## **ALTERED STATES**

# Material Culture Transformations in the Arafura Region

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## Macassans and their pots in northern Australia

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#### Introduction

The antiquity of the visits by Macassan traders to northern Australia, and the influences on local Aboriginal culture, have been topics of scholarly research since at least the 1940s (Macknight 1976:3-5; Mulvaney and Kamminga 1999:407-422). The emerging consensus holds that the Macassan presence in Australia began at around 1700 (e.g. Mitchell 1994:47-48; Mulvaney and Kamminga 1999:415), notwithstanding evidence of pottery in Groote Eylandt (presumably brought from Indonesia) as early as a thousand years ago (Clarke 1994:399). However, apart from Macknight (e.g. 1969, 1986), scholars have given scant attention to the history and archaeology of the Macassans in their South Sulawesi homeland. We shall argue that this latter perspective allows a seventeenth century origin for Macassan activity in northern Australia, but refutes any earlier claim. Having established the appropriate time scale of comparisons, we shall be in a position to reveal the striking contrasts between material culture in South Sulawesi and the repertoire that the Macassans brought with them. This point illustrates an important consideration in contact archaeology: the very act of moving into a contact situation involves a major cultural reorientation.

The term 'Macassans' relates to Macassar, the South Sulawesi entrepôt which the Dutch East India Company occupied in 1667, and which formally became part of the Netherlands East India colony in the 1810s (Poelinggomang 1993). The city was named after the Makasars, the indigenous ethnic group of the immediate region. The orthographic difference between Macassar (European spelling) and Makasar (Indonesian spelling) will be retained here as a convenience to distinguish between the historical city and its local ethnic group. Both Makasars and Bugis (the largest ethnic group in South Sulawesi) were involved in every aspect of the trade which carried *trepang* or sea-cucumbers from Australia's shores to Macassar for onward distribution (Macknight 1976).

Although members of other ethnic groups were also involved, the term Macassans properly refers to maritime traders, predominantly of Makasar and Bugis ethnicity, who carried *trepang* from northern Australia to the terminus of the network in Macassar (Figure 3.1).

This trepang network would hardly have sprung up in a vacuum. As soon as sailing vessels began operating in the islands of Nusatenggara, between Flores and Kei, a proportion of them would have been blown off course towards Australia by the northwest monsoon (Mulvaney and Kamminga 1999:410). Some of the sailors would certainly have survived the landfall and managed to return to Nusatenggara, establishing a tradition of return voyages to the coastlines in the south. The Bajau sea gypsies, who played a major role in the fourteenth to early sixteenth century trade between Macassar and the islands to the west (Bulbeck 1996-7:1034), could potentially also have pioneered regular trading routes through eastern Indonesia, routes which may have reached Australia. Turtle shell, sandalwood, pearls and pearl shell were ancillary northern Australian products handled not only by the Macassans but also by other groups including the Bajau (Macknight 1980:142; Mitchell 1994:31-33). This trade may well have preceded the trepang industry. The Dutch account of the trade through Macassar in 1670 fails to mention trepang, whilst recording other produce such as turtle shell in detail (cf. Macknight 1986:69). Similarly, Morwood and Hobbs (1997:205) claim the possibility of relatively early, non-trepanging sites along the Kimberley coast.

### **Background to Macassar and Macassans**

Macassar makes its oldest textual appearance in the *Desawarnana*, completed in AD 1365 (Robinson 1995). The context suggests Macassar was a major station between Java and the Spice Islands. Next, the *Sejarah Melayu* describes how an early fifteenth century prince from Tanah Mengkasar' plundered parts of Java, Malaya and Sumatra (Reid 1983:128-129). Early sixteenth century Portuguese used the term Macassar both as a catch-all for much of Sulawesi (Reid 1983:127) and as the name for a specific trading locus within South Sulawesi (Poelinggomang 1993:62). For two reasons, there is little reason to doubt that the above references to Macassar invoke the same place as the well-attested entrepôt of later times, even if the toponym was also sometimes generalised to cover a wider area (*pace* Reid 1983:119, 129; Pelras 1996:67). First, the rulers of Gowa, the Makasar kingdom that controlled Macassar before the Dutch occupation, are reliably recorded back to approximately AD 1300. Second, imported Chinese ceramics of

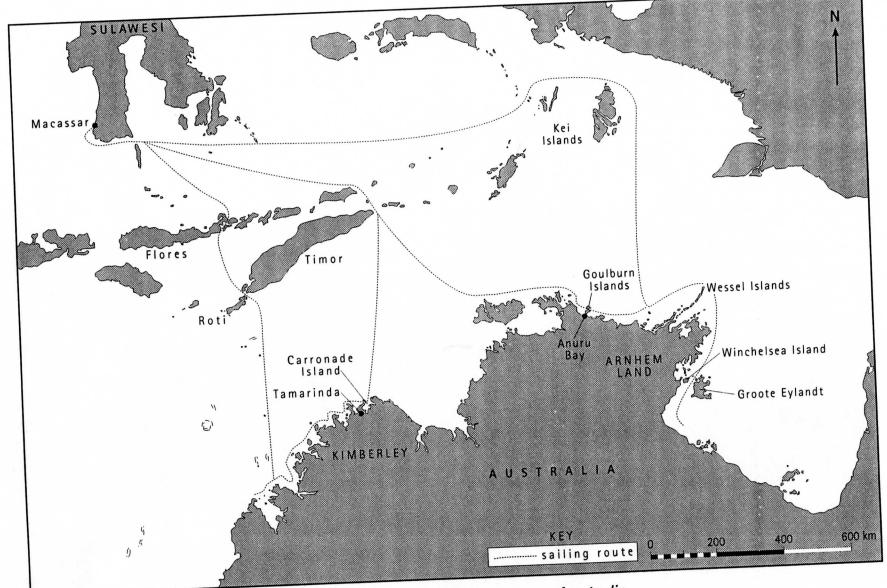


Figure 3.1 Macassan sailing routes to northern Australia.

thirteenth to fourteenth century antiquity are common in surface collections from Macassar and its immediate hinterland (Bulbeck 1992). Hence, the Macassar end of any trading link with north Australia would have been established by the fourteenth century.

Macassar had developed into a major entrepôt at the time of its official conversion to Islam in 1605. A Portuguese visitor in the middle sixteenth century described Macassar (under the name Gowa, in this case) as a large city (Jacobs 1966:294). Bulbeck (1992) estimated the population of Makasars in Macassar and its immediate surrounds as approximately 80,000 in the sixteenth century, and 90,000 in the seventeenth century, based on the number of recorded cemeteries. This large population enjoyed great prosperity, as indicated by the staggering quantities of circa sixteenth century Chinese, Vietnamese and Thai ceramics that have been looted from Makasar pre-Islamic graves.

Although Macassar operated as a significant port at an early date, this need not imply that Makasars, or any other South Sulawesi ethnic group, were active mariners throughout the same period. The famous passage by Tomé Pires (written in 1511) on traders to Melaka from Macassar (Reid 1983:127-128) specifies Bajaus and nobody else. Andaya (1991:72) was prepared to accept that Makasar traders from Macassar had penetrated eastern Indonesia by the late sixteenth century. However, all references to these traders in Andaya (1993) postdate 1600 (see also Leirissa 1993). Even then, as Andaya (1993:164) states, 'Many of the so-called "Makassarese" traders operating in the archipelago were in fact Malays or Bandanese'. Further, all of Macassar's military conquests east of Sulawesi postdate 1600 (Bulbeck 1992:Fig. 4-5). Indeed, the dramatic expansion of Bugis and Makasar traders into eastern Indonesia resulted specifically from the disruption wrought by the 1667 Dutch occupation of Macassar (Andaya 1981:Ch. VIII). The primary pursuit of these traders in nineteenth century Maluku was trepang, followed by turtle shell and pearls (Leirissa 1993:84-85), exactly as in north Australia. In sum, 'Macassans' as defined here were a seventeenth century phenomenon at the earliest, and a later development in the main.

Chronological evidence from Macassan sites in northern Australia The northern Australian archaeological evidence on which our paper focuses comes from recorded sites for processing *trepang*, and so would refer to Macassans in the strict sense defined previously. In both Arnhem Land and the Kimberleys, Macassan trepanging sites follow a quite

standard pattern. The dominant feature is one or several parallel lines of stones on the beach, used to support cauldrons to boil the collected *trepang*. Charcoal-rich layers frequently survive, buried beneath the sand that tends to accumulate around the stones. Tamarind trees, descended from the tamarind cuttings brought by the Macassans, supplying shade and edible fruit, are generally present. This complex of features is described by Macknight (1969, 1976), Crawford (1969), Mitchell (1994), and Morwood and Hobbs (1997).

## Radiocarbon dating

Mangroves supplied the tinder and, as observed by Morwood and Hobbs (1997:200), trepang-processing sites are usually located near mangrove stands. Mitchell (1994:54-56) noted that radiocarbon dates on mangrove trunks and branches would be affected by the 'marine reservoir effect', currently estimated at 450±35 years in northern Australia. Hence any radiocarbon dates from mangrove wood could potentially be up to 450 years older than the date when the wood was used. Mitchell's observation explains the suite of anomalously old radiocarbon dates which Macknight (1969, 1976) obtained from trepang-processing hearths, as well as the 380±80 BP date from an extant mangrove stump which Macknight interpreted as a vestige of Macassan firewood collection. Leaves that had regrown from trees in the same copse, however, produced a modern radiocarbon determination, suggesting to Mitchell that mangrove twigs should give a reliable radiocarbon age. Mitchell's 'twig criterion' would admit only one of Macknight's charcoal dates, namely ANU-317, processed on charcoal derived from relatively thin branches (Macknight 1969:388). Another of Macknight's dates, ANU-61, may also be included as the determination is consistent with the two dates obtained by Mitchell (1994) on charcoal from narrow branches and twigs. This leaves four dates which can be considered relevant to dating the Macassan stone lines (Table 3.1)

Table 3.1 Accepted radiocarbon dates from Macassan stone-line hearths.

 1-sigma calibration AD 1424-1623 AD 1682-1935 AD 1689-1924 Cannot be calibrated	2-sigma calibration AD 1407-1643 AD 1671-1955 AD 1672-1944 Cannot be calibrated
430±70 BP 125±57 BP 217 110±60 BP 115 100±0.7%	430±70 BP AD 1424-1623 125±57 BP AD 1682-1935 217 110±60 BP AD 1689-1924 115 100±0.7% Cannot be calibrated

Calibrated with the CALIB 3.03 computer program (see Stuiver and Reimer 1993), using the method of the area beneath the probability curve.

Three of the dates can be calibrated with conflicting implications. They may both predate and postdate the seventeenth century; alternatively, they could pertain to the early and late seventeenth century respectively. The semblance of near overlap between the early date (ANU-317) and the later dates (ANU-61 and BETA-47217) is an artefact of calibration. The radiocarbon calibration curve covering the period of interest is characterised by a steep middle seventeenth-century drop between two plateaus which respectively extend between the early fifteenth and seventeenth centuries, and the late seventeenth and middle twentieth centuries (Stuiver and Pearson 1986). While both plateaus would appear to be represented, the true age of the sample along these plateaus sadly cannot be deciphered.

Following the approach of Housley et al. (1999) we could conclude that the Macassan chronology incorporates the seventeenth century. However, we also acknowledge that better evidence of dates referring to chronologically disjunct, fifteenth to sixteenth century and eighteenth to nineteenth century events would be virtually impossible. Spriggs and Anderson (1993) recommend rejecting older radiocarbon dates if their two-sigma range fails to overlap with the two-sigma range of younger dates from the same (or here, analogous) context. Accordingly, the case for treating the early date ANU-317 as referring to a pre-seventeenth century event would fall prey to the case for rejecting ANU-317, and assigning the entire Macassan chronology to the eighteenth and nineteenth centuries.

Further dates on carbonised twigs from hearths in Macassan stone lines are obviously required to produce a reliable radiocarbon chronology. In the meantime, we conclude that one interpretation of the radiocarbon dates would admit a seventeenth century origin for the Macassan stone lines, while a second interpretation would boil down to accepting the eighteenth to nineteenth century chronology favoured by Macknight (1986) and Mitchell (1994).

### Coinage

Coins can provide the most precise dates even if they are *terminus post* quem determinations. Crawford (1969) excavated an 1823 Netherlands East India coin at his Tamarinda site in the Kimberleys. Mitchell (1994:50) shows that all dated coins from Macassan sites in Arnhem Land either postdate 1742, or occur as part of a single hoard dated to 1784 or later by its most recently minted coin. This opening of the ledger in the eighteenth century could not be attributed to the availability of coins in

South Sulawesi. Here, archaeologically documented coins include six with a sixteenth or seventeenth century inscription, five specimens identified only as Dutch East India Company coins (1602-1799), and six dated between 1796 and the 1890s (Bulbeck 1992, 1996-7). Definite eighteenth century coins of which we are aware are essentially restricted to two Chinese coins from Luwu, at the northern extremity of South Sulawesi, minted during the reign of Emperor Qian Long (1736-1795). It is therefore difficult to fault the numismatic evidence in its suggested eighteenth to nineteenth century dating of the Macassans in Australia.

#### **Ceramics**

The survey of Macassar and its hinterland by Bulbeck (1992) recorded approximately 2700 sherds from imported sixteenth century vessels, and 7100 seventeenth century specimens. Some traces of this abundance of imported ceramics might be expected in northern Australia if Macassans had voyaged thus far during those centuries. Evidence of any reliability is forthcoming only for the seventeenth century.

Inspection of the Chinese sherds from Tamarinda would date them all between the nineteenth and twentieth centuries (Rowley 1997:61-63). The sherds from a surface collection at Goulburn Island (see Figure 3.1) could all be fitted into an eighteenth to nineteenth century bracket, with just one possible exception (Rowley 1997:80). This is a coarse stoneware jar, provisionally dated to the fifteenth or sixteenth century, which is however the sort of sturdy vessel that may have remained in use for centuries. The Arnhem Land sherds illustrated by Macknight (1976:81, Plates 6, 29) and Mitchell (1994:198, 214) are clearly Qing Dynasty (1662-1911), and some have distinctively late Qing or 'Kitchen Ch'ing' motifs dated between the nineteenth and the early twentieth century (cf. Willetts 1981; Harrisson 1995). Even the three Chinese sherds illustrated by Clarke (1994: Plates 20, 54, 55) from post-contact Aboriginal sites on Groote Eylandt could readily fall into an eighteenth to nineteenth century bracket, though they are very small and hence not particularly diagnostic. As discussed by the archaeologists cited above, all other exotic items from these sites (glass, bronze, iron, European stoneware) could fall within the same time frame.

However, a Wanli dating (1573-1619) has been assigned to a sherd collected by McCarthy and Setzler from Winchelsea Island, and to various sherds collected by Macknight from Arnhem Land in 1966 and 1967 (Macknight 1976:162). Wanli china tends to be distinctive from Qing china (e.g. Rinaldi 1989; Harrisson 1995), so these expert identifica-

tions must be taken as evidence of a seventeenth century presence. They are not conclusive evidence, as there may have been a considerable time lag between a vessel's date of production and when it was brought to northern Australia (Macknight 1976:162). The fragility of china would however suggest a relatively short use life. Another consideration is that these Wanli sherds could relate to habitation earlier than the trepang industry, even if they were subsequently incorporated into trepang-related sites. Nevertheless, on current evidence no clearly fifteenth to sixteenth century ceramics, many of which are very distinctive, and which occur in abundance at Macassar, have yet been documented in northern Australia.

#### Burials

All the major Bugis and Makasar polities in South Sulawesi officially adopted Islam in the early seventeenth century. However, the spread of Islamic beliefs, and especially Islamic mortuary rites, was slow among the populace. Vestiges of the pre-Islamic Makasar burial practices, such as pointing the extended, supine corpse towards the west, and interring grave goods, continued throughout the seventeenth century. The Islamic prescriptions of a northwards directed corpse buried on its right side to face west towards Mecca and a grave marker but no grave goods, only prevailed after a process of gradual adoption (Bulbeck 1992).

This perspective suggests a seventeenth century date for the two human burials oriented perpendicularly to each other at Anuru Bay in Arnhem Land (Figure 3.2). From their osteology, they are undoubtedly of Southeast Asian and presumably of Macassan descent (Macknight and Thorne 1968). One of them, Burial 2, is a correct Islamic burial except that it does not face west as prescribed by Islamic custom. Instead it faces northwest in the direction of Macassar (Figure 3.2). This deviation in orientation is unlikely to be accidental as we are dealing with mariners whose sense of orientation must have been precise.

The grave for Burial 2 was cut through the skeleton of the first burial whose circumstances are therefore a matter of reconstruction. Macknight and Thorne interpreted it as a prostrate burial with the skull and attached cervical vertebrae about 10 cm lower than the foot bones. However, they illustrate the clearly undisturbed shin bones and feet in accordance with a burial lain on its right side (Figure 3.2). In addition, most of the vertebral column, the lower ribs, the right pelvis, and right long bones (above the shin) had been replaced in the space between the skull and the shin bones, whereas the left pelvis and left long bones (above the

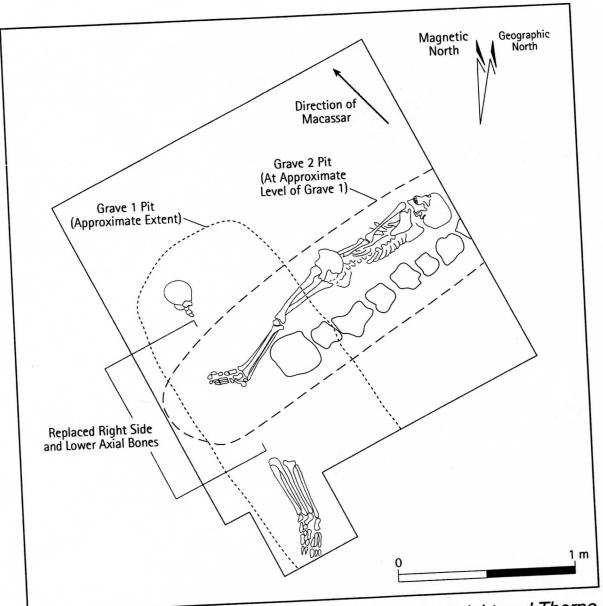


Figure 3.2 Anuru Bay burials (Adapted from Macknight and Thorne 1968:Fig.1).

shin) were completely missing (Macknight and Thorne 1968:219). This assortment suggests that when the second grave was dug, the grave diggers initially encountered various left-side bones of Burial 1, and discarded them before realising they were digging through an earlier burial. When the grave diggers understood what they were doing, they then kept the dislodged bones from Burial 1, and attempted to restore them after having filled the grave of Burial 2 to the appropriate level. The skull of Burial 1 itself might have been fished out and replaced face down at some point, or certainly disturbed by all the adjacent digging activity in the soft sand. Moreover, the width of the grave of Burial 1 (Figure 3.2) is consistent with a lining along the back of some kind, probably a row of stones as provided for the Burial 2 grave. The evidence for this inference is the boulders included in the fill of the Burial 2 grave

(Macknight and Thorne 1968: Fig. 1, 'East Section'). Burial 1 would therefore appear to have been an Islamic burial lain on its right side but facing, very strangely, to the southwest. Presumably the direction in which the corpse was pointing was the significant orientation in this case, i.e. towards geographical northwest, the direction of Macassar.

Burials 1 and 2 therefore seem to have followed the same mortuary practice but with one exception, a shift in focus from the direction in which the corpse pointed, to the direction in which the corpse faced. Indeed, to explain how a second grave was dug through the first, we suggest that the grave diggers saw a marker set above the head of the first burial, and assumed they were placing their corpse parallel to the first. The perpendicular reorientation in burial orientation between the two episodes caused them to cut through the first burial. (Presumably, also, covering the area of the burial with a pile of stones, as performed for Burial 2, had not been carried out for Burial 1.) In Macassar, the transition from pre-Islamic to Islamic mortuary rites also involved a shift in focus from the direction in which the corpse pointed to the direction in which it faced. Hence the Anuru Bay burials would appear to date to the early adoption of Islamic burial customs, i.e. the seventeenth century more probably than the eighteenth. Even the second burial could be considered transitional Islamic as it faces Macassar rather than Mecca.

These Macassans buried at Anuru Bay were probably, but not necessarily, working in the *trepang* trade. The seventeenth century witnessed the infiltration of Bugis and Makasar traders into eastern Indonesia, and perhaps the first arrival of Chinese wares to northern Australia. The earthenware sherd excavated by Clarke (1994) in a suspected 1000 year-old context is relevant in this context.

### Summary

The evidence reviewed here consistently suggests the seventeenth century as the earliest possible inception date for Macassans in north Australia. The mild discrepancy with the historical record, which implies an eighteenth century inception date, could be considered useful information rather than a source of conflict. Archaeology and text-based history can be expected to supply different pieces in the puzzle when they relate to an industry in its infancy.

## Earthenware pottery from Australian Macassan sites and from South Sulawesi

Decorations on the earthenwares in the Kimberleys and in the Northern Territory show similarities as well as differences. Rims with distinctive thumb impressions have been recorded in both the Kimberleys and Goulburn Island. But the most conspicuous decorated sherds in the Northern Territory, which feature incised triangles filled with stamped triangles, are yet to be reported from the Kimberleys (Macknight 1976; Morwood and Hobbs 1997; Rowley 1997). Both this motif and the thumb impressions have been documented ethnographically in parts of South Sulawesi outside Macassar (Macknight 1976:80; Rowley 1997:93). Although neither motif was found on decorated sherds from surface collections near Macassar itself, only about 50 of these decorated potsherds would be contemporary with the Macassan presence in northern Australia (Clune and Bulbeck 1999). Even this unsatisfactorily small sample of sherds includes examples with rows of punctate triangles, and incised points inside triangular-topped domes, both similar to the 'triangles inside triangles' motif reported from the Northern Territory (Clune and Bulbeck 1999:47). Stylistic comparisons therefore suggest that the northern Australian decorated pots could have derived from South Sulawesi, though not necessarily from Macassar.

Water-storage jars with a calcareous temper are responsible for 22% of the sherds at Tamarinda (Rowley 1997:66-69) and 19% of the sherds from four other Kimberley assemblages (Thies 1988), but are apparently absent from any Northern Territory assemblage. As argued by Thies (1988) on the basis of the calcareous temper, and confirmed by Rowley's (1997) analysis of the clay matrix, this calcareous-tempered pottery evidently did not derive from South Sulawesi. Crawford (1969) suggested it is Kei Island pottery, which was extensively traded in Island Southeast Asia during the eighteenth and nineteenth centuries. Rowley (1997:146, 153) notes two problems with this suggestion: this calcareous-tempered pottery should therefore be present in Northern Territory rather than Kimberley sites (see Figure 3.1), whereas the reverse applies; and its friable nature would be incompatible with a widely sought-after ware. Further, Kei pottery in European museum collections is usually painted with geometric designs (Crawford 1969:344) whereas the calcareoustempered sherds in the Kimberleys are always plain. We therefore view this pottery as having been acquired in Timor, Flores or some other island en route between Macassar and the Kimberleys. The other line of non-South Sulawesi pottery in northern Australia could be the finer type of earthenware mentioned by Key (1969) from Arnhem Land

collections, as apparently represented on Goulburn Island by one chemically distinctive sherd with a very fine-grained temper (Rowley 1997:151).

All other pottery from Tamarinda and Goulburn Island, as analysed by Rowley, is volcanic-tempered pottery which probably originated from South Sulawesi. Rowley compared the northern Australian sherds with five Macassar samples: fifteenth to seventeenth century and seventeenth to twentieth century samples from the site of Moncongloe; a general fourteenth to sixteenth century sample; a general seventeenth to twentieth century sample; and an ethnographic sample. The volcanic-tempered Tamarinda and Goulburn Island sherds were found to be very similar to the sherds from Macassar on the basis of the chemistry of their clay matrix. Chemically, the pyroxene and feldspar clasts in the northern Australian sherds can be readily matched with the clasts in the Macassar sherds. These results suggest that all these tested sherds have the same origin within the South Sulawesi peninsula, which is dominated geologically by andesite formations (Rowley 1997:Chapter 8).

Variations in the composition of the temper, i.e. the size and quantity of five different mineral grains and seven types of clasts, were remarkable. Only the ethnographic and the general seventeenth to twentieth century samples from Macassar were indistinguishable. The general fourteenth to sixteenth century sample from Macassar was arguably the most aberrant of all the samples. Generally speaking, Rowley's Macassar samples were as different from each other as they were from the samples of Tamarinda and Goulburn Island volcanic-tempered pottery, or as the latter samples were from each other (Rowley 1997:Chapter 7). That is, during historical times Macassar potters have employed clays which are highly variable in their inclusions, or have tempered the clay with quite distinctive additions of sand. Nonetheless the clay matrix and the sandy inclusions are chemically distinctive of South Sulawesi. The same characterisation covers the Tamarinda and Goulburn Island volcanic-tempered pottery which, accordingly, can be sourced to South Sulawesi.

As one interpretation of the evidence, the Macassans may have preferred volcanic-tempered pottery manufactured on the South Sulawesi peninsula but not in Macassar itself. The mobile Macassans could have easily run the gauntlet of pottery vendors along the south coast of South Sulawesi (see Figure 3.1). However, an explanation along these lines would fail to explain the differences in temper composition between the

Tamarinda and Goulburn Island samples. Nor would it explain why the tall-bodied storage vessels decorated with triangles inside triangles are yet to be reported from the Kimberleys. As a more general explanation, we suggest that specific lines of pottery were preferred for specific purposes, and much of the observed variation between the earthenware assemblages can be attributed to settlement function.

The Tamarinda assemblage is dominated by cooking pots, which relate to the site's ancillary function as a camping ground, whereas the Goulburn Island assemblage consists mainly of storage jars which for some reason had been abandoned on the beach (Rowley 1997). Neither of these vessel types need have prevailed in Macassar where, instead, bowls (presumably for serving) and incense burners were the most common forms at the main studied site of Moncongloe (Table 3.2). Potters using the same clay source could vary their tempering techniques to produce vessels in a range of shapes and sizes, functionally adapted to withstand thermal shock or allow the evaporation of stored water, etc. (Rye 1988). It may be too much to expect individual South Sulawesi potters to have understood all the secrets of temper addition. But the various potters would certainly have diverged in their tempering techniques, and each would have been aware of which vessel lines (s)he turned out better from their continual purchase by customers (cf. Schiffer 1996). The Macassan sailors would have soon identified which vendors in Macassar offered the best jars or the best cooking pots. Hence, functional considerations can largely explain the differences in temper compositions between all of Rowley's (1997) seven samples of volcanic-tempered pottery. This consideration would argue against any simplistic assumption that exported pottery should be indistinguishable in its temper composition from pottery utilised at home.

Table 3.2 Main vessel forms identified at Tamarinda, Goulburn Island and Moncongloe Lappara.

Vessel form	Tamarinda <sup>1</sup>	Goulburn Island <sup>2</sup>	Moncongloe 15th-17th centuries <sup>3</sup>	Moncongloe 17th-20th centuries <sup>3</sup>
Cooking pots Jars Bowls Incense burners	392 (94.7%) 16 (3.9%) 2 (0.5%) 0 (0%)	0 (0%) 366 (75.9%) 91 (18.9%) 0 (0%)	0 (0%) 16 (11.5%) 79 (56.8%) 30 (21.6%)	0 (0%) 5 (19.2%) 13 (50.0%) 0 (0%) 8 (30.8%)
Other Total	4 (1.0%) 414	25 (5.2%) 482	14 (10.1%) 139	26

<sup>&</sup>lt;sup>1</sup> Excavated; volcanic-tempered vessels only (Rowley 1997:89). Percentages add up to 100.1% owing to rounding error.

<sup>&</sup>lt;sup>2</sup> Uncontrolled surface collection (Rowley 1997:89)

<sup>&</sup>lt;sup>3</sup> Controlled surface collection of all observed rims (Rowley 1997:50)

#### **Discussion**

The differences between the earthenwares in Macassar and in Australian Macassan sites are paralleled in other aspects of material culture. Bronze fishhooks and needles are relatively common at Macassan sites in Arnhem Land (Macknight 1976) but, despite decades of sustained archaeological work, only two fishhooks and no needles at all have been reported from the South Sulawesi peninsula (Bulbeck 1996-7:1037-1043). Conversely, bronze jewelry and vessels are frequently recorded in South Sulawesi (Bulbeck 1996-7; Bulbeck and Prasetyo 2000) but seem to be absent from Macassan sites in Australia. As regards numismatics, there is no known parallel in South Sulawesi for the five fourteenth to fifteenth century Kilwa Sultanate (African) coins from the Wessel Islands hoard, which is believed to have derived from a post-1784 Macassan shipwreck (Mitchell 1994:49-50).

A further specialty of the material culture of the Macassans is their predilection to mount guns on vessels sailing to Australia. Macassan guns include the Southeast Asian *lantaka*, and the Southeast Asian copy of a European-type cannon, retrieved in 1916 from Carronade Island in the Kimberleys (Green 1990). They were found upright in the sand two metres apart, which contrasts with the reported context of any cannons found in South Sulawesi (Bulbeck 1996-7; Ali Fadillah 1998-9). The Carronade Island guns had probably been used to mark an Islamic grave, thereby constituting another example (along with the unusually oriented burials at Anuru Bay) of idiosyncratic Islamic mortuary practices among the Macassans who visited northern Australia.

In collecting, processing and transporting trepang, the Macassans in northern Australia carried out an industry very different from the standard farming, fishing and cottage crafts exercised in their South Sulawesi homeland (cf. Chabot 1964; Pelras 1996). They had to camp on beaches, repair their own clothes and other gear, collect and store fresh water (especially when in transit), and reduce the transport of victuals as far as possible through fishing, planting tamarinds, and (presumably) obtaining Australian bush tucker. All these logistic activities would have differed from the usual village lifeway in South Sulawesi. Similarly, there would have been minimal scope for storing bulky ceremonial and recreational paraphernalia, wearing fine cloth and jewelry, or burying the deceased according to the exact customs preferred at home. The material culture of the Macassans would have varied between ports of call as broken wares were replaced and attractive items were acquired (hence the minor occurrence of sherds of non-South Sulawesi pottery in northern Australian sites).

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The Macassan voyagers also lived in a world apart, far more dangerous and less predictable than village life, fostering an all-male camaraderie in prevailing 'us-them' circumstances. They would have transacted a myriad of personal (including sexual) and business relationships throughout the eastern Indonesian archipelago and on northern Australian shores. Mulvaney and Kamminga (1999:413-414) observe that relations between the Macassans and Australian Aborigines were sometimes amicable, sometimes antagonistic, but always lively. Clarke (1994) and Mitchell (1994, 1996) have explored the ways in which contact with the Macassans transformed Aboriginal settlement patterns, material culture and subsistence activities in Groote Eylandt and Arnhem Land. The contact experience would have had a similarly dramatic impact on the behaviour of the Macassans in Australia, and the experiences may well have shaped their attitudes and expectations more generally. Certainly, only cognitive and ritual adjustments of a substantial nature could have successfully adapted these Macassans to their unusual way of life.

Berndt and Berndt (1947:133) collected Aboriginal tales in Arnhem Land of the *Baijini*, supposedly lighter-skinned men and women who preceded the Macassans, built stone structures, wove cloth and planted gardens. The Berndts speculated that these were Bajau sea-gypsies, but no supporting archaeological evidence has ever been produced, and the range of described activities hardly meshes with Bajau ethnography. Further, the term *Baijini* strongly resembles the Makasar word for woman (*baine*). Macknight (1976) and Mulvaney and Kamminga (1999) point out that these tales almost certainly derive from the accounts of Aborigines who visited Macassar. This point symbolises the stark differences between life in Macassar and Macassan life in north Australia, to the degree that Aboriginal mythology has identified the Macassans' homeland with a distinct, chronologically earlier people.

#### **Conclusions**

The divergent nature of the material culture of South Sulawesi and the Macassans in northern Australia is an expected consequence of the latter's specialised focus. It should not be attributed to chronological or ethnic differences, as discussed earlier in this paper. The apparent orientation of the Anuru Bay burials towards Macassar symbolises the archaeological transformations that could be expected of a community far from home. The Australian Aborigines, apart from the small number who accompanied the Macassans back to Macassar, would have had a direct experience with only the quite atypical Bugis and Makasars who

arrived on their shores. The question of a Macassan impact on local Aboriginal culture would therefore boil down to influences from a subculture with a distinctive array of possessions and a peculiar social orientation.

The problematic nature of inferring cultural influences archaeologically, and the requirement to situate any such study in its wider social context, are addressed by the papers in Schortman and Urban (1992), especially those devoted to a core-periphery perspective. We doubt that northern Australia should be thought of as a periphery of the system in which Macassar was the core, particularly as both ends were then subjected to colonial intervention perpetrated independently of or, indeed, against the Macassans (Macknight 1976, 1980). Further, the contributions in Schortman and Urban focus on the use of material culture to negotiate relations across a cultural frontier, and the manner in which members of the contacted community adopt items which they perceive as advancing their own interests. While these considerations would always be important in a contact situation (see Clarke 1994; Mitchell 1994), the case of the Macassans exemplifies a frequently overlooked factor. This is the fundamental transformation in material culture and social relations associated with the successful establishment of a way of life abroad. It may have little to do with political control and everything to do with making a living, as in the Macassan case, and it logically precedes and guides the transmission of cultural influences to the indigenous denizens at the contact zone.

The Macassan *trepang* industry in north Australia is a historically well attested case of an enduring contact situation (Macknight 1976; Mitchell 1994). Without that historical documentation, we may wonder, would the archaeological evidence have revealed anything like the extent of the connection with South Sulawesi? The archaeological contrasts between Macassan sites, and seventeenth to nineteenth century sites in South Sulawesi, are so strong as to suggest an answer in the negative. The general implication would be that it may be very difficult to link expatriate communities and homeland communities on archaeological criteria alone. In particular, though some form of pre-Macassan contact between northern Australia and Nusatenggara appears inherently likely, these early visitors may be very difficult to detect archaeologically, and impossible to source with any precision.

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