sizes ranging down to the small cup 1204. A possible exception is the base sherd 565 which appears to be from a small plate. All base sherds have a ring foot, though these are most strongly developed on the larger bowls such as 944. On these larger bowls, the bottom of the ring foot is unglazed, presumably because of the position of the pot during firing. The rims of the bowls are slightly everted, except for 1160 which has a slight recess on the inside, a plain band around the exterior and an unglazed lip. This rim is probably designed to fit a lid.

1b. Overglaze Polychrome Porcelain

8 items. Wares and shapes are generally similar to the previous category. Exceptions are a small cup (1109) with a vertical unglazed rim and a lid (1252) with an unglazed flange. Colours used are red, green, blue and yellow. 1109 also has a single underglaze blue line.

1c. Blue on White Porcelain

54 items. The wares and shapes are generally similar to those in category 1a. By far the most common shapes are bowls with a ring foot and a radius at the lip of about 5-10 cm. Rims are either everted or vertical. Item 1144 is a typical, though rather small example with a vertical rim. Exceptions are a small plate (679), a small cup (1305) and 2 spoon handles (1306, 1307). The glazes, though all light in colour, vary in shade and application. For example the bowl 648 has a very pale green glaze applied rather thickly
so that it has crackled on the bottom of the interior. The base of the ring foot and the enclosed circle are unglazed on the exterior: on the interior, there is an unglazed ring over the ring foot. The interior of the small cup 1305 appears to have a cream constituent added to the glaze. The small bowl 1335 has a lustrous green glaze, applied very thickly on the exterior. The glaze on the rim of the bowl 1058 is very thin and fails to disguise small irregularities in the underlying surface. The lip of sherd 884 consists of an unglazed groove, probably designed to fit a lid. The bowl 805 illustrated by McCarthy & Setzler (1960:292) is unusual in that only the upper part of the wall is glazed, and even then very thinly. Several vessels have unglazed lips, particularly the series of bowls 690, 939 and 1144. On another example, the low bowl 198, the bottom of the ring foot is also unglazed and it is on this that the vessel appears to have rested during firing.

All sherds in this category have some form of underglaze decoration. This is usually blue, though on sherds 1305 and 1308 it has lapsed into a dull green. The brush work varies from fine, careful floral designs on 679 to crude, rough patterns as on 1144. The main design elements are floral or abstract patterning. Double or single lines around the rim or base on both the interior and exterior are also common.

Even in this small collection, a number of types recur. These are as follows:

A. Small bowl, c. 5.5 cm. radius with an unglazed lip and a band of circle and colon decoration around the upper exterior. See plate 8.2

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</table>
B. Medium sized bowl with 'irregular net' decoration. 
See plate 8.3

| 938 | Site 25a |
| 1336 | 32f |
| 1363 | 32h |

C. Low bowl with 'crysanthemum' decoration. 
See plate 8.2

| 941 | Site 25a |
| 1067 | 9 |
| 1203 | |

D. Small bowl with dense floral decoration on exterior and a floral band on upper interior. See plate 8.3

| 937 | Site 25a |
| 1078 | 9 |

E. Plate with 'Kellor' pattern. See plate 8.2

| 1048 | Site 9 |
| 1281 | |

The blue and white sherd in plate 8.9 from site 30a should also be included in category 1c.

2. **Transfer Printed Ware**

11 items. This category corresponds with the same type distinguished by Allen, though it is not divided into his numerous sub-types. Also included is one sherd (605) which he would classify as transfer printed porcelain. All items are bowls or plates, except 1379 which is a large mug. Decoration is usually blue, but on 686 it consists of a red border around the ring foot, on 1310 there are tendrils drawn in fine black lines and on 1379 dark green twigs. One
bowl, 878, decorated in a bold blue design, has an inscription in Javanese characters in the centre of the ring foot. Only the name Maastricht is preserved which is presumably the place of manufacture in the Netherlands. Other designs are generally floral, though the bowl 613 is clearly scenic and 1024 could be a fragment of willow pattern. On a small piece of 609 preserving part of the mark, the letters GOU can be read.

3. Miscellaneous Fine Fabric Wares

11 items. A number of these merit brief description. 195 is a body sherd with a light grey, crackled glaze over a cream body. 841 is a body sherd of white clay ware with white underglaze, decorated on the exterior with plum red wavy lines and on the interior with several traces of green. Both sides have a clear glaze, slightly cracked. 946 is the rim of a small bowl, radius c. 3.6 cm., in very fine translucent porcelain. The interior glaze is dull white and the exterior dark brown. 947 is the rim of a bowl, radius 4.5 cm., with a white clay body and majolica decoration. The exterior has a floral design in red, green and blue and there is a red line on the interior of the lip. The glaze is dull and crckled. 1079 is a small piece of the rim of a small bowl in white porcelain with what appears to be a raised floral motif on the exterior, but very little is preserved. 1370 is a rim of a bowl in fine, white porcelain but very different from sherds in category 1a. It is probably European in origin. The other sherds in this category are plates and cups and a tile (1378) of normal European chinaware.

B. Course fabric wares or stoneware

4. Thin Stoneware

31 items. This category does not correspond with any distinguished by Allen, though it would be included within

I wish to thank Drs R.P. Soejono and Dr Sutjipto Wirjosuparto for reading this.
his Coloured Clay Wares. It comprises hard, well-made stoneware generally about 2-4 mm. in thickness. The most common colour of the fabric is grey, but cream, buff, orange and brown also occur. The interior of some vessels has a brown glaze, though this is not always continuous and is also found sometimes on the exterior. On the rim sherd 1028, a thick flange is produced by attaching a strip to the interior of the lip. The thick greenish glaze on the exterior and just over the lip of the strip has been wiped off the flange area before firing, while the interior of the body below the strip has only a very thin application of the glaze. Certain shapes recur in a variety of wares as follows.

A. In-sloping rim of a globular vessel with a groove and ridge near the lip. All unglazed

<table>
<thead>
<tr>
<th></th>
<th>Site</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>948</td>
<td>25a</td>
<td>Grey</td>
</tr>
<tr>
<td>950</td>
<td>25a</td>
<td>Buff</td>
</tr>
<tr>
<td>1054</td>
<td>9</td>
<td>Grey</td>
</tr>
<tr>
<td>1075</td>
<td>9</td>
<td>Grey</td>
</tr>
<tr>
<td>1218</td>
<td>32a</td>
<td>Grey</td>
</tr>
</tbody>
</table>

B. Lid with raised flange. All unglazed

<table>
<thead>
<tr>
<th></th>
<th>Site</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>796</td>
<td>32g</td>
<td>Cream</td>
</tr>
<tr>
<td>949</td>
<td>25a</td>
<td>Cream</td>
</tr>
<tr>
<td>1049</td>
<td>9</td>
<td>Grey</td>
</tr>
<tr>
<td>1313</td>
<td>32c</td>
<td>Brown</td>
</tr>
<tr>
<td>1338</td>
<td>32f</td>
<td>Orange</td>
</tr>
</tbody>
</table>

C. Spout

<table>
<thead>
<tr>
<th></th>
<th>Site</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>838</td>
<td>16b</td>
<td>Cream</td>
</tr>
<tr>
<td>1055</td>
<td>9</td>
<td>Grey</td>
</tr>
<tr>
<td>1212</td>
<td>32a</td>
<td>Off white</td>
</tr>
<tr>
<td>1262</td>
<td>32a</td>
<td>Grey</td>
</tr>
</tbody>
</table>

D. Lid with down turned rim and dark brown glaze outside

<table>
<thead>
<tr>
<th></th>
<th>Site</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>399</td>
<td>8b</td>
<td>Cream</td>
</tr>
<tr>
<td>875</td>
<td>23a</td>
<td>Cream</td>
</tr>
</tbody>
</table>
573 which appears to be from a lid, and 432 which may be part of a large bowl. A number of wares recur of which the most distinctive are:

A. A large jar of brown clay with a thin green glaze roughly applied to both exterior and interior and usually some decoration on the shoulder

<table>
<thead>
<tr>
<th>Item</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>789</td>
<td>23g</td>
</tr>
<tr>
<td>1032</td>
<td>31b</td>
</tr>
<tr>
<td>1315</td>
<td>32c</td>
</tr>
</tbody>
</table>

B. Various body sherds of grey fabric with thick, dark brown glaze on the exterior, and thin brown glaze on the interior, often only in patches

<table>
<thead>
<tr>
<th>Item</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>309-10</td>
<td>8b</td>
</tr>
<tr>
<td>393-98</td>
<td>8b</td>
</tr>
<tr>
<td>842</td>
<td>16d</td>
</tr>
<tr>
<td>890</td>
<td>25a</td>
</tr>
<tr>
<td>1314</td>
<td>32c</td>
</tr>
<tr>
<td>1333</td>
<td>32e</td>
</tr>
<tr>
<td>1340</td>
<td>32f</td>
</tr>
<tr>
<td>1365</td>
<td>14c</td>
</tr>
</tbody>
</table>

(Some of the items distinguished on site 8b should probably be merged.)

**Discussion and attribution**

An initial problem to be considered in connection with this material is to establish its association with Macassan activity. Although the Asian or European origin of most items can be readily determined, it is often difficult to know whether a particular item is the result of European or Macassan activity. A typical example of this uncertainty is the fine transfer ware base sherd 613 from Copeland Island (site 7a). Although of European manufacture, it could have been obtained by the Macassans in Macassar or even at one of the British settlements in northern Australia. Equally, there was considerable European
activity in the area at various periods during the nineteenth century.

However, this problem is not as serious as might at first appear. On the major sites such as the Amuru Bay site (site 9) or Wobalinna Island (site 25a) or Lyāba (site 32a) there is the accumulation of other archaeological evidence indicating major Macassan activity and providing a more or less secure Macassan context for the sherds. Furthermore, all articles possibly or certainly deriving from European activity date from the nineteenth or even twentieth centuries. Since the general picture for these centuries is known so well from documentary sources, in practice it is possible to obtain considerable guidance on any particular site.

There is no reason to doubt that the so-called bowls, cups, plates and spoons of categories 1, 2 and 3 were in fact eating and drinking utensils. Most of the vessels in category 4 were probably food containers or their lids, while the large jars of category 5 may have been used to store water, or possibly some forms of food.

The number and variety of items represented well illustrate the widespread and sustained contacts of the Macassans, just as the comparative sophistication and prosperity of the crews can be seen in the quality of some pieces, which at best are no more than their most casual refuse. Before about 1820, much of the Chinese material was probably brought to Macassar on the annual China junk. In the 1770s Forest (1779:325) describes similar junks coming to the southern Philippines, each carrying 'one million pieces China ware, consisting of small terrenes and basons in nests, big and small, plates and basons with red edges for Mindano.' Later, Macassar probably received much of its pottery through Singapore.
A point which is clear enough from other evidence, but which is confirmed by the distribution of similar types of import ware over various sites, is that similar artefacts are to be found on all Macassan sites. Whatever the difficulties in establishing the relative chronology of sites, there are no meaningful differences in the spatial distribution of Macassan sites around the coast. Only one important qualification needs to be added. In western Arnhem Land and on the Cobourg Peninsula there has been much more European trepanging and other activity than elsewhere. The collections from these areas therefore, generally contain much more material certainly or probably of European manufacture and deposition than is found further east.

When the first sherds of import ware were recovered by McCarthy & Setzler, and later by Mulvaney, great hopes were held that it would be possible to derive significant information from a determination of their origin and more especially of their date of manufacture. In general these expectations have not been fulfilled, and the reasons for this need to be clearly understood. Most basically, there is a lack of organized knowledge relevant to this sort of common ceramic material of everyday use, so that historically meaningful identifications cannot be obtained. In the Asian context, the necessary research cannot be properly undertaken without reference to kiln sites, and that is indeed a daunting prospect. Even a straightforward seriation of wares current at various periods in southeast Asia is still a long way off, though the means of achieving this goal through careful excavations in well-dated historical contexts is apparent. At the moment there is a great dearth of basic reference collections either in accessible museums or more usefully in adequate publications.
The most obvious exception to this statement, particularly as concerns the present problem, is Allen's material from Port Essington. Its value will be seen below. Furthermore, as a model not only of publication, but also of meticulous reasoning, it is a pleasure to be able to refer to the work of the Locsins in the Philippines. Yet even with a site as rich as Santa Ana and with complete specimens of wares much better known than ours, they are unable on the evidence of the ceramics, to give precise dates for the cemetery (Locsin & Locsin 1967:124-6). In view of this lack of dated material, it is the more regrettable that the open nature of Macassan sites and the consequent difficulty of establishing a precise chronological context for any particular sherd, mean that even the present collection cannot be used as more than a general reference for future work.

However, in spite of the lack of these resources, some very tentative guesses can still be made on general stylistic grounds, though as will be seen below, even this procedure raises certain problems. Naturally the task is not made any easier by the fragmentary nature of many sherds, which often precludes any complete knowledge of shape or design.

The best possibilities for obtaining useful information lie with category 1, and particularly with the decorated material of categories 1b and 1c. In addition to my own limited experience of such wares, parts of the total collection in these categories have been shown to
a number of experts\textsuperscript{2} and some attempt has been made to examine the most obvious literature.

Firstly, all items in category 1 were almost certainly manufactured on the Asian mainland, probably in Kwang-tung, Fukien or neighbouring provinces of China. It might perhaps be argued that a very few items, notably 885 and perhaps 301, are fine enough to have come from the kilns at Ching-Tê Chên, but relative coarseness of fabric, roughness in decoration and imperfection of glaze betray the provincial origin of most pieces. The only mark, adequately preserved, that on 937a, cannot be read,\textsuperscript{3} but appears to be either the name of a minor kiln or a fabrication.

The question of dating sherds in category 1 is very difficult. It is necessary here to distinguish two different modes of procedure. The first is to take specific items or even elements of design and try to establish when these first came into use. Naturally this procedure tends to give the earliest possible date for an item, which is what is often required. Thus one could draw attention to the similarity between a few Macassan pieces

\textsuperscript{2} In Australia, Dr H.A. Lamb, now of the University of Ghana, has handled some of the material, as have Dr Leonard Cox and Mr Gordon Thomson of the National Gallery of Victoria. Overseas, Mr J.G. Ayres of the Victoria and Albert Museum, London, Mr Abu Ridho of the Museum Pusat, Djakarta and Mrs Kamer Aga-Oglu of the Museum of Anthropology, University of Michigan have kindly given me their comments on photographs. It is instructive that they have all remarked on the difficulty of giving precise attributions to this class of material. Although the following paragraphs are largely based on the information provided by these scholars, for whose assistance I am most grateful, it must not be thought that they are responsible either individually or collectively for the opinions expressed.

\textsuperscript{3} For assistance on this point, I would like to thank Mr J. Winter of Colombo, and Dr Noel Barnard and Mr Michio Matsumaru, both of the Department of Far Eastern History, Australian National University.
and some of those found in South Celebes and tentatively dated to the fifteenth century. A very large collection of this material has been published by Chuta & Yoshitara (1941). Macassan items 937 and 1078 resemble in shape, size and floral decoration their bowls (70)-84,86; (71)-90, though the interior of the ring foot of 937 is glazed unlike the first and third of the above examples. (The base of the second is not visible.) The 'hexagon with dots' design of 825 is repeated on their (62)-46 and (69)-81,82, but the spirit is quite different. The comparison is similarly vague between the 'Kellor' design of 1048 and 1281 and their examples such as (55)-10-15. In fact, given sufficient imagination, it would probably be possible to find most of the design elements in categories 1b and 1c on late Ming pieces. However this is evidence for the continuity of tradition, not for a similar date.

It need hardly be pointed out that this procedure is more likely to produce confusion than clarification. What is required is an estimate of the range of time over which certain wares were used, and particularly when they were most prevalent. Here the opinion of all authorities is clear; most, and possibly all sherds in category 1 are probably eighteenth or nineteenth century in date of use. A few, such as 196 with its unglazed interior to the ring foot and unglazed circle on the base of the interior, may have been made in the preceding century, but even ignoring

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4 It should, however, be added that Mr Abu Ridho saw no similarity at all between the sherds of which he had photographs, including some of those mentioned in this paragraph, and the South Celebes material in the Djakarta museum. In practice, one hardly needs an experienced eye to see the difference between the Macassan sherds and the vast quantity of (?) Ming pottery currently being unearthed in South Celebes.
the time lag for deposition, this would be shaky evidence for the presence of the Macassans in the Northern Territory before 1700. Mrs Aga-Oglu, who tends to favour slightly earlier dates than other authorities, even suggests that sherds such as 885, 1311 and the blue and white sherd from site 30a discussed in chapter 12, could have been made as early as the late sixteenth century. In my opinion, these sherds are a little later.

The material found by Allen in the Port Essington settlement provides reassuring confirmation. The use of this collection is certainly not before 1838 and is probably not after 1849. In general, the Port Essington porcelain is very similar to that found on Macassan sites. In fact a few pieces may even have come from the Macassans themselves, though more probably this is a result of both parties using the same sources of supply. The following specific comparisons may be made: Allen's item 14 with sherd 679; item 16 with sherds 1336 and 1363; and item 19 with sherds 937 and 1078. The conclusion is inescapable that a large part of the material in category 1 need not have been in use before the 1840s.

A further collection of relevance to some sherds is a small quantity of material from the Northern Territory goldfields collected by Allen and myself and held in Canberra. The use of this material is certainly after 1870 and probably before 1900. Though in general the material is rather different, clear parallels can be found for sherds 1125 and 1335 at least, and probably a larger collection would reveal further similarities.

Another work which it is worth noticing, if only to show the vagueness of present information, is the study of form (or shape) by Osgood (1956). By far the most common shape in category 1 is the bowl with everted lip,
fitting comfortably into his sub-classes 23A and 23 B. These sub-classes range in date from the fourteenth century to at least 1850. His class 22, bowls with straight lips, which is also represented, covers a similar time span.

Several collections from Indonesia are also of interest. In 1969, I made small collections in Kampong Tua, BantaEng, South Celebes and on the small island of Barrang Lombo, off Macassar. No precise dating is possible for these uncontrolled collections, but there is every suggestion that they are comparatively recent. A considerable number of Macassan import ware sherds, particularly from category 1c, can be matched more or less exactly in these collections. Though it is interesting that such ware does actually occur in South Celebes, it is by no means restricted in its distribution. Mr Abu Ridho has collected similar sherds, together with much older material, from the bottom of Djakarta Bay, and he kindly showed me some of these sherds in the Djakarta museum. Again more or less exact parallels can be drawn with some sherds in category 1c.

The material in category 2 is much simpler to deal with. The process of transfer printing did not come into general use until the second half of the eighteenth century, and there is no reason to think that any of these items are particularly early. The rather dark blue of 609 may indicate a date early in the nineteenth century, while the scenic design of 613 and the geometric design on the rim of 610 probably also date from the first half of that century. The porcelain sherd 605 from Smith Point is identical with Allen's item 22, and is probably derived from the British settlement. Sherd 1024 may be a fragment of Willow pattern design of almost any nineteenth century date, whereas the red design of 686 is at least after the 1820s (Allen 1969, 1:200-3). The only other item of interest in this category is the Dutch bowl 878. This type of
ware is again nineteenth century in date. The remaining sherds are clearly from the late nineteenth or even twentieth century.

Most of the miscellaneous sherds of category 3 are relatively modern European ware. 946 and 1079 are certainly Asian, but of unknown date, whereas not even the origin of 841, 947 or 1370 can be determined. There is no suggestion that any of these are particularly early in date.

It should be noted that many of the sherds of European origin in categories 2 and 3 come from contexts where there has been a possible or certain European presence in the area.

Categories 4 and 5 can be dealt with together, as almost no information is available for either. Most items are similar to everyday wares still in use throughout southeast Asia. The majority are fairly certainly of Asian manufacture, though not necessarily Chinese. The large rim sherd with 2 out of 4 strap handles remaining, 952, is a very common type, while most of the brown glaze sherds in category 5 are similar to Allen's Nga-Kwun ware. Several complete examples of the large green glaze jars represented by sherds 789, 1032 and 1315 are to be found today in private possession in Arnhem Land. They appear to have arrived on the praus of recent castaways.

However, a few items are possibly or certainly of European manufacture, such as 1377 which has the stamp B.L.&C., and the salt glaze sherds 1375 and 1380. All these come from sites with definite European associations. More doubtfully, the fine tooling on 843 suggests that it may be European. The sherd 879 has been identified by Mr J.G. Hurst of the Ministry of Public Building and Works, London as English, late eighteenth or early
nineteenth century, a Nottingham type with characteristic colouring and rouletted decoration (letter to Mr J. Golson, 27.6.1966).

As with other categories, a general similarity can be seen between this collection and that from Port Essington. Furthermore many of the brown glazes are similar to those found on material from the Northern Territory goldfields.

The conclusion from all these lines of approach is clear. There is no certain evidence among the import ware sherds for any Macassan activity in the Northern Territory before the late seventeenth century. Good parallels can be found for the use of material similar to many items within the nineteenth century, and there is no reason to suppose that others were necessarily in use more than a century earlier.

Within that general conclusion, finer definition is extremely tentative and needs to be confirmed by further work. However, in a few contexts there does appear to be a vague succession of porcelain types, going from the simple to the more elaborate. This is best illustrated by the difference between the material from the earlier area 2 at the Anuru Bay site and the later area 1. All the porcelain from area 2 (items 1094, 1099, 1102 and 1202) are plain (category 1a), while from the rest of the site there is considerable diversity. At the sites describes in chapter 7, the position is not quite so clear. From Lyäba

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5 It needs to be emphasized again that the matching of sherds presumed to be from the same item is very difficult with this plain porcelain. The actual number of separate sherds in these 4 items is 11. It should also be noted that the carbon date from this area, if accepted, would date this ware to the late Sung period.
(site 32a) which may be relatively early, there are 5 plain items (category 1a), 3 with overglaze decoration (category 1b) and 2 with blue underglaze decoration (category 1c). However, all come from the central area of the site which the carbon dates indicate may be more recent than the extremities. The other site in the area which may be relatively early, Äningmerrunguwa Island (site 32g) produced only one small blue and white sherd. On the other hand, the possibly later sites produced a comparative wealth of decorated material. Ilyaugwamaja 3 (site 32c) supplied 5 items in category 1c and Ilyaugwamaja 6 (site 32f), 3 items, including the apparently recent item 1335, while no sherds of category 1a were found on either site. The only two other sites with more than an occasional item of import ware, sites 8b and 25a, both have a number of decorated and plain items in category 1, but there is no control on their distribution. It must be emphasized again that this suggestion of the priority of category 1a over categories 1b and 1c is highly tentative, and is put forward as a hypothesis to test rather than as a tool to date any future collection.
Chapter 9

The Earthenware

By far the most common artefacts found on Macassan sites are the sherds of coarse, but quite well-fired, brown earthenware. The term earthenware is used in this thesis with reference only to this ware, and not in its more general and extended meaning. Allen (1969, 1: 190 - 1) refers to my earthenware as Macassan ware.

Most of these earthenware sherds are undecorated body sherds (m.b.s.), usually too small to indicate the shape of the vessel from which they came. The chief information to be obtained from such material derives from its differing relative density on a site, and the use of this technique has been shown in previous chapters.

In addition to these miscellaneous body sherds, there are what have been termed 'useful' items, that is sherds which could be used in a formal analysis. The first criterion for a sherd's selection has been that it should include some part of the vessel's rim. (An exception has been made in the case of small rim pieces in the Canberra collection which do not reveal the shape of the flange on globular pots or otherwise the outline of a fair amount of the vessel. These exceptions have been described as miscellaneous rims (m. rims) and left with the miscellaneous body sherds.) Other criteria for selection have been that a sherd should show the shape of a base (though small base sherds have also been treated as miscellaneous bases), or that it should demonstrate the nature of a lid, a handle or some other feature. All decorated sherds are also included. Each of these 'useful' sherds has been allotted a number in
the first series described in the preliminary note.

In 1966, when starting work on this earthenware pottery, it seemed possible that a formal analysis of the material might prove of some value, and some steps were taken to begin this. It now appears, after handling a much greater quantity of sherds from many more sites, that the information to be derived from such an analysis would be minimal. This is not only because of the apparent similarity of the assemblages from all sites, but also because of the lack of a standard against which to interpret change. What is required are large, precisely documented collections from historical contexts in South Celebes and should they become available, it may be worth re-examining the material described here.

Partly as a means of recording material in museum collections and partly as a means of organizing quantitative information for possible analysis, a standard, edge-punch card was designed (fig. 9.1). However since no analysis is attempted here, it is not necessary to enter into the details of the codes used. The cards were also used to record

1 Naturally with the benefit of hindsight, a number of improvements in the design can be suggested. The most important would be to remove the category of lids, and treat all uncertain examples as dishes. At the same time, the range of miscellaneous types needs to be extended, and would then include definite lids, as well as decorated body sherds, handles, various special types of rim and a place for classifying import ware. In the general section dealing with the ware itself, the items III Colour, V Filler and probably IV Surface require recasting and simplification.
import ware sherds, mainly by notes and sketches on the reverse side.

The next section of this chapter is devoted to a purely subjective and non-quantitative description of various types of vessel found. No attempt is made to assign all the numbered sherds in the collections to a particular category, as was done with the import ware, though some idea of the relative frequencies of various types has emerged from the thorough handling of the material.

**Globular Pots**

The most common vessel from all sites is a roughly spherical pot with an outward flaring collar around a circular orifice. No complete specimen of a globular pot, as these are conveniently termed, has been found in a Macassan context, but items 1147 and 1296 show the general shape (plate 9.1). The interior of the body of a pot often shows clear marks of its paddle and anvil manufacture, though the exterior is usually very smooth and well finished. The body wall, particularly away from the rim, can be very thin and sherds with a thickness of as little

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2 A number of terms are employed with specific meanings. Rim, as used with reference to globular pots, refers in a general way to the whole area of the flared collar and its connection to the body of the pot. With reference to other pots, rim is used as a general term for the band an inch or so around the orifice. On globular pots, flange refers to the actual collar, and its length is measured with calipers held parallel to its main line, measuring from the interior surface of the pot. Lip refers to the top edge of the flange, or the actual edge of any other orifice. The radius of the rim is measured at the lip.
as 2mm. are common. The rims are much more substantial and sections are often found with very little of the body attached. A more detailed discussion of various rim types is given below, but in general they are at least 4mm. thick and well made. Indeed many appear to have been turned on a wheel, though this is unlikely to have been more than a tournette or simple turntable. On the basis of Solheim's (1952) distribution study, such techniques would be quite normal in South Celebes.

The outer surface of the pot and the inner surface of the rim are usually smooth. Very often the clay constituent in the fabric forms almost a slip on at least parts of the surface, an effect which appears to result from wet smoothing after the pot is formed. Many sherds also bear traces of a reddish brown paint, at least on the exterior and some way down the interior, but in most cases this is almost completely weathered off. Those sherds exposed to the action of the sea, such as those from site 8b, have naturally suffered much more severely. Not only has the clay matrix of the surface been eroded away, leaving the sand grains of the temper protruding to form a rough surface, but some chemical process has altered the colour of the clay constituent from its original brown to a dusky pink colour. The nature of this process is not understood, but that some such process has occurred and that there are not two types of pottery present is shown by the identical mineralogical analysis of the sherds (see below) and by the evidence of a site such as Wobalinna Island (site 25a) where only those sherds exposed to the salt water have been affected. This process is quite distinct from the growth of pink algae and other marine creatures which also affects sherds taken from the sea.

The general range of size of the rims is shown by the
items 900 (radius 14 cm.) and 1146 (radius 7.5 cm.), though both larger and smaller exceptions could be found (fig. 9.2 and plate 9.2). However most rims are within the range of these two examples.

Various forms of profile are also shown in fig. 9.2. The simplest is instanced by item 1143, with a relatively straight flange of even thickness ending in a round lip (lip type 1). The exterior of the flange is usually plain and well finished. Item 1071 however is an example of the most common type. Here the exterior of the flange is almost straight, but the interior curves so as to narrow the flange towards the top, which then curls over to form a small ridge around the exterior of the lip (lip type 2). A variation, into which the previous type grades, is seen in item 386, where the whole flange curls over at the lip without any diminution in thickness (lip type 3). Finally two examples are given of comparatively unusual types: item 1103 with a small ridge around the bottom of the flange and a groove in the lip, which is cut square at right angles to the flange, and item 1068 with downward sagging flange and flat lip (miscellaneous types are recorded as lip type 4).

Almost without exception the rims with outward curling lips, whether of type 2 or type 3, have some form of irregularity on the exterior of the flange. The interior is always smooth. The treatment of the exterior ranges from a shallow groove, probably made with the thumb, and random streaks and folds at the base of the flange, to deliberate thumb nail decoration. An example of the former is item 1227, while of the latter there are a number of varieites. Item 661 has only one row of thumb nail imprints, item 1295 has two and item 1237, an exceptional example, has three rows. Item 901 with one row of imprints is also illustrated to show how in the course of handling
before firing, these impressions are sometimes smudged over (see plate 9.2).

A further type of rim which may be included with those of globular pots, comes from much larger, heavier vessels. The flange is approximately vertical or even slightly in-sloping and the lip is very thick and flat on top. A typical example is item 973 (plate 9.3).

Lids and Dishes

After globular pots, the most common form of sherd appears to be a shallow dish. However it is impossible to distinguish a rim sherd of this type from the rim of various forms of lid. Indeed it is possible that all such items are really lids, those that appear to be dishes being in function merely lids without handles. This difficulty is well illustrated by comparing items 641 and 1077 (fig. 9.3). The former has on its convex side a distinct angle between an almost flat central area and the side, while the latter although rather irregular in section, has a more or less continuous curve. On the other hand both appear to have been made with the convex side resting on a tournette or turntable as, apart from the rim area, this is poorly finished in both cases. Both have red-brown paint around the lip, though this has been smudged rather carelessly over other areas of 641. Certainly the radii of both, about 11 cm. for 641 and 7 cm. for 1077, provide no distinction.

The position is further complicated by a consideration of those items with handles, which can thus be positively identified as lids. These are both concave and convex. In other words the lids or dishes described in the previous paragraph could have been either concave or convex lids.
Two types of handle are found, the knob type such as item 639 and the strap type such as item 672 (plate 9.3). The former, which is more common, occurs on both concave and convex lids, and the latter only on convex examples.

**Bowls**
A type of rim quite distinct from the last category, comes from large bowls with approximately vertical sides. The rim usually has a profile which includes a ridge on the exterior about 2 to 4 cm. below the lip. Item 1008 (radius 18 cm.) is a typical, though rather large example. A variation is seen in item 607 (radius 17 cm.) with a simple band around the exterior of the lip. Several other variations occur occasionally, such as item 1226 (radius 18 cm.) which has a thick horizontal flange and square lip (fig. 9.3).

**Miscellaneous**
A few examples are found of sherds from vessels of other shapes, though often these cannot be fully reconstructed from the limited evidence. The most common of these minor types is the small spherical bowl with no collar around the orifice. A simple example, with a rim not unlike those on some bowls, is item 1044 (fig. 9.3). Three examples of proper foot rings are found on items 794, 856a and 933, all of which were probably low bowls, while two similar items, 670 and 926, have small ridges as foot rings. Occasionally a completely flat sherd is found, perhaps joined at right angles to form a base or corner.

**Decorated sherds**
Any sherd bearing incised, impressed or applied decoration, or paint in a recognizable pattern has been
included as a 'useful' sherd. The only element which recurs with any consistency and can be taken as diagnostic of the collection as a whole, is the impressed corner. This is a small depression in the shape of an isosceles triangle. The apex, which contains a right angle, is depressed between 1 and 2 mm., while the sides, some 3 to 4 mm. long, slope up to the base level with the surface of the pot. Twelve items in all display some decoration using this element. These can be divided into the following groups.

A. Alternate triangle arrangements, associated with incised lines and painting

<table>
<thead>
<tr>
<th>Site</th>
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<th>Plate</th>
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</thead>
<tbody>
<tr>
<td>167</td>
<td>8b</td>
<td>9.6</td>
</tr>
<tr>
<td>873</td>
<td>23a</td>
<td>9.4</td>
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<tr>
<td>1022</td>
<td>25a</td>
<td>9.4</td>
</tr>
<tr>
<td>1225</td>
<td>32a</td>
<td>9.4</td>
</tr>
</tbody>
</table>

(Item 1022 is too sea eroded to preserve any traces of paint.)

B. Linear arrangements with incised lines

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<tr>
<th>Site</th>
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<tbody>
<tr>
<td>427</td>
<td>8b</td>
<td>9.6</td>
</tr>
<tr>
<td>802</td>
<td>23a</td>
<td>9.4</td>
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(illustrated in Berndt & Berndt 1947: plate IVB/fig. ID)

C. Decoration around the top of the body of globular pots

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<tr>
<th>Site</th>
<th>Site</th>
<th>Plate</th>
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<tbody>
<tr>
<td>558</td>
<td>8b</td>
<td>9.6</td>
</tr>
<tr>
<td>850</td>
<td>20b</td>
<td>9.4</td>
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<tr>
<td>1355</td>
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</tbody>
</table>
D. Other rims

<table>
<thead>
<tr>
<th>50</th>
<th>Site 8b</th>
<th>Plate 9.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>872</td>
<td>32a</td>
<td>Plate 9.4</td>
</tr>
<tr>
<td>1072</td>
<td>9</td>
<td>Plate 9.4</td>
</tr>
</tbody>
</table>

Other items with designs very similar to those in A above are two thick walled spherical jars without collars, item 876 (site 23a) and item 1059 (site 9). The former has a band of incised decoration below the rim in which alternate triangles are filled with small pits instead of triangular impressions, while the latter is a simpler version lacking the incised lines (plate 9.4).

Various further impressed designs occur on single items. Item 848 has large impressed lines and a repeated stamp of 4 small lines (plate 9.5). Item 871, which is of unusual fabric, has several small impressed circles and traces of paint (plate 9.5). It is similar to the two sherds in the bottom right hand corner of McCarthy & Setzler 1960 : 291 plate 18. Item 1339 is outstanding, both because of a remarkable grey clay with contrasting white temper and because of an elaborate impressed and incised design (fig. 9.4). The spherical collarless pot 456 has a ring of deeply impressed panels with angular apex (plate 9.6) and a similar design may have been on 828, though only a small area of the surface is intact (plate 9.5).

Other forms of decoration only occur on isolated examples as listed below.

1056, 1084 (possible from the same item) - carved lines and panels (plate 9.5).
49, 1036 - applied vertical ridges (plate 9.5; 1036b is illustrated in Mulvaney 1969: plate 9c).

800, 1023 (possibly from the same item) - applied horizontal ridge with sharp notches (plate 9.5; 800 is illustrated in Berndt & Berndt 1947 a: plate IV A/fig. 1c).

817 - applied horizontal band crimped with the thumb and surrounded by a painted angular design (fig. 9.4).

1137 - notched lip. 1087 has a single notch on the lip and 1066 two pairs of notches (plate 9.5).

1178 - many sherds from a paddle decorated pot, the paddle being carved in vertical grooves. 1065 has similar decoration, but it is very faint. On the many sherds of 1168, the paddle is carved in a pattern of nested lozenges (plate 9.5).

877 - possibly a lid, with a large impressed groove and outside that a marked ridge. It is composed of an unusual, coarse fabric.

1327 - lightly incised grid lines on the interior of a dish.

**Painting**

Many sherds bear traces of a reddish brown paint or very light slip, though this has often been partly - and no doubt often completely - eroded by weathering. On globular pots, the exterior is frequently completely covered, together with the interior of the flange, but with only accidental application inside the main body.
of the pot. The spherical pots without a flange are also painted on the exterior only. However variations occur such as the deep flanged bowl 1354 which is painted on the interior, but the paint stops neatly on the lip. The globular pot 42 has faint traces of painted horizontal lines on the exterior of the flange. Shallow lids often have a band of paint around the lip. Items 850 and 876 mentioned above both have non-painted bands to emphasize the impressed decoration, while on 873 paint has been used to strengthen the impressed and incised design.

Three examples of actual painted decoration survive, items 815, 817 and 856 and these are shown in fig. 9.4. It should be noted that 815 has an unusual fabric with coral sand filler.

Discussion

Earthenware pottery is the most unequivocally Macassan artefact recovered in the Northern Territory, and except in the clear cases of transportation by Aborigines or natural causes, a few earthenware sherds provide a reliable indication of Macassan visits to an area. As discussed in chapter 11, the claim for Aboriginal manufacture of pottery can be confidently dismissed. Nor is there any suggestion of European importation.

The general function of the pottery in the transportation and preparation of food has already been mentioned in chapter 4.

Although no exhaustive analysis of the form of the earthenware has been attempted, some evidence for its place of manufacture is available on other grounds.

At the most basic level, Matthes (1885: plate 11/7, 8 and 9) illustrates in his atlas of South Celebes material
culture, a globular pot and lids with both knob and strap handles. The globular pot in particular is hardly diagnostic, but this does show that the most common Macassan artefact did occur in South Celebes.

Secondly there is the evidence provided by Key, relating to the geological origin of the constituents of the pottery. For the most common ware, which makes up the overwhelming majority of the collections on all sites, he suggests that it is highly likely that the source of the potters' raw material lies on the Recent andesitic volcano, Lompobatang in South Celebes (Key 1969 : 105). The major part of the territory occupied by the Macassarese people consists of the slopes of this massif and the adjacent plains. There are also, of course, other wares in the collections, most notably those with a carbonate filler, and Key (1969 : 106) mentions another specimen containing hornfels fragments, which probably drives from another volcanic area. However these exceptional items, wherever else they may have come from, should not divert attention from the major conclusion, that most of the earthenware pottery came from South Celebes. It need not cause any surprise that a few exceptions were found on praus which over the years must have called at many ports throughout the archipelago. Indeed, as Key notes, there are specific references in the nineteenth century to special centres of pottery production, notably Kei Ili, where perhaps some of these exceptional items were obtained (Kolff 1840 : 345; Sweatman 1848, 1 : 229; Stokes 1846, 1 : 465-6).

Very much the same conclusion arises from a study of the decorated sherds. Clear parallels can be found in ethnographic pottery from South Celebes for the only common design elements, that is the impressed corner and
decoration, notably Solheim's Sa-Huỳnh complex. Such comparisons, however, must wait on greater clarification of sequence and styles within South Celebes. It would be rash indeed to attempt such correlations on the basis of the present collection. Furthermore, the topic is beyond the scope of this thesis.

Apart from the design elements already discussed, there are various others represented on a few sherds. Most of these are of obviously unusual fabric and have been treated above. The decoration on the remainder is not sufficiently distinctive to warrant detailed comparisons, but in general terms it fits easily into the general context of South Celebes pottery.

It should be noticed that although large quantities of earthenware pottery are still made in South Celebes, it is likely that a number of changes have occurred in recent times, probably during this century. From my enquiries and observations in 1969 and from what I have seen of museum collections, the most important changes would seem to be: 1) a high degree of standardization in the quite substantial pottery factories south of Macassar; 2) the abandonment of nearly all applied or incised decoration, except for an incised leaf pattern around the neck of a few globular pots; 3) the development of a few basic designs in red slip; and 4) the copying of several utilitarian forms usually made in metal, such as a kettle. But even if one cannot claim to be able to buy 'Macassan pottery' in Macassar today, the stalls in the markets probably do not look essentially different from those where the pottery in the archaeological collections was bought to fit out a prau.
Chapter 10

Miscellaneous Finds

This chapter describes and discusses those artefacts not made of pottery, which are found on the sites dealt with in chapters 5, 6 and 7. As with the import ware, these are not necessarily all Macassan artefacts, but individual cases are discussed below. The labelling and location of the items has been dealt with in the preliminary note to part II. The criteria used to select these artefacts from the total collections have not always been applied with complete consistency, since an attempt has been made to select a few representative pieces, for example of bottle rings and moulded glass lettering, as well as providing the complete range of other classes of items. The most important classes of which every item is included are coins, fish-hooks, bullets and cartridges, glass bottle prunts and clay pipes.

While further details are given for each specific class, the general conclusion to be drawn from this assemblage of artefacts, and the other non-pottery artefacts in the original collections, is that there is nothing which does not accord with the historical record. Yet even with this diversity of objects, we are still far from a complete inventory of the material culture of the Macassans (as a glance through Matthes' Ethnographic Atlas (1885) makes clear).
**Coins**

S54 (site 16b). Copper doit. Obv., crowned shield of Utrecht with 2 lions as supporters: Rev., VOC, mintmark above and 1790 below. Depending on the mintmark, which is most indistinct, this could be either of two possibilities:

a) if the mintmark is a miniature version of the shield on the obverse side, the coin is Scholten No.316, struck by the town of Utrecht in 1790 to be sent out to the Indies.

b) if the mintmark is a rosette of 5 petals, the coin is an imitation of a), Scholten No.745c, struck by the official mints at either Batavia or Surabaja in 1840 - 43.

S55 (site 16b). Copper doit. Obv., arms of Zeeland, without crown and badly offset: Rev., VOC, 1790 below but no mintmark above. No such coin is listed and this may be a forgery using the very common 1790 date.

S56 (site 16b). Copper doit ( = 1 cent). Obv., crowned arms of the Dutch kingdom between 1 - Ct : Rev., NEDERL. INDIE, star above, 1838 and J below. This is probably Scholten No.735a or 735b, but precise identification depends on the number of billets in the shield, which is rather indistinct. Both varieties were struck by the mintmaster L.J. Jeekel at Surabaja in 1838.

S97 (site 32a). Copper doit (plate 10.1). Obv., crowned shield of the province of Holland: Rev., VOC, the mintmark above has been cleaned a little more than shown in

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In this section I have relied heavily on Scholten (1953), an invaluable guide.
the plate and is probably a rosette and two dots as on S111, the date below is probably 1742. The last digit, which is the only one indistinct, could on Scholten's list be anything but 0 or 1. If this is correct, the coin is Scholten No.88, minted by Holland at Dordrecht in 1742 under the mintmaster Otto Buck.

S111 (site 32g). Copper doit (plate 10.1). Obv., crowned shield of the province of Holland: Rev., VOC, rosette and dots above, 1780 below. This is Scholten No.114, minted by Holland at Dordrecht in 1780 under the mintmaster Wouter Buck. The coin now weighs 3.110 gm which accords well with the figure of 3.09 gm given for similar coins in 1771 (Scholten 1953:23). This coin is illustrated in Mulvaney 1969: plate 11a.

Another coin in mentioned by Harney (1943: 171-2), who says that on Bickerton Island probably in the 1920s, an Aborigine showed him a 'twa' dated 1779. The word 'twa' is probably a corruption of doit.

These five, or probably six, coins serve to emphasize the essentially commercial nature of Macassan activity. However, it would be rash to conclude that they represent any necessary comprehension of money by Aborigines. In fact, given the sharpness of Aboriginal eyes, perhaps the reverse is more likely. Great caution is also needed in assessing their value as dating evidence. Not only is it impossible to associate them reliably with other features and artefacts, but there is also the possibility of considerable time lag in their deposition. In fact Kennedy (1953:92) seems to imply that VOC coins were in use in South Celebes right up until 1905. The last VOC issue, perhaps represented by S54, was in 1843. However in a general way, the coins do confirm the dating of the industry to the eighteenth and nineteenth centuries.
Fish-hooks


(of these S80, 87 and 105 are broken)

All the fish-hooks are made of bent bronze wire. They range in length from 2.7 cm. (S94) to 7.6 cm. (S85). There is usually a nick a few centimetres down the interior edge of the point to create a small barb. The proximal end of the shaft is also often treated in this way, or with several nicks, in order to secure the line. Another style of treating the proximal end is seen on some of the larger hooks; a long step is taken out of the wire which is then bent over to form a loop not much wider than the original wire. Two examples survive of the wire shank which was then passed through the loop, S59 and a double shank, S86. The following items are illustrated in plate 10.2, S78, 85, 86, 94, 104. Items S26 (left) and S108 (right) appear as plate 11b in Mulvaney 1969.

It is notable that all but three of the site 9 items and the four hooks from site 8b, have been recovered by excavation. This may be a result of Aboriginal removal for re-use, or it may only be that they are difficult to see on the surface - except of course for Aborigines. There is no reliable date that can be assigned to the manufacture of such hooks, though as suggested in chapter 6, they do not occur in the possibly early context of area 2 at the Anuru Bay site (site 9). Earl (1837 : 194) has an interesting passage relating to their use. 'The fishing-lines used by the natives of the [Indian] Archipelago are made of cotton, twisted up extremely hard, and afterwards dipped in bullocks' blood, which enables them to resist the water. European hooks are rarely employed, as they
prefer the clumsy implements made of brass or iron wire, which every fisherman or seaman can manufacture for himself.' However, in 1969, all the fish-hooks I examined in South Celebes appeared to be European.

Cartridges

Site 5b - S9: cartridge case, 32.20 calibre sporting, Canadian Dominion Cartridge Company.

Site 12b - S34: Insert of 12 gauge cartridge.

Site 20d - S41: cartridge case, .44 calibre, United Kingdom, Eley Brothers Ltd.

S42, 43, 49: cartridge cases, .22 calibre, Winchester Fire cartridges.

S47: cartridge case, .35 calibre self-loading, United States commercial marking of Winchester.


Site 25a - S131: cartridge case, .303 calibre, perhaps Indian.

None of these items can be dated earlier than the late nineteenth century, and most are probably from this century. They almost certainly derive from European activity, though the veritable arsenal of weapons indicated at site 20d, is difficult to explain.

Other metal artefacts

The most impressive but least securely associated of these are two cannon.

S127. A small, brass, swivel-type gun, a little over 1 m. long and decorated with triangular designs. From these designs, it would appear to be of southeast Asian manufacture. In 1937, it was presented to H.M.A. Surveying Ship Moresby by

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I wish to thank Detective Sergeant I.C. Broomby for the following identifications.
Captain T. Haultain, Patrol Officer Larrakia. In 1939, it was transferred permanently to the office of the Hydrographer, R.A.N., Garden Island, Sydney, where it still is. It is understood that it was given to Captain Haultain by the then curator of the Darwin Botanic Gardens, who had found it amongst discarded rubbish. From hearsay evidence, it was originally found by pearlers on New Year Island in the 1890s, but there is no means of assessing the reliability of this information. It seems definite, however, that the gun was recovered in the coastal waters of the Northern Territory. The simplest explanation of its provenance, whether or not this is New Year Island exactly, is that the gun comes from a wrecked prau.

(Information from a letter dated 22.12.1967 from Captain A.H. Cooper, Hydrographer R.A.N. to D.J. Mulvaney, enclosing 2 photographs.)

S128. An iron, swivel-type mortar, overall length 23 inches, bore 4 inches. This was recovered from a reef off Darwin by Captain Cumberlege R.N., of H.M.A.S. Encounter in 1916. In 1968 it was seen on display on the lawn at H.M.A. Naval Dockyard, Garden Island, Sydney. (This is item (e) in an undated letter (Ref: PRO. PG.) from Captain J. Bell, General Manager of the dockyard to D.J. Mulvaney, from which the relevant details are taken.) There is even less firm evidence to connect this gun with the Macassans than for S127, but in the absence of further information, the easiest hypothesis to explain it, is that it comes from a wrecked prau somewhere around the coast of the Northern Territory.

In addition to the fish-hooks described above, there are a number of other small bronze, brass or copper objects. Two copper needles from site 8b, S15 and S16, have broken eyes, but a third from site 9, S69, is well preserved (plate 10.2). Related items from the former site are a small, double-ended,
copper spatula, S19, and two pieces of copper wire, S17 and S18. S73 (site 9) consists of two pieces of brass wire and from the same site, S84 is a double loop of copper wire. Also from here is a rough copper disc, about 2.5 cm. in diameter and with six nail holes (S79). Similar pieces of pierced metal come from site 32a (S98, 109) and site 32c where S113d has part of a hole. S113a,b,c are small pieces of cut metal. The hole in one small piece of brass, S45, (site 20d), has possibly been drilled. From site 9 there are a large copper eyelet, probably from a sail, S63, and a flat copper ring, 2 cm. in diameter with broken attachment, S64. Lead artefacts consist of two musket balls c. 1.2 cm. in diameter, S92 from site 9 and S101 from site 32a. They are not of a standard calibre. Also from this last site is a small lead sinker, S102. The most interesting of these small artefacts is S117 from site 32d (plate 10.2). This appears to be part of the bronze chasing from a musket, an identification helped by the presence of a small tack caught in its hole.

The iron objects are generally less well preserved. The most impressive is the large iron cauldron, S129, found on Record Point (site 3c). Two views of this are shown in plate 10.3. Although found with little associated evidence, it was probably a Macassan trepang boiling vessel. It resembles in general shape and dimensions those pictured in Dumont d'Urville (1846: plate 115; reproduced in Mulvaney 1969: plate 6 and in appendix 11, p.13). The small fragments of rusty iron found on many sites are probably derived from similar cauldrons, but the only other piece of any size, c. 10 cm. across, is S81 (site 9). An iron chopper with a brass ring still encasing a few fragments of the wooden handle, S3, comes from site 4a (plate 10.4). It seems in remarkably good condition to be Macassan, though it is very similar to that illustrated by Matthes (1885:
plate 7/23). The head of an axe, S130, from site 33, is also most simply accounted for as being Macassan. The remaining iron objects consist of a shovel nose spear blade, S118 (site 32d), perhaps made from a piece of hoop iron similar to S115 (site 32c) (plate 10.4). S82 from site 9 may also have been a blade of some kind, perhaps from a knife, while from the same site, S65 is an iron tongue from the catch on a box. S11 from site 7a appears to be the iron base to a bayonet scabbard.

Although it is difficult to be certain of the Macassan association of a number of items in the above list, taken as a group they reflect the considerable technological sophistication of the Macassans.

Case bottles

There are 22 whole or broken prunts in the collections. They fall into various groups:

J.H. Henkes with stork: S7 (site 4b), S10 (site 7a), S24, 25, 28 (site 8b), S32 (site 10b). S38 (site 13a) is probably this brand, but very little is preserved.

AVH linked together: S31 (site 10a).

AVHL linked together: S116 (site 32d), S125 (site 32j).
A (broken): S121 (site 32f).

BLANKENHEYM & NOLET with key: S30 (site 8c), S120 (site 32f).

P. RADEMAKER... DE VALK (the falcon) with a falcon on a branch: S29 (site 8b), S36 (site 13).

...ERs H.. with rose: S27 (site 8b), S124 (site 32i).

J.T. HENKERS SCHIEDAM: S1 (site 3f).

DER V..: S112 (site 32c).

Anchor over (?) R : S50 (site 20d).

... DAM : S119 (site 32d).

Four other items have also been selected as representative specimens.

S88 (site 9) - flat fragments marked VAN HOBO over ER and other marked OTT. This is A VAN HOOKEN, ROTTERDAM.

S122 (site 32f) - flat fragment marked NKEN over & NOL. This is BLANKENHEYM & NOLET.

S39 (site 13d) - square base of a case bottle, marked on the bottom with a circle divided into quadrants and with a large dot in each quadrant.

S96 (site 32a) - ring of a bottle. Another neck is also preserved on S29, mentioned above.

The following items are illustrated; plate 10.5 : S10, 28, 30, 31, 124, 125; plate 10.6 : S29, 39, 88, 122. Mulvaney 1969 : plate 8 illustrates a) S25; b) S29; and c) S39.

The items in the list above (which are all of dark green glass) and by far the major part of the remaining dark green glass in the collections, are derived from Dutch gin bottles, the so-called case bottles. This does not necessarily imply, of course, that they were full of Dutch gin when brought to Australia.

The first observation to be made about these bottles is that the same types are found on a variety of sites, thus confirming yet again the unity of the collections.

In addition to the items listed here, there are also quite a number of other marked fragments in the collections which almost certainly come from bottles of the same brands as those above, particularly A. van Hoboken and Blankenheym & Nolet. The actual spread of such bottles is thus a little wider than shown above.
More importantly, it is possible to date roughly at least some items. Photographs of S24, S25 and S32 were sent to J.H. Henkes' Distilleerderij N.V., Rotterdam. In a letter dated 23 June 1967, Mr H.J.M. Henkes replied 'we are sure that the prunts you have found must come from shipments of Henkes "Stork" Geneva in square faced dark green glass bottles which were forwarded to our (Chinese) agents in Makassar and Ambon in a period between 1845 and 1890.'

A photograph of S30 was also sent to N.V. Blankenheym & Nolet's Distilleerderij, Rotterdam. Unfortunately many of the firm's records have been lost, but in their reply of 7 March 1967, they state that they were shipping Geneva to Australia from at least as early as 1857 and considerable quantities continued to come until 1939. The firm was founded in 1714 and its gin is famous in many Dutch possessions. Klein (1966:132) says the firm's bottles are common in Surinam.

Less definite information is available concerning the Hoboken bottles, but various related firms using this name have existed since the late eighteenth century, usually in Rotterdam. The significance of the slight differences between the prunts AVH and AVHL is not known, but together with S121, they all seem to relate to this firm. Allen (1969,1:261-2) mentions an AVH prunt from Port Essington (1838-49) and draws comparisons with other nineteenth century examples from the Northern Territory.

The remaining prunts appear to be from similar Dutch firms, with the exception of S50, which may be British, but too little remains for a definite identification, and S53, which appears to be from a French brandy bottle. A similar prunt was found at Port Essington, though this further discovery from a site in Arnhem Bay rather weakens
the case that that bottle came with Dumont d'Urville, who only called at Raffles Bay and Port Essington (Allen 1969, 1:260). However no alternative explanation suggests itself.

Although no complete case bottles were found, a little information can be derived from the rings or rims that remain. The majority of these are similar to some figured by Allen from Port Essington (Allen 1969,2:plate IV/12; series D, 1-3). A few up-standing examples are also found, rather similar to Allen's type E, but on a case bottle. The two types are figures by Klein (1966 : fig. 5/3 and 4), who dates their introduction to the eighteenth century. However, since the vast majority of fragments, and perhaps even all the collections, appear to be from moulded bottles, a nineteenth century date may be more probable (Allen 1969,1:246).

It is relevant to note here that, working from Allen's information, the rings on the bottles which are not case bottles, are also nineteenth century in style. Moreover a considerable quantity of the glass, particularly from sites such as site 4c, is clearly very late indeed.

The conclusion to be drawn from all these lines of enquiry is clear: most of the glass recovered from Macassan sites was made in the nineteenth century. It is possible that some pieces date from the eighteenth century, but they would be very few. There is certainly no evidence for anything earlier.

One important reservation with this material is a certain doubt as to the Macassan association of any particular item. Vast quantities of Geneva gin, probably mainly Dutch, were imported into the Northern Territory in the late nineteenth century and Hoboken bottles are found on the gold fields. Blankenheym & Nolet also sent large

3 It is of interest that in 1907 White (1918:146) saw 'some Malay calico and three gin bottles marked "Rotterdam"' on the southwest corner of Groote Eylandt. These bottles apparently were complete and may have been used by Aborigines to store water.
quantities to Australia, so that, for example, it is questionable whether S30 from McPherson Point might not be the result of McPherson's thirst rather than Macassan visits. Similarly, the British settlements might have been a possible source of entry for some bottles, though it is perhaps more likely that the Macassans supplied the garrisons with Dutch spirits than vice versa. Whatever the possibilities, however, it would be straining belief to say that none of the fragments found on Macassan sites come from bottles brought by Macassans from Macassar.

Other glass artefacts

A rather surprising find from the Anuru Bay site (site 9) is a series of 5 glass beads: S68, 74, 93 (green); S70 (yellow); S83 (blue). A further white bead, S44, comes from site 20d. The function and the date of manufacture of these beads is unknown.

A fragment of a Lea & Perrin sauce bottle, S51 (site 20d), and part of a similarly marked glass stopper, S6 (site 4c), can be taken, on the evidence of Searcy (1907: 110-11), as witnesses of an Englishman's presence.

S99 and S100, both from site 32a, are included as examples of glass that has been utilized by Aborigines. There are, of course, many examples of this in the collections. This subject has been extensively treated by Allen (1969 : chapter 4), and virtually all his discussion of the Aboriginal use of glass applies to the present material.

Clay pipes

Site 4a - S2a (tip), 2b (fragment of bowl), 4 (bowl).

Site 4c - S5 (fragment of bowl).

Site 5b - S8 (tip).
Site 8b - S20 (part of bowl), 21 (part of bowl),
22 (bowl and 3 joining sections of stem),
23 (base of bowl).

Site 9 - S62 (tip and part of stem).

Site 12a - S33 (tip and part of stem).

Site 12b - S35 (section of stem).

Site 13a - S37 (bowl).

Site 20d - S40, 52 (both sections of stem).

Site 23c - S57a, b (part of bowl).

All are in a dull white ware except S21 and 57 which are terracotta. The tips S2a and 8 have a small ridge, presumably as a grip for the teeth, while the end of S33 is coated in a brown varnish. Plate 10.7 illustrates S20, 21, 22, 23, and 37. For S37 see also Mulvaney 1969: plate 11c.

The sample is too small and dispersed for any meaningful analysis of bore diameters, but a few tentative identifications can be made. S22, which has a very faint stamp on the side of the stem, is a McDougall pipe, made in Glasgow. The firm was founded in 1846, and similar pipes were produced for over a century. The goat's head, S23, is perhaps of French, nineteenth century manufacture, while the ship designs, S21 and 37, are of the same date, but it is difficult to specify a country of origin. In the Arnold Pilling collection of the Lowie Museum, Berkeley, U.S.A. there is another fragment of a bowl with a rigged ship (Register No. 11-3595a, b) and another which appears to have an anchor on it (11-3594a, b). Both are from

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The following comments are based upon a letter of Mr I.C. Walker to Dr F.J. Allen, dated 3 April, 1968. Mr Walker had kindly inspected photographs of the relevant pipes.
Fort Dundas, which was occupied from 1824 to 1829. \(^5\) S20 has a finely rouletted decoration around the rim and on the edge of the break are the letters S over SI. It is perhaps of Dutch manufacture. All other bowls are plain, except for S57 which has a stylized floral decoration on the front spine and traces of unidentifiable decoration on either side.

There is no reason to doubt that the entire collection of clay pipes dates from the nineteenth century. What is less certain is the association of the pipes with the Macassans. Such pipes were a standard European gift to Aborigines throughout the nineteenth century, who might have transported them to the sites where they are now found. For example, on the Tomkinson River, not far from where the Entrance Island pipe was found (S37), Carrington in 1885 presented the Aborigines with 'pipes, tobacco, and biscuits.' (SAPP 1886/53:9). Many of the sites producing clay pipes also have abundant evidence for European presence and the use of the pipes was by no means restricted to the Aborigines. Therefore in the absence of specific evidence, the use or importation of clay pipes by the Macassans must remain dubious.

**Miscellaneous**

S126 (site 25a) - a thin clay brick, approximately 10 x 18 x 3 cm, but very eroded. Microscopic examination of a thin section of this shows that it includes volcanic material. The brick was thus not made in northern Australia. Furthermore, its general dimensions are similar to those of old bricks observed in Macassar and elsewhere in Indonesia. It was probably brought to Australia by chance.

\(^5\) I wish to thank Mr John Mulvaney for telling me of these specimens.
S60 (site 9) - a sandstone pebble, perhaps used as a whetstone.

S114 (site 32c) - a haematite pebble, perhaps used as a whetstone.

S71 (site 9) - a piece of long bone with marks of being cut.

S103 (site 32a) - a small piece of yellow ochre.

S110 (site 32g) - a piece of lead carbon, perhaps for use as a pencil, measuring 4.7 mm. x 2.4 mm. x 81.3 mm.
PART III: CULTURES IN CONTACT?

Chapter 11

Macassans and Aborigines

When the first praus from Macassar sailed along the Australian coast, some of the Aboriginal watchers on the shore may have already beheld the amazing vessels of the first Europeans or of castaway sailors from the great archipelago to the north. But when the Macassans anchored in a bay and set up their camp on the beach to process the abundant trepang, the possibility was presented of a far more sustained contact than the earlier, fleeting visitors had provided. To understand the results of that contact, it will be necessary to discuss the conditions under which it occurred.

The initial impression the Macassans received of the Aborigines was probably not dissimilar to that recorded by the early Dutch explorers, that they were a race of naked savages with whom little trade was to be done. The tone of Macassan abuse is familiar: the Aborigines are 'cannibals' (Wilson 1835:97) or even 'Ourang Outang' (HRA III, 6:804, literally this means 'forest men'). To the end, the Macassans, who sought no more of the land than the beaches on which to camp, were spared the necessity of converting their initial caution into the aggressiveness needed to take a larger possession of the land. In contrast, once the initial amazement had worn off, Aborigines were drawn to Macassan camps by interest and by hope of exceedingly good trade and the gain of many useful items.
Yet the relationship was very different from the stereotype image of a handful of visitors surrounded by a horde of natives, friendly or otherwise. Rather, in most encounters, the Macassans outnumbered the relatively small number of Aborigines in any one neighbourhood, particularly if several praus were working together. The best case for which some idea can be obtained of the actual numbers involved, is that observed by d'Urville's expedition at Raffles Bay in 1839. Here a total of 27 Aboriginal men met 4 praus working for 2 days. One prau had a crew of about 37 men, and the others were probably comparable. In addition, another 3 praus briefly anchored in the bay during the same period, and about 20 praus had left a day or so before (Dumont d'Urville 1844:29, 47-56). There is no real reason to suppose that these were atypical numbers on either side (though it should be noticed that no Aboriginal women or children were present) and the general ratio is clear enough from many sources.

This is supported by the fact that the Macassans visited the coast while the Aborigines were in their wet season pattern of distribution. That is, although they were oriented towards the coast and its resources, and the comparative scarcity of food and the general discomfort of the situation perhaps made them welcome the Macassans and their food (see below) all the more eagerly, they were also fragmented into small, more or less sedentary groups and the difficulty of travel discouraged large gatherings (Warner 1937 (1964:394); Thomson 1948, 1949a, 1949b:passim). The general point is not invalidated by Berndt's caution against over-emphasis (Berndt 1958:254).

An awareness of the relative numbers involved is important, particularly when considering Aboriginal stories of contact.
Both parties had an interest in establishing and maintaining good relations. On the Macassan side, it was obviously more efficient, and therefore profitable, if the collection and preservation of the trepang could proceed unhindered by the threat or the reality of attack. In addition, there was some slight trade to be done, most notably in tortoise-shell, which seems to have been almost all obtained in this way (Dashwood 1902:42 q.471-2, 481). Pearls and pearlshell were also to be had. Occasionally some Aborigines seem to have worked at trepangning, but they can hardly have provided more than a minimal addition to the labour force required (see below). Finally, relatively friendly relations were needed for at least some Macassans to find solace in Aboriginal women.

For the Aborigines, regular access to Macassan material possessions, liquor and food, as well as the more intangible benefits of travel and prestige could only be obtained through fair and friendly dealings.

As it is less dramatic, the evidence for good relations is less obvious than that for the occasional violence, but enough exists to allow the main outlines of the picture to be drawn with some certainty. There are many instances of Aborigines visiting Macassan camps in a way that must have required a certain minimum level of trust on both sides (e.g. Searcy 1907:27).

Considerably more trust was required, at least on the Aboriginal side, for the fairly regular practice of Aborigines travelling on the praus to distant parts of the coast, or even to Macassar and beyond. A striking instance of this familiarity was found by a European prospecting party in 1876 who met an Aborigine in the country behind Caledon Bay who knew a few words of English he had learnt in Singapore (SAA 790/1876/74). In the same year, there were said to be about 17 Aborigines, mainly from Port Essington, living in Macassar (SAA 1374/A1798). This was nothing new
or unusual, as is shown by references to the same practice at the time of the British settlement at Port Essington (Jukes 1847,1:359; Sweatman 1848,2:268). Nor was it restricted to any one area. Tindale (1925-8:130) mentions men on Groote Eylandt who had sailed with the Macassans, and there are many other similar references for all parts of the coast.

It is interesting to note the distinctiveness of the Aborigines in the context of Macassar. In 1824, van der Capellen (1855:375) described them in unmistakeable terms: 'they are very black, tall in stature, with curly hair, not frizzy like that of the Papuan peoples, long thin legs, thick lips and, in general, are quite well built' (translated). Similarly, there is no difficulty in recognizing an Aborigine in the engraving, from a photograph taken in Macassar, of an Orang-Mereghi, said to be from the Cobourg Peninsula (Giglioli 1875:796-7). The visitors apparently remained in a group, probably in the guardianship of an influential captain (Berndt & Berndt 1954:56-8). In 1969, a substantial building, now a Muslim school, at Djalan Maipap 18, Kampong Bassi, Macassar, was pointed out as the former house of Remba (master 6 in appendix 8) (plates 11.6 and 11.7). Mangngellai and other elderly informants recalled that a number of Aborigines had stayed there. Among these was a daughter of Using (master 15) by an Aboriginal mother from eastern Arnhem Land (and thus a half sister of Mangngellai). She was called Kunano and had stayed between seasons in 1903. All Aborigines are said to have returned to Australia before the end of the industry in 1906-7.

Although it is certainly true that many of the recent Aboriginal accounts have emphasized the happier side of Macassan contact and have idealized the past for the purpose of the present, some weight should be given to the
generally favourable picture created. It is hard to get
other than an impression of friendship from a story like
that of Djaladjari about his voyage to Macassar (Berndt &
Berndt 1954:51-4, 56-8). At crucial points in this narrative,
the names and actions of specific Macassans are given,
pointing up the particular personal nature of the relation-
ship. The same point is clear on the Macassan side from
Mangngellai's information given above and from the account
of the Australian voyage by Daeng Sarro. As well as
mentioning specific Aborigines known to himself, he says that
his father had been very good friends with a man on Groote
Eylandt and 'they treated each other like brothers' (Cense
1952:264; appendix 12:185). This may even indicate, as
Worsley suggests, a Macassan awareness of Aboriginal kinship
terms (Worsley 1954:15; 1955:3). Cense says that Daeng Sarro
had some knowledge of various Aboriginal languages and some
other aspects of Aboriginal life and he was not exceptional
(Cense 1952:255 and pers. comm.). The most remarkable case
of familiarity is that of a Macassan called Timbo who was
left at Port Essington for a year to act as an interpreter
for the British and who spent three months away from the
settlement with the Aborigines (Earl 1842:139-40).\footnote{1}

\footnote{1 This may be the same man as one whom McArthur says spent
8 months with the Aborigines, though McArthur seems less
impressed than Earl with his knowledge (Copies or Extracts
1843:18).

There are several other cases of Macassans living with the
Aborigines, which it is convenient to list here. King in
1818, and Ree in 1824 (King 1827,2:239-40), both saw a boy
of Malay appearance on Melville Island, and possibly the same
individual is mentioned by Campbell (1834:155) at Fort Dundas.
Wilson (1835:72,75,180) knew Da'Ata, who deserted from a
prau in Trepang Bay in 1829 and walked alone to Raffles Bay.
In 1869, two Macassans were brought to Goyder's party at
Darwin, two years after they had been wrecked. The other
41 members of the crew to which they belonged had been
killed (see chapter 13). Harney (1943:171) records a
convincing story about two Macassan boys who were brought
(continued on p.324)
the extent of this familiarity can be overstated, particularly on the Macassan side. Earl sounds one warning in the same letter as that just mentioned. 'The Macassars, although nearly all the natives on the coast speak their language, know even less about the natives than we do, simply from their not taking trouble to inquire' (Earl 1842:140).

On the other hand, there is no doubt that many Aborigines had a relatively extensive appreciation of the Macassan world. The extent of their knowledge is most strikingly seen in the wide range of vocabulary items and proper names known, and Earl continues,

You ask for vocabularies. I am in the most ridiculous perplexity about them. After having collected many words, I found that I was making a vocabulary of a horrid patois of the Macassar dialect: in fact, nearly all the words the natives use when speaking with us are Macassarese (Earl 1842:140).

Many of these are still remembered (see below).

It is also true, however, that at times relations between Macassans and Aborigines broke down. There seems to have always been a certain caution on the part of the Macassans. As noted in chapter 4, many camp sites appear to have been selected with some regard to clear approaches. Flinders was cautioned by Pobassoo to beware of the natives, and his previous suspicions of poor relations between them

(continued from p.323)

up on Groote Eylandt and later acted as intermediaries. Harney (1943:172-3) has also collected a remarkable story about a political refugee from the islands, who appears to have been the man called Muragualakui. This man lived near Cape Fourcroy on Bathurst Island sometime before 1900, and Mr John Morris has obtained from Aborigines considerable information about him, as well as a carved statue. He had almost no contact with Aborigines. In 1966, Ana, an old Japanese living in Darwin, told me that about 1915, a Macassan boy was found living with the Aborigines near Junction Bay. He was brought to Darwin. Warner's statement that an occasional prau remained over a dry season is discussed in chapter 2, note 17.
and the visitors were confirmed by the story of several clashes (Flinders 1814,2:198, 231-2). Similarly, King was regaled with tales of 'perpetual warfare', though his information may relate more specifically to Melville Island (King 1827,1:138). Stokes mentions how the Macassans who arrived at the settlement in Port Essington at the end of March 1839 were grateful for the protection afforded by the British as the hostility of the Aborigines 'had until then forced every other man of them to keep under arms whilst the rest worked' (Stokes 1846,1:388).

These statements are probably best seen as generalizations from particular instances. For example, Stokes' statement must be viewed in the light of the French account of cautious intimacy at Raffles Bay at almost exactly the same time, and more importantly perhaps together with the information that there had been a specific quarrel between the Aborigines and the Macassans in Port Essington at the beginning of April 1839 (Dumont d'Urville 1844;49-50,56,66,277).

In a few cases where we have details of the circumstances of attacks, the particular nature of the situation is apparent. Searcy relates two stories which illustrate the motives of both sides. On Entrance Island, the brother of a Macassan who had been killed there, first made friends with the local Aborigines and then, when he had them in his power, massacred them (Searcy 1907:83; SAA 790/1884/445). In 1967 Old Johnny Godawa at Maningrida told a story which may refer to the same events. He added the detail that two Macassan boys had been killed originally and that the revenge occurred two years later. At an old camp in Arnhem Bay, Searcy was told the story of how an Aborigine had teased a Macassan captain for grog and tobacco until the Macassan struck him in exasperation. A little later, the captain was lured into the bush and murdered, his prau was then surprised and looted (Searcy 1907:90 SAA 790/1884/445). The technique
of the punitive expedition was no recent invention. In 1829 Captain Barker at Raffles Bay had to dissuade a Macassan, though perhaps not a regular visitor, from setting out with a party to punish the Aborigines for stealing some of his rice (Barker 1829: 2 Apr. 1829; Wilson 1835:81). In 1840, Bremer gives a grim tally. 'At Goulbourn's Islands they [the Macassans] were attacked...and four of their number killed; they afterwards revenged themselves by the slaughter of seven of the islanders' (Copies or Extracts 1843:10). Some Aborigines were prepared to eliminate the owners if they saw a chance for immediate plunder and Harney (1943:170-1) gives a good example. This motive probably lay behind the attacks on various castaways (see chapter 13), though the desire for indiscriminate revenge may also have played some part (e.g. for 1892 murders, see SAPP 1893/64:17).

It is possible to see some common causes in the various affrays that occurred. Revenge for injury by the other party, whether or not the same individuals were involved, was the most important, but there were innumerable possibilities for initial friction in the situation of trading, in the vast material wealth, to Aboriginal eyes, possessed by the Macassans and certainly in the regulation of the use of Aboriginal women. Disputes between different groups of Aborigines may also have had a part in some cases, with the Macassans not always perhaps being fully conscious of their partisanship. These potential sources of conflict were rendered more likely to be realized by difficulties of full communication and understanding between the parties, and occasionally by the effects of alcohol.

It has been suggested for Groote Eylandt (Worsley 1954: 9) and for Melville and Bathurst Islands (Campbell 1834: 155-6; Hart and Pilling 1964:97-8) that an additional reason for Aboriginal hostility was a history of attempts by
visitors from the north, or even the Macassans themselves, to collect slaves. This might possibly be the case on Melville and Bathurst Islands, though the evidence is very tenuous, but it seems most unlikely on Groote Eylandt.

A number of modern writers have tried to characterize relations between Macassans and Aborigines as either generally good (e.g. Thomson 1948:146-7; 1949b:58-9), or as generally poor (e.g. Tindale 1925-8:131; Worsley 1954: 11-2). The two aspects of the relationship have been most fully set out by the Berndts, but their rationalizing of this difference as an earlier period of amicable relations and a later period of deterioration would not seem to be justified by the variety of reports, as much from the early nineteenth century as from later (Berndt & Berndt 1954: 110-1). This variation was noted by the Macassans themselves. In 1841, McArthur recorded that:

...they speak of the different tribes of nations [? natives] as varying much in character and disposition, and appear to be on terms of amicable intercourse with those in the Gulf; but those along the shores of the north coast, especially in the vicinity of Cape Wessel, they have a rooted aversion to' (Copies or Extracts 1843:32).

In general, the issue of co-operation or antagonism depended on chance and circumstance, and varied from place to place, from time to time, and from individual to individual.

There are, however, a few areas where a slightly less indefinite verdict is possible. The most important is the Cobourg Peninsula and the immediately adjacent coast to the east. The long standing European presence in the area (over the last 80 years of Macassan activity) had so altered the traditional situation that, by the end of the nineteenth century, relations between the local Aborigines and the Macassans had developed much further than elsewhere. Thus, for example, there appears to have been a greater dependence
on Macassan food supplies (SAA 790/1884/177). However any detailed comparison with other areas is hindered by the lack of modern ethnographic work in this area and the absence of contemporary documentation for other areas. The long European occupation of the Cobourg Peninsula is responsible for both the documentation and depopulation of the area.

Conversely, the Tiwi of Bathurst and Melville Islands were consistently hostile to outsiders and were affected comparatively little by the Macassans (see area 1 in chapter 5). The contrast with the Cobourg Peninsula was specifically noted by Daeng Sarro (Cense 1952:262).

The minor variations between areas however are less important than the overall picture. This is of considerable interest as an example of culture contact, particularly as neither culture is European and because of the remarkably detailed information available on the conditions, nature and results of the contact. Essentially, the picture is that of two cultures existing side by side, involved neither in major co-operation nor in competition. This is not to say that both sides were not affected by the contact, but that the activities of both the Macassans and the Aborigines could have been, and often were, carried on in the absence of the others with little or no difference. The most useful theoretical discussion of various types of contact is that by MacWhite (1956:16-8). The situation we are concerned with falls most nearly into his type III A (1), 'Visits of specialist groups...of greater or less duration but who do not settle permanently'. However the visits by individual Aborigines to Macassar and elsewhere comes under his type IV A (1), 'Specialist groups...returned after visits to foreign lands', though the specialization of the people concerned is rather vague.

The contact situation was in many ways analogous to that in comparable areas of economic resource, but with different
parties involved. Trepangers, mainly European, in north Queensland and Torres Strait, enjoyed a similarly ambivalent relationship with the local Aborigines, though conflict may have been even more frequent (Bolton 1963). A more distant comparison is with the early sandalwooders in Melanesia. As Shineberg (1967) has shown, individual circumstances preclude sweeping generalizations about relations between the two sides, and the benefits of good relations were not all on one side. Certainly the Aborigines gained much from the Macassans, and it is to the influences exerted by the two groups upon each other that we now turn.

In the contact situation described above, it is not surprising that the Aborigines had minimal influence upon the Macassans. Some Aboriginal place-names in Australia were known and used by the Macassans, as well as the elements of some Aboriginal languages (Cense 1952:255; chapter 5).

Macassan influence on the Aborigines however, was extensive, even if rather superficial, and has long excited comment and speculation. Flinders wondered whether the custom of circumcision had been introduced to Australia by the Macassans, but thought it unlikely (Flinders 1814, 2: 232). Various other writers throughout the nineteenth and early twentieth centuries looked for similarities, mainly in language and physical anthropology, but were hampered by the lack of reliable ethnographic data. Curr, for example, on the information of Pascoe and Foelsche, gives a picture of fairly slight influence (Curr 1886,1:247-8,252,268-73 and for W.A. 291,296,370-1). It is unfortunate that Howitt, who corresponded with Robinson, was not specifically interested in this matter. Similarly Spencer, though aware of some contact, failed to visit precisely those areas where the results would have been brought most forcibly to his notice. A summary of the early discussion about 'Malay'
influences in Aboriginal languages is provided by Jennison (1927:177-8). This work also contains the observations of one of the first Europeans to have enough personal experience in the relevant area to advance our understanding of the extent of influence. Now, after almost 50 years of ethnographic fieldwork on the problem, notably by Tindale, Warner, Thomson, R.M. and C.H. Berndt, McCarthy, Rose, Mountford and Worsley, any debate as to whether the influence was great or small is rather unreal, for the nature and limits of influence can be fairly accurately described.

One major difficulty however, with virtually all of this work by Australian ethnographers has been the failure to look for the models which the Aborigines are supposed to have imitated. In fact, it would sometimes appear as if any unusual element in Aboriginal culture has been attributed to 'Malay influence'. Any claims to specifically Macassan influence should indicate the precise element in Macassarese-Buginese culture which has produced the effect, and also the presence of the Macassans in the relevant area or the line of connection to such an area. Enough is now known about the Macassans to set some limit to their usefulness as a general ragbag source of the unusual. This is not to say that there have been no other external cultural influences in northern Australia, but discussion of such other influences should also specify the presumed source of the influence and when and how it might have arrived, or if such precision is not possible, clearly say so. Nor does it imply that all influence is necessarily direct on a simple, diffusionist model, but even a discussion of indirect influence should attempt to show the specific and/or general stimuli which initiated the process.

What is attempted below is a summary list of the results of Macassan contact on Aboriginal culture, as known at this stage of research. A number of unproven claims
These and many other writers have drawn attention to the apparent part-Macassan ancestry of a section of the present population in all the areas of contact. This observation is so evident that there can be little doubt of its reliability. Indeed there are specific cases. Apart from Kunano, Using is said to have fathered nine other children by three Aboriginal women. Plate 11.1 shows Willie at Elcho Island whose father is said to have been a Macassan, and from his age this is quite possible. In some cases however, the Macassan ancestor might be several generations in the past, yet through chance, the 'Malay' appearance may be even more pronounced. At Umbakumba in 1967 there was a boy of only ten or twelve with very marked 'Malay' features, but of normal 'Aboriginal' parentage.

The majority of Macassans were undoubtedly Macassarese or Buginese, but it must be remembered that other ethnic groups were also occasionally represented in the crews. In addition, more recent visitors to the coast have left progeny, and there is the possibility of some contact with New Guinea.

Kirk (forthcoming) has reviewed the present state of knowledge in the systematic investigation of this problem and notes several possible indicators of Macassan influence, but further work is required, particularly in South Celebes.

It is difficult to assess the evidence for the introduction of various diseases by the Macassans. Brown (1802-3) noted some faint traces of smallpox on the faces of Pobassoo's crew, and Wilson (1835:170), at Raffles Bay in 1829, mentions something similar. Bremer observed smallpox among the Aborigines when the Port Essington settlement was founded in 1838 (Allen 1969,1:399), and at this early date, Macassans are the most probable source of the disease, though the previous British settlements are also possibilities. Robinson in 1882 describes a relatively
recent outbreak of the disease which killed many Aborigines (SAA 790/1882/346), and this is presumably that referred to elsewhere (e.g. Foelsche in Curr 1886,1:252,271). Curr also records outbreaks of smallpox, apparently introduced by visiting trepangers to Western Australia a little earlier (Curr 1886,1:296,370). The different sources for the introduction of this disease are discussed by Stirling (1911) and Cleland (1928:67-70).

One of the French visitors to Port Essington in 1839 recorded the presence of venereal disease among the Aborigines (Dumont d'Urville 1844:277), though even at this early date it could have been derived from Europeans. The Macassans are a more likely source however, and Robinson was told by a Macassan captain that the majority of his men were suffering from venereal diseases (SAA 790/1882/346).

A recent review by Packer (1961) suggests yaws is an introduction from the north, though this review also shows how unsure any conclusions on this subject must be.

By the end of the nineteenth century, and probably earlier, the question of the source of disease was too complicated for easy analysis by either European or Aborigine. Brown in 1903, when defending the Macassans against the charge of introducing venereal disease, points out the unreliability of native informants (SAA 790/1903/438). We can only say that there is no certain evidence for any catastrophic decimation of the population in the area of contact at any stage as a direct result of the introduction of infectious disease. The depopulation of western Arnhem Land is due to more complex factors, though sterility induced by venereal disease is probably the most important (Berndt & Berndt 1951:43-5). Indeed, by introducing at least some diseases gradually, the Macassans may have done much to build up resistances against the effects of European
contact, although as Berndt & Berndt (1964:18) point out, there is no actual evidence for this.

B. Language and Proper Names

The area of Macassan activity in the Northern Territory spans a number of linguistic divisions (Capell 1940; 1942; O'Grady, Voeglin & Voeglin 1966). Not only did this reinforce the natural tendency for the language of the Macassans to dominate in communication, but it also meant that it became a lingua franca between Aborigines from different areas (e.g. Searcy 1907:36). The relevant Aboriginal languages have been affected in a number of ways as a result of this situation.2

There has been confusion in some of the previous literature about the precise linguistic status of the Macassans and hence where the source of Aboriginal borrowing should be sought. However if, as shown in chapter 2, the majority of Macassans were in fact Macassarese, the most obvious source is the Macassarese language. This is confirmed in practice. Although no exhaustive work has yet been completed, numerous examples, of which some are given below, indicate Macassarese as the most important source of influence.3 Despite the failure of most contemporary

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2 Unfortunately, there is not enough evidence to examine in detail the relationship between the use of an intrusive language and other aspects of cultural change. However it is clear that many parallels can be drawn between this case and other multilingual situations. Fox (1968) has discussed two useful examples. A matter Fox does not mention, but which is relevant here, is the effect of the comparatively limited understanding of the donor language and culture by many of the speakers of the recipient language. This naturally affects the selection of elements transferred.

3 I am supported in this opinion by Dr A.A. Cense (pers. comm.) and by Dr Sutjipto Wirjosuparto (pers. comm.), who has collected a considerable list of loan words. Heeren
European observers to get past the label 'Malay', there is a little direct evidence on the matter. Jukes (1847,1:358) noted that Macassans at Port Essington in 1845 spoke 'Malay in a different dialect from that used at Sourabaya', and the Macassan deserter Barker left at Kupang in 1829 had difficulty making himself understood there (Wilson 1835: 180). Furthermore, all the examples of writing that can be attributed to a Macassan are in Macassarese-Buginese script. Similarly the contracts in Nederburgh (1896-8) and Kern (1933) are from Macassarese originals. Though inconclusive, it is interesting that the men to whom King showed his letter in Malay, written by Raffles in Arabic characters, could not read it (King 1827,1:93; the original is in the Dixson Library. A similar letter in Javanese is held by the Royal Australian Historical Society).

Probably Buginese was the next most widely used language, and indeed it would be difficult to distinguish it in many of the references above. In addition, the widely travelled Macassan seamen would have been aware of and may have used words in various other languages, particularly Malay. Indeed, when talking with someone such as Flinders' cook, who, as a Javanese, is unlikely to have known Macassarese, they may well have used this language. However when considering the source of Aboriginal

3 (continued from p. (1952:155) has also pointed this out, and gives a few examples. I would particularly like to thank Dr Cense for saving me from many elementary errors in this section and for a number of specific suggestions.

4 These are: 1. Flinders' copy of the rendition by Pobassoo's son of the name 'Port Jackson' (Flinders 1814,2: 232; Cense 1952:250). 2. Two signatures each by Using and Bangkasi on manifests. Using also wrote on the back of his 'export' manifest ma-ni-pe-si (= manifest) and on his 'stores' manifest su-ra-ki-sa (= surat kassa, letter of information). (See chapter 13 for this distinction.) (SAA 790/1884/177). 3. Two signatures by Unusu (daeng Remba) on manifests (SAA 790/1903/438).
borrowings, it is more accurate to look to Macassarese in the first instance, rather than to cognate forms in other languages.

i) Specific vocabulary items

Many writers have drawn attention to possible examples, in some cases with the suggested source (see especially: 1. Groote Eylandt - Tindale 1925-8:104,130,132; Worsley 1954:207,367. 2. Eastern Arnhem Land - Jennison 1927. 3. Western Arnhem Land - Vallack 1840; Jennison 1927). Further publication of linguistic work in northern Australia should make more definitive lists possible. However the main categories of words borrowed are clear and can be distinguished as follows: a) names of things possessed by Macassans which had not previously come to the attention of Aborigines.

- e.g. metal chopping or cutting tool
  - Eastern Arnhem Land - Bingal
  - Groote Eylandt - Banggilja (Worsley 1954:367)
  - Macassarese - Pangkulu' (Matthes 1859:94; 1885: plate 12/20)

5 It had been intended to provide here a checklist of Macassan loan words in northern Australian languages, insofar as the published literature and some slight fieldwork on this point would allow. However the complexity of the linguistic issues involved and the difficulty of obtaining anything approaching a complete conspectus of Aboriginal knowledge on this point without further publication or fieldwork make the effort inappropriate in this place. Problems of particular interest are the geographical spread of loan words and the differing intensities of influence in various languages.

6 Aboriginal words in common use have not been attributed to any particular source, but all examples have been confirmed by myself. With more unusual examples, the name of the informant who supplied the word is attached.

7 This is a good case of a specifically Macassarese derivation. The Buginese for axe is uwase and the Malay (Bahasa Indonesia) kapak.
rice

throughout area - Berita (many cognates cf. Vallack 1840 - Berrija)

Macassarese - Berasa (Matthes 1859:199). This is specifically uncooked polished rice.

needle

Western Arnhem Land - (Djarung) (Ngoliman)
Eastern Arnhem Land - (Tjarung) (Djinggulul)
Groote Eyländt - Djara (Worsley 1954:367; Malgari)
Macassarese - Djarung (Matthes 1859:416-7)

A particularly striking group of words in this category concern the praus and canoes of the Macassans (see below).
b) names for other concepts used by the Macassans.
e.g. a man in charge of something

throughout area - Bunggawa (many cognates)

Macassarese - Punggawa (Matthes 1859:96), probably most often meaning a prau's captain

European

throughout area - Balanda

Macassarese - Balanda (Matthese 1859:216). Primarily this means Dutch or Dutchman, but it is also used in Macassarese to mean European in general. The word is ultimately related to the English 'Hollander'.

prayer

Eastern Arnhem Land - Djambeya (Djinggulul)

Macassarese - Sambayang (Matthes 1859:565), meaning in particular the formal worship required of Muslims

The words for compass directions, or more strictly for the associated winds, also come within this category. Djinggulul supplied the following list:
(Bara) - Northwest
Macassarese - Bara' - West wind (Matthes 1859:188)

(Djelatan) - Southeast
Macassarese - Sallatang - South wind or land wind
(Matthes 1859:603-4)

(Tungara) - also meaning Southeast
Macassarese - Tunggara - Southeast (Matthes 1859:276)

(Timuru) - Northeast
Macassarese - Timoro' - East wind (Matthes 1859:306)

For a similar list from Groote Eylandt see Worsley (1954:94).

c) names for items of special interest to Macassans
e.g. trepang
throughout area - Daripa (many cognates)
Macassarese - Taripang (Matthes 1859:336-7)

pearlshell
throughout area - Mitiera (many cognates)
Macassarese - Mutiyara (Matthes 1859:248)

d) Worsley (1954:368) has suggested Macassan influence on the numerical system in the language of Groote Eylandt, but the evidence is exceedingly tenuous.

e) Worsley (1954:207) also claims Macassan influence on certain Groote Eylandt kinship terms, but I am unable to perceive this from his examples.

The language of the Macassans does not seem to have affected the grammatical structure of any Aboriginal language, and the loan words are all fairly readily explicable in terms of the subjects about which communication was regularly
required. A few of these loan words, such as *Daripa* (= trepang), are now firmly embedded in the relevant Aboriginal languages, as are several Macassan place names. Badelumba is the best example, as that has also come to denote a social group on Groote Eylandt (see site 30). An interesting case of a drift in meaning is the word *ungbardi*. In Macassarese, this means the frame under the bowsprit of a prau (see table 11.1, no.40). In Maung, it means the front part of a canoe, the man who harpoons from there, and also a skilful sea-hunter (Miss H. Hinch pers. comm.). However many of the loan words are alternatives to more usual words, adding still further to the range of synonyms in these languages. The situation is well put by informants when they describe the loan words as 'Old Testament'. Indeed some are so specific in their meaning that they must be regarded merely as Macassarese words directly remembered. When this is so, there is often a degree of 'pepper-potting' to be found: several words on a common subject are remembered, but their precise meaning is forgotten. A very clear example of this is seen in a list of numerals as remembered by Djinggulul. He himself recognized that the order was rather vague.

<table>
<thead>
<tr>
<th>Macassarese</th>
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<tbody>
<tr>
<td><em>(Rrua)</em></td>
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<td><em>(Anna)</em></td>
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A more complex example of 'pepper-potting', which also shows a remarkable facet of Aboriginal knowledge, concerns technical terms relating to praus. A photograph of Westall's drawing of a prau was shown to various informants and they were urged to remember as many terms as possible relating to it (plate 11.2). The letters shown on the plate were not present on the print used in the field. The results are set out in table 11.1. These are also compared with the terms recorded by Mountford (1956:98-100) for a bark painting of a prau from Groote Eylandt. Slight variations in pronunciation have been neglected. The column on the far right indicates the correct answers according to the descriptions and pictures in Matthes 1859 and 1885.

Moyle (1964:18) also mentions the occurrence on Groote Eylandt of the word *barawa*, from the Malay (Bahasa Indonesia) *perahu*.

Further ethnographic and linguistic work would probably increase the number of indentifications. However it is remarkable that 10 is the only common word not yet identified. A useful list of terms relating to ships in various languages is given in Enc. Ned. Ind., 5:429-30. It confirms the specifically Macassarese origin of many of the words above.

It would be unwise to interpret this table too rigorously, but it is clear, for example, that the term for a rudder is well established (I = 11). However the terms for the yard and boom (F and G) are less well known,

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Dr H. Groger-Wurm (pers. comm.) has collected at Yirrkala several series of terms relating to praus and other subjects connected with the Macassan trepang industry as illustrated in bark paintings. Our lists of terms correlate very well.
14, 15 at top of mast

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Cabin, 36; parts of deck, 37, 38. Also knew 3, 28.

Cabin, 37, 38, 39; Hold, 36. Also knew 2, 21, 32.

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Dayngumbu

Ngoliman

Sam

Paddles, 42

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Terms relating to Praus
Key to table 11.1.

<table>
<thead>
<tr>
<th>Informants' words</th>
<th>Macassarese</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (Luluna)</td>
<td>- Lolo = rope fixed to the upper end of the yard, the 'umbilical cord' of the sail (528 &amp; plate 16/1:29)</td>
</tr>
<tr>
<td>2. (Beya Beya)</td>
<td>- Baya-baya = sheet (184 &amp; plate 16/4:30)</td>
</tr>
<tr>
<td>3. (Bukuna) or (Baku Baku)</td>
<td>- Poko' = rope fixed to the lower end of the yard (93 &amp; plate 16/1:28)</td>
</tr>
<tr>
<td>4. (Bainjouro)</td>
<td>- Banjoro is a form of caulking according to Mr Harris Tjandra: Banjoro' is given by Matthes (184) as a kind of timber.</td>
</tr>
<tr>
<td>5. (Barwor)</td>
<td>- Bau = top yard for sail (231 &amp; plate 16/1:20)</td>
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<tr>
<td>6. (Biluka)</td>
<td>- Pelokang = bottom boom for sail (132 &amp; plate 16/1:21)</td>
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<td>7. (Bakalinga)</td>
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<td>8. (Rikin)</td>
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<td>10. (Murreiyar) or Marayarryn</td>
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<tr>
<td>11. (Kauli)</td>
<td>- Guling = rudder (82 &amp; plate 16/2:11 and 12/37a)</td>
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<tr>
<td>12. (Dombala)</td>
<td>- Sombala' = sail (567 &amp; plate 16 and 17)</td>
</tr>
<tr>
<td>13. (Karoro)</td>
<td>- Karoro' = sailcloth made from the leaves of the kuala' tree (46)</td>
</tr>
</tbody>
</table>
14. (Dangala) - Takala' = pulley unit at the top of mast for halyards (273,907)

15. (Banoinggi)

16. (Mikkan)

17. (Lokor)

18. (Morndju) (? = 19)

19. (Waidjung) - Anjdjong = bowsprit (659 & plate 16/1,2:3)

20. (Pubuka) - Bu'bukang = halyard (158 & plate 16/1:27)

21. (Panna Luntu) - Pangngalontong = rope fixed to the bottom boom to adjust the sail (97 & plate 16/2:24)

22. (Mitjia) or (Meetiang) or Mitjuna - Biseang = a ship, whether large or small (228). The suggestion of Worsley (1955a: 5) and Moyle (1964:18) that this is derived from Djung or Junk (Macassarese Djongko) is unlikely to be correct.

23. (Parembi) - Parimping = the draw rings on the edge of the sail (122) or even just the seam along the edge (Mr Harris Tjandra)

24. (Lauwula)

25. (Kantaijang) - Gantayang = rattan binding the sail to the yard and boom (73)

26. (Balira) or (Balairang) - Pallayarang = mast, particularly the two sternmost sections of the tripod mast (513,907 & plate 17/1,3:18,19)

27. (Balangu) - Balango = anchor (215 & plate 16/4:32)

28. (Djamarai) or (Semara) - Samara = the rope binding the halyard (bu'bukang) to the top yard (bau) (570)
29. (Baratang) - Baratang = bamboo struts supporting the outrigger(s) on a canoe (197)

30. (Bamilo) - Pamelo' = piece of wood stuck through a hole across the end of the boom to help roll it up (132 & plate 16/2:22)

31. (Lopuru) - Loporang = pulley in takala'

32. (Tambera) - Tamberang = ropes holding the mast upright (301)

33. (Lemma Bira)

34. (Tarawan)

35. (Sjepung)

36. (Rrawa) - Rowang = hold of a prau (463)

37. (Karnang) - Kanang = the right or starboard side (30)

38. (Kairi) - Kaïri = the left or port side (67)

39. (Borkor) - Bukku' = deck of bamboo and palm leaf mats (148 & plate 16/2:2)

40. (Ungbardi) - Ungbardi = the V shaped frame under the bowsprit called Surempa' by Matthes (589 & plate 16/1:4). This identification was suggested by Mr Harris Tjandra

41. (Balari) - Palari = type of prau (514 & plate 16/4)

42. Miaitja

43. (Bulu) - (? = 6)
and in one case reversed. The precise meaning of some terms, for example 14 and 30, seems to have been forgotten, though more detailed questioning may reveal more knowledge.

ii) Phrases and Sentences

Some Aborigines undoubtedly acquired considerable facility in the language of the Macassans. Though of decreasing practical use, particularly as English came to be accepted as the lingua franca in its stead, the ability to speak 'Macassan' could be put to advantage, if only to create the impression of learning (Chaseling 1957:50). There is of course no question of Aboriginal 'borrowing' here: this is just knowing another language. A typical phrase remembered by Djinggulul is (Tena mangi mangi senang) which he translates as 'watch him, sit down, quiet'. The Macassarese is 'Taena mange-mange sannang' (not) (go) (quiet) meaning 'Don't move about, be still'.

iii) Ritual Formulae

A number of formulae used by Aborigines, but of which they have now forgotten the exact meaning, have been derived from Macassan ritual (Warner 1937 (1964:421); Cense 1952:257-8,260). Mun-gurrawuy supplied what would appear to be another such formula. He said that the Macassans used it during a dance which marked the completion of work in a particular locality.

(Muduyeima Muduyeima Ruyeima
Gilili (uttered 4 times in a high pitched manner)
Rui)

The second line is probably the Dzilelji (= Salli 'alaihi) recorded by Warner (1937 (1964:421)) and Berndt Berndt (1949:215), and explained by Cense (1952:260). Wallace (1869,2:165) mentions it being used during a departure ceremony on a prau leaving Macassar.
The words of a mast song spoken by Mawalan have been recorded by Moyle (1967:39-40 & Disc 4A Band 6), and this may be a similar sort of formula. (Alternatively, it may be one of the songs discussed below.)

iv) Macassan names of Aborigines

Cense (1952:262-4), records various Macassarese names for individual Aborigines. That Aborigines assumed these names, usually in addition to their Aboriginal name, is confirmed by informants. The process was similar to the attribution to and assumption by Aborigines of European names. Nanungunda at Umbakumba, for example, claimed to have taken over the Macassan name of (Kariemboitj) from his father. The Macassarese title, Kare, can be recognized here. By this time, some Macassan names have become totally integrated, such as that of Dayngumbu, where the Daeng title is apparent (cf. Warner 1937 (1964:380,457); Thomson 1949b: 59). These names may either be those of specific Macassans or of objects. Several examples provided by Miss Beulah Lowe are:

Märritja cf. table II.2, no.1: appendix 8, master 7
Buwa'nandu no.13 16
Bayabayá table 11.1, no.2
Bamuniya see below under section C, heading x

v) Macassan place-names in Australia

In most cases, the Macassan name is clearly recognized as such and is supplementary to an Aboriginal name. However this is not always so, although the extent to which such names are recognized may depend merely on the traditional knowledge and interest of the informant. The Macassan names either describe some peculiarity of the feature named, or refer to a person, or are copied from a name in South Celebes. A complete coverage of known examples is attempted in the gazetteer (chapter 5).
vi) Names of individual Macassans known by Aborigines

It is hardly surprising that the more prominent Macassans became known to the Aborigines by name. Many of these names appear in stories about the Macassans, particularly those in Berndt & Berndt (1954: chaps. 5-10, 12; cf. also Worsley 1954:15). The names listed below were collected just as names. Some attempt has been made by Aborigines to impose their patterns on to these names, as perhaps they did in respect of the individuals themselves. Thus Mun-gurrawuy claimed names 1-3, 7, 11-2, 17-21 as Gumatj, while Mawalan said 22-7 were Rirratjingu. The resulting Dhuwa moiety connotation of the latter is particularly notable, in view of the usual Yirritja association of the Macassans. Various filial and fraternal relationships were suggested and perhaps some temporal order, but these were very vague. The correlations with names listed in appendix 8 should be regarded as extremely tentative, particularly as there may have been more than one individual of the same name. However it is interesting that the four more certainly identified individuals were particularly prominent over the last 30 years of the industry.
<table>
<thead>
<tr>
<th>Name</th>
<th>Djinggulul</th>
<th>Dayngumbu</th>
<th>Mun-gurraway and Mawalan</th>
<th>Birrigidji</th>
<th>Correlation with appendix</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (Maritja) or (Wonamadu)</td>
<td>x</td>
<td>xa</td>
<td>x</td>
<td>x</td>
<td>7</td>
</tr>
<tr>
<td>2. (Wonamadu)</td>
<td>x</td>
<td>xb</td>
<td>x</td>
<td></td>
<td>?20</td>
</tr>
<tr>
<td>3. (Madu)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. (Lantoro)</td>
<td>x</td>
<td>xc</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. (Udjing)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>6. (Bunga Lumpu)</td>
<td>x</td>
<td>xd</td>
<td>x</td>
<td></td>
<td>?15</td>
</tr>
<tr>
<td>7. (Deindaranka) or (Wonaiuadjing)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. (Deinduruang)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. (Bukualupalu)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. (Bapa Sembang)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. (Dein Katjing) or (Gardjing)</td>
<td>x</td>
<td>xe</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. (Dein Dadjing)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. (Buatnandu)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>14. (Mangalei)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td>26</td>
</tr>
<tr>
<td>15. (Deindali)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. (Deimadula)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. (Dimadeia)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. (Deinbarwi)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. (Kurumulna)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. (Keielinna)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. (Wanasei)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. (Kalara) or (Deinatdji)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. (Bapa Lenti) or (Bankibudu)</td>
<td>xf</td>
<td></td>
<td>x</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>24. (Teibung)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. (Tjorbor)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. (Bapa Jindidi)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. (Daendarimpa)</td>
<td>xg</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>28. (Kaderi)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notes

a. said to be Bunggawa at (Wobalinna) (site 25a)
b. " Lunggudja (sites 20c,d)
c. " Groote Eylandt
d. " (Karkanga) (site25)
e. " (Dairangilla) (?)
f. " (Bunkalau) (? Coburg Peninsula)
g. " Buyurigi (site 14d)

Worsley (1954:15) gives a short list in which some of these names also appear.

(vii) Names of places outside Australia known by Aborigines as a result of Macassan influence

Berndt & Berndt (1954: chaps 7-9) record many Aboriginal versions of foreign names. Several of the names given for the vicinity of Macassar can be identified, e.g.

Leileiia = Lae Lae Islands, about 1 kilometre off Macassar.

Kambu'Maleiju = Kampong Melaju, to the north of central Macassar. The meaning is Malay Kampong.

Kambu'biru = Kampong Beru, to the south of central Macassar, but many other examples as well. The meaning is New Kampong.

(Berndt & Berndt 1954:51,57-8; see bibliography for map of Macassar).

The following list known to Djinggulul confirms a number of the names collected by the Berndts.

(Kampon Malaku) = Kampong Maloku, to the south of central Macassar. The meaning is Moluccas Kampong.

(Kampu Wara) Unidentified, but the meaning of North Kampong is clear.
(Kampon Kota) = Unidentified, but the meaning of the central part of the town is clear (Matthes 1859:20-1).

(Panambuna) = Panambungang, about 2 kilometres south of central Macassar.

(Kampu Mundjung) = Kampong Udjung (Tana) in central Macassar; or Kampong Kundjung to the south of the city near Galesong.

(Rrengura) = Mangkura, a kampong to the south of central Macassar.

(These identifications are based on maps and the suggestions of informants in Macassar.)

A term frequently used for the general area of Macassar is Yumainga. The identification of this name is not absolutely certain, but the most probable suggestion derives it from Djongaya, the old port about 5 kilometres south of central Macassar. This settlement was the capital of Goa until early this century.

The question of place-names in Torres Strait is difficult. As stated in chapter 2, it is difficult to believe that this knowledge is a result of the Macassan presence.

The personal names and place-names known to Aborigines emphasize again the specific connection with Macassar and the Macassarese-Buginese cultural group, and not with any other area or group in Indonesia.

C. Material Culture and the Economic Basis of Society

i) The dug-out canoe

This is widely known by its Macassan name, lipalipa (Macassarese lepa-lepa - Matthes 1859:482) and together with associated sails, ropes, masts, etc. is indisputably derived from Macassan prototypes. Indeed at first, the
canoes were obtained directly from the Macassans, with or without their permission, and they may not have been regularly made by Aborigines until the very end or even after the period of contact (Wilson 1835:146,167; MacGillivray 1852,1:146-7; Worsley 1954:61-4; Morris n.d.:4). It is difficult to believe Warner's statement that none at all were made until after the Macassans ceased coming, though no doubt more had then to be made (Warner 1937 (1964:451)). Tindale (1925-8:103-11) and Thomson (1949c:52,57-60) have described the making of a dug-out canoe and stress the importance of a metal cutting tool as an addition to the traditional Aboriginal tool-kit. Some Macassan canoes had outriggers, (Matthes 1885: plate 17/3 and 4) but these were not copied by Aborigines, who were satisfied with the smaller, simpler models (Warner 1937 (1964:451); Heeren 1952: 154; Morris n.d.:5). Thomson (1949b:59) also classes the idea of the three strand rope for dugong and turtle fishing as an introduction. If so, it is best associated with the canoe complex.

One interesting line of speculation arises out of early observations of canoes. In 1705 a Dutch expedition recorded bark canoes probably off the Cobourg Peninsula, though possibly Melville Island is meant, or both areas. The absence of iron is also specifically mentioned (Major 1859: 169-70). The next record is by Flinders who describes a bark canoe in Blue Mud Bay. However iron implements are now in demand (Flinders 1814,2:198,213). King (1827,1:67) found a dug-out canoe at South Goulburn Island in 1818, but says

9 The earliest record of canoes which were almost certainly made in Australia, is in photographs taken on Oenpelli lagoon in the early twentieth century (Masson 1915:opp. 116, 118). Unless they were brought round from the north coast by sea and then overland from the East Alligator River, they must have been made locally, though perhaps by north coast men working for Cahill.
that it was originally Macassan. Thereafter dug-out canoes are frequently recorded in many areas. There is here the faintest suggestion that dug-out canoes only came into regular Aboriginal use at the beginning of the nineteenth century. Davidson (1938:62-3,73) comments on the rapid integration of the dug-out canoe into Aboriginal culture, though his remarks on its diffusion are not reliable.

(ii) Metal

Whenever it was first introduced, it is unlikely that it took the Aborigines long to discover the usefulness of iron, and their avidity for it is often mentioned (Dumont d'Urville 1844:33; SAA 790/1876/74:22 and 27 Sept. 1875; Tindale 1925-8:98). The metal items obtained were axes, knives (including various types of sword) and miscellaneous pieces of wire of flat iron from which shovel nose spearheads, harpoon tips, barbs, and so forth could be beaten out. For an example of a Macassan axe, see under site 33; for a knife, site 4a (S3 in plate 10.4); and for a shovel nose spear, site 32d (plate 10.4 compares this spear point, S118, with a piece of crude hoop iron, S115, which could easily have been fashioned into such a point). Matthes (1885) also illustrates an axe (plate 12/20), a range of knives (plate 7) and various types of lances which probably served as models for the shovel nose spear (plate 8/1b, 2, 5,11,12). This last example demonstrates very simply the interaction between a new idea and the new material resource which had to be made available (not just from the Macassans, but from any source) for its implementation (see Harney n.d.: 84).

An interesting problem concerns the use of fish-hooks. The Macassans certainly had them (Matthes 1885: plate XIII/7,8,9 and the evidence of the bronze fish-hooks described in chapter 10) and Thomson (1949c:86) mentions 'nails (for fish hooks etc.), fish hooks and lines' among items
iv) Cloth

Various sorts of cloth are usually mentioned by Aborigines among the items received by them (e.g. Thomson 1949c:72 - calico and blankets). The Macassans were not the first to discover that cloth is a suitably harmless item of trade. Some of this cloth may have been obtained originally from Indian or European sources, though some of the karoro', or sailcloth made from vegetable fibre (Matthes 1859:46) and other local cloths probably also found their way into Aboriginal hands. Occasionally actual clothes seem to have been given to Aborigines (e.g. Napier n.d.:29). This was of doubtful use. Sweatman (1848,2:274) mentions a case in which the Aborigines bartered the clothes given to them by the settlers at Port Essington, to the Macassans in exchange for rice. However there is also record of them wearing sarongs, presumably obtained from Macassans, when meeting Europeans (SAA 1374/A755).

v) Pipes and Tobacco

Though the use of various forms of 'tobacco' is well known in Aboriginal Australia, the smoking of true tobacco in a pipe closely modelled on a Macassan prototype points to this method being an introduction to the contact area, as of course was any non-native tobacco (Berndt & Berndt 1964:96). For an example of a Macassan pipe, though this was chiefly an opium pipe, see Matthes 1885:plate 10/24. Berndt & Berndt (1964:378-9) discuss the use and decoration of Aboriginal pipes (see also Elkin, Berndt & Berndt 1950:102-3, plate 20b; Berndt 1964b:105).

Some of the clay pipes found on a number of sites may have been brought and used by the Macassans, but most were probably distributed by Europeans (see chapter 10).
The use of a pipe for smoking was not essential however, and Searcy (1907:27) records Aborigines smoking cigarettes made from Macassan tobacco. No doubt a large crab claw was also used on occasion, as at present.

vi) Miscellaneous items of material culture

Thomson (1949c:86) says the Macassans brought beads, belts and string. Some of the first have been found on Macassan sites (see chapter 10). Warner (1937 (1964:449)) also mentions belts.

vii) Food and Alcohol

Visitors to a foreign and supposedly barbarous people have usually offered food in the hope of encouraging good relations. To an Aborigine in the wet season any such offers were particularly welcome, nor, when good relations had been established, was the need to reciprocate in terms of work or desirable commodities such as tortoise-shell or pearlshell, particularly onerous. Where even greater intimacy occurred and Aborigines sailed on the praus, there was no choice but to eat the food of the hosts.

The chief items thus brought to the notice of the Aborigines were rice, tamarind fruit, syrup and alcohol. Of these, the first and the last were the most important, though the growth of tamarind trees in Australia eventually provided another minor, but useful source of food in the natural environment. There is also one record of Aborigines using betel (SAA 1374/A755). The point on which Aboriginal tradition is least helpful is in estimating the approximate quantities of food distributed and its importance relative to other sources of supply. Naturally the unusual and exciting are stressed at the expense of the regular and accepted. This deficiency can be made good from other sources.
Firstly it is clear that the Macassans brought the bulk of their labour force with them, and any Aboriginal help or trading was incidental. They had no need to come into contact with large groups of Aborigines. Furthermore, any single group only came into contact with the Macassans for the relatively short time that praus happened to be working in the vicinity. For the remainder of the year, it was necessary to rely on traditional foods, though iron and the dug-out canoe may have made their acquisition easier.

Secondly some figures do survive. The papers of 3 praus in 1883-4 distinguished supplies brought for the crew from those brought for export. The quantities are shown in table 11.3.

Table 11.3

Rice and Alcohol on 3 Praus, 1883-4

<table>
<thead>
<tr>
<th>Prau</th>
<th>Rice</th>
<th>Alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Crew</td>
<td>Export</td>
</tr>
<tr>
<td></td>
<td>piculs</td>
<td>piculs</td>
</tr>
<tr>
<td>M</td>
<td>67</td>
<td>10</td>
</tr>
<tr>
<td>B</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>N</td>
<td>70</td>
<td>nil</td>
</tr>
</tbody>
</table>

Source: SAA 790/1884/177
See appendix 8 for names of praus
Prau L also brought nothing for export in 1902-3  (SAA 790/1903/438).

While the precise reliability of these figures may be questioned, it is clear from the calculations on the total amounts of rice brought, that they cannot be very far wrong
(see chapter 13). The Macassans needed most of their rice for themselves, and this cannot have been substantially different even before the squeeze of the last 30 years of the industry.

The position regarding alcohol is a little more obscure. If really large quantities were essential to the industry, no European observer saw praus carrying it and the drop in quantity as a result of higher duties - and that in the face of fairly observant Customs officers - passed remarkably quietly. Even before this, the quantities involved as suggested in table 11.3, should be compared with the vastly greater quantities consumed in the area today. Just how far would a couple of dozen bottles go among a crew of perhaps 35 over about 6 months, and leave some over for Aborigines? No doubt there were cases of gross drunkenness with unfortunate results, but when the available quantities of alcohol are compared with the number of people involved, it is obvious that such cases can hardly have been common occurrences. Both nineteenth century European observers and modern Aborigines have had their reasons for exaggerating the amount of alcohol available.

A major difficulty for Aborigines in the use of rice must have been the need for an efficient receptable for cooking. Pottery can hardly have been used away from Macassan camp sites, and tin cans appear to be a European introduction. There is a similar difficulty in the storage and transportation of alcohol. There is only one record which may indicate the presence of whole bottles in an Aboriginal camp (White 1918:146).

In short, we may conclude that although Aborigines obtained some food and alcohol from the Macassans and,

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10 Compare the ease with which flour can be prepared, and the analogy with methods of preparing native foods.
understandably, were always ready to obtain more, the actual amounts spread over the total population and the entire year were comparatively insignificant.

viii) Economic Thought and Practice

The concept of barter, that is the mutual interchange of goods, was customary throughout Aboriginal Australia, though it is usually overlaid with ceremonial connotations as well. It is against this background that the exchange of goods with the Macassans should be seen (Warner 1937 (1964: 450)). However although coinage was certainly known in Australia (Berndt & Berndt 1954a:45; see also the coins described in chapter 10) and perhaps the Macassans thought in monetary terms, there is no evidence of any use of money by Aborigines. Indeed the fact that the Aborigines speak of specific trading partners emphasizes the way in which the process, in their eyes, was made to conform with existing patterns of interchange (Warner 1937 (1964:449); Berndt & Berndt 1954:43). Yet the extent to which they invested this trading relationship with added meaning is unknown and some ethnographers have tended to minimize the ceremonial import of the exchange (Thomson 1949c:51; Worsley 1954:77-8). There must have been many occasions when a particular group of Aborigines met Macassans with whom they had had no previous contact. Their response to this situation can be guessed from that displayed to early Europeans. Napier (n.d.:50), for example, says that the Aborigines in Castlereagh Bay in 1867 'make very hard bargains; for a parcel of tortoise shell which they wished to sell, nothing less than a tomahawk would satisfy them.'

The exact comprehension by Aborigines of wages, or goods paid for labour, is also in doubt. Certainly a few men did actually work for the Macassans (Howard in SAPP 1866-7/79:1; Dashwood 1902:42q.478; also 43 q.513) but the number of
crewmen on the praus indicates that the Macassans themselves provided the bulk of the labour. Furthermore, although Worsley in particular has argued that 'the aborigines were... fully acquainted with wage labour' (Worlsey 1954:75; also 1955a:3), his list of masking features obscures or compromises the situation so seriously that it may be doubted whether the essential idea was there at all. However the situation probably varied from one area to another. Thus Daeng Sarro points out that on the Cobourg Peninsula, an area of considerable acculturation, 'the people were peaceful and the men prepared to work on board the ships, collecting trepang in return for food and tobacco' (Cense 1952:262; appendix 12:182).

Thomson (1949c: passim, but particularly 82-94) has expounded in detail a theory that the acquisition by coastal Aborigines of highly valued items of material culture as a result of Macassan contact gave 'a special impetus' to the ceremonial exchange cycle far inland. Certainly some items such as iron and glass, seem to have travelled some distance, although it is now probably impossible to plot the limits of distribution. However similar exchange cycles are such a regular feature of traditional Aboriginal society that the special nature of this one can perhaps be over-emphasized (Warner 1937 (1964:450); Stanner 1933-4; McCarthy 1939). The oldest reference to the practice in the area is by Earl (1842:140) at Port Essington. 'All the clothes, iron, axes, &c., that the natives of the coast have taken from us goes into the interior, but I cannot discover that they get anything in exchange but spears, and perhaps food.'

ix) Groote Eylandt Society

Rose (1961) has argued that the introduction of the dug-out canoe permitted the permanent occupation of Groote
Eyllandt by a society which, unlike that in Arnhem Land, depended basically on the resources of the sea, and thus maintained a greater density of population on land. While the dug-out canoe has certainly been very important in the traditional economy of Groote Eylandt, the complexities of the historical and ethnographic situation throughout the whole area are too great to allow such confident conclusions to be drawn.

x) Additional Claims

A number of other instances of Macassan influence on Aboriginal material culture have been suggested, but require further substantiation.

The most important concerns the use and manufacture of pottery. Berndt & Berndt (1947a), on the basis of the content of certain songs of which they publish two, state that Aborigines assisted in the manufacture of the earthen-ware pottery found on Macassan sites, which was made in Australia from local termite mounds, and that they were familiar with its use for cooking. There is no reason to doubt the last point, as presumably the sight of rice being prepared would have been common to all Aborigines visiting sites or travelling on the praus. There is no specific evidence for Aborigines using pots to cook rice independently of the Macassans, but it may have occasionally happened. Such pots could have been obtained from the Macassans.

The question of the manufacture of pottery in Australia is very different. The evidence against this, though essentially negative, is very strong. Firstly there is no indication in any documentary or archaeological material that the Macassans had any other object in coming to Australia than the collection of natural products, chiefly trepang. It would be most unusual within the pattern of pottery
manufacture and supply in the archipelago if its manufacture were undertaken during a voyage of this character. Quite adequate supplies were available through the normal channels. Certainly all the pottery found could have been imported both in respect of design and quantity. Secondly, there has now been a considerable amount of ethnographic and archaeological work in the relevant areas of Australia, yet no direct material evidence, such as clay quarries, rudimentary wheels, paddles or the like, has been found. Key (1969) has discussed the difficulties of making any pottery from the termite mounds, the alleged source of clay, and the microscopic examination of thin sections prepared from a number of sherds indicates that they have not been made from such material. Indeed the volcanic minerals present could not have been obtained anywhere in northern Australia.

It is possible that the similarity in colour and texture between the earthenware pottery and termite mound material has led to this confusion. The words used for the pottery in the songs published by the Berndts, except for one unidentifiable case, are actually derived from Macassarese or Malay terms for vessels. Thus they cannot have the primary meaning of 'termite mound' though Professor Berndt (pers. comm.) has confirmed that they are used in this sense.

Kauwa - Macassarese Kawa - a large round iron pan, also used for cooking trepang (Matthes 1859:62)

Dandanga - Bahasa Indonesia Dandang - rice boiler steamer

Jormudjin - Unidentified

Bam'munijauwi) - Macassarese Pammoneang-pot

Bamudja ) (Matthes 1859:178)

Bamunija )

(Berndt & Berndt 1947a:135; 1954:44)
My informants have often given the first two words above with approximately their correct meaning, as well as a term (Wurri) for pottery which is the Macassarese uring meaning a cooking pot (Matthes 1859:672). The usual eastern Arnhem Land word for termite mound is Gundirr. McCarthy & Setzler (1960:287, 293-4) and Mulvaney (1966:454-5) also doubt that Aborigines made pottery.

It should be noted that if no pottery was made in Australia, much of the point is removed from the debate about the failure of the Aborigines to learn the art (Thomson 1954; Berndt 1954; Burland 1955). While some of the men who sailed back with the praus may have seen pottery being made, it was only one wonder among many greater.

Berndt & Berndt (1948:311; also Berndt 1964b:6) have suggested the use of shark-skin sandpaper as a Macassan introduction. Thomson (1949c:17) thinks that large rectangular wet season huts were probably developed or modified by Macassan influence.

D. Art and Legend

i) Bark Paintings and Cave Paintings

The most usual subject directly related to the Macassans, which is depicted in these media is a prau. Plate 11.3 for example illustrates a fine bark by Mawalan. Plate 11.4 shows two praus at Yinimalawayamadja shelter about a mile WNW.

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11 Several words relating to the subject were collected from the artist while he was painting. The upper knife is called (Tarpalngu); middle knife, (Sili); lower knife, (Bardang); goat (right of mast), (Timbala); fowl (beside canoe), (Gurnaowu); cauldrons (in bow), (Malara); bags of rice (in bow), (Balati); bamboo (between bags), (Lungi). The three cabins with figures belong, from left to right - or stern to bow, to the captain, the second-in-command and the 'boys'. The present location of the painting is not known.
of Central Hill on Groote Eylandt (Map ref. 473.229½).\textsuperscript{12} Another prau, somewhere on Groote Eylandt, is illustrated in colour by Baglin & Mullins (1969). It is notable that none of the sites recorded by McCarthy (1960a) on Groote Eylandt contain praus, but it is difficult to suggest any explanation for this. The depiction of objects such as dug-out canoes or metal axes does not illustrate contact so specifically as these can be regarded as a part of Aboriginal culture.

There may also be unrecorded cave paintings of praus in the Wessel Islands (Chaseling 1957:93), though the photographs I have seen have all been of Japanese or European luggers.

Occasionally more detail will be shown in a bark painting, as in plate 11.5. Mr J.A. Davidson has in his possession (1967) a superb bark painted by Mathaman in 1965 depicting two praus and the process of boiling the trepang. Mountford (1956:98-100) discusses several paintings of praus from Groote Eylandt and links them with associated legends and songs.

There have been a number of attempts to discern Macassan influence on the style, as well as the content of bark painting. However Mountford's comparison of art motifs from Arnhem Land with those figured in Kaudern is misleading, as the latter relate to the Toradja and it is most unlikely that there is any Toradja influence in Australia. (Mountford 1956:336 n. 78; see also Berndt 1958:255). Tuckson (in Berndt 1964b:65) also attributes the 'diamond-shaped patterning' in some Arnhem Land art to Macassan influence,

\textsuperscript{12} Professor Worsley, to whom I am indebted for providing enough information to enable me to visit this site, has also noticed praus at Enderura and Mangala on the south side of Dalumbu Bay (pers. comm.). There are still many unrecorded cave paintings on Groote Eylandt.
but adduces no evidence. McCarthy (n.d.:190) makes similar unsubstantiated claims for floral elements.\textsuperscript{13}

ii) Stone Pictures
See appendix 10.

iii) Sculpture

One of the most striking features of Arnhem Land art is the manufacture of representational sculptures carved in the round. In western Arnhem Land these are made from clay or wax, but in the east they are carved out of wood. In some ways they are similar to the totemic figures made from grass and reeds. Berndt (1958:259-60) has argued against Mountford (1956:416-9) that the technique of carving at least the unelaborated figures of eastern Arnhem Land is not a recent introduction, and in this, he is surely correct. Carvings are found both of the great sacred figures and of legendary and even historical figures. Berndt & Berndt (1949), Elkin, Berndt & Berndt (1950) and Mountford (1956) have illustrated and described some of the specimens collected which depict Macassans and even a Dutchman. These secular figures are basically illustrative and are parallel to other treatments of the same themes in song and legend, though occasionally the design used on a figure may have some separate degree of sanctity.

The association of carving with Macassan subjects and with elaborated grave posts has led most writers on this subject to assume that the practice has been developed, or even introduced as a result of contact. However, although the range of subjects was certainly extended, there is little

\textsuperscript{13} Davidson (1949) suggests that the interlocking key design in the area around Broome is an introduction from Indonesia.
evidence for such technical innovation. Cense (1952:260-1) has discussed the problem of finding a model for carved grave posts in South Celebes (see also Heeren 1952:156). It is much easier to suppose that, whatever Mawalan told Mountford (1956:416-7) in 1948, the idea of carving grave posts came from an already existing tradition of carving representational, or at least schematic figures (see below for the introduction of the grave post). In the context of the rich and varied art of the region, such a gradation would be interesting, but hardly surprising. Nor would it be quite as distinctive as Berndt & Berndt (1964:372-5) suggest in their review of the practice, since they do not mention such parallels as the carved figures McCarthy collected on Cape York Peninsula and now in the Australian Institute of Anatomy. Even within Arnhem Land, Warren (1918:8) saw on the Rose River in 1916 what was clearly another form of carving described as a female 'idol' about 8 ft. 6 ins. high with 'a roughly carved face'. If it is true that the addition of arms and legs to the usual Arnhem Land figures is a fairly recent development (Berndt 1958:259-60; Berndt & Berndt 1964:372) there is still no reason why this should be the direct result of outside influence rather than an independent elaboration, though the introduction of iron tools may have had something to do with this.

Adam (1953) claims that a wooden replica of a kris was observed by Daisy Bates as far south as South Australia. This sounds unlikely.

iv) Songs and Legends

As they played a significant part in recent history, it is natural that the Macassans and their doings should figure in Aboriginal stories, songs and other oral material. Such material is best described as legendary (in the strict sense of the term) since the original basis of fact has often
been subtly adapted. Berndt & Berndt (1947a:135-6) have published two out of a great song cycle of 150 songs relating to the Macassans in northeast Arnhem Land. Another is given in Berndt 1952:282-3 and six more in Berndt 1965. On Groote Eylandt, Moyle (pers. comm.) has recorded an intriguing song about a Macassan swimming in the sea while drunk (Miss J. Stokes has transcribed and translated this). Among the Nunggubuyu of Rose River, Dr van der Leeden (pers. comm.) has recorded, transcribed and analyzed several songs relating to the Macassans. He makes the point, which is also well known from further north, that such material 'belongs' to specific groups, in this case, the Wurindi-Jirga'ri clan of the Mandari'dja moiety.

Many stories relating to the Macassans have also been collected by various workers (e.g. Worsley 1954:181; Robinson 1956:53-4; Morris n.d.). Much of the traditional information on specific sites can be regarded as legendary. See, for example, Berndt & Berndt (1964a).

Most of this material needs much more rigorous examination, both historical and linguistic, than it has so far received. It is difficult for example, to accept Berndt's claim that Aborigines accompanied Macassans to Torres Strait (Berndt 1954:93,101). If the Macassans did get this far, it is inconceivable that no one else saw them or that there is no other convincing evidence of this (chapter 2; Heeren 1952:156). Yet this is to question the whole interpretation that Berndt has put on the Badu song cycle.

More importantly, there is the difficult question of the Baiini. Both the Berndts and to a lesser extent Mountford, who were working in eastern Arnhem Land in the late 1940s, collected stories about a group of people who are supposed to have visited the area before the Macassans. Unfortunately it is not now possible to collect any further accounts as the older men have died and the younger men forgotten, a process
to which Berndt (1965:5) has drawn attention. In 1967, many men had no knowledge of the Baiini at all, while the few, such as Mun-gurrawuy and Mawalan, who did know about them, recalled only the most general points. In the case of one informant, Burramurra, they had become integrated into an elaborate fantasy world.

It is necessary then to turn to the original accounts, though, unfortunately, full texts have never been published. However a number of matters seem to be well established: the Baiini came before the Macassans; as well as collecting trepang, they exhibited a wide range of technology including building in stone and rice agriculture; they were lighter in skin-colour than the Macassans; they included women, which was a marked difference from usual Macassan practice; and they were associated with a large number of individual places in eastern Arnhem Land. (See Berndt & Berndt 1949: 219-22; Elkin, Berndt & Berndt 1950:85; Berndt R. 1952:28, 55; Berndt & Berndt 1954:32-9; Mountford 1956:333-8; Berndt 1964a:passim.)

Various more or less factual comments need to be made. Firstly the name Baiini is indubitably derived from some form of the general Malayo-Polynesian root meaning woman. Berndt & Berndt (1954:34) draw attention to cognates used on Butung and Salajar, which is only to say that the word is not unnaturally found in Macassarese and Buginese (Matthes 1859:232; 1874:236). Secondly a great deal of the material is permeated with words and ideas derived either from a Macassarese source or at least from a generalized Malay base. Cense (1952:258-9) has drawn attention to several detailed examples, and very many more can readily be seen. For example, two of the personal names of the Baiini given by Mountford, Tainitja and Dainbari (Mountford 1956:336) probably include the Macassarese-Buginese Daeng title. Further, no archaeological remains of any sort connected with Baiini
have ever been recognized, although much of the area has been more or less intensively traversed. For example the Gove Peninsula, where there are many sites with traditional Baiini associations, is very well known. Lastly, as a negative comment, the suggestion that the Baiini may have been Bajau or Sea Nomads (Berndt & Berndt 1954:34), cannot now be supported in the light of Sopher's (1965) work.

While the mythological reality of the Baiini is indisputable, their historical existence can only be described as shadowy. Further publication may remove some of these shadows, but the possibility remains that it will not. The most important question in any complete exegesis is to determine what, if anything, cannot be attributed to a Macassarese-Buginese source.

It would be less than honest to conclude this section without expressing a personal and interim evaluation. It is my opinion that the Baiini myths are totally derived from Aboriginal experience in South Celebes and possibly other areas, obtained during visits with the Macassans. The remarkable associations with particular sites are the product of complicated transference mechanisms, while the temporal element is a more or less inevitable rationalization.

E. Social Organization and Ceremonial

   i) Eastern Arnhem Land

      a) The Macassans and objects associated with them fall into the Yirritja moiety, that is the moiety generally associated with an 'outward' and 'innovatory' orientation (Warner 1937 (1964:31)). Various patrilineal clans (mala) in this moiety claim totems connected with Macassans. Berndt (1964b:106, plate 73b) illustrates a hollow log coffin decorated with a totemic prau. Thomson has recorded the more surprising example of a gin bottle totem (Thomson 1949b: 60; 1949c:89-90, plate 5). He also claims a specific type
of dog totem as an introduction, but this seems doubtful (Thomson 1949b:61, plate opp.62, left).

b) A model of a Macassan anchor is used in mustering people for a funeral ceremony and for the ceremonial capture of women (Thomson 1949b:60-1; it is not clear whether the same or additional uses are referred to earlier on p. 60). A fine model of a similar anchor used in love magic is in the University of Western Australia museum. It is illustrated and discussed by Elkin, Berndt & Berndt (1950:86,91, plate 19b).

c) The most spectacular manifestation of Macassan influence on ceremonial is in the mortuary ceremonies of certain 'saltwater' Yirritja clans. Warner (1937 (1964: 420-3)) describes the initial burial of the body with the symbolism relating to it (the body) being regarded as a mast. It is at this stage that the Macassarese chants, explicated by Cense (see above) are used. A separate memorial ceremony is held later, and elements of it may be repeated in various places if an important man is involved. When totemically appropriate to the particular deceased, a representation of a prau may be made by heaping up lines of sand, with the totemic waterhole symbolically depicted in the centre (Thomson 1949b:60, plate opp.62). The essential elements of memorial however are the setting up of a grave post and mast.

The basic idea of the grave post is probably an introduction based on any of the many variants of this idea

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In the 'traditional' situation, secondary burial was also practised whether the body was buried or, as with other clans, exposed on a tree platform. See also Warner (1937 (1964:33, 408)) where the groups participating are specified more clearly. I am grateful to Mr N. Peterson for clarification on this point.
found throughout the archipelago, and including South Celebes. Indeed it seems that at least some of the graves of Macassans who died in Australia had such posts (see appendix 9), which provides a clear source of origin. However, as Cense (1952:260-1) and others have pointed out, the practice of carving the post into the shape of a head has no clear parallel, and this is probably an independent embellishment of the idea (see above).

The setting up of the mast, which usually has a flag, symbolizes the idea of departure, after the model of the erection of the masts for the departure of the praus. Many such masts are currently to be seen about settlements in the area. Heeren (1952:156) is surely wrong in suggesting a generalized origin for the symbolism of the mast. It is much too specifically connected with the Macassans.

d) Berndt & Berndt (1949:213-7) have described a secular ceremony centering around a carved wooden figure, which is carried through a camp by a party of men who collect any objects they can find. Sometimes the ceremony is held as an adjunct to a mortuary ritual. There are various Aboriginal identifications of this figure, all of them associated with Macassar and Macassans, though as Heeren (1952:158) points out, they involve an extraordinary distortion of reality. Further complexity arise from the fact that the main term for the central figure, Wuramu, is also used for various other types of carved wooden secular figures and for grave posts. Mountford (1956:416-9) also has a rather confused account of much the same material.

The Berndts have connected the ceremony with the Aboriginal concept of a Macassan funeral. Cense (1952:260) however, has suggested a less specific derivation from various Macassarese customs. There remain a number of puzzling features about the ceremony, but these cannot be understood without a very careful analysis of the linguistic
material and a full consideration of the function of the ceremony in 'traditional' society. From the evidence as published, the present writer would hazard a guess that the basic inspiration of the ceremony is not the imitation of a Macassan ritual, but lies in Aboriginal society itself. The strong Macassan associations have arisen out of what Aborigines have supposed to be similar situations in Macassan life, though in fact these situations (business dealings with Dutch officials and the entrepreneurs of voyages, local violence in South Celebes, various Macassarese-Buginese ceremonies, etc.) were quite different.

e) Warner (1937 (1964:38)) suggested that the unusually large size of the Murngin group proper is a result of the mobility induced by Macassan contact. This is possible, though some later investigators would question the validity of Warner's ethnographic observations on this point.

ii) Groote Eylandt

a) Some of the wind totems are known by names derived from Macassarese terms (see above) and are represented in bark painting by prau sails. The prau itself also appears as a totem (Worsley 1954:94-7; 1955a:5; 1955b; Rose 1947; Adam 1951:179-81).

b) Worlsey (1954:164-5) also suggests that the hollow log coffin was probably introduced by the Macassans. There is no specific evidence for this, and in view of Warner's discussion on the recent use of the practice on the mainland, there would seem to be no need to invoke Macassan influence (Warner 1937 (1964:460-3)).

iii) General

a) Elkin (in Berndt 1951:xv,xxi-ii) has related the supposed origin of the Gunabibi cult in the lower Victoria
River area and of the Mother cult of western Arnhem Land on the Cobourg Peninsula to contacts with voyagers from the north. If the Macassans are meant, this theory must be regarded as very improbable. Heeren (1962:157) shows that even in pre-Islamic culture in South Celebes at least, there is no model for such cults.

F. Miscellaneous

i) Warner (1937 (1964:450)) and McCarthy (n.d.:190) state that the Van Dyke beard style is an imitation of the Macassans. The style certainly appears on some of the carved figures of Macassans, which shows that the shape of Macassan beards was noticed. Although there is no more specific evidence, this seems a highly probable introduction.

ii) McCarthy (n.d.:70) mentions the introduction of boiling as a method of cooking. This depends on the possession of efficient containers and the regular practice is better associated with tin cans supplied by Europeans in the late nineteenth century (see above).

iii) Moyle (1964:22) suggests that the 'shaky voice' style of singing on Groote Eylandt may owe something to Macassan influence, but rightly emphasizes the uncertainty of the evidence. Dr van der Leeden (pers. comm.) has also made this point about certain Nunggubuyu songs.

iv) Berndt & Berndt (1947b:249) state that a form of card game was learnt by the Aborigines from the Macassans. No detailed evidence is provided, and it would seem possible that there has been some unconscious accretion of ideas by informants in the work-camps of the period.

v) Warner (1937 (1964:457)) suggests that the idea of a man acquiring the soul of a man he has killed, may be an introduction, possibly Macassan. This seems rather unlikely.
vi) McCarthy (1960b:441-2, 461-2, 500-1) illustrates three string figures from Yirrkala representing Macassan subjects.

vii) There are also many guesses, more or less inspired, about possible influences dating from before the period of detailed ethnographic work among the Aborigines. Most of these can be safely neglected. For example, Ratzel (1896,1:184) mentions the extension of the bamboo, objection to pig-meat and the absence of the boomerang in Arnhem Land.

From the above list, it is evident that Macassan influence has been quite extensive in certain aspects of Aboriginal life, but that it did not transform the fundamental bases of society. Furthermore, this influence was only felt directly in the areas immediately contiguous to the region of contact, that is in the Northern Territory, the coastal strip from Cape Don to the Pellews. Even within this area, some groups such as the Burara whose coastal area near the mouth of the Blyth River was rather poor trepanging ground, or the Gunavidji, inland from Maningrida, seem to have been less affected than groups in better trepanging areas such as around the Gove Peninsula. There is no certain evidence of influence beyond the normal limits of travel by an Aborigine who might have met the Macassans himself, except possibly for the disposal of a few iron implements.¹⁵

¹⁵ The geographical spread of various elements of Macassan influence is a question deserving further study, but it is outside the scope of the present work.
There are a number of reasons why the contact did not produce an even greater effect on Aboriginal culture and society. The most obvious is the seasonal and fairly transitory nature of Macassan activity in Australia. In addition, only a very limited part of the total Macassarese-Buginese culture was exhibited in the course of a voyage and only the relatively small number of Aboriginal men returning to Macassar saw anything of agriculture, permanent buildings and the full range of social and religious life. Few Macassan items, even of material culture, fitted easily into the pattern of Aboriginal life. Warner (1937 (1964: 137-8)) has stressed the Aboriginal need for absolute mobility, so that, for example, the use of pottery for cooking was hardly feasible. However the underlying cause for the limitations to the influence was that there was no pressing economic or ideological competition between the two cultures. In comparison, the deep effects on Aboriginal culture and society induced by European contact have usually been produced by far fewer European individuals and over a much shorter period, but these few have made insistent demands for land and sometimes for labour, together with usually well-meaning attempts to introduce 'proper' notions of dress, social custom and religion.\textsuperscript{16}

Yet it is apparent from the complete integration of an item such as the dug-out canoe into Aboriginal technology, and the introduction of exotic items into the totemic complex that Aboriginal society cannot be characterized as conservative and unable to adapt itself to new conditions. The difficulty of supplying a 'background in tradition' for any new cultural

\textsuperscript{16} The comparison and contrast between the nature of the Macassan industry and European activities, particularly on modern missions, government settlements, mines and other commercial enterprises, and the resulting effects on Aboriginal culture and society in the same area of contact present themselves forcibly to the observer.
PART IV : TWO QUESTIONS OF TIME

Chapter 12

When did the Industry Begin?

Nearly every writer who has ever mentioned the Macassans, has ventured an answer to this question. More than once, it has been predicted that detailed archaeological work would resolve the problem, and this was certainly one of the hopes with which the present project began. Yet despite the accumulation of a considerable amount of new evidence, certain intractable contradictions remain. This chapter is intended as a complete review of all forms of evidence bearing on the problem, and as a justification for my current opinion.

It is necessary to begin with a clear statement of the question. This is the date at which praus from the archipelago began to visit the coast of the Northern Territory for the purpose of collecting trepang. Problems such as the first non-Aboriginal discovery of the continent or the frequency and nature of drift voyages across the Arafura Sea are related, but distinct.

In view of present difficulties, some useful perspective is gained by considering the history of opinion on this question. The point at which to begin is the statement of Flinders that Pobassoo, whom he met in 1803, 'had made six or seven voyages from Macassar to this coast, within the preceding twenty years, and he was one of the first who came' (Flinders 1814, 2:231). Later at Kupang, similar information was obtained. 'The natives of Macassar had been long accustomed to fish for the trepang
amongst the islands in the vicinity of Java, and upon a
dry shoal lying to the south of Rottee; but about twenty
years before, one of their prows was driven by the north-west
monsoon to the coast of New Holland, and finding the
tre pang to be abundant, they afterwards returned; and had
continued to fish there since that time' (Flinders 1814,
2:257). It would be possible to maintain that this second
statement refers to the discovery of the Kimberley coast
rather than the Northern Territory coast, but there can be
no mistake about the first. This is a direct answer to
our question. The substance of this first statement is
also confirmed in the journals of Brown (1802-3) and
Fowler (1802-3).

From this time until quite recently, the field lay open
to speculation based on no further evidence. Occasionally
considerable antiquity was suggested, as by Dubouzet in
1839. 'Since time immemorial, the Bugis of Macassar have
carried on this fishery on the north coast of New Holland.;
there they doubtless preceded the first Dutch navigators'
(after Dumont d'Urville 1844:251). However Flinders' clear
statement tended to have a restraining influence. For
example Searcy, who usually contents himself with a vague
statement, suggests in one passage that contact lasted
'about two centuries' (Searcy n.d. : 9). Warner also
thought that Flinders must be in error, but only speaks of
the industry being carried on 'from an early date'
(Warner 1937 (1964 : 445-8, 455)). His imaginative attempt
to obtain a date from the tamarind trees at Macassar Well
unfortunately proved abortive.

Further work by anthropologists in Arnhem Land produced
greater detail on the effects of Macassan contact on the
Aborigines, but this material is notably unsuitable for
estimating the time involved. In fact, the controls on the
rate of acculturation are so vaguely understood, that it seems to me that to estimate the time required to produce certain visible effects is to stand the problem on its head. However despite this fundamental difficulty, a number of authors have offered their opinions on the question.

Thomson, who worked in the area just before and during the Second World War, stressed the essentially conservative nature of Aboriginal society and the considerable extent of Macassan influence. He concluded that 'although there is no conclusive evidence as to the time when these Macassan visits commenced, there is reason for the belief that they occurred over a relatively long period' (Thomson 1949c: 83). His more specific statements suffer from so many qualifications as to be almost meaningless, but his general opinion seems to be that the industry began in the early eighteenth century (cf. Thomson 1949c: 5, 7, 82, 83; 1952: 1, 5 n.6). It is worth noting that one important argument used by Thomson is invalid. He states that 'the evidence of Asiatic influence on this coast, which Flinders had already recorded on this voyage before his meeting with Pobassoo, indicates that these visits were probably of considerably greater antiquity than suggested by Pobassoo' (Thomson 1948: 146; cf. 1949c: 7). It is not clear whether Thomson means the material remains of Macassan activity recorded by Flinders (as fully listed in chapter 5) or his remarks concerning the influence of the Macassans on the Aborigines. As perceived by Flinders, this influence consisted of a knowledge of fire arms, a propensity to steal iron implements and perhaps the habit of making some small recompense for theft (Flinders 1814, 2: 213). Elsewhere he conjectures that the apparent hostility of the Aborigines may have been due to clashes with the Macassans,
of which he was told by Pobassoo, and he dismisses the question of the diffusion of circumcision (pp. 198, 231-2). The only material evidence of influence he observed (and this is highly dubious) was a broken spike nail in a hut on Cotton's Island (p.235). The sum of this evidence, whether material remains or influence, cannot possibly support Thomson's assertion.

Much more widely known and quoted is the work of R.M. & C.H. Berndt, who have worked in Arnhem Land from 1946 until the present day. Their knowledge of the anthropology of the area, including matters relating to Macassan influence, is unrivalled. In one of the first publications resulting from this work, they tentatively suggest that there was 'early Macassan or late pre-Macassan (Baijini) contact, in perhaps the first part of the sixteenth century' (Berndt & Berndt 1947a : 133). This, in essence, remains their opinion. It should be emphasized that this is simply a very well informed guess based on the evidence of Macassan influence on Aborigines.

Also based on fieldwork experience is the opinion of McCarthy and Setzler, who did archaeological work in Arnhem Land during 1948. Although they carefully avoid drawing any direct chronological inferences from their archaeological material, they do suggest contact 'within the seventeenth to nineteenth centuries' (McCarthy & Setzler 1960 : 215; cf. also 294).

Finally, there is the invaluable contribution of Cense (1952) who draws attention to the passages by Dalrymple and Forrest discussed below, although Cense himself does not offer an opinion on when the industry began. More recently, Coolhaas (1960) has discovered another reference which is discussed below.
In addition to the evidence adduced by these previous writers, the present study has produced some fresh information. It is now necessary to review this total sum of evidence.

The most convenient place to begin is at the point of demand for trepang in China. As Professor Wang Gungwu shows in appendix 1, the earliest evidence of any possible demand for trepang from Southeast Asia is from about the seventeenth century. It would seem improbable that the Australian coast was among the first to be exploited.

This is supported by the absence of any mention of trepang in the trading records of Southeast Asia for the sixteenth and early seventeenth centuries, as discussed in chapter 1. If the range of interest is restricted to the Buginese-Macassarese seamen sailing from Macassar, (and the only possible evidence for not so doing is the question of the Baiini), then, as also discussed in chapter 1, it is extremely difficult to see a pattern of activity into which this industry would fit, before the first part of the seventeenth century. A very clear indication of this is the map in the back of Abdurrazak daeng Patunru (n.d.) showing the extension of Macassarese influence up to 1660. Apart from a few sixteenth century dates in South and Central Celebes, all the dates in other parts of the eastern archipelago are from the early seventeenth century. The date + 1640 appears over western Arnhem Land.

It must be stressed that this date in the early seventeenth century is only an early limit of possibility. It does not imply that the trepangers were actually coming to Australia so early.

There is, however, one piece of evidence which has been taken to indicate contact at this early date. Coolhaas
(1960) has drawn attention to a passage in an official Dutch letter of 1654 reporting, at secondhand, that 'behind Damar are situated yet a great crowd of islands (south), whereof some are as big as the island of Buru and bigger, producing slaves, wax, tortoise-shell, etc., which were sailed to annually by the Macassarese...' (my translation). Coolhaas believes that because the Dutch already knew of the Tanimbar and Aru Islands, this may be a reference to Australia. However such an argument seems to be rejecting the most simple and straightforward interpretation on very slender grounds. Not only does the geographical description fit the islands to the east of Timor precisely, whereas it would be a singularly poor geographical description of the Australian coast, but also the list of products, particularly wax, is less likely to have come from Australia. The absence of trepang from the list should be noticed. The easiest explanation of the difficulty, which is very slight anyway, is a certain understandable vagueness in the original information. The passage cannot, therefore, be accepted as the earliest mention of the Macassan trepangers.

This distinction belongs to the passage from Dalrymple (1769:83) quoted in the introduction. This is purely a geographical statement saying that Bugis seamen had reached New Holland. Very considerable reliance can be placed on this information from Dalrymple, who was not likely to make a casual slip on such a point. Furthermore it is confirmed a few pages later in another context. Speaking of the possible trade of the region, he says, 'the Bugguese describe New Holland to yield gold, and the natives, who are Mahometans, to be well inclined to commerce; this must be referred to the northern part, which seems to be what Marco-Polo calls Lochae' (Dalrymple 1769:92). At first sight, these details encourage distrust, but a number of
points need to be considered. Firstly this passage is in fact separate from the previous one; secondly there is no other nearby area to which the description applies any more exactly; and lastly, only the most generalized source is given for the statement. The conclusion from this would seem to be that some time in the early 1760s when he was in the South China Sea area, Dalrymple was given a general account of the range of Bugis sailing, which certainly included Australia, but perhaps the informant was rather vague on the most distant areas. It would also be unwise to understand the term Bugis too rigidly.

The only other eighteenth century notice of the Macassans is much more helpful. In a general description of Celebes and its people, Captain Thomas Forrest remarks that 'I have been told by several Buggesses, that they sail in their Paduakans to the northern parts of New-Holland, possibly Carpentaria Bay, to gather Swallow (Biche de mer), which they sell to the annual China Junk at Macassar; they say also, gold is to be got there. I make no doubt but that our settlements in New-Holland will soon be visited by the Buggesses, when the English extend from port Jackson further north into a warm climate' (Forrest 1792: 82-3). This information may have been obtained at any time over the preceding thirty years, which could make it contemporary with that of Dalrymple. Again, though here there can be not the slightest doubt that the Macassans are being referred to, there is also mention of gold.

The greatest probability of finding an earlier reference to the Macassans than those by Dalrymple and Forrest, would seem to lie in archival material. No exhaustive search has been attempted, but the work that has been done has failed to turn up any information. In reply to my enquiries, the General State Archivist (Algemeen Rijksarchief) in the
Hague has replied as follows. "In the registers of "Van Batavia Overgekomen Brieven en Papieren" were found for the period September 1757 - September 1797 accounts of ship movements to and from the port of Makassar. These lists contain information on the ports of departure and destination of the ships and on the cargo. Indeed many of the ships arriving in April, May or June brought in quantities of trepang. However it seems that all these ships departed from nearby islands as Sumbawa, Bonerate, Bima, Ambon, Ende, Butung, Bugis, Bulekomba, Salaja, Ternate and Timor (Colonial Archives, inventory number 2825, 2882, 2915, 3073, 3385 and 3701. Archives of the Oost Indisch Comité, inventory numbers 92-96).

Our provisional investigation produced for the period before 1757 only one list giving ship movements from October 1734 till September 1735. This list again does not mention any part of Australia (Colonial Archives 2206 folio 213)' (letter D 216 dated 26 June, 1969. A.E.M. Ribberink to C.C. Macknight).

There is no need to conclude from this information that vessels were not coming to Australia at this period, as other evidence indicates, but it would seem that detailed work is required to locate the reason why Australia is not specifically mentioned. Perhaps only the last port of call is specified or perhaps there was some reason for concealing from the authorities the fact that praus were sailing to Australia.

There are also some similar eighteenth century documents from Macassar preserved in the Arsip Nasional, Djakarta, but a preliminary search in the "daghregisters" by Miss Soemartini (pers. comm.) has failed to locate any mention of the industry. As far as it was possible to discover
in 1969, there are no archives remaining in Macassar itself.

In addition to European records, it is necessary to consider the native historiography. In this respect South Celebes is outstanding (Noorduyn in Soedjatmoko 1965). Unfortunately however, the attention of these writers is very far from such humble matters as the trepang industry and no references to it have been noticed (Dr J. Noorduyn pers. comm.).

It is now possible to turn to the evidence actually emanating from the area visited by the Macassans. The earliest positive written evidence is that of Flinders, which has already been discussed. However Flinders was not the first European in the area. Two previous British vessels had touched the Arnhem Land coast. In December 1791, McCluer touched western Arnhem Land, but the visit was so brief and the surviving record so poor that nothing can be deduced with reference to the Macassans (Dalrymple 1792; Hockin 1803 : 47; Flinders 1814, I : xv). In about May of the same year, a boatload of convicts, who had escaped from Sydney, also touched the Arnhem Land coast. In one account there appears to be a garbled version of attacks on the boat by Macassans, and it is so interpreted by the editors (Becke & Jeffery 1896 : 235). However another account shows quite clearly that the boat was pursued by Papuans on the east side of the Gulf of Carpentaria. On the western side of the gulf, the escapees probably only landed briefly in the Wessel Islands (Ingleton 1952 : 13 - 15).

Much more important are the records of the early Dutch explorers in the area, in which there is no mention at all of the Macassans. Very little is known of the first two voyages along the coast of Arnhem Land, that of the Arnhem in 1623 and Tasman's voyage of 1644, and nothing about
the Macassans can be inferred (Sharp 1963: 52-4, 88-91). A number of other voyages are not to exactly the right area, notably those of Janz (1606), Carstensz (1623) and Gonzal (1756) to the eastern side of the Gulf of Carpentaria and that of Pieterszoon (1636) to Melville Island (Sharp 1963; Heeres 1899). These voyages do serve to show, however, that the north coast of Australia was known in some detail in the seventeenth century, and many maps of the period demonstrate that this knowledge was by no means secret (e.g. Heeres 1899: chart 14).

One voyage deserves rather closer attention. In 1705, three vessels, the flute *Vossenbosch*, the sloop *De Waijer* and the patchiallang *Nieuw Holland* spent the period from 2 April to 12 July sailing eastwards along the coast from the north point of Bathurst Island to Bowen Strait (Major 1859: 165-173; Heeres 1899: viii, 87-90). They appear to have crossed Dundas Strait in about mid-May. A number of points should be noticed: no Macassans were seen (though it could be argued that this was rather late in the season); the Aborigines had only bark canoes; and there is specific comment on the absence of iron implements. As discussed in greater detail in chapter 11, these observations, probably on the Cobourg Peninsula, suggest a lack of Macassan contact. Another point of great interest is that the first two vessels returned to Macassar, where the official maps of the voyage were improperly detained. It is difficult to believe that these were not seen by local captains. In fact, the name of the third vessel, which returned to Banda, suggests that it was a tender, perhaps of native construction, specially engaged for this voyage. There may well have been Macassarese or Bugis sailors on her, or the other vessels.

It is, of course, impossible to argue rigorously from
such negative evidence, but it is difficult to believe that if in the seventeenth century there was a flourishing trepang industry in northern Australia and regular fleets sailing there from Macassar, this phenomenon would never be mentioned in the relatively complete records of Dutch exploration. Furthermore it can be shown to be highly likely that at about the beginning of the eighteenth century, local sailors in Macassar would have been aware of the existence of the north coast, though whether or not for the first time we do not know.

The dating of objects actually found on Macassan sites has been dealt with in chapters 8, 9 and 10, and the main points can be briefly restated. One or two pieces of import ware might have been made in the seventeenth century, but most date from the eighteenth and nineteenth centuries. We have no means of judging the time between manufacture and deposition. The earthenware is undated, as are many of the miscellaneous finds. However there are several eighteenth and nineteenth century coins from Macassan contexts, several nineteenth century clay pipes from doubtful contexts and considerable collections of glass, probably from the nineteenth century.

Two important points need to be made. Firstly, on a purely subjective opinion, the quantity of Macassan artefacts to be found in the Northern Territory could easily have accumulated over a period of about a century and a half. There is no prima facie indication of greater antiquity. Secondly, any of the sequences or processes tentatively proposed, could also have taken place within that order of time. Thus to take only one example, if there really was a pre-glass stage to the industry, this can be easily accommodated in the mid-eighteenth century before the
introduction of the earliest dated glass at the end of the century or the beginning of the next.

One artefact requires more detailed discussion. The blue and white porcelain saucer from site 30a, illustrated in plate 8.9, was originally identified by Mrs Kamer Aga-Oglu as 'a typical Ming blue and white...dating not later than the very beginning of the sixteenth century and may very well be of the late fifteenth century' (McCarthy & Setzler 1960: 294). However further work over the last 20 years has entailed many revisions of previous ideas. Mrs Aga-Oglu has therefore kindly re-considered the sherd and concluded that 'the dating I assigned to the blue-and-white sherd in 1950...should indeed be altered. That sherd cannot be earlier than the late 16th century (Wan Li, 1573-1619) and may in all probability be of the first half of the 17th century, a late Ming product' (letter of 13 October, 1969). She also dates various other sherds found in 1966 and 1967 to the same period (but no earlier), and certainly this sherd is by no means exceptional. As mentioned in chapter 8, even these dates seem to me to be rather early. In relation to this particular blue and white sherd, two points can be made. Firstly, the closest parallel I have seen is a sherd from Djakarta Bay collected by Mr Abu Ridho and dated by him to about the eighteenth century. Secondly, the only other dateable artefact from the site, the transfer printed sherd 1024, is probably nineteenth century. There is nothing about the site to suggest an unusually long period of use.

The most aberrant and controversial dating evidence for the Macassans are the carbon dates. These have each been recorded in detail in the relevant places, but the six are conveniently summarized below.
Site 9. S.L. 2 125 ± 57 B.P. (ANU - 61) Modern
S.L. 7 500 ± 75 B.P. (ANU - 316) 1450 A.D.
S.L. 17 740 ± 70 B.P. (ANU - 240) 1210 A.D.

Site 13b. buried S.L. 830 ± 80 B.P. (ANU - 242) 1120 A.D.

Site 32a. S.L. 8 430 ± 70 B.P. (ANU - 317) 1520 A.D.
S.L. 13 780 ± 75 B.P. (ANU - 241) 1170 A.D.

A number of points need to be made about this series of dates. From what slight archaeological evidence is available, the dates from sites 9 and 32a, appear to be in the correct relative order. Furthermore, with the 'modern' date of ANU - 61, this relative sequence is brought up to a date consistent with other forms of evidence. The three oldest dates in particular, show a rather surprising consistency between sites. This is perhaps partly explained by the fact that, on archaeological grounds, these samples were selected as being relatively old. The samples themselves are all of excellent quality, consisting of lumps of charcoal. Associated charcoal with sample ANU - 317 at least showed that the original wood consisted of relatively thin branches, thus eliminating any significant tree-ring effect. Although the samples were taken from relatively close to the surface (all less than 1m.), it is difficult to think of any source of contamination, particularly as this would need to be older contamination. There are a number of special factors which need to be considered when converting carbon 14 years into calendar years. However with dates of this age, particularly the three oldest dates, no significant alteration is produced and the dates are more conveniently quoted in their original form.

Finally, it is important to be quite clear what is actually being dated; this is in each case, the death of
the wood used in a trepang boiling fireplace. If the fireplace was used more than once, as most probably were, an average date is obtained, assuming random selection of charcoal. The use of this type of fireplace for boiling trepang is quite certain in the nineteenth century; they were not constructed for other purposes; and they are remarkably distinctive. Therefore, quite irrespective of the Macassans, the carbon dates are directly connected with trepanging.

The only remaining form of evidence to be discussed is that relating to Macassan influence on the Aborigines. Some doubts have already been expressed about the validity of attempting to produce a date from such evidence. However, if the attempt must be made, it is my opinion that the evidence discussed in chapter 11 is not inconsistent with a period of Macassan influence extending over about two centuries. The problem of the Baiini and the question of the influence of drift voyagers, both of which are marginally relevant to this conclusion, have been treated in chapter 11. It is perhaps worth noting that the only really contrary opinion to this, based on specific anthropological fieldwork, is that of the Berndts.

At the beginning of this chapter, it was stated that certain intractable contradictions exist in the evidence relating to when the industry began. These can now be briefly summarized. Firstly, there is a significant difference between the statement of Pobassoo that the industry began in about 1783 and the information of Dalrymple that it was in progress during the early 1760s. Secondly one can oppose the sixteenth century date of the Berndts against the silence of the historical sources in the seventeenth century on both the trepang industry in general and
specifically on Macassarese or Bugis praus visiting Australia. It should be noted that even if Coolhaas's reference were to be accepted as relevant, this is still over a century after the earlier date.

Finally there is the unbridgeable gulf between the carbon dates and all other forms of evidence. It must be pointed out that these dates are about double the oldest other inferences drawn from the evidence, and introduce a quite new order of age. To accept these entails not only a fundamental reappraisal of such subjects as the earliest non-Aboriginal activity in Australia and the pre-European trade of the eastern archipelago, but also a complete revision of matters such as Chinese contact with Southeast Asia, the dating of certain very well known types of Chinese pottery and the whole question of influence on the Aborigines - and that is to mention only the outstanding problems. Yet not to accept the dates is either to cast doubt on their stratigraphic association (which is virtually impossible in the absence of earlier strata, to say nothing of the difficulty of repeating the mistake on different sites) or to suggest the presence of some disturbing physical or chemical factor, as yet unknown. Specific discussions with Mr H.A. Polach of the A.N.U. radiocarbon laboratory have failed to suggest any possibilities for resolving this problem, which undoubtedly merits considerable further work.

In attempting to assess the final conclusion to be drawn from all this evidence, one deceptively alluring possibility presents itself, that of there being more than one period of trepanning activity, perhaps by groups other than those known in the nineteenth century. It is true that with ingenuity some difficulties can be so explained, but fresh problems arise, notably the reasons for such alterations.
Furthermore it does nothing to resolve difficulties associated with the date of the trepang trade itself, which is the very thing which the carbon dates relate to directly.

It is not possible to conclude this chapter without offering my own opinion as to when the industry began. On the present evidence, this seems most likely to have been about the beginning of the eighteenth century. However it must be recognized that this date is in conflict with the specific statement of Pobassoo, the opinion of the Berndts and five out of the six radiocarbon dates.
Chapter 13

The End of the Industry

In 1863 South Australia, in the face of considerable internal dissension and deftly moderated competition from Queensland, annexed to itself the Northern Territory. Although the Macassan trepang industry had been described in the well known narratives of Flinders, King and Stokes, there is no evidence to suggest that the wealth of the sea, or the possibility of extracting gain from the Macassans, featured in the thoughts of those in favour of the annexation. In contrast with the earlier British settlements, the prime object of the South Australians was pastoral development, though the hope of mineral discoveries was never far behind and from the very beginning there was the dream of an Overland Telegraph.

The initial South Australian attempt at settlement, the Northern Territory Expedition of 1864, was a sorry failure. The poor site of the main town at Escape Cliffs has been largely blamed for the disaster, though the incompetence and fractiousness of individuals were probably more potent causes.¹ In the two years seven months before the settlement was abandoned in January 1867, there was no sign of interest in contact with the Macassans. Indeed there was some slight apprehension (Stow 1866:42), though when Howard met several

¹ For a brief modern accounts of the early history of South Australia in the Northern Territory, see Threadgill (1922), Price (1930), Bauer (1964), Lockwood (1968) and appendix 12. The best detailed account is still that by Roberts (1908). The South Australian Archives contain voluminous records on the various settlements and expeditions, of which I have been able to consult only a small part.
praus in Mountnorris Bay and near the Goulburn Islands early in 1866, he remarked that 'the Malays seemed a quiet set of people, and took little notice of us' (SAPP 1866-7/79:1).

In the dry season of 1867, Cadell was sent north to select a better site for a settlement. He did see a single prau returning home, but made no contact beyond showing his flag (SAPP 1868-9/24:10; Napier n.d.:30). In his reports recommending the mouth of the Liverpool River for settlement, he made no reference to the considerable numbers of praus which passed this site each year.

However, Cadell's recommendation was ignored, and when Goyder arrived with another settlement expedition in February 1869, he went straight to Port Darwin. The founders of Palmerston, as the new town was called until 1911, were fully occupied at first in the immediate vicinity. Their only contact with Macassans was when, in April 1869, the Aborigines brought in two survivors from a prau wrecked two years previously. They were sent back to Kupang (Lockwood 1968:103, quoting Goyder).

However, one part of the coast visited by the Macassans came into prominence comparatively early in a rather unexpected way. In the dry season of 1871, the Government Resident, Douglas, visited Port Essington and noted the numerous cattle remaining from the British settlement. Several government officers sensed an opportunity for profit, and applied for leases, only to find that they had long ago been outfoxed by the wily Captain Cadell who, in May 1868, had sought leases covering the entire Cobourg Peninsula. The scheme collapsed very smartly anyway when the file reached Goyder, who had returned to Adelaide as Surveyor-General. He pointed out the irregularity involved in government

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2 For convenience, it will be referred to here as Darwin.
officers holding leases, particularly since they had been in
government employ when inspecting the area, and secondly,
that Cadell also had little right to the leases, since the
wild cattle, which were supposed to satisfy the stocking
provision, must still belong to the Crown  (SAA 790/1871/230).

This incident revealed the potential of the Cobourg
Peninsula. It is easy today to forget that the northern
coast of the peninsula and the area immediately to the east
have been almost continuously occupied by Europeans and other
visitors from the early seventies. Official attitudes towards
the Macassans and European contact with them in this final
period must always be seen in the light of events along this
limited part of the coastline visited by them. A list of the
area's advantages and resources explains why, for more than
30 years, it was the only settled part of the coast away from
Darwin: there were the introduced livestock, cypress pine,
trengang and other marine products; communication with Darwin was
comparatively easy; there were good harbours; the Aborigines,
some of whom still remembered the British settlements, had
long been conditioned to visitors; and until 1907, there was
some employment by the Customs authorities.

As early as 5 August 1872, about a year after his visit
to Port Essington and before the exploitation of the area had
begun, Douglas wrote to the Commissioner of Crown Lands in
Adelaide proposing a scheme for issuing licences to the
Macassans (SAA 790/1872/330). In view of later events, this
scheme has a number of interesting features. Pearlshell was
specifically mentioned and it was in this commodity that
competition with Europeans was expected. A seasonal licence
costing £10 was to be issued, which would entitle a licensed
vessel to fly a distinctive flag. Initially, licences were
to be collected by a small armed vessel, but after the first
season, praus were to be forced to come to Darwin. Douglas
also recommended that provision be made to prevent the
exploitation of Aborigines. It is perhaps significant that
he crossed out the word 'the' and wrote 'our Aborigines.' From the phrasing of the letter, the effective stimulus for the plan was clearly the new settlement's need of a small vessel. Douglas began by referring to previous requests, and this scheme was designed to demonstrate another possible use. In due course, the necessary provisions for issuing licences were inserted in legislation (Northern Territory Lands Act, 28 of 1872, section 79), but no vessel was available to implement the scheme. The whole question then fell back into limbo for another decade.

However, interest continued in the Cobourg Peninsula area. When he was visiting the Roper River in September 1872, Douglas received a proposal offering the government £1 per head for any cattle over a year old, which would be taken from the peninsula to the new goldfields. Douglas, when forwarding the proposal to Adelaide, noted that £1-10-0 or £2 would be a better price and suggested the appointment of a Crown Lands Ranger. The Commissioner of Crown Lands remarked that the Ranger himself should be able to move the stock and relieve the hungry miners (SAA 790/1872/372). Nothing came of this, or a similar application to shoot buffalo on Melville Island (SAA 790/1873/52).

Early in 1874, a party of three Europeans, led by a man named Sinclair, were picked up in Port Essington after a long series of adventures. Their rescuer, Captain Marsh, remarked on the kindness shown to the party by the Aborigines, particularly Jack Davis, who had been well known to the British and later visitors (SAA 1374/A176). He and 'about 100 of his people' were not so helpful a little later when a boatload of shady characters arrived in the area.

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3 Berndt & Berndt (1954:74,217) in a rather garbled account of this episode, imply previous mention of the Macassans. However it is clear from the original letter that this is the first time Douglas has referred to them.
though this may have been the result of an unfortunate misunderstanding (SAA 1374/A305). The first mention of European trepanging in the area is in a letter from Sinclair to the new Government Resident, Scott, on 12 January 1875. He claimed to have spent about £200 'trying fishing for trepang at Port Essington', and requested the reservation of two small blocks, one at Port Essington and the other at Trepang Bay, out of the pastoral leases for the area (SAA 1374/A636). This attempt at trepanging was probably before his rescue by Marsh, since he was now without a boat. In March 1875, he was compelled to ask whether he could hire the government cutter Flying Cloud to reach Port Essington (SAA 1374/A726). By June, the Government Resident could report to the Minister that 'a small fishery establishment for curing Trepang is being carried on at Port Essington and some of the produce has been shipped' (SAA 1374/A900). E.O. Robinson, of later fame (see below), may also have been involved in this (Searcy 1905:47). The same report informed the Minister that Messrs Lewis and Levi had started out with a strong party to take up the pastoral leases on the peninsula, their intention being to bring cattle back to Darwin. This matter had been under negotiation throughout 1874, and the station of the Coburg Cattle Company, established just south of the old British settlement, proved important for the Macassans (see site 3a; Allen 1969: plate I-3; Lewis 1922: 129-56).

In November 1876, Price, the Government Resident, visited Port Essington and reported on the fine station run with Aboriginal labour. A man, Lake, was now trepanging in the area, while further east in Raffles Bay, Dewar and party were shooting buffalo and tanning the hides locally (SAA 790/1877/52; Register 30.4.1892; Searcy 1905:47).

Of these enterprises, only the Coburg Cattle Company lasted any time. As Price pointed out later, when explaining the failure of several early European attempts at trepanging,
'the price obtained for the trepang when cured did not pay.' Even with the assistance of Malays (presumably from Darwin), 'the sample sent from here was not good.' The industry needed 'plenty of beche-le-mere [sic] and very cheap labour and few expenses' (SAA 790/1878/461).

At this early stage when actual contact with the Macassans was minimal and when development of the area was still exploratory, the official attitude of the South Australian government was one of non-interference, partly because of the lack of any effective means of control, but also because they were unwilling to act without a much fuller understanding of the situation. Their attitude was clearly demonstrated in a number of incidents.

The new settlers on the Cobourg Peninsula, particularly Levi and Dewar, had taken it upon themselves to issue some rations to Aborigines and to demonstrate some interest in them. Levi was given a small sum of money for these purposes and it was suggested that he be made a Sub-Protector (SAA 1374/A1798; SAA 790/1877/81). On 11 July 1877, he wrote to the Government Resident mentioning first that the Macassans had destroyed two horses, but adding that an estimated 500 men on a fleet of 30 praus 'have also this season greatly abused the natives and the result has been in some instances death to our natives.' To meet this situation, he suggested some kind of tax. When forwarding the letter to the Minister, the Government Resident pointed out the difficulties in providing for such a tax. He observed that although the stations were unprotected, there was no reason for the Macassans to trouble them. The Minister, and eventually Cabinet itself, agreed on the difficulty of imposing a tax and restricting Macassan activities (SAA 790/1877/435). In his reply to the Government Resident, the Minister suggested that any 'misbehaviour' by Macassans should be reported to the commanders of naval vessels visiting Darwin (SAA 1374/A 2584).
A second demonstration of the same official attitude followed almost immediately, though the origins of this incident are to be found somewhat earlier. In 1875, the government of the Netherlands East Indies introduced new regulations controlling the employment of native labour beyond the archipelago. This inconvenienced a number of pearlers in Western Australia, who were using divers from Kupang, Macassar and elsewhere. To judge from two cases of reported ill treatment of Malay divers by the ubiquitous Captain Cadell and a Mr Broadhurst at Shark Bay in mid 1875, the control measures were justified. The new regulations were evidently enforced: in 1876, two captains in Macassar were not permitted either to employ or even re-employ some of the small group of Aborigines there, (estimated to be about 17 and mainly from Port Essington), without paying the due deposit of 200 rupees (c. £16) per man (SAA 1374/A1798).

The Northern Territory Protector of Aborigines, in reporting this information to the Government Resident, pointed out that the Aborigines thereby unemployed were British subjects, accidentally in Macassar, and that Malay vessels had unrestricted access to Australian pearling and trepang grounds.

Cadell was also concerned about the situation. However he solved his labour problems, at least in part, by recruiting Aborigines to work away from their homes. Whether rightly or wrongly, he again provoked charges of ill treatment, this time by removing men from western Arnhem Land to work in Torres Strait (SAA 1374/A2645, A2646, A2884, A2944, A3060

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and Register 15.11.1878, 18.11.1878, 17.12.1878). It was an unfortunate background to a remarkable request he put forward in mid 1878. Relying on his reputation to clear him of any charges, he sent a letter to the Minister of Education, who also controlled the Northern Territory, in which he referred to several conversations he had held with the Premier some months previously, regarding the trepang fishery on the Northern Territory coast. From a good summary account of the industry, he deduced four highly dubious points: that Macassan economy defied European competition; that the Macassans stripped the trepang beds so thoroughly that their regeneration for European trepangers might take ten years; similarly that the improfitability of pearling in Northern Territory waters was a result of Macassan incursions; and lastly that 'the anomaly of a foreign flag borne by a semi-savage race in British waters should be put a stop to.' He stated that he had previously suggested the value of a lease as a means of stopping the industry, and he now applied for a ten year lease to cover the entire coast of the Territory, east of where other European trepangers were working on the Cobourg Peninsula. In return for a minimal rent, he would not demand any form of government protection in the likely event of trouble. In fact, in consideration of his position with the government, perhaps he might have the lease at quit rent 'as let bloated Chinamen at Macassar have it for nothing.' Furthermore, he continued, cessation of Macassan visits would prevent the debauching of the Aborigines, and as he would be shortly in Macassar, he would, if empowered by the government, attempt to claim 'any stray N.T. natives for the purpose of returning them.'

It is highly unlikely that Cadell could either have prevented the Macassans coming or made any profit whatever the lack of competition, but the scheme is an intriguing example of the distortions which prejudice and self-interest produce.
The Minister, and Cabinet, were unimpressed. 'I do not recommend the acquiescence of the Govt. in Captain Cadell's proposal. It would I think lead to serious embarrassment, if without much fuller enquiry, we were to empower the Captn. to prevent a trade which he himself says has obtained for centuries—if the matter is considered of sufficient importance a special Commissioner should be sent to report on the whole subject. In the mean time I will instruct [the] Govt. Resident in his despatches to give me all the information he can on the subject' (SAA 790/1878/351). Despite Cadell's reputation, or perhaps because of it, the government was not going to be drawn.

Although no commissioner was sent, further information was received. In August 1878, the Government Resident wrote confirming the disappointing results achieved by the few pearling vessels that had so far worked in Northern Territory waters; he also mentioned the Macassan trepang industry and described the failure of European attempts to date, though 'a Mr Robinson is now at Croker Island and has stated his intention of trying trepang curing again'; Cadell was said to visit the coast only to get natives for pearling in Torres Strait; and a few Chinese had begun to cure fish (SAA 790/1878/461).

In November, Morgan, the manager for the Coburg Cattle Company at Port Essington, reported that some sixty or seventy praus came, that the Macassans took profitable cargoes of timber as well as trepang, and that they debauched the Aborigines (SAA 1374/A3199). At least he was mistaken in his figures, since Cadell wrote again a month later, this time from Macassar itself, stating that the fleet for that year amounted to 23 praus. However, his chief concern was once more the 200 rupee deposit on pearling divers; the trepang industry was secondary. Even the 'numerous Aboriginal Australians' were not permitted to join 'the vessels of their fellow subjects' (SAA 790/1879/83). This concern with the deposit is yet more apparent in the supporting letter from
four other pearlers who were similarly placed. 'We cannot help regarding the Policy of the Australian Government that sacrifices the rights of Free born Englishmen to the compulsory labour of the Foreigner, with the strongest feelings of contempt and disgust and gladly avail ourselves of the present opportunity of entering our Protest against the continuance of the unjust and condemnable apathy shown by our Colonial Government in this matter' (SAA 790/1879/84).

Even such words as these did not move the government, and the matter lapsed, probably largely because, in the following year, Cadell, who had clearly been the chief instigator, was murdered by his native crew in the Arafura Sea.

The final incident before some control was imposed, shows how the government was inevitably drawn into some regulation of the industry. It was a function of the current expansion of settlement and increasing contact between Macassans and Europeans.

On 1 January 1880, the Government Resident informed Adelaide that Robinson, whom he had mentioned two years before being at Croker Island, had returned from there with the news that Aborigines had murdered his mate, Wingfield (SAA 790/1880/1). A police party was despatched with as much speed as the sorely misnamed government cutter Flying Cloud could manage, but by the end of the month the Government Resident could only report that the murderers had probably joined the Macassans and any further action would have to await their departure (SAA 790/1880/70). On 16 June, Foelsche, the Inspector of Police, put in two reports; the first identified Wingfield's murderer as Wandi Wandi and suggested that the only way to capture him was to offer a reward of £50 to the Macassans to bring him to Port Essington or Port Darwin. The second report was more general. Foelsche
suggested, and from other accounts he seems to be at least partially correct, 'that the original cause of the murder is traceable to supplying the natives with intoxicating liquor for which they do any kind of work, and do anything to obtain it - and for the craving after it the Malays ... are to blame.' He continued, 'I think it would be advisable to make the Captains of these proas obtain licences from here [Darwin] and pay a fee of, say, £10 each yearly, which would be a moderate charge.' The Government Resident, in forwarding these reports, agreed with the suggestions, but in familiar terms, pointed out the need for a steam vessel in place of the Flying Cloud, if there was to be any hope of catching a prau under sail (SAA 790/1880/371).

Wandi Wandi was eventually captured without the help of the Macassans and once again, the matter lapsed.

The first money extracted from the Macassans by the South Australian government was not for licences, but in payment of duties, and indeed this was always a more important source of revenue than licence fees. In 1880 after various changes over the previous decade, a modified form of the South Australian tariff was re-imposed on the Northern Territory (Bauer 1964:142). In late 1881, Little, the Sub-Collector of Customs in Darwin, wrote to the Government Resident saying that Robinson, now manager for the Coburg Cattle Company at Port Essington, had reported that the Macassans, who would soon be arriving, 'bring considerable quantities of rice, tobacco, spirits, & other dutiable articles.' Little suggested that Robinson be appointed a Customs officer on £20 a year to collect the duties. It would also be necessary to appoint Captain Marsh of the Flying Cloud 'or any other officer ... at any time sent to control these fisheries' (SAA 1374/A5167). Robinson was duly appointed Acting Landing Waiter (SAA 790/1881/721; SAA 1374/A5175).
Edward Oswin Robinson was a key figure in the events of the next two decades. He had first come to the Territory in about 1874 (SAPP 1884/53B:8; SAA 790/1892/130; Register 30.4.1892). For the next three or four years, his activities were rather obscure as there was at least one other Robinson in the area, but in general terms he was 'knocking about the coast, ... pearling, trepanging, and buffalo shooting' (Searcy 1905:47; 1907:21). It is apparent however that he was no ruffianly beachcomber. Much later in life he was described as 'a medium sized, wiry, grey man, with a keen eye, and a quiet manner, he was found to be courtesy itself at a pleasant interview with him at the Austral Club' (Register 25.5.1897). There is a portrait in Searcy (1905: opp.7). His reports show that he was well educated and certainly he excelled in the gentlemanly art of billiards (Searcy 1907:20). Unlike many of his fellows, he knew how to make money and how to put it to good use. In 1889 he recuperated from an illness by visiting Japan (SAA 790/1889/47), and in the nineties he used some of his profits from buffalo shooting to visit England. He eventually retired to Melbourne in some comfort (Register 30.4.1892, 20.5.1897, 25.5.1897, 1.6.1897; Conigrave 1936:237-8).

As described above, in 1878 he established himself on Croker Island. When Wingfield was murdered, Robinson was left with 'certain liabilities', and to work them off he became manager of the cattle station in Port Essington. At that time, at least, he was not always the perfect clubman as 'his full dress ... consisted generally of a strap and revolver' (Searcy 1907:20). Not unnaturally perhaps, he was wary of Aborigines, though his attitude of stern justice does seem to have inspired respect, particularly among his immediate assistants. He can hardly be expected to have avoided the contemporary conviction of European superiority, but the worst that can be said of his interest, perhaps
employed, which would add materially to the revenue.' The only expense would be an annual trip by the Flying Cloud to issue licences; alternatively, they could be issued at Port Essington.

The Government Resident, when forwarding these reports to the Minister, reverted to a familiar theme; there would be no difficulty collecting licence fees when the Territory had a steamer. He also thought Robinson's suggested licence fee excessive and proposed 10/- per ton for the first twenty tons and 5/- per ton thereafter. The Minister, Parsons, who led rather than followed the period's expansive optimism, ignored the lack of a suitable vessel, and recommended that Cabinet approve the Government Resident's proposal. There had been a subtle move from Robinson's tentative ideas about the advisability of imposing licence fees to Parsons' assumption that the only question was the size of the fee. On 30 June 1882, Cabinet approved the scale of fees suggested by the Government Resident and the regulations were framed under the act of 1872. By the end of September, 50 copies of the relevant Order-in-Council and 500 licence forms had been despatched to Darwin (Robinson's reports and subsequent minutes in SAA 790/1882/346; Order-in-Council in S.A. Government Gazette 31 August 1882, p. 2739).

Meanwhile, Police Inspector Foelsche submitted another report, including a long extract from a letter by Robinson giving more details on the untaxed profits of the Macassans, the condition of the Aborigines and the need to protect European trepangers. A licence fee of 20/- per ton was again suggested, but by the time the letter reached Adelaide, the relevant decisions had been taken (SAA 790/1882/552).

At the end of October 1882, the Government Resident acknowledged receipt of the regulations and commented that as soon as the government steamer arrived there would be no trouble issuing the licences. As, according to the regulations, a Customs officer was necessary for this, he
could also collect the various duties (SAA 790/1882/736). The reply from the Minister was a telegram on 8 December saying that the steamer would not arrive until the next year, and that, if possible, some action should be taken during the present season (SAA 1374/A5815).

It is a tribute to the various government officers in the Territory that despite their long-standing complaints about the government cutter Flying Cloud, a trip was organized in her. The moving spirit was probably the new Sub-Collector of Customs, Alfred Searcy, who had been transferred from Port Adelaide in the middle of 1882 as the growing importance of Port Darwin and the imposition of the full South Australian tariff was thought to merit a more experienced officer (SAA 790/1882/316; Searcy 1907:8). As well as being experienced, the twenty-eight year old Sub-Collector possessed dash and enthusiasm, which extended to writing vivid and detailed reports. For a few years after leaving school, Searcy had worked as a journalist and it was at the instigation of a newspaper editor that he later adapted his reports, in some cases with only minor alterations, for publication. Because of the verve of his writing, there is some danger of exaggerating the rôle played by Searcy. However it was apparently on his initiative that the regulations relating to the Macassans were strictly enforced, and this accords well with the picture of him in other fields as the active, upright and imperialist public servant. What better adventure could there be than patrolling the remotest bounds of the Empire, to regulate the industry of the alien, and to enforce impartially the fees and tariffs of the colony for the benefit of the Territorial revenue?

Searcy's companions on this trip in the Flying Cloud were the commander, Captain Marsh, the crew of ten Malay seamen who had been sent from Surabaja in 1880, and
Inspector Poelsche who had come 'to get acquainted with the natives east from Port Essington and the business, trade and other relationships that exist between them and the Malays' (SAA 1374/A5855). They left Darwin on 19 March 1883 and went first to Port Essington where they collected Robinson. Not only was he useful in gaining information from Aborigines, but he also knew enough Malay (perhaps even Macassarese) to act as a check on the regular interpreter, who was the serang or boatswain of the Malay crew.

No sooner had they cleared the entrance to Port Essington than a single prau appeared from the east, moving along the coast on its way home. When the Flying Cloud hoisted the Customs flag and pendant, the prau hove to and the master was called on board, bringing his ship's papers. This first interview shows the effect that each side was trying to make on the other. Searcy arrayed himself in his Customs uniform with gold braid and brass buttons, though Bangkasi, the master of the prau, appeared even more resplendent. As far as business went, Bangkasi apparently made an offer of some pearls to Robinson, since he assumed that the prau was in a situation where help might be needed. However Searcy was only concerned to warn the prau of what was impending. His message was exact and tough. 'Thro' the serang I informed Ban Kassi of the regulations made by the Govt. of South Australia with regard to trepang fishing. I also told him that all prows must first call at Pt. Darwin or Pt. Essington to obtain a license before trepanging on the coast. That a correct list of all stores on board must be produced to the Officer of Customs and duty paid before a license would be granted. That if any stores be found on board and not on the list the same would be forfeited. That if a prau was found trading upon the coast and duty not paid on goods she would be forfeited and all cargo on board. Next year that a steamer would visit the coast and that any prows found acting contrary to the
regulations would be forfeited' (SAA 790/1883/319; Searcy 1907 :22-3). Searcy then endorsed the prau's papers, and the two vessels went their respective ways.

The next evening four more praus were discovered in Bowen Strait and given the same message. Two days later, another four praus arrived and were duly warned. After waiting several days in Mountnorris Bay, the Flying Cloud returned to Port Essington, where a further three praus were found. The party finally got back to Darwin on 8 April.

Searcy's report on the trip concludes with several general remarks. He confirmed the general size of the industry and despite some trouble with the masters concealing quantities of spirits, he obtained figures roughly comparable with those of succeeding years. It is notable that no attempt seems to have been made in this season to collect any duties, despite Robinson's efforts in 1882.  

On balance, Searcy pronounced himself in favour of the scheme for controlling the industry. Apart from producing some revenue, it offered white men 'a chance to compete which ... would bring trade direct to Pt. Darwin.' Competition would be further promoted by protecting Aborigines, even to the extent of driving the Macassans off altogether, so that Europeans would find labour easier to get and to hold. A few practical details needed attention, such as sending copies of the regulations and tariffs to Macassar, and including pearls and pearlshell in the regulations. More importantly, there was no provision in the regulations for the punishment of offenders. Finally, Searcy reiterated the need for a steamer (SAA 790/1883/319; for Marsh's report see SAA 1374/A6008).

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5 In the Statistical Register for 1883 there is an unexplained item of import, 1930 lb. rice worth £15 from Macassar.
The day after sending in this report, Searcy applied for a Customs uniform for Robinson, and even the Collector of Customs approved it as 'a good thing in intercourse with Malays' (SAA 790/1883/323; SAA 1374/A6173). Later in the year, Robinson was also issued with a revolver (SAA 790/1883/667).

This warning trip was not without effect. In October, the Minister in Adelaide received a request from the Netherlands Consul for information about the regulations. The Consul had been informed that duty had to be paid on goods used as rations as well as licence fees, and reported that the Macassans 'complain about the said duties being imposed upon a trade that was in existence long before the settlement of the Australian Colonies' (SAA 790/1883/632). The reply by the Minister's secretary set out the 1882 regulations and confirmed that normal duties had to be paid on imports. Furthermore, 'the Minister desires me to say that his attention has been directed to the fact that the Malay fishermen greatly injure the aborigines by supplying them with drink' (SAA 793/1883/409 p. 122). In fact the Minister's minute had been even stronger on this last point, saying that 'the necessity for action had arisen' because of it.

There was an immediate reply from the Consul pointing out that 'the Trepang fishermen consider it a hardship to have to visit Port Darwin or Port Essington for the purpose of procuring the necessary licenses ... it is stated by them that once put into Port Essington with its western entrance it is most difficult to get out to sea again the more so as the Trepang fishery lies to the Eastward.' To get over this, he suggested that the South Australian government might be able to appoint an agent in Macassar. Other suggestions from the fishermen themselves were that duties should be levied only on goods for trade or barter, not on rations, and that
they should be given the tariff rates in order to assess the profitability of fishing the Territory's coast. When this letter reached Cabinet, it was decided that 'arrangements should be made to issue licences on the spot.' The size of the fee certainly did not warrant an agent in Macassar (SAA 790/1883/698).

The inadequate reply to the Dutch representatives provoked another letter and on 26 November, the Acting Consul in Adelaide apparently interviewed the Minister, Parsons, in person. He pointed out first that the trepangers objected not to the amount of the licence, but to the difficulty of procuring one. On this matter, Parsons replied that Searcy had gone to Port Essington to arrange matters. (In fact Searcy did not leave until 30 November.) The matter of the duties was more difficult. Parsons gave the Acting Consul to understand that the rations were not dutiable (SAA 793/1883/433 p. 148; SAA 790/1883/728; SAA 793/1883/446 p. 163). However when Searcy met the praus, he took no notice of the official Dutch manifests which carefully divided the cargoes between export and provisions for the crew. He says that he had specifically explained the previous year that duty had to be paid on both categories, and when returning the papers to the masters, he gave them a copy of the regulations endorsed with the statement that 'duties must be paid on all stores as well as cargo' (SAA 790/1884/177).

Although there is no documentary evidence, it seems that when Parsons received Searcy's report in the following February, he realized that there was no good reason for excepting rations consumed in territorial waters from the regular tariff and that his previous decision had been in error. The report arrived on Friday, 15 February 1884; on Monday Parsons wrote his first minute on it; on Wednesday, while the Treasurer had the report and before it went to the Collector of Customs, the Acting Consul was advised of
the change (SAA 790/1883/728. Minute by Parsons on 26/2/1884. See also dates on minutes to SAA 790/1884/177). Certainly the change had been made before the Collector of Customs returned the report. In due course, the Acting Government Resident was informed of the change (SAA 793/1884/197 p. 21).

There was no reply that the Acting Consul could make to the change, particularly as he had in the previous December informed Parsons that the government of the Netherlands Indies had been officially informed of the South Australian complaints about the Macassans supplying the Aborigines with alcohol (SAA 790/1883/797).

This complicated correspondence is interesting in that it shows that the Macassans, or at least their entrepreneurs, had access to official channels of complaint and were fully aware of the administration behind the collection of the duties and licence fees. It is a good indication of the sophistication of the industry. Furthermore, the Macassan representations did have some effect. Although the South Australians could not conceive that their impositions were anything but justified, they did agree to issue licences on the spot, though this was also a practical necessity. On the question of the duties, it is ironic that communications broke down not between the Macassans and the Minister, but between the Minister and Searcy.

As there was still no steamer available, Searcy had set out again in the Flying Cloud at the end of November 1833 to meet the praus and instruct Robinson in his duties (SAA 1374/A6429, A6444; SAA 790/1883/694). His first destination was Robinson's camp in Port Essington. It was not until 23 December that an Aborigine arrived with the manifests of two praus waiting in Bowen Strait. The Flying Cloud took two and a half days to move around, by which time another prau had arrived.
Searcy's first question to the masters was why they had not called at Port Essington. They answered that they had been blown past, which may or may not have been unavoidable. However Searcy himself now had enough experience to perceive the advantages of Bowen Strait as a reporting station.

The issue of licences, at the rate laid down in the 1882 regulations, appears to have been straightforward, but the Customs duties proved troublesome. Our understanding of events is confused by the fact that Searcy, on his return to Darwin, compiled a summary of the arrangements in which the figures are substantially in excess of those on other Customs forms. These discrepancies cannot be reconciled, but the main issues are clear enough. Firstly Searcy ignored the official Dutch manifests brought by the masters, and allowed no distinction between stores and trading supplies. He made his own estimates of quantities and calculated duty accordingly. Secondly the masters, who at first declared that they had only been given 100 rupees each (c. £8), eventually found about £20 each in various currencies, though even this may not have been all that was on board (see below).

There can be little doubt that the masters had worked out a joint line beforehand and feigned poverty in the hope of charity. Undaunted, Searcy took out part of the balance owing in rice and spirits. Yet even he could not remove more than a certain quantity of supplies, and when it was discovered that one prau had less than first thought, he allowed it some remission. This left a small balance to be paid, but this seems never to have been collected. The masters did, therefore, win a small concession, though it can hardly have appeared in this light to them.

The immediate result of this tough policy was that the praus tried to bolt before handing over the supplies, but
this was prevented. A more lasting result was that the general level of imposition and a policy of firmness had been established. For good measure, the masters were each presented with a copy of the regulations bearing several important endorsements, including the information that in future a Customs officer would meet the praus in Bowen Strait and that all duties must be paid in cash current in South Australia (effectively in gold English sovereigns). As in the previous year, verbal communication on these issues seems to have been fairly successful through the serang of the Flying Cloud, who came from Macassar and actually had a brother on one of the three praus.

The Flying Cloud waited until 13 January before returning to Darwin. Instructions were left with Robinson at Port Essington in case any of the further praus which were expected should arrive there. In fact, the final total for the season was 8 praus, of which one was wrecked. This small total may reflect some discouragement. (The main file on this trip is SAA 790/1884/177; see also SAA 1374/A6591, A6592, A6601; Searcy 1907; 44-75)

It was only a few months before two items of news prompted another trip to the Arnhem Land coast. In early March, Captain Marsh reported that on his regular visit to the Chinese timbermen cutting cypress pine behind Mountnorris Bay, he had found two murdered by Aborigines and the remaining fourteen insistent on leaving (SAA 1374/A6686). A little later, Robinson reported that he was having trouble with Aborigines who missed their usual supplies from the Macassans, and that this had occasioned the murders (SAA 1374/A6878). This scarcity had been caused partly by the small number of praus coming, and partly by the fact, also reported by Marsh, that some had arrived further east than usual, thus avoiding their payments. The government chartered the steamer Fleetwing to investigate the murders and catch the unlicensed praus (SAA 790/1884/267).
The party, with Searcy in charge, left Darwin on 11 March 1884 and picked up Robinson two days later, together with some Aboriginal guides who had been down the coast with the Macassans. It was soon obvious that there was no hope of apprehending the murderers, but on 14 March off South Goulburn Island, two more praus were discovered. Since they had sent word to Robinson that they had been blown past Port Essington, Searcy, after extracting the usual licence fees and duties, partly taken out in rice again, showed some mercy by imposing a fine of only £10 on each prau.

Although this was as far as he had originally intended to go, Searcy now proceeded eastwards. He must have realized that this would mean an overdue return, but the party was probably enjoying the adventure and Searcy was determined to catch all offending praus. The next was not found until Mallison Island, but that one was quite unexpected.

The master, Bapa Palu, who had come down for the two previous years in charge of another prau, had been specifically informed of the regulations, and this time, unknown to the other masters, had sneaked down straight to eastern Arnhem Land. Searcy regarded it a clear case of evasion. He considered at first towing the prau back to Darwin, but finally imposed a £50 fine over and above the other impositions. As the master possessed only about £4 cash, most of this had to be taken out in trepang and tortoise-shell. This particular master had a reputation for ill treating Aborigines, and as some of the others considered his actions to have been the cause of government interference in the first place, the punishment caused no general grief, except to the crew of the prau in question. After supplying some materials to stop a leak in the prau, Searcy sailed off eastwards again.
Two days later, two praus were discovered in Melville Bay, but one of these had been licensed in December and the other, which had been separated during a squall from those visited at South Goulburn Island, was again fined only £10. Searcy was somewhat chagrined to find that the extra sovereigns for the fine were borrowed from the other captain, who had solemnly declared in December that he had not enough cash to pay his own fine. Searcy got his revenge however by selling the offending master some rice at a vastly inflated price.

Even now, although already a week overdue, Searcy considered pressing on to Port Bradshaw, but the chance of discovering more praus seemed slight and the party returned to Darwin - to find a search party being organized. The results of the expedition were well summarized by Searcy in his report. 'I believe that this visit in conjunction with the fines inflicted, will prove conclusively to them that the Government are in earnest in this matter, and will have the desired effect' (SAA 790/1884/445; see also Searcy 1907: 76-97; SAPP 1884/53B:8).

Around 1884, it did indeed appear that the government were in earnest about the control of the industry. It was a period of optimism for northern development, and it is not surprising that old dreams were revived. On 21 February 1884, R.D. Ross, the Speaker of the South Australian House of Assembly, when discussing the Northern Territory Excesses, developed the theme of Port Darwin as a trading emporium for eastern Indonesia (S.A. Parl. Debates 1883-4:2114; Register 21.2.1884). In his report for the last quarter of the same year, Parsons, now Government Resident, took up the subject again and connected it directly with the trepang industry. The reader is left wondering to what extent this trade was to be in conjunction with the Macassans and to what extent as European competition (SAPP 1885/53:9; see also SAPP 1888/ 53:16).
Meanwhile more practical matters were also in hand. On 27 February 1884, the Governor-in-Council approved a new set of regulations relating to the issue of licences, which incorporated Searcy's suggestions of the previous year (see above). The annual licences now covered fishing for 'pearls, pearl-shell, trepang, and other shells or shellfish' and detailed provisions for penalties and other minor matters were spelled out. It was a much more thorough piece of work, and designed to cover European vessels engaged in these activities as well as Macassan. The most important change was an increase in the licence fee which was now calculated at £5 for every vessel under two tons, and 10/- for every extra ton up to fifty tons. For an average sized prau of, say, 18 tons this meant an increase from £9 to £13. No mention is made of the reasons for this increase. These new regulations reached Darwin a few months later and were in force until 1891 (SAA 790/1884/381; SAA 1374/A6711).

The second practical matter arranged at this time was Robinson's move to Bowen Strait. Searcy had again recommended this in his report in April, but nothing was done for some months. It would appear that in the meantime Robinson's position as manager of the cattle station at Port Essington had come to an end, and that the £100 per annum, which had been suggested as his new salary, was needed to make it possible for him to return to the area. Parsons, the Government Resident, in his usual style, went ahead and granted the increase in salary, which in view of the revenue expected, and in fact collected, was not unreasonable, but Baker, the new Minister in Adelaide, was less than enthusiastic. A spate of telegrams ensued and a very apologetic letter of explanation from Parsons, but the matter was not finally cleared up until August 1885, and that after a change of Minister. Meanwhile Robinson had been paid from 1 July 1884 (SAA 790/1884/917, 1160; SAA 790/1885/4; SAA 793/1885/5 p. 226).
The last matter arranged in readiness for the next season was the implementation of another proposal by Searcy in his April report, that a letter be written by Macassar to obtain a list of the praus leaving for the Northern Territory coast. The eventual reply did not reach Searcy in Darwin until the end of March 1885, but it did confirm the effectiveness of the system as by that time, all praus had been accounted for (SAA 1374/7826; SAPP 1885/54:13).

From the point of view of the South Australian government, the 1884-5 season was a complete success, and set the general pattern for future years. The first prau anchored off Robinson's new camp in Bowen Strait on 20 December, and over the next fortnight a further twelve arrived, making a total of thirteen for the year. From these, the licence fees amounted to £155 and the duty to £442, most of which was willingly paid in gold sovereigns (SAA 790/1885/423). The Government Resident in a long section on the Macassans in his official report, noted that this total had already exceeded Searcy's estimated revenue of £500. Optimistic of yet greater returns, he suggested that 'that race will prove much more honest than the rest if it should be found that every proa has reported and paid duties' (SAPP 1885/53:8).

The authorities were given the chance to confirm that no more than thirteen praus had come. Early in January 1885, the new government steamer, the Palmerston, which had at last arrived in the north, was making a trip to the Roper and McArthur Rivers. Searcy again went on the voyage, partly on other Customs business and partly to check on the praus. As the letter from Macassar had not yet arrived there was still considerable doubt whether all had reported (SAA 790/1885/13, 204). In the event, eight out of the thirteen were interviewed and no news heard of any but the other five. (For reports on this voyage see SAA 790/1885/423; SAPP 1885/55; Searcy 1907:98-135.)
Naturally the profit made by the government from the Macassans was a welcome addition to Territorial revenue, but there was yet another benefit to be extracted. Throughout the period of South Australia's control of the Territory, there were always voices in Adelaide willing to attack the whole northern involvement as extravagant and unprofitable. On the other hand, the optimists never wearied of praising the possibilities for development, if only encouraged by a little government expenditure. The complaints of the pessimists seem to have been particularly prevalent around 1885, so that Searcy, an optimist, was eager to help the balance of the Territory's overall budget by adding an apparently profitable enterprise. Consequently he instructed Robinson to obtain an estimate of the value of the goods removed by the Macassans. As he explained when presenting the figure of £5240 for trepang and tortoise-shell exported to Macassar in 1885 (against total imports for the season of only £653) 'I ... think it only just that we should have the credit of the export, as the imports by the prows ... are taken into account and duties collected on them' (SAPP 1886/53:19).

The general trend of the industry over the following two decades can be seen in the figures set out in table 13.1. Despite some gaps in the records and reservations about certain figures, the overall picture is one of decline and increasing difficulty. This can be demonstrated in detail by considering each of the columns.
<table>
<thead>
<tr>
<th>Season</th>
<th>Total number of praus on S.T. coast</th>
<th>Number of licences issued to Macassans</th>
<th>Revenue from licences issued to Macassans</th>
<th>Revenue from duties paid by Macassans</th>
<th>Total Revenue from Macassans</th>
<th>Tareung exported by Macassans</th>
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<tr>
<td>1897-8</td>
<td>40</td>
<td>299</td>
<td>339</td>
<td>60</td>
<td>45/6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1898-9</td>
<td>46[8]</td>
<td>285.3.10&quot;</td>
<td>321.11.0</td>
<td>95</td>
<td>35/5[2]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1899-00</td>
<td>33</td>
<td>250.7.8&quot;</td>
<td>293.7.8&quot;</td>
<td>105[14]</td>
<td>40/4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900-1</td>
<td>31</td>
<td>270.6.0&quot;</td>
<td>303.6.0&quot;</td>
<td>59[14]</td>
<td>47/6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1901-2</td>
<td>6[2]</td>
<td>299</td>
<td>42</td>
<td>328.5.7&quot;</td>
<td>370.5.7&quot;</td>
<td>66</td>
<td>40/6</td>
<td></td>
</tr>
<tr>
<td>1902-3</td>
<td>32</td>
<td>238.13.4&quot;</td>
<td>270.13.4&quot;</td>
<td>44</td>
<td>50/4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1903-4</td>
<td>2</td>
<td>96.16.4&quot;</td>
<td>110.16.4&quot;</td>
<td>30</td>
<td>49/2[2]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The numbers in parentheses indicate the source of the data.
Notes

1. For the sources, see appendix 7. Some of this information is also represented graphically in table 13.6.

2. Figures in round brackets give the numbers of extra praus which left Macassar, but were wrecked or listed as missing. Praus working on the Kimberley coast are not included.

3. Perhaps not a complete total.

4. For 6 praus only, the figures for columns 3, 4 and 5 are 184 men, £80.10.0 and £299.13.6.

5. An estimate of 25 men per prau is given for these years in SAA 1374/13848.

6. Three praus paid a total of £21.

7. According to SAA 790/1892/130, the difference between these two figures should be £2 greater.

8. According to the method described in appendix 7, this should be £36. The total revenue figure may be wrong.

9. The calculated duty sometimes differs slightly from that actually paid. Where the figure is available, that actually paid has been given.

10. Also £80 in fines, half of which went to the Customs officers concerned.

11. Also £20 in fines, and various goods seized.

12. This figure given in SAA 1374/10241 slightly exceeds the sum of columns 4 and 5.

13. Later revised to at least 130 tons.

14. The figures given for total trepang production (i.e. Macassan and local) in SAA 1374/13848 for these years varies from those in the Statistical Registers.

* See explanation of how these figures were calculated in appendix 7. The figure of 4 praus in 1892-3 seems very low compared to the figures for that year in columns 5, 6 and 7 and must be regarded as highly dubious.
Except for those seasons marked with an asterisk, the figures for the number of praus coming to Arnhem Land can be accepted with some confidence, since considerable efforts were made to contact all praus, and it is difficult to see how many evasions can have occurred once the system was operating. Furthermore, in later years the number of praus was confirmed during the season by a letter from the Dutch authorities in Macassar. Although the actual lists sent from Macassar were forwarded to Bowen Strait and have thus not survived, there does not appear to have been a single unexplained discrepancy in the final tally for any year in which a list was sent. As mentioned above, the first letter was sent in 1885, but no further reference to the practice is made until January 1889 when Robinson suggested that another list be obtained (SAPP 1889/28:22). This suggestion seems to have arisen out of the apparent fall in numbers from eleven to six praus. Robinson had heard that some praus had gone west of Darwin and this was to be a way of checking on the situation (SAPP 1889/28:22). Although Robinson fell ill and went off to Japan to recuperate, Searcy set out on a search down to the mouth of the Victoria River, but without success. A similar disappointment was met with by Stretton, who was ordered to search in the Pellew Group (SAA 1374/462). In commenting on Searcy's report, the Government Resident said that he proposed writing to the authorities in Macassar to clear up the matter for the next year (SAA 790/1889/47,147; Searcy 1907:188-199). However, perhaps because three late arrivals appeared at Bowen Strait in April, nothing further was done. In August 1897 Stretton, who had replaced Searcy in the previous year, dug out the letter of 1885 and sent it to Dashwood, then Government Resident, asking that another request be made for an annual list (SAA 1374/7826). This was done and a reply received for the 1897-8 season, though it did not arrive in Darwin until the end of March (SAA 1374/8153). Thereafter the Dutch appear to have kept up
the annual dispatch of letter and list, referring back to
the request of 1897. As is clear from the situation in 1900,
when a missing prau was accounted for independently of the
normal collection, the list only acted as a check after the
event (SAA 1374/9505, 9847). Letters for the following
seasons are preserved, the last two saying that no praus had
left for Marege': 1901-2, 1903-4, 1904-5, 1907-8 and 1908-9
(SAA 1374/11225, 12628, 13830, 17153 and 18001).

On the information available it is not possible to a
account in detail for the praus that ceased coming to the
Northern Territory coast, or perhaps, since the span of a
man's career is longer than the life of a prau, it is more
meaningful to look for the alternative employment of the
individual masters. Certainly as appendix 8 shows, a master
such as Using, despite his changes of command, came more
consistently that any prau he captained. Nevertheless some
general points can be made about the praus that did not come.

The most obvious alternative was to go to the Kimberley
coast and thus avoid the financial impositions of South
Australia. In the 1883-4 season after the first large scale
collection, three praus were said to have gone to the
northwest coast (SAA 790/1884/177). Robinson mentions that
in 1887-8 some had had a very successful season there and
that at least six had gone there in the following year (SAPP
1889/28:22). There appears to have been some difficulty with
this alternative however, as three of the six eventually
reported at Bowen Strait in April 1889, and in January 1890
two out of three praus which had set out south sou'east from
Roti had lost their way and ended up with Robinson (SAPP
1890/28:12,18).

Moreover the financial difficulties of the industry in
this period would have made it difficult to replace those
praus which had outlived their usefulness or been lost by
misadventure (see chapter 2). The following table, which is probably incomplete, shows the extent of this last factor.

Table 13.2

Praus wrecked or missing on the voyage to the Northern Territory coast: 1881 - 1907

<table>
<thead>
<tr>
<th>Season</th>
<th>Praus wrecked</th>
<th>Praus missing, perhaps lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1881-2</td>
<td>1 (Melville I.)</td>
<td></td>
</tr>
<tr>
<td>1883-4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1886-7</td>
<td>2 (Melville I.)</td>
<td>1</td>
</tr>
<tr>
<td>1889-90</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1891-2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1894-5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1898-9</td>
<td>1 (?)</td>
<td></td>
</tr>
<tr>
<td>1899-1900</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Sources: see appendix 7.

These losses were all the more significant for the owners and outfitters as the fleet shrank in size. In 1894-5 all four praus, two of which were wrecked, had a single owner (SAA 790/1895/175). For this situation, the wreck of a prau must have been a serious capital loss, though as late as 1900 replacement was possible (SAA 1374/9505).

Only one prau continued to come throughout the period for which we have adequate records. The Mannongkoki (prau L) appears in the first full list in 1882-3 and it is almost certainly the same prau of that name which came in 1905-6. Only one other prau from the eighties, the Erang Poleang (prau C), was still coming at the turn of the century.
The clearest expression of the growing difficulty in making an economic success of a voyage is seen in the increasing size of crews and the decreasing amount of rice for each man. The larger crews were presumably thought to be more efficient, though as the figures given below indicate, the actual return per prau does not seem to have grown. The return for each individual was consequently reduced. Column 3 in table 13.1 gives the available total numbers of men. As these are obtained from the separate crew totals, they are probably fairly reliable. In one case where an actual crew list is preserved, it agrees exactly with the figure given elsewhere (SAA 790/1903/438). When these totals are divided by the number of praus, the increasing size of crews is apparent (table 13.3).
Table 13.3

Average crew size and quantity of rice per prau

<table>
<thead>
<tr>
<th>Season</th>
<th>Total crew</th>
<th>Rice (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1883-4</td>
<td>28.3 (for 3 praus)</td>
<td>8085</td>
</tr>
<tr>
<td>1884-5</td>
<td>-</td>
<td>8239</td>
</tr>
<tr>
<td>1885-6</td>
<td>28.6</td>
<td>9036</td>
</tr>
<tr>
<td>1886-7</td>
<td>30 (for 2 praus)</td>
<td>-</td>
</tr>
<tr>
<td>1887-8</td>
<td>29</td>
<td>8553</td>
</tr>
<tr>
<td>1888-9</td>
<td>30.7 (for 6 praus)</td>
<td>9086</td>
</tr>
<tr>
<td>1889-90</td>
<td>30.7</td>
<td>7428</td>
</tr>
<tr>
<td>1890-1</td>
<td>-</td>
<td>9509</td>
</tr>
<tr>
<td>1891-2</td>
<td>-</td>
<td>7436</td>
</tr>
<tr>
<td>1892-3</td>
<td>-</td>
<td>18585*</td>
</tr>
<tr>
<td>1893-4</td>
<td>-</td>
<td>8633</td>
</tr>
<tr>
<td>1894-5</td>
<td>-</td>
<td>8560</td>
</tr>
<tr>
<td>1895-6</td>
<td>-</td>
<td>8340</td>
</tr>
<tr>
<td>1896-7</td>
<td>-</td>
<td>9288</td>
</tr>
<tr>
<td>1897-8</td>
<td>34.7</td>
<td>9165</td>
</tr>
<tr>
<td>1898-9</td>
<td>-</td>
<td>9022</td>
</tr>
<tr>
<td>1899-1900</td>
<td>-</td>
<td>9286</td>
</tr>
<tr>
<td>1900-1</td>
<td>-</td>
<td>9866</td>
</tr>
<tr>
<td>1901-2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1902-3</td>
<td>49.8</td>
<td>9887</td>
</tr>
</tbody>
</table>

* This figure is based on the very dubious estimate of 4 praus for this year, and should be disregarded. See notes to table 13.1.

Sources: see appendix 7.
The third column in table 13.3 is calculated by dividing the amount of rice imported from Macassar by the number of praus. The precise accuracy of the rice import figure is questionable, though in the years such as 1898, when it is possible to check this against the total of the individual prau assessments at Bowen Strait, the difference is comparatively small. However on the available figures, the amount of rice does not increase at the same rate as the size of the crew. Even the slight rise in the quantity of rice is open to some suspicion. Stretton notes in 1900 that the quantities allowed for the journey back (which were not subject to duty and therefore not recorded as imports), had been reduced, and that as the captains made no complaint 'it is fair to presume that they had sufficient to take them back' (SAA 1374/9505).

This conclusion from the overall figures is supported by particular examples. The actual manifests of prau M in 1883-4 and of prau L in 1902-3 invite comparison. Both vessels were of about the same size and class.
Table 13.4

Comparison of the cargoes of 2 praus, according to their manifests

<table>
<thead>
<tr>
<th></th>
<th>Prau M</th>
<th>Prau L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Season</td>
<td>1883-4</td>
<td>1902-3</td>
</tr>
<tr>
<td>Tonnage as given for year</td>
<td>17</td>
<td>18-75</td>
</tr>
<tr>
<td>Crew</td>
<td>35</td>
<td>51</td>
</tr>
<tr>
<td>Provisions for crew</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>67 piculs</td>
<td>70 piculs</td>
</tr>
<tr>
<td>Tobacco</td>
<td>1 picul</td>
<td>0.75 piculs</td>
</tr>
<tr>
<td>Arrack</td>
<td>2 cases</td>
<td>---</td>
</tr>
<tr>
<td>Export</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>10 piculs</td>
<td>---</td>
</tr>
<tr>
<td>Arrack</td>
<td>5 cases</td>
<td>---</td>
</tr>
<tr>
<td>Piculs of rice per man</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Provisions only</td>
<td>1.91 piculs</td>
<td>1.37 piculs</td>
</tr>
<tr>
<td>b) Total</td>
<td>2.20 piculs</td>
<td>1.37 piculs</td>
</tr>
<tr>
<td>c) Provisions less 16 piculs</td>
<td>1.46 piculs</td>
<td></td>
</tr>
</tbody>
</table>

Sources: see appendix 7.

Unfortunately it is not possible to confirm these figures by reference to the amounts of duty paid. For prau M, the figures are very confused (see above). Yet it should be noted that the master was able to provide 16 piculs of rice and 2 cases of arrack as part payment, and this despite the fact that he had begun with a smaller amount of rice per man than the other two praus interviewed on the same occasion. In the case of prau L, the duty actually paid exceeds by nearly 20 per cent what should have been paid at current rates for the goods on the manifest.
However, even allowing for all these uncertainties, the figure of 1.91 piculs of rice per man for the prau in 1883-4 is notably greater than the later figure of 1.37. Even if we assume that all the 16 piculs used to pay duties in 1883-4 were taken from the crew's provisions, and not from the rice brought for trading with Aborigines, the amount per man is still 1.46 piculs.

These figures have more meaning when seen on an average daily basis. Allowing time for the voyages to and from the coast, the supply of rice was intended to cover about six months. An allowance of 1.91 piculs per man for this period means 1.4 lb. per man per day, whereas the later figure of 1.37 piculs reduces this to 1.0 lb. per man per day. Perhaps a working figure was a cattie (1.3 lb.) per day, but the result depended on how generously this was interpreted (see also chapter 2).

The figure of 1 lb. per man per day is getting rather low for a basically rice diet. Clearly, in later years particularly, there was little surplus for Aboriginal consumption.

Column 4 in table 13.1 gives the annual revenue derived from licence fees. The payment of these has been discussed above. In 1891 there was a sharp reduction in the rate with new regulations introduced under the Northern Territory Crown Lands Act 1890 (para. 84). The reason for this reduction may have been a desire to stimulate local pearling enterprise. The new rates were £1 for a boat over 2 tons and 10/- for one under that. The Macassan canoes were usually charged at the higher rate, but at least this removed the small variations resulting from seemingly random changes in a prau's registered tonnage.

Column 5 in table 13.1 shows the total duties paid by the praus in successive years, an imposition of far greater importance than the licence fees. To set this in
perspective, it should be noted that a substantial part of total government revenue for the Northern Territory, as for the separate colonies, was derived from import duties. In a sense, these duties were the equivalent of more direct taxes.

The duties in force when the Macassans first began to pay, were essentially those of South Australia, except for some higher rates on a few commodities (SAA 793/1883/446 p. 163). One of these higher rates was that on rice which stood at ½d. per pound. In 1885, the rate for tobacco was increased from 2/- to 2/6 per pound and for spirits from 12/- to 14/- per gallon. This was probably partially responsible for the fact that after the next season, there were virtually no spirits brought down, or at least declared. In 1886, the duty on rice was increased to 1d. per pound, though this was not collected until the 1887-8 season. A suggestion in 1889, that the rate for rice be increased to 2d. per pound for the Territory in order to promote Chinese agriculture, was not taken up and the rates paid by the Macassans remained the same until the Commonwealth took over Customs responsibility (SAPP 1890/28:6). In 1902 the rate for rice was lowered to 6/- per 100 pounds and that for tobacco raised to 3/3 per pound, giving much the same result in total.

The effect of these changes in licence fees and duties was that the average revenue derived from each prau remained roughly constant throughout the period. Since the costs to the government were little more than the salary of £100 for a Landing Waiter at Bowen Strait, a small profit was always achieved. Until the end of the century, some portion of the revenue continued to be paid in kind, usually rice. In 1899, one captain even provided a canoe. This arrangement had advantages on both sides. Goods were probably obtained in Macassar at a lower price than their
value in Australia, and Robinson was able to dispose of the rice in particular to buffalo shooters and other Europeans about the coast. Conversely, the real cost of English sovereigns in Macassar was inflated by the difficulty of procuring them from Singapore (SAPP 1896/45:20; Dashwood 1902:43 q.518-20). In 1898 an attempt was made to get all the revenue paid in gold, perhaps chiefly because there were fewer buffalo shooters. Although in the next season the captains denied knowledge of the new instructions, more gold was used in the last years of the industry (SAA 1374/8502, 8745).

The figures in the last two columns of table 13.1 are comparatively unreliable, as they are taken from the figures in the annual Statistical Registers and it is unlikely that the Landing Waiter at Bowen Strait had any accurate means of measuring the quantity of trepang. In fact, Brown who succeeded Robinson in this position stated that the quantity was only estimated by bulk, and sometimes he himself did not actually see the prau (Dashwood 1902:42 q.458,462). Nor do we know the basis on which he assessed the total value, from which the price has been calculated. On at least one occasion, Robinson admitted that he had very seriously underestimated the quantity of trepang. Yet whatever the uncertainties, the figures are reasonable when calculated as an average for each prau (table 13.5). They have already been quoted in chapter 3.
Table 13.5

Average cargo of trepang per prau

<table>
<thead>
<tr>
<th>Season</th>
<th>Tons</th>
<th>Season</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1884-5</td>
<td>8.5</td>
<td>1895-6</td>
<td>16.0</td>
</tr>
<tr>
<td>1885-6</td>
<td>12.5</td>
<td>1896-7</td>
<td>10.0</td>
</tr>
<tr>
<td>1886-7</td>
<td>11.8</td>
<td>1897-8</td>
<td>10.0</td>
</tr>
<tr>
<td>1887-8</td>
<td>22.7</td>
<td>1898-9</td>
<td>15.8</td>
</tr>
<tr>
<td>1888-9</td>
<td>20.0</td>
<td>1899-1900</td>
<td>20.6</td>
</tr>
<tr>
<td>1889-90</td>
<td>13.0</td>
<td>1900-1</td>
<td>11.8</td>
</tr>
<tr>
<td>1890-1</td>
<td>10.9</td>
<td>1901-2</td>
<td>-</td>
</tr>
<tr>
<td>1891-2</td>
<td>15.6</td>
<td>1902-3</td>
<td>11.0</td>
</tr>
<tr>
<td>1892-3</td>
<td>21.8</td>
<td>1903-4</td>
<td>8.8</td>
</tr>
<tr>
<td>1893-4</td>
<td>10.3</td>
<td>1904-5</td>
<td>15.0</td>
</tr>
<tr>
<td>1894-5</td>
<td>10.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: see appendix 7.

The prices indicated by the stated quantity and value of the trepang exported to Macassar are also reasonable and agree with various contemporary estimates. Two matters however, cause some concern, though in neither case is sufficient detail available to resolve the issue. Firstly, the Macassan price is usually below the price calculated in the same way for the product of the local industry. From the evidence presented in chapter 2, this seems improbable, but perhaps the disparity in quantities for most of the period is responsible. Secondly, the Macassan price fluctuates over nearly 100 per cent, but these variations, which can be clearly seen in table 13.6, occur in a remarkably regular cycle. The reason for this is not known, since the factors influencing the price are not understood. The variation is clearly not just a matter
of the Customs officer's whim, as three out of the five dramatic falls are specifically commented upon (1886-7: SAPP 1887/53:11 assuming that Robinson transferred his low price of 1886 to the 1887 valuation; 1891:SAPP 1892/181:18; 1903: SAA 790/1903/4/71). As an example of the possible factors at work, the war between China and Japan was said to have lowered the price of trepang at Thursday Island for a few years before 1900 (Dashwood 1902:62).

The average price however over a complete cycle remained fairly constant. The general effect of this was to produce a sort of stability in price, which perhaps explains why the price fluctuations do not appear to have had any marked effect on the number of praus setting out the following season. This was rather contrary to the natural expectations of the various Customs officers who, viewing things on a more limited basis, assumed a fairly direct connection (e.g. SAPP 1887/53:11; SAPP 1899/45:20). There is a similar lack of correlation between the quantity of trepang obtained per prau and the number of praus the following season, though again some connection was predicted (SAPP 1888/53:28). Even the most direct measure, the average financial return per prau, which is shown on table 13.6, does not appear to have had any effect.

It is interesting to observe that the average quantity of trepang per prau and its financial return remain roughly constant. This is not what appeared at the time. In 1902 Dashwood asked Brown who had recently become the Customs officer at Bowen Strait, why, if duty charges made the industry unprofitable, any praus at all kept coming. Brown answered that the lack of competition made it easier to get a larger cargo (Dashwood 1902:142 q. 468-9). Tingha, when he was asked, quoted an earlier figure for an average cargo of about 100 piculs (5.9 tons), as against a current 250 piculs (14.7 tons) (Dashwood 1902:43 q. 506). Yet when
Table 13.6

Sources: Table 13.1 and appendix 7
the scale of the industry a century before is recalled, Brown's decrease in competition over the last twenty years is obviously minimal: Tingha's figures are just not substantiated, though it is possible that he had in mind the estimate of Flinders, passed on in some way.6

No other commodity was available to make up this decreased profit. Although some attention was given to other items as detailed in chapter 3, there is no evidence to suggest that trepang was supplanted as the chief object of the voyage. In fact for tortoise-shell, which is the only other commodity listed in the Statistical Register, there is some evidence of decline. From 1884-5 to 1893-4 about a ton, valued at £1000 is regularly mentioned. In 1894-5, the amount was 500 lbs, and thereafter the quantities were probably too small to notice. Both Brown and Tingha told Dashwood in 1902 that only a little was then obtained (Dashwood 1902:42-3 q.457, 471-2, 509, 511-2). In 1901, £50 worth was exported to Macassar and £90 to Britain, but it does not otherwise appear in the figures for these later years.

It is impossible to avoid the conclusion that the level of financial imposition by the government gradually strangled the industry. Although occasional profit was still to be made, this was not sufficient to replace capital losses or to attract new merchants into financing voyages. A small number of merchants and captains continued the industry on a reduced scale, more out of habit than the expectation of great gain. As discussed above, the alternative trepang grounds in Western Australia do not seem to have been entirely satisfactory, and certainly the major part of the praus and men lost to the

6 On Tingha, see appendix 12:182 n.6. He is frequently mentioned in the records and clearly played a major part in the practical business of dealing with the Macassans.
Northern Territory did not transfer there. They were merely absorbed back into the general maritime activity originating from Macassar.

That this would be the result of the impositions was apparent before 1890. Both Robinson and Searcy expected that the increased duty on rice for the 1887-8 season would deter a number of praus (SAPP 1887/53:11; SAPP 1888/53:20). There is also direct evidence that this was the case. When asked why the number of praus had declined, Brown replied to Dashwood in 1902, 'the Malays have told me that the duties imposed by the Customs were too heavy to make the industry profitable', and Tingha thought that more Macassans would come if the duties were not so high (Dashwood 1902:42-3 q.468,517).

The only slight break in the decline of the industry was in the late nineties, when the fleet built up to six praus again. Stretton linked this with the increasing price of trepang, but his explanation is less convincing when we see that there was no immediate reduction following the price crash of 1899 (see table 13:6). As only one or two praus are involved anyway, the increase may have been caused by purely individual circumstances.  

The severity of the South Australian impositions can be judged in two ways. On the one hand, a tax of usually more than £50 for a prau with a gross income often less than £500 was extremely heavy. Furthermore in the circumstances of the industry, the duty on the basic rice ration, which was the most important item of expense, was rather unreasonable. On the other hand, all industries had to pay import duties on various items and the level of licence fees was not excessive.  

7 The current economic situation in Macassar would also have had an effect. However the task of reconstructing that in meaningful detail would be laborious indeed.
In 1893, Saville-Kent (1893:227) gives the licence fees in Queensland as 10/- for a small boat (i.e., canoe), and £3 for a ship or lugger of 10 tons burden plus 10/- for every extra ton up to a maximum of £20. Not only was this rate higher than that introduced for the Northern Territory by the 1890 bill, but the number and efficiency of the Aboriginal workers (who also had to be paid) was undoubtedly less.

Once the system of collection at Bowen Strait had been established in the mid-eighties, there were few administrative changes or complications. However it did take some time for the initial flurry of action to die down. At the end of 1885 Robinson was appointed an Assistant Health Officer in addition to his Customs position, but the job seems to have been purely nominal (SAA 793/1885/753 p.364). In the coming season he was busy enough trying to outwit and overawe the captains, who were still not resigned to paying up without a struggle. As Searcy remarked, 'there is no doubt that Mr Robinson had a very hard and trying time of it.' One of his minor troubles was persuading a man from one of the crews who had been in Darwin and thought he knew what went on, that he was not interested in smuggling opium. It seems unlikely that much, if any, ever came on the praus (SAA 790/1886/356).

In fact, the bulk of the revenue for the season, the largest ever collected, was nearly lost. By chance, Robinson was able to send in most of it on the government steamer, but coming in later with the remainder himself, his lugger was wrecked and he barely escaped with his life (SAA 790/1886/356). In re-establishing Robinson after this disaster, Searcy requested that he be provided with a small safe to protect the revenue, and a barometer and other weather gauges to keep meteorological records. He received only a new uniform and set of Customs flags (SAA 790/1886/355).

In June 1886, Robinson asked for a subsidy of £100 towards the cost of a new and more substantial building at the Bowen
Strait site. The earlier one had been destroyed by white ants (SAA 790/1886/644). This request was rejected, but the following year when the Government Resident was going to Adelaide, Robinson asked him to draw the Minister's attention to the matter, and the grant of £100 was eventually approved (SAA 790/1887/572). The cement floor apparent on the site today (see site 6b) probably belonged to the building financed in part with this money. At about the same time a small iron safe was sent up for Robinson, and a pair of steel yards to enable a more accurate assessment to be made of the rice imported by the Macassans (SAA 790/1887/477).

The establishment of machinery to levy the duties and fees on the Macassans had involved more than the original idea of an annual steamer trip, but at least it was a system that worked. In April 1888, Parsons, the Government Resident, visited Bowen Strait and summed up the reasons for the success. 'The site appears to be well selected as a calling-place for the Malay proas. The buildings are substantial and suited for Customs purposes. Mr E.O. Robinson, the landing waiter in charge, is the very man for the work, having a thorough knowledge of the coast and having a great influence over native races' (SAPP 1889/28:10).

From this time on, much less is heard of the Macassan industry and the work of collection. In part this is due to the general slackening of enthusiasm and drive which affected virtually all aspects of government in the Territory at about this time. But it also means that the annual collection had become a fixed routine for both parties and caused comparatively little trouble. Indeed it is possible to observe the growth of mutual acceptance and almost friendship between Searcy and Robinson on the one hand, and the regular captains on the other. In 1895 for example, Robinson sent in a report describing the arrival in canoes of two crews whose
praus had been wrecked in northeast Arnhem Land. When forwarding this to the Government Resident, Searcy suggests in a covering note that, as everything had been lost, the moneys paid by the two praus for that season should be refunded. Of the two masters, Using and Sulemang, he says, 'I have had personal dealings with these men, and can testify to their being honest and always willing to pay their duties. Mr Robinson also endorses this (and his knowledge of them extends over many years) and speaks highly in their favour.' The money was not refunded (SAA 790/1895/175).

Robinson continued to receive his salary of £100 per year, while the work, with the drop in the number of praus, became easier. In view of his increasing involvement in other activities, he probably regarded it as a useful and reliable bonus. He even missed a number of seasons. In 1889 he was in Japan (see above) and on another period of sick leave, probably early in 1890, part of the work was left to unsatisfactory replacements (Searcy 1907,288). In 1897 he went to England and may again have missed some time (see above).

In December 1899, Robinson wrote to Stretton, who had succeeded Searcy as Sub-Collector of Customs, resigning his position at Bowen Strait. He announced that he had sold his schooner, his camp at Bowen Strait and the goodwill of his business to V.V. Brown, the Darwin auctioneer, whose son Alfred Joseph Voules Brown was to carry on there. He recommended young Brown for the Customs position, noting that Tingha would still be there to help. It must have been a position with its attractions, as four other applications were received. Brown was appointed with some haste, as the praus were expected soon. Although when making the appointment, the Government Resident promised to review the method of collection after twelve months, things carried on much as before (SAA 790/1899/497; SAA 1374/9316). By 1902, it would
appear that the camp was no longer habitable as Brown was
described as being always on board a small lugger (SAPP
1903/45:19). The reason for Robinson's resignation is not
clear, but he may possibly have wanted to concentrate on his
growing interests in other fields, particularly buffalo
shooting.

Although the collection of money from the Macassans came
to be regular and accepted, this was not the end of
government interest in the coast. The two most persistent
matters of concern were occasional murders and the arrival of
castaways from the north. Neither of these matters was
directly connected with the activities of the Macassans, but
because they were to some extent confused with Macassan
activities, they make up part of the total background to
government attitudes. A number of these incidents generated
considerable public controversy and extensive official files,
but all that is necessary here is a summary list for the
period.

The murder of Robinson's mate, Wingfield, by Wandi Wandi
on Croker Island in 1879 has already been mentioned. The
culprit was apprehended and served a gaol sentence. However
nothing came of the attempts to locate the Aborigines who
murdered the two Chinese wood cutters in Mountnorris Bay in
1884. Six years later, a buffalo shooter, R.C. Spencer was
convicted of the murder of an Aborigine at Bowen Strait. His
sentence was commuted to life imprisonment, but after
serving ten years he was back trepanging around the coast.
In 1904 he was in turn murdered by Aborigines in northeast
Arnhem Land (SAA 790/1890/188; SAA 1374/13497; Searcy 1907:
287-90; Register 26.12.1895, 6.1.1896; Bartlett 1954:207; see
also below).

In 1892 Robinson reported the murder of six crewmen from
a small prau which had come ashore near Brogden Point. This
prau, together with a larger one with which it may have been
in company, seems to have been blown away and completely lost.
At the time it was thought that they must have had some
knowledge of the coast since they asked for 'Tingha', but this
sounds like a misunderstanding. What is significant is that
both Robinson and Searcy used the incident to urge another
inspection of the Macassan praus, although they were certainly
aware that this was not a regular prau (SAA 790/1893/96). In
the event, seven Aborigines were arrested, charged and
convicted. A notable public debate then erupted, relating
also to several other contemporary murders, in which doubts
about the impartiality of justice spilled over into seeking
motives and causes. In this confusion, even Dashwood, who
had presided at the trial, failed to see the distinction
between the regular Macassan trepangers and chance castaways.
Eventually only one Aborigine, Wandi Wandi, who had already
been convicted of Wingfield's murder, was executed at Port
Essington (SAA 790/1893/286; see also SAA/1892/453; SAA 790/
1893/220; SAPP 1893/64; Register 9, 18, 28.11.1892, 11.7.1893
to 9.8.1893, 1.10.1896).

In 1899, there was some suspicion of foul play by a
European captain who abandoned a Malay crewman at Port
Essington, but a police investigation discovered that the man
had died of venereal disease (SAA 1374/8745, 8765).

In 1902 a trading prau sailing from Banda to Ceram was
blown away and wrecked near Cape Wilberforce. Only one crew
member survived an Aboriginal massacre and was eventually
rescued by a Macassan prau. This man, an Arab from Banda,
was left with Brown at Bowen Strait and eventually reached
Darwin. The authorities obtained permission to search for the
Aborigines who had murdered the other nine men, but the scheme
fell through when neither the survivor nor the Macassan captain
could supply sufficiently precise information (SAA 790/1902/

In late 1904 another prau from the Moluccas, with eight
men on board and a cargo of sago and palm leaf baskets, was
rather more fortunate to get blown into Port Essington. The crew were sent to Darwin where one man died, but the remainder were eventually sent off to Surabaja (SAA 790/1905/198; SAA 1374/13497).

In these last two cases, there appears to have been no confusion about the purely accidental nature of the voyages. Such castaways have continued to arrive occasionally up to the present, just as they no doubt did before records are available.

The basic reason for the South Australian government's decision to end the Macassan trepang industry was an attempt to encourage and protect the local industry. Other possible motives, such as the protection of Aborigines, anti-Dutch sentiment, or racial discrimination, which were occasionally mentioned, are subsidiary to this basic reason and by themselves would clearly have been without effect. Such protectionism was of course unexceptional in early twentieth century Australia, or, for that matter, in the Netherlands East Indies.

The evolution of policy was thus linked directly with progress in the local trepang industry. The beginnings of this industry have been described above, and it always remained primarily located in the bays of the Cobourg Peninsula and along the nearby coast to the east. Table 13.7 reveals two clear phases of local activity.
Table 13.7

Production of the locally based trepang industry in the Northern Territory: 1881 - 1909

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity Tons</th>
<th>Value £</th>
</tr>
</thead>
<tbody>
<tr>
<td>1881</td>
<td>nil</td>
<td>-</td>
</tr>
<tr>
<td>1882</td>
<td>0.05</td>
<td>3</td>
</tr>
<tr>
<td>1883</td>
<td>nil</td>
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<td>9.15</td>
<td>420</td>
</tr>
<tr>
<td>1885</td>
<td>19.5</td>
<td>821</td>
</tr>
<tr>
<td>1886</td>
<td>12.35</td>
<td>465</td>
</tr>
<tr>
<td>1887</td>
<td>11.3</td>
<td>382</td>
</tr>
<tr>
<td>1888</td>
<td>4.45</td>
<td>205</td>
</tr>
<tr>
<td>1889</td>
<td>7.5</td>
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<tr>
<td>Year</td>
<td>Quantity</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>1906</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>1907</td>
<td>19.75</td>
<td></td>
</tr>
<tr>
<td>1908</td>
<td>23.6</td>
<td></td>
</tr>
<tr>
<td>1909</td>
<td>38.4</td>
<td></td>
</tr>
</tbody>
</table>

Notes
The majority of these figures represent the annual trepang export to places other than Macassar. Hong Kong is the main destination. Due to a new accounting system, the figures for the years 1904-6 are difficult to ascertain. The lack of any non-Macassan export in 1904 is difficult to believe. In 1906 the total figure of 94.3 tons, worth £6056, certainly contains some local production. The prices obtained from this table do not correspond with those in table 13.1. No figures are available before 1881; for a continuation, see Bauer 1964:180,246, though there are some minor errors in his tables. All figures in this table have been checked in the Statistical Registers and Government Resident's reports.

The first phase reached its very moderate peak in the few years after 1885. The bulk of the trepang came from Robinson and his associates, such as Tingha. Great expansion was, of course, predicted, but even Robinson could not fully overcome his Aboriginal labour problems, and that in spite of the decline in the quantity of Macassan spirits (SAPP 1886/53; SAA 790/1885/423; Searcy 1907:101).

Comments suggesting restriction and discouragement of the Macassans, which as shown above, were current when duties and licence fees were imposed, continued throughout this period.

In 1888, Robinson bewailed the pilfering of his trepang and other goods by Aborigines for barter with the Macassans and suggested that praus be prohibited from
working within ten miles of his camp (SAPP 1888/53:28). The following year Searcy wrote that 'we cannot expect any great fishing being done by local people until the proas are driven off the coast' (SAA 790/1889/147). When commenting on new and more restrictive Dutch pearling and trepanging regulations introduced in 1893, he suggested that, 'if it should be found necessary at any time to restrict the issue of licences as to foreigners it would be well to remember the action of the Dutch Government, and provision will have to be made in dealing with the Malay proas who visit our coast every season, the crews of which are all Dutch subjects' (SAPP 1894/53:20; a copy of the regulations is in SAA 1374/8280).

But if the theme of competition was continuous from the days of Cadell, the local demands were not strong enough to force the government to exercise further its comparatively tenuous authority. Current financial demands had greatly reduced Macassan numbers anyway, and naturally Robinson, who seems to have at least partially resolved his problems with Aborigines, did not seek complete prohibition, which would have deprived him of his salary. Finally a drop in the price of the dollar in 1895, brought the local industry to a standstill (SAPP 1896/45:20).

In 1899, the second phase of the local industry began with an export of 9½ tons. Quite a good price was obtained for this, but the explanation for the resumption of the industry is more complicated than merely an increase in price. In the late nineties there was considerable enthusiasm

8 A statement by Searcy that the Macassans were prohibited from fishing westwards of De Courcy Head in 1885, appears to be the result of confusion with the later prohibition (Searcy 1907:101).
for pearling out of Darwin (SAPP 1898-9/45:19). In 1899 new regulations were introduced prohibiting Asiatic ownership of pearling vessels and among those affected was Tingha (SAPP 1900/45:13; SAA 1374/8701). He therefore returned to trepanging and probably inspired several others to do the same. Stretton commented with approval on this renewed activity, though he noted persistent problems with Aboriginal labour (SAPP 1901/45:22).

A useful review of the situation in 1902 is provided in the evidence tendered to the Dashwood inquiry. This inquiry, under the Government Resident, had been set up to inquire into many aspects of the marine industries in Northern Australia. Brown and Tingha, who were currently trepanging in Bowen Strait, provided much useful information. They reported some diminution of the trepang beds, but not sufficient to require any restrictions, so long as no great expansion of the industry occurred (Dashwood 1902:42 q. 489-94, 43 q. 521-2). Both were quite neutral towards the Macassans.

In fact, the actual situation on the coast seems to have been considerably less satisfactory than appeared from this evidence. The basic problem lay in European relations with the Aborigines. While Tingha seems to have been perfectly

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9 See Bach (1962) for the background to this situation.

10 Question 487 refers to a reserve for Europeans established at this time. I know of no other specific mention of this, though a reference in 1900 to De Courcy Head as the western limit of Macassan activity may indicate some reserve in force at that time (SAPP 1900/45:19). If there currently was a reserve in force, it is difficult to see the need for concern about the Macassans in 1903. There is also a specific statement by Brown, in his letter of 18 May 1903, that although the Macassans mainly worked east of the Goulburn Islands, they sometimes worked for a time in Port Essington (SAA 790/1903/438). If some reserve did exist, it was probably only in the immediate vicinity of the Revenue Station.
correct when he told Dashwood that the Macassans brought their own labour force (Dashwood 1902: 43 q. 513), there is no doubt also that they continued to have considerable dealings with Aborigines, partly in buying tortoise-shell and the like (Dashwood 1902: 42 q. 481), and partly because of the natural attraction any camp exercised on local Aborigines. The Macassans can hardly have been unaware that the local industry was totally dependent on Aboriginal labour and perhaps, as the Aborigines believe, they foresaw the trouble that Europeans would bring with them, and tried to influence Aboriginal opinion against the local trepangers (Warner 1937 (1964: 474-5)). 11 Whatever the exact truth, there was certainly trouble, at least for some local men, in retaining their labour force from the comparatively few Aborigines available (SAA 790/1903/438).

This problem appears to have been at the bottom of a strange incident in April 1903. The infamous R.C. Spencer was trepanging near Guion Point when two praus arrived on the scene. Spencer's Aborigines were entertained on the praus and when he tried to prevent this, an argument ensued. Next day, and only possibly due to a misunderstanding, some shots were fired. It is now impossible to get to the truth of the matter as only Spencer's letter of justification to the Government Resident is available, but Brown, though he did not report the affair, seems to have taken the part of the Macassans (SAA 1374/12557).

At about the same time, two letters were sent to Dashwood, the Government Resident, and to the two members for the Territory in the South Australian parliament, one of whom was the future Government Resident, Herbert. The authors of the letters were C.E. Gore, who had done a little

11 Berndt & Berndt (1954: 69) have perhaps another version. I have been told the same story at Elcho Island mission.
trepanging in Bowen Strait and had labour troubles, and jointly, J. Cleland and C. Pfitzner. Cleland had unsuccessfully applied for Brown's position at the end of 1899 (SAA 1364/9316), and a few months later, on a pearl prospecting voyage, he had the satisfaction of extracting some dues from an unlicensed prau in Melville Bay. Pfitzner had just started trepanging in partnership with Spencer. The letters urged that the Macassans should be prohibited from visiting the coast. They contained most of the usual charges: that the Macassans debased the Aborigines with liquor and worse; that they introduced disease; that they evaded Customs duties and licence fees in various ways; that the Dutch regulations were unfair and generally that the profits of the industry should be reserved for local Europeans (SAA 790/1903/483,461).

Dashwood sent off his letters to Stretton for comment and received long reports from both Stretton and Brown rebuffing the charges and exposing the untrustworthiness of the authors. Stretton would have been quite prepared to stop the Macassans if it would help the local industry, but this was not the case. Brown was even more specific. 'I see no reason why the Macassars should be undesirable for they are in my opinion doing nobody any harm and also are a source of revenue' (SAA 790/1903/438). It is therefore clear that Brown and Stretton at least, were not concerned at this stage with Macassan competition against the local industry as it then existed. But as Brown had told Dashwood in the previous year (see above), no great expansion was possible. He had many interests in maintaining the present situation.  

There is a rather puzzling letter from Stretton to Dashwood earlier in 1903 which may also relate to the apparent disagreements among various individuals. Stretton asked that most of the north coast of the Cobourg Peninsula be made a government reserve. A minute suggests that Pfitzner had also made some sort of application. From later events, nothing seems to have come of either request (SAA 1374/11878).
Although in conflict with his earlier evidence, Brown was not being altogether inconsistent when just over a month later he wrote to Stretton suggesting 'that the coast between Cape Don and De Courcy Head be a closed ground for trepang fishing purposes for a period of two years' (SAA 790/1903/471). The ostensible reasons for this were to allow the beds to recuperate after over-fishing by both Macassans and locals and to encourage local fishermen to open up new areas further east. As suggested in chapter 4, it is possible that the area was being exhausted, and Brown was becoming concerned about the future for those already engaged in the industry, probably including himself. Stretton forwarded Brown's letter to Dashwood, with his confirmation that the areas were being over-fished, and when Dashwood asked for the relevant statistics, he replied that for 1903 there had been licences issued at Bowen Strait to six praus, carrying thirty-six canoes, and to six local canoes.  

Perhaps remembering Brown's remarks before him at the previous year's inquiry, Dashwood recommended to the Minister that the specified area be closed to allow recuperation, 'and this would be the case even though perhaps the trepang fishers might be making it pay.' As for the difficulty of enforcing the reservation, Dashwood was satisfied that the locals would respect it and that a letter to the authorities in Macassar would achieve the same result with the Macassans. The Minister agreed to the closure from September 1903 for two years, and a letter was eventually sent to Macassar (SAA 790/1903/471; SAA 1374/12158).

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13 This last figure which comes from Brown, has to be reconciled with his statement in May 1903 that 'this year (a fair sample of past years) there are on the coast, seven different local people as owners [of trepanging boats]' (SAA 790/1903/438). Some of these seven, perhaps including Brown himself, must have taken out their licences in Darwin and not at Bowen Strait. Dashwood missed the distinction in his minute for the Minister.
The two years passed without incident on the coast and presumably the reserve was respected. It is clear however that there were further attempts to get the Macassans prohibited. It was even reported in the Register on 9 September, 1904, that after certain representations had been made to him, the Federal Minister for Customs had decided to close the station at Bowen Strait, thus forcing the praus to visit Darwin to pay duties, a feat that was acknowledged to be sufficiently difficult to deter them coming at all (Searcy 1907:vi). If the Minister did make this decision, it seems to have been reversed when it was discovered that the praus were actually licensed by the Marine Department of South Australia and the matter was therefore a State affair (see Herbert's minute of 8.2.1907 in SAA 790/1906/360; also SAPP 1905/45:25).

In his annual report for 1905, Herbert, now Government Resident, considered the matter of the trepang industry. He noted the growth of the local industry which had produced 32 tons out of a total of 62 tons for the year. (The figure of 30 tons for the Macassans, which was the lowest on record, is depressed because only two praus came. Fifteen tons for each of these was a good catch.) As he saw it, 'now that the local boats are exploiting the coast, and the Malay proas are so few..., there can be no valid reason for continuing the issue of licences to Malays.' Furthermore, 'those who should know, and on whose judgment I can rely, aver that it [contact with the Macassans] tends only to demoralise the natives' (SAPP 1906i/45;16). Perhaps the propaganda had had some effect.

However nothing was done, and in September 1905, the previous reservation expired. In the 1905-6 season, four praus arrived and worked the coast with various local trepangers (SAPP 1907/45:38). This led Brown to initiate, possibly unintentionally, the chain of events which resulted in the
closure of the whole coast to the Macassans. 

Probably in May, 1906, Brown suggested to Stretton that the area previously closed be reserved exclusively for local boats. In his letter of 28 May on the subject to Herbert, Stretton's only reason for implementing this suggestion was that it would facilitate execution of Customs business if the praus had all to pass to the eastwards through Bowen Strait on arrival and westwards on departure. In view of the operation of the system over the last two decades, the excuse is remarkably fatuous. An important factor might have been the 'great deal of ill-feeling' on the matter shown recently by witnesses at a Customs inquiry.

Before proceeding, Herbert consulted further with Stretton. He learnt that only one of the four praus was west of De Courcy Head, though the others would terminate there. There were also another four local boats, all inside the reservation. Brown seems to have been the only European owner. The total revenue from the Macassans alone had been £110/16/4 for 1905, and £252/3/4 for 1906.

Armed with these facts Herbert forwarded Stretton's letter to Adelaide, with a long minute, reiterating his 1905 opinion, that the whole coast should be closed to the Macassans. After allowing for the saving of Brown's salary, he estimated the loss in revenue to be about £80 per year which he expected be made up in increased revenue from the local industry. This was exceedingly optimistic, and the figure of £80 was only based on the returns for the previous two years, one of which was far lower than any other year on record. Herbert opposed the suggestion of Brown and Stretton.

14 The basic files in Adelaide and Darwin relating to the following incident are SAA 790/1906/360 and SAA 1374/15236 respectively. The more important documents are to be found in both files, though naturally minutes will be found only on the appropriate one.
on the grounds that a distinction between Macassan and local boats in the specified area would be 'individuous'. In either case, it would be necessary to contact the Dutch authorities again.

On 26 July 1906, O'Loughlin, the Minister in Adelaide approved Herbert's recommendation. Thus it was finally decided that the praus, which for so long had made their annual voyage to the coast, would be henceforth prohibited, or rather that no further licences would be issued to them.

The necessary business arising out of the decision was immediately put in hand. The Dutch Consul in Adelaide was notified and he communicated the decision to the authorities in Macassar. Although Stretton had earlier urged the value of a Customs officer in the area, Finiss, who was the Acting Harbor Master, reported that no officer was required at Bowen Strait. As Brown was now a Federal public servant, the matter had to be referred to the Commonwealth authorities.

Stretton's doubts of 1903 about the effect of prohibiting the Macassans on the local industry, proved to be well founded (SAA 790/1903/438). Although his report on the Marine Department for 1906 predicted progress (SAPP 1907/45:38), by the following year this was not apparent. Both Stretton and Herbert offered excuses in the need for time to allow the trepang beds to recoup again and more significantly, the difficulty of obtaining Aboriginal labour (SAPP 1908/45:17, 42-3,47). Stretton also noted that the whole trepang industry was then in the hands of Europeans, as Tingha had died and the other local Asians were working for Europeans (SAPP 1908/45:47). The industry has persisted in the Territory almost up to the present, but production has never attained the level of even the most disastrous year before 1906 (Bauer 1964:180-1, 245-6; Development Committe 1946). The chief reason for this stagnation is not far to seek and had been clearly foreseen by Brown in 1903. 'The native
population is too scarce to supply labour to many people, and unless there is other cheap labour imported, or some other method discovered for the working of trepang, the industry will never be much good" (SAA 790/1903/438).

It is fortunate that enough documentation survives for the period of contact between the Macassans and the South Australian officials to enable a fairly detailed account of events, with some idea of the causes of specific decisions and of the motives of the chief characters, to be reconstructed. Behind this mass of detail, there is a consistent logic.

When South Australia annexed the Northern Territory, it was exclusively interested in exploiting the resources of the land. Only gradually and as the very considerable practical problems were overcome, did concern for the wider range of affairs which make up the business of government, become apparent. Given the modern theory of the sovereignty of the state over precisely defined territory, the regulation of the trepang industry on the north coast was only a matter of the expansion of effective power. In the early eighties, this had reached the stage at which the visitors were subjected to the current obligations of contributing to government revenue. Given the power to control events, which in this case was caused as much by the decline in Macassan activity as by an extension of government power, it was perhaps inevitable that the government would seek to supplant an industry controlled from abroad by local enterprise. It was simply a matter of time and opportunity.
That this is the correct interpretation to put on events, can be confirmed by showing briefly that certain other possible motives did not enter significantly into the consideration of the government.

Firstly, the scale of finances involved in the industry, whether Macassan or local, was not large, even in the limited context of the Northern Territory budget. Though revenue and production of any sort were welcome enough, no great hopes of financial benefit ever motivated the government. Thus changes in Customs duties and licence rates can be explained without reference to the trepang industry. Furthermore, although the regular exactions eroded the economic base of the Macassan industry, there was never any financial discrimination against them. Apparently this applied in practice as well as theory.

Secondly, there are many references over the years to the need to protect the Aboriginal population from the supposedly baneful influence of the Macassans. Undoubtedly the duty on spirits did prevent some drunkenness at points of contact, and this change is often commented on with approval. Yet it cannot be shown that there was any forceful or coherent policy of Aboriginal welfare in force at the time and in most cases, complaints about the ill effects of Macassan influence on the Aborigines are only too patently a blind for self advantage on the part of the writer.

Lastly, it might be thought that prejudice against non-Europeans, such as that manifested in many parts of Australia in the late nineteenth century, affected the issue. Although it is possible to find a few expressions of such sentiments in connection with the trepang industry, these never seem to have been a major factor in conditioning decisions. Thus the Macassans were prohibited because they were foreign, not because they were Asiatic. In this, there is a major
difference with the much larger pearling industry for which legislation was introduced in 1899, prohibiting local Asiatic ownership of pearling vessels. As Northern Territory opinion has always been rather more pragmatic on this issue than elsewhere in Australia, this difference with the pearling industry is largely one of the size of the industry and the nature of competition experienced. Although in fact the local trepang industry did drift into the exclusive control of Europeans (SAPP 1908/45:47), the rigid anti-Asian regulations proposed by a Queensland Royal Commission in 1908 were thought inappropriate for the Territory (SAA 1374/17772; Qld Report 1908:1xxvii-471).

The decision of the South Australian government in 1906 to cease issuing licences to the Macassans was final, but there is one further episode in the story of Macassan enterprise in Northern Territory waters. It serves as a reminder that the visitors were not altogether passive receivers of government edicts.

On 30 January 1907, Brown arrived in Darwin from Port Essington with the surprising news that at least some Macassans had appeared on the coast despite the information that had been sent to Macassar the previous year. The matter was immediately referred to Adelaide where the Netherlands Consul was asked to confirm that the authorities in Macassar had in fact been contacted. A week later the Consul General in Melbourne replied confirming that the authorities had been contacted, but asking for full details about the praus involved. He pointed out that the praus could be merely blown off course and have no connection with the usual Macassans. The Government Resident's office was duly instructed on 6 February to obtain the relevant details and take any necessary action to warn the praus off the coast. This was all very well, but as Stretton had pointed out when first reporting Brown's news, the station at Bowen Strait
had been closed and Brown was no longer employed by either the State government to look after the Macassans (though he was still able to issue licences (SAA 1374/15129)) or by the Federal Customs authorities to collect duties. In this difficulty Stretton suggested that Brown be offered £10 to try and obtain the necessary information. As Brown was about to leave Darwin an urgent decision was required. The Minister agreed to pay the £10, only to learn the next day that more complications had arisen with the Customs aspect of the affair. The Collector of Customs in Adelaide, to whom Stretton had also reported the matter, had been in contact with the Minister's office to say that the matter had been referred to Melbourne, and Herbert, the Government Resident who happened to be in Adelaide at the time, thought that as no State licences had been issued, the affair was entirely a Commonwealth matter to be dealt with under the Federal Immigration Restriction Act. In the event, the Customs authorities replied that no duty could be collected except at a port, but Brown could be asked to warn the praus that a prosecution would follow an entry elsewhere. The State government seems to have been left to pay the £10.

On 12 February 1907 Stretton officially informed Brown that he was offered £10 to obtain the relevant information and then warn the praus of the coast, 'at the same time notifying them that they are likely to be seized.' Brown accepted the offer and proceeded to Bowen Strait, where he discovered the information he was looking for. A single prau had called leaving the following letter:
Makassar November 30th 1906

Honored Sir.

The present will be handed to your goodself by Oesindaeng Manrangka, Poongawa of my prawn BOENKAWA INJAYA with 2 Saroongs from this country, which please accept as a token of friendship.

It has been reported here that to fish Tripang from Port Darwin up to Pellew Islands, no licenses are allowed any more, so the people do not dare to go out fishing Tripang over there.

As at the time (May or June) when my proas were at your port, nothing was known about this new regulation. I cannot beleive it is really true, but for prudential reasons, I now send only one prow, to see how matters lay and I will feel very much obliged to you for instructing my people how they are to act.

I will also feel very thankful if, on arrival of the bearer you will kindly inform me, by a couple of lines by mail how the situation is in reality.

Offering many thanks in anticipation.

I remain, Honored Sir,

Yours faithfully

POEDDOE DAENG TOMPO

Brown gave the two sarongs to the Aborigines and brought the letter to Darwin. In his minute Stretton suggested sending a Customs officer on the next ship to the Gulf of Carpentaria 'to enforce the order to warn the proas off our coast' A letter to Macassar would have been just as effective, and more polite.
PART V : CONCLUSION

Chapter 14

The Macassans and Australian History

This study began with a consideration of the Macassan trepang industry in the context from which it emerged. It is appropriate to conclude by looking for its significance in the history of the area where it was actually carried on.

If the question is put in purely practical terms, the answer is clear. It had very little practical effect. Flinders and his crew were briefly diverted from their work, as were King and various other observers throughout the nineteenth century. Fort Dundas and Fort Wellington were established to take advantage of the industry, but even their failure has been of little consequence in the history of European settlement in the area. The Port Essington settlement achieved a more lasting renown, but the rôle of the Macassans in the origin and progress of that settlement was comparatively minor.

Despite the mass of detail given chapter 13, the Macassan trepang industry played only a very small part in the history of the South Australian development of the Northern Territory. It produced a few hundred pounds in revenue and was responsible for the setting up of a minor outport in Bowen Strait. The example it provided may have stimulated some of the contemporary European activities along the north coast of Arnhem Land, but the opportunities for Europeans were more apparent than real in many areas of northern Australia. Nor did the Macassans have a rôle to play in the great debates on non-European labour in a White Australia, but then the Northern Territory as a whole has
in general been treated as a special case (or forgotten) in this regard.

Even in respect of those parts of Aboriginal society and culture which display certain indubitable effects of contact and co-operation with the Macassans, no fundamental revolution has been induced nor does any important feature distinguish these people from other Aborigines, as in the case of Torres Strait culture. Today this is all the more apparent, as the old men for whom the memory was at least real enough to be used as psychological weapon against the onrush of European civilization, gradually die away.

The archaeological remains of the industry are certainly extensive and repay the attention of the careful recorder and excavator. Yet to the untrained eye they could well-and often do - pass unnoticed. Even the tamarind tree, the introduction of the Macassans, is now spreading along coastal beach ridges and losing its rôle as a distinctive indicator of the sites of Macassan activity.

It could be argued, and with some force, that the mere existence of the industry, as the occupation of a relatively large number of men over a long period of time, provides the justification for its description. Moreover the regular voyaging of the praus, though not comparable with the great feats of global navigation, are certainly worthy of note as a maritime achievement. If one could take as the criterion of importance a simple aggregate of effort, then the Macassans would hold a not inconsiderable place in early Australian history and would loom large indeed in the very much more restricted history of the Northern Territory. Though such an extreme attitude as this cannot be sustained, it remains that the industry was a substantial activity carried on by men in Australia and as such deserves a place in a history of the continent. Perhaps the fact that it is a comparatively unusual and unfamiliar enterprise seen against the pattern
of other human endeavour in this land, gives it some claim to special recognition. But that is to anticipate the argument.

For those who like to perceive such themes, the industry is perhaps the clearest example in Australian history of the inadequacy of the Europocentric view of events. Even if the first Macassans did not precede the Dutch explorers who 'discovered' Australia for European geography, they were certainly the first non-Aboriginal group to visit Australia consistently and find a resource which could be exploited on the markets of the world. Although there is no evidence of permanent occupation by the Macassans, it is quite reasonable to regard men, who returned to the coast again and again over many years, as in a sense, Australians. Just as the miners and graziers, and before them the sealers and whalers, of European Australia based their economy on distant export, so did the Macassan trepangers. The continent's first industry in a modern sense, was trepang. Whatever the final verdict on the date of the origin of this industry, it would be possible to maintain very strongly that, using the terms as defined by Clark (1962:3), the earliest civilization to reach Australia was not European, but Asian; not Christian, but Muslim; and it came to the north, not to the west, the east or the south.¹

In my own view, there are three areas in which the study of the Macassans has some significance. They are all concerned with creating attitudes or establishing orientations.

¹ For the date when it was written, the first chapter of Professor Clark's great history is remarkably perspicacious. However, just as the last decade of work on Aboriginal prehistory has rendered his remarks on that subject totally obsolete, so more recent work on the Macassans and Indonesian history in general has necessitated a recasting of other details in his vision.
The first, and perhaps the simplest, concerns the implications of such a study for the theory of historical and prehistorical research. Mulvaney (1966:454) has appealed to historians of Southeast Asia between 1750 and 1850 'to leave those dreary wastes of Colonial Records and direct their attention to humbler sources.' As he envisaged, this study has involved following leads into many fields, not least being colonial records. The work of Allen on the Port Essington settlement, integrating the historical and archaeological evidence, forms an instructive comparison, though the material on which the present study is based is more varied and more diffuse. On the one hand, there is material gathered from a range of techniques more or less familiar to the archaeologist: field recording, excavation, carbon dating, the study of artefacts such as pottery, coins, glass, fish-hooks and the like, together with an awareness of the possible effects of change in the biological and geomorphological environment. Beyond these, there is information to be derived from ethnography, language and physical anthropology. It is a situation with which the prehistorian is well acquainted. On the other hand, there is an almost equally wide range of documentary material, to be handled with a variety of techniques. The analysis of official statistics and the study of government correspondence are complemented by a critical reading of the accounts of explorers, adventurers and tellers of tales. This is a field with which the historian is familiar.

Some pains have been taken in this study to bring as wide range of evidence as possible to bear on specific points. This is intended to demonstrate, by particular example, the interaction of various types of evidence. The intention is not to challenge the utility or validity of specialized techniques, but only to assert the need for seeking out information wherever it is to be obtained. If the final
account is difficult to classify, that is a reflection on the theory of classification.

To be specific, there are many situations in the study of the past of Australia, and probably of most of the Pacific and Southeast Asia, where the conventional categories of history and prehistory, though conceptually useful, cannot be separated in practice. The study of the Macassan trepang industry is certainly one of these situations.

The second area in which the study of the Macassan trepang industry is of some significance is in the recognition of northern Australia as a distinct historical unit. The case for regarding the area in this way has been outlined elsewhere (appendix 12: Introduction), and it is not necessary to repeat the argument here. Except for the eastern side of the Gulf of Carpentaria and the shores of Van Diemen and Joseph Bonaparte Gulfs, virtually all the coast of northern Australia was visited by foreign trepangers. This is in itself one of the factors linking the various parts of the coast and distinguishing it from the rest of Australia. Just because this industry, whether on the Kimberley coast or in Northern Territory waters, is so clearly exceptional within the main pattern of Australian history, it can be seen to have a symbolic value, far in excess of its actual practical effect. At a time when great efforts are being made to develop the economic resources of northern Australia, the establishment of regional identity and the orientation of opinion towards a rounded interest in the region may prove to be the cornerstone of social progress. The story of the Macassans has a small, but significant part to play in this process.

Finally, the Macassans are important in Australian history simply because they are unusual. Their story serves to remind us that the history of the continent is not fully described
by the relatively well known picture. In the central foreground, the spectacle of the European settlement and expansion from the south will always remain under the brightest light. Around the edges of this and stretching back into the millenial mists behind, there are the details of Aboriginal ethnohistory and prehistory, which are only now gradually coming into focus. Yet the picture is not solely made up of white and black. Here and there, are small areas of brown or yellow. In the desert there were Afghan camelmen; on the canefields there were Melanesian labourers; on the pearling grounds there were Japanese and Malay divers; on the goldfields there were Chinese fossickers. These people have not left a mark on Australian civilization comparable with the dreams of the Catholics, the labours of the Protestants or the schemes of the sons of the Enlightenment. Indeed their contribution is even less than that of the baffling complexities of the Aboriginal imagination. Yet their separate gifts are, in themselves, unique, and the history of the contact between them and their white or black neighbours almost infinitely various. The Macassan trepangers, on the southern boundary of their world, displayed only a small part of their civilization, and despite the long series of fleets anchoring in so many bays and inlets, their impact was slight on a distant and barbarous coast. Nevertheless, the side niche burial on a lonely beach or the shattered fragments of a blue and white porcelain bowl, half covered by the drifting sand, are the final eddies of those mighty religious and economic currents that began in Arabia and in China. Perhaps an awareness that even a few of the ghosts of the land are not in the image of present society can enrich our understanding.