The Archaeology of Difference

Negotiating cross-cultural engagements in Oceania



Edited by Robin Torrence and Anne Clarke



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THE ARCHAEOLOGY OF DIFFERENCE

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Negotiating cross-cultural engagements in Oceania

Edited by

Robin Torrence and Anne Clarke



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Foreword

One World Archaeology is dedicated to exploring new themes, theories and applications in archaeology from around the world. The series of edited volumes began with contributions that were either part of the inaugural meeting of the World Archaeological Congress in Southampton, UK in 1986 or were commissioned specifically immediately after the meeting—frequently from participants who were inspired to make their own contributions. Since then the World Archaeological Congress has held three further major international Congresses: Barquisimeto, Venezuela (1990), New Delhi, India (1994), and Cape Town, South Africa (1999). It has also held a series of more specialised 'inter-congresses' focusing on *Archaeology ethics and the treatment of the dead* (Vermillion, USA, 1989), *Urban origins in Africa* (Mombasa, Kenya, 1993), and *The destruction and restoration of cultural heritage* (Brac, Croatia, 1998). In each case these meetings have attracted a wealth of original and often inspiring work from many countries.

The result has been a set of richly varied volumes that are at the cutting edge of (frequently multi-disciplinary) new work, and which provide a breadth of perspective that charts the many and varied directions that contemporary archaeology is taking.

As series editors we should like to thank all editors and contributors for their hard work in producing these books. We should also like to express our thanks to Peter Ucko, inspiration behind both the World Archaeological Congress and the One World Archaeology series. Without him none of this would have happened.

Martin Hall, Cape Town, South Africa Peter Stone, Newcastle, UK Julian Thomas, Manchester, UK June 2000

Preface

This book has a long genesis beginning in 1992 with a session which we organized at the Australian Archaeology Association annual conference at Valla Beach, Australia. We thought the new approaches which people were using, developed mainly from prehistory, were so exciting that they deserved a wider audience. Consequently, we sent abstracts off to the World Archaeological Congress 3 programme committee. We had hoped that our small group of papers would be incorporated into a larger, global group so that this new research in the Pacific region could be compared and contrasted with others, but the abstracts got lost on someone's desk and it was only due to a valiant rescue attempt by Jack Golson that we were able to find a small space at the conference in New Delhi. By this time Gosden and Pavlides (1994) and Head and Fullagar (1997) had chosen to publish elsewhere but we are grateful for their participation in the early conception of the book.

Our session was held on the last afternoon of the conference which was a boon since it gave us time to recruit a sizeable audience with people from other areas of the world and their comments have been extremely useful in the rethinking and rewriting stages. The session was based almost entirely on discussion and was so lively that we took advantage of an empty room to continue several hours beyond our scheduled time. Martin Hall agreed at the last minute to be our discussant and it was his enthusiasm that encouraged us to think about putting together a book based on the pre-circulated papers (WAC3). The book took a long time to assemble and we have lost papers by Denise Gaughwin, Melissa Kirkendall (who also could not attend WAC3), Attenbrow and Steele (1995), Bedford (cf. Bedford 1996), but we have also gained exciting new work by McBryde and Frederick, and a paper presented in another WAC3 session by Steve Hemming, Vivienne Wood and Richard Hunter.

We would like to thank all the authors for their perseverance in producing several drafts and their patience when things were moving slowly. We are also very grateful to Martin Hall for having faith in the 'south-south connection' and sticking with us, to Peter Stone for helping us see this project come to fruition, and to Peter Ucko who, despite his frustration at the delays, kept encouraging us. Jim Specht and Peter White read through parts of the manuscript and made valuable suggestions. Finally, all the authors would like to thank the many indigenous friends and colleagues who have been more than just key participants in the fieldwork process since interaction with them has been instrumental in the shaping of the ideas presented here.

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Negotiating difference: practice makes theory for contemporary archaeology in Oceania ROBIN TORRENCE AND ANNE CLARKE

INTRODUCTION

From the fifteenth century until the present day, the region of Oceania has been one of the main stages upon which the dramas of European colonial, commercial and ideological ambitions have been portrayed. The diasporas of northern seafaring nations into uncharted territories beyond the Mediterranean—west to the Americas, south into Africa, east to Asia and even further beyond to the mythical great southern land of *Terra Australis*—were of an order of magnitude larger than any of the imperial enterprises of antiquity. Each place where European settler societies were translocated belonged to someone else and the long-term consequences of the ensuing battles for control over land, life and resources are clearly evident in the independence, Indigenous land rights, and sovereignty movements of the late twentieth century.

The narratives of encounter and engagement with Indigenous peoples quickly became part of a pervasive western mythology that created a catalogue of the strange and colourful customs and habits of the exotic other while all the time clothed in the destructive rhetoric of racial, religious and cultural supremacy. Although, as Reynolds (1987) has recently documented for Australia (cf. McBryde, Chapter 9), there were members of the early settler societies who were genuinely interested in understanding cultural difference and concerned for the welfare of the dispossessed Indigenous populations, these sorts of responses to were uncommon. More recently, cross-cultural encounters historical ethnographies, oral histories and the writings of Indigenous people have provided alternative narratives of encounters in Oceania (cf. Shaw 1981, 1983, 1986; Hercus and Sutton 1986; Bradley 1988; Read and Read 1991; Rose 1991, 1996; MacIntosh 1994; Denoon 1997b; Linnekin 1997; Meleisea and Schoeffel 1997: 150-1). One of the important points to emerge from these texts is that the social, economic and political trajectories initiated by the enforced colonization and settlement of Indigenous lands did not stop at some pre-ordained moment in time fifty or one hundred years ago, but the processes and consequences of historical cross-cultural encounters continue into the present day.



Figure 1.1 Oceania showing the location of the case studies in this book.

Within archaeology, there is a mirroring of these changes in historical scholarship in the desire to hear and understand voices other than those of colonial authority and to recognize the ongoing nature of cross-cultural engagement. This change in approach is well exemplified by the case studies presented here. The aim of this book is to re-interpret the interactions between the native populations and colonial/settler societies in the recent period in Oceania by focusing primarily on the Indigenous archaeological record. The emphasis on archaeology is deliberate because, as the chapters demonstrate, it offers an important and fresh perspective to previous, mainly historical, research on European contact in this region. Oral history, ethnography, and documentary research are also included since the best results will inevitably come from comparing and contrasting different perspectives.

Research on contact between Indigenous societies and outsiders has a different flavour in Oceania when compared to many other parts of the world, because it has been carried out in a particular and unique cultural context. We argue that current practice as represented in this volume, which is dominated

by prehistoric rather than historical archaeology and which demands the maintenance of working relationships with Indigenous communities forged through negotiation, has been critical for innovations in method and theory. The ideas presented here have many parallels with the development of post-colonial theory elsewhere, but interestingly these have arisen more from the daily practical experiences of working with Indigenous people than from the borrowing of theory, as is so often the case in archaeology. Despite their specific histories, however, these new approaches have broad relevance for studies of inter-cultural interaction by scholars working on other times and places. Before examining the volume's contributions to archaeological scholarship as a whole, it is important to consider their genesis.

OCEANIA

The studies in this volume are concerned with the processes of cultural contact, encounter, or engagement as they are defined below, between Indigenous populations and the colonial/settler societies emanating from their shared history. The book is concerned with the archaeology of the recent past in Oceania, a sizeable region encompassing the continent of Australia, the large islands New Guinea and New Zealand, and the myriads of islands and atolls that form the Pacific nations. Figure 1.1 shows the region of interest and the location of the case studies in this book. It is an excellent place to ground a book about new approaches to the study of cultural contact because it is a region of the world characterized by an enormous cultural and geographical diversity. It is also a region that for almost five hundred years has experienced a shared history of entanglement and encounter with the colonial powers of Europe.

Although Oceania is often studied in terms of smaller areas which are based on geographic, social, linguistic and racial differences-i.e. Australia, Polynesia, Micronesia, and Melanesia-we focus on the whole because the differences provide useful contrasts for analysis and the region as a whole has widespread social and cultural links dating far back into prehistory (e.g. White with O'Connell 1982; Spriggs 1997; Kirch 1997; Kirch and Green 1987; Weisler 1997). The choice of Oceania also reflects the interconnectedness of contemporary political history which is simply one end of the long process we are studying. For example, Australia and New Zealand were both British colonies before independence, Papua New Guinea and Australia share a recent colonial past and a current aid-based relationship, and New Zealand and Australia are the main countries of migration for Micronesian and Polynesian islanders. Consequently, there is a great deal of cross-fertilization of scholarship and research effort between historians, linguists, geographers, anthropologists and archaeologists from Australia, New Zealand, Papua New Guinea, the Micronesian countries and both French and English-speaking Polynesia. It is therefore not surprising that The Cambridge History of the Pacific Islanders (Denoon 1997a) was mainly edited and written by scholars based in Australia.

Apart from their shared past and modern experience, what is it that makes the archaeology of Oceania so interesting and why does the archaeology of crosscultural engagement there warrant serious consideration by archaeologists working in other parts of the world? One compelling reason is that Oceania is a place of contrasts with a complex history of cross-cultural engagements. The diversity of economic, social and political systems, the wide-ranging time frame of engagements, and the enormous climatic and geographic variability in the region mean that much variation in cultural processes should also be expected. Projects discussed here are located within independent countries, extant colonies, and disenfranchised Fourth World populations within nation-states. Temperate, arid and tropical settings within one continent, several continental islands, and numerous small islands and atolls are represented. Furthermore, the processes of cross-cultural engagement have been monitored within hunter-gatherer and horticultural societies characterized by a wide range of socio-political forms including egalitarian, ranked, and stratified societies. The Archaeology of Difference therefore provides the opportunity to compare and contrast crosscultural negotiation in a very wide range of settings contained within a single geographic region.

Like the European settlement of the Americas (e.g. Deagan 1990:98; Lightfoot 1995:200; Orser and Fagan 1995), the colonizing nations in Oceania were not comprised of one or two cultural identities but included representatives of British, French, Dutch, Spanish, Portuguese, German, Russian, American, Chinese, and Japanese trading companies, entrepreneurs, governments, and missionaries. Along with the material commodities of modern capitalist production, each nationality imported to their newly conquered lands their own particular ideologies of governance, business, religious practice and racial tolerance. The first European explorations of Oceania began in the early part of the sixteenth century and were carried out by Portuguese and mainly Spanish explorers based in the Spice Islands. Their efforts were centred around Micronesia with occasional trips to the Solomon Islands and the Bismarck Archipelago of Papua New Guinea. These were followed in the eighteenth century by Dutch, British, French and German explorers as the fortunes of the various European empires waxed and waned. A permanent foreign presence was established at different times by all the countries just named in various pockets of the region over the next three hundred years. In many parts of Oceania, particularly Papua New Guinea, European settlement did not take place until the first part of the twentieth century (Meleisea and Schoeffel 1997).

Many areas were characterized by successive or contemporaneous engagements with different ethnic groups. For instance, Swadling (1996; cf. Torrence, Chapter 5) documents a long history of contact between people in New Guinea and outsiders from Southeast Asia which sets the scene for much later encounters with various groups of Europeans. For many areas of the Pacific the first encounters were with Polynesian missionaries rather than with Europeans (Meleisea and Schoeffel 1997:120). In Australia Indonesian (Macassan) fishing

fleets made annual visits to the coast of Arnhem Land from at least 1700 until stopped by the Australian government in 1907 (Macknight 1976; Clarke, Chapter 6; Mitchell, Chapter 7), pre-dating the establishment of the first British colony of Port Jackson (Sydney) in 1788 (McBryde, Chapter 9; Colley, Chapter 10). These were followed by many European explorers, the German missionaries described by Birmingham (Chapter 13) and Rose (Chapter 8), whose presence was felt until the Second World War in some parts of the country, and later by the pastoralists described by Frederick (Chapter 11). Sand (Chapter 3) catalogues the tragedies that occurred in New Caledonia after British exploration and later French colonization and Rainbird's (Chapter 2) discussion of Japanese landscapes imposed on the people of Chuuk, who had experienced previous rule by Spain and Germany and later by the United States, brings the history of contact up to the mid-twentieth century.

The studies in this book provide an important counterpoint to studies of contact and encounter in, for example, the United States or South Africa, because there is not a singular modern political entity which has been the outcome of the process of colonialism in Oceania. On an individual basis this allows archaeologists to engage in studies that follow some of Hodder's (1986, 1987) notions of archaeology as contextualized, long-term history while also collectively addressing the question of whether cross-cultural processes of Indigenous responses to external contact can be discerned from the archaeological record.

These few observations alone render simplistic any notion that contact histories can be gathered together under a single, linear trajectory of impacts and outcomes. The cultural, political, geographical, and historical diversity of the recent past in Oceania is a potent force that has encouraged archaeologists working in this region to challenge and question the stereotypical models and explanations surrounding the archaeology of cross-cultural contact which are prevalent in other parts of the world. A unifying theme of this book, as with a number of recent studies elsewhere (e.g. Rogers and Wilson 1993; Rubertone 1989; 1996), is that cultural change in the recent period was not a one-sided process directed only by European or other outsider actions and policies. Indigenous perceptions and interpretations are considered as important in structuring responses to both the cultural and physical challenges of contact. This does not deny the catastrophic outcomes of disease, warfare, enforced land acquisition and genocide (cf. chapters by Sand, Phillips and Mitchell). It is, rather, a view in which Indigenous societies are not merely regarded as the passive recipients of superior European technology, but are considered as active social agents in their dynamic and strategic relationships with external cultures.

THE ROLE OF PREHISTORY

Unlike many areas of the world where research on interaction between Indigenous groups and outsiders has primarily been carried out by historical

archaeologists, prehistoric archaeology in Oceania has played a very important role in the development of the ideas presented in this volume. The majority of these studies did not owe their genesis to an explicit research agenda from within the framework of historical archaeology or the archaeology of colonialism, but have been generated from within larger projects aimed at investigating the prehistoric archaeology of the region (e.g. chapters by Rainbird, Sand, Torrence, McBryde, Clarke, Colley) or use techniques primarily associated with prehistoric archaeology (chapters by Mitchell, Frederick). Three important perspectives have been particularly affected by the view through prehistorians' spectacles. First, the emphasis on long time scales is crucial to a new understanding of European contact. Second, types of sites and data not usually considered by historical archaeologists have played an important role in the studies. Third, the focus on landscape, which is integral to a number of the chapters, is also derived from prehistoric archaeology. While agreeing with Lightfoot (1995) that the division between historical and prehistoric archaeology is a false one when studying European contact, it is nevertheless the case that the disciplinary background of researchers has highly coloured the method and theory previously applied to this subject.

An important insight derived from prehistory and applied in this volume is that cross-cultural engagement should be placed within a long-term view of the processes of change and continuity in human social systems. Finding the appropriate chronological context is important for several reasons. The events and impacts of colonialism should not be studied in isolation and given a privileged position because of their historical immediacy or because of a deepseated need to understand the historical roots and origins of our own place in alien landscapes. Consequently, the chapters do not necessarily conceive of the arrival of outsiders as a sharp break with the past: recent happenings are contextualized within a broader temporal framework. Rather than assuming that European 'contact' necessarily meant 'fatal impact' (Moorehead 1966; cf. Howe 1977), evaluating the long-term consequence of the European presence is a goal of these studies. Also, as pointed out by Lightfoot (1995:200) and Rubertone (1996), one cannot understand how local cultures reacted to outsiders if nothing is known about their behaviour beforehand. Furthermore, Rowlands (1989) has noted that the belief that native cultures were stable and unchanging in contrast to dynamic and innovative European culture can only be overturned by research into their prehistories.

The myth that Indigenous cultures became extinct is also one that can be attacked by extending the study of engagements up to the modern day (cf. Rubertone 1996:81–2). In a long-term view the links between past and present are duly acknowledged. This is one reason why oral history as used by Clarke (Chapter 6), McBryde (Chapter 9), Rose (Chapter 8) and Hemming *et al.* (Chapter 12) makes such an important contribution to contact studies (cf. Kirch 1992; Sahlins 1992 for a slightly less integrated use of oral history in archaeology). These links serve not just to make a political statement about

Indigenous cultural survival in the late twentieth century, although that it is an important achievement in itself. One of the more analytically powerful consequences of studying the interactions between past and present is the realization that cross-cultural interaction is a process of negotiation. In addition, the long-term perspective allows one to establish a multi-layered explanatory framework encompassing useful concepts such as change within tradition (Turner 1974:183–97; Clarke, Chapter 6), innovation, and questions about the rate and scale of transformations, whereby new items of material culture, symbols and ideologies become integrated into existing social systems and re-interpreted as Indigenous practice (Urry and Walsh 1981:98). For example, Urry and Walsh took an interactional view of the relationship between Australian Aboriginal people and Macassars' language as a *lingua franca* by Aboriginal people to facilitate communication with other language groups as well.

The important questions to consider in assessing the impact and reaction of 'Macassan' on Aboriginal cultures are not those involving how or where influences occurred on separate aspects of Aboriginal existence but the effects of the contacts on the *total* pattern of existence. The issues which must be confronted are how quickly the effects and influences became integrated into Aboriginal life and when and how they became interpreted as something Indigenous.

(original emphasis, Urry and Walsh 1981:98)

A similar perspective is useful in the study of place. Historical archaeology has generally privileged places dominated by Europeans. This practice has drastically limited our understanding of how Indigenous people reacted and negotiated with their changing world. For example, Rubertone (1989:33-7) has made the observation that in the archaeology of the seventeenth century, Native Americans have been treated as a temporal sub-set within the larger enterprise of colonial archaeology, a practice which necessarily reduces the range of cultural and economic relationships between Native Americans and European Americans which can be studied. In terms of the types of data analysed in many of the chapters in this volume, the approach presented here provides something of a contrast to that taken by many historical archaeologists who have examined contact through the material remains of the early towns, fortifications, trading posts and missions of the colonial societies (e.g. cf. Jack 1996 and Smith 1990 for recent summaries of 'traditional' historical archaeology in Australia and New Zealand, respectively). In general, the studies of cultural contact in Oceania are focused on places primarily associated with these outsiders (e.g. cf. Mulvaney 1989).

We argue that there is an alternative archaeological record in which the Indigenous experiences of contact—the relationships, conflicts, negotiations, and exchanges—are also documented. Much of this record has been ignored in Oceania as in other parts of the world because more often than not these archaeological sites, conventionally described as 'recent prehistoric sites', do not occur close to European places and do not contain abundant quantities of foreign goods (cf. Mitchell, Chapter 7; Clarke, Chapter 6; Colley, Chapter 10). Rubertone (1996:78) has pointed out that defining contact sites merely in terms of the presence of European influence means that evidence for people who resisted change and persisted is ignored. Colley and Bickford argue that this practice also removes many sites from study:

prehistorians usually assume that Aboriginal archaeological sites pre-date European contact unless well-stratified, introduced materials, such as glass, ceramics, or metal are immediately apparent. However, many Aboriginal sites which do not obviously contain such materials may have continued in use after European contact. Even today, Aboriginal people sometimes use 'traditional' places (eg *[sic]* rock shelters, waterholes, campsites) without leaving any 'European' materials behind. To label these Aboriginal sites 'prehistoric' because they contain no obvious exotic materials is to render post-contact Aboriginal places, and the people who used them, invisible.

(Colley and Bickford 1996:8)

Chapters in this book show that such shell middens, rock shelter deposits, stone artefact scatters, rock art, and even museum and private collections of artefacts all have the potential to offer a very different and rich Indigenous view of the consequences of engagement and interaction with European explorers, traders, missionaries and settlers than has been provided by more traditional historical archaeology. The traces of cross-cultural encounter may be less tangible in these sites than in the palimpsests of Indigenous artefacts and items of European material culture, for example found at trading posts or forts. Nevertheless, they contain a significant amount of important data relating to cultural contact. Even Birmingham's (Chapter 13) study of a mission in Australia, which on first glance fits into the established practice of historical archaeology, goes far beyond the boundaries of that particular site to compare and contrast behaviour in the broader world of Aboriginal people. The types of data presented in these case studies represent useful information which until relatively recently has not formed a major component of the knowledge base from which cultural contact has been analysed and discussed by archaeologists.

A third contribution from prehistory to these studies of culture contact in Oceania is the focus on landscapes. As with the emphasis on long blocks of time, the study of large tracts of space originally may have been forced on prehistory because of the lack of specificity of the data, but both these approaches offer important ways to consider human behaviour regardless of whether one focuses on the deep or the recent past. A study of landscapes forces one to move beyond the specific places inhabited by traders, missionaries, and colonizers and therefore place the Indigenous people into their wider social networks. For example, Mitchell's (Chapter 7) analysis of how trading patterns between Macassans and Aboriginal groups were structured by the wider trade networks of the latter depends on data gathered from regional surveys using sites normally classified as both 'contact' and 'prehistoric'. As discussed further below, changes in the way the landscape has been used and marked provide important data about local and outsider interactions, as demonstrated particularly by the chapters by Rainbird, Sand, Phillips, Mitchell, Clarke, Frederick, and Birmingham.

To emphasize the role prehistory has played in opening up the way for new approaches to contact archaeology is not, of course, to detract from the important contribution made by historical approaches. Although documents are an integral part of the mission studies of Rose (Chapter 8) and Birmingham (Chapter 13), the understanding of land tenure in Phillips' case study (Chapter 4) and McBryde's (Chapter 9) insightful analysis of trading patterns at Port Jackson, historical data are critical to all the chapters in this volume. It is nevertheless the case that the necessary broadening of scales in time and space that others have argued for in studies of European contact and colonialism (e.g. Rubertone 1996; Rowlands 1989; Lightfoot 1995; Colley and Bickford 1996), now widely practised in Oceania, is due to the background of most of the practitioners in prehistoric archaeology, rather than to a change in historical archaeology.

NEGOTIATION IS CONTEXT SPECIFIC

Possibly the most important factor in the innovations in method and theory illustrated by the chapters has been one particular characteristic of regional archaeological practice: the direct involvement of local Indigenous communities in the conduct of research is mandated. Regardless of whether one is researching in a colony, independent nation, or with Fourth World Indigenous groups, the normal legal requirement for archaeologists in Oceania is to work closely with local groups, although this is less the case for historical archaeology in Australia (cf. Colley and Bickford 1996:15–17). Written permission from local Indigenous groups (e.g. land councils) is typically necessary for obtaining permits from relevant government authorities to undertake research. Many archaeologists also employ or work closely with community members on a daily basis. In some cases, as for example Clarke (Chapter 6) and Hemming *et al.* (Chapter 12), the research agenda has either been initiated by an Indigenous group or negotiated with them.

We argue that for most of the contributions in this volume archaeological theory about past interactions between native groups and outsiders has been heavily influenced by the important role that negotiation plays in modern research programmes. As with their European ancestors, modern archaeologists in Oceania are frequently highly dependent on their Indigenous hosts for basic necessities such as food and shelter, as guides in an unfamiliar environment, and as a source of labour. In many ways modern practice repeats the past. It is not surprising, therefore, that the importance of the role of negotiation in intercultural interaction has been introduced into studies of contact archaeology in this region.

Most Indigenous groups are satisfied with their own mythological reconstructions of the prehistoric past and see little need for an archaeological version. In contrast, they are very interested in archaeological studies of significant places dimly remembered through oral history, especially if archaeology can be used to confirm or elaborate the stories heard from parents and grandparents. Their fascination with these places is directly comparable to that of people in the dominant society where 'local history' is a popular avocation.

When archaeologists have allowed their research agenda to be determined by community needs, they are almost invariably directed to the recent period of the 'remembered' past. In Australia state governmental agencies have undertaken projects in response to community requests. Groups have expressed concern over the location and preservation of unmarked burials, cemeteries and massacre sites, places which the White community have ignored or deliberately 'forgotten'. Archaeologists in New South Wales (Byrne 1998) and Victoria (Avery and Brown 1998; Goulding, personal communication) have carried out surveys using conventional archaeology, historical documents, and community memory to find and record these important places.

One important consequence of the current process of negotiation within archaeological practice is a rethinking of theories of contact, especially those in which simple notions of acculturation, dominance and power are given prominence. In line with our emphasis on engagements as defined below, in this volume passive models of interaction are rejected in favour of the exploration of new theories in which negotiation is the central element. Under this recasting of the relationship between Indigenous people and settlers, all participants are perceived as taking active roles. The nature of the roles is also not necessarily assumed to have been polarized or oppositional, as for example in domination and resistance or core and periphery models of interaction, nor are they assumed to have been unchanging through time. In contrast, the analyses presented here show these negotiated cross-cultural interactions and engagements to have been both multi-faceted and dynamic.

Many previous archaeological studies of contact, colonialism, and world systems expansion have emphasized asymmetrical relationships, although the recent dialectical approach of Thomas (1998) emphasizes negotiation in the same way we are proposing here. Neo-Marxist or world system approaches tend to overstate the dominance of colonial power and gloss over variability in outcomes as recorded in the archaeological record. Orser and Pagan (1995) and Orser (1996b) have proposed a new definition for historical archaeology as the study of the modern world following Deetz: 'the spread of European societies world-wide, beginning in the fifteenth century, and their subsequent development and impact

on native peoples in all parts of the world' (Deetz 1991:1). As a result of criticism by people from or working in Third World countries (e.g. DeCorse 1996), who have pointed out that many changes during the past four hundred years have been internally generated and were not necessarily completely due to the presence of Europeans, Orser has since broadened this definition to include 'colonialism, imperialism, racism, the spread and mechanisms of capitalism, the creation of categories based on gender and ethnicity, and any other topic that helps to explain the modern world' (Orser 1996a:2).

The fact still remains that, not surprisingly, most archaeologists still view the past from the perspective of the dominant society in which they are based and therefore assume that power played the primary role in intercultural relations in the past. In contrast, as demonstrated in many of the chapters in this book (particularly those by Torrence, Rose, McBryde, Birmingham), outsiders were often equal partners or even dependent on Indigenous groups for their survival.

The approaches taken in these Oceanic studies make a radical break from previous scholarship on European expansion and Indigenous interaction. Rather than seeking universalities or all-encompassing generalizing theory to explain the specific cases of cross-cultural engagement experienced in Oceania, the authors' analyses are informed by the local social and historical landscapes in which the interactions took place. In *The Archaeology of Difference* the underlying assumption is that the processes of interaction and engagement are context specific, and that as a result the analysis must be informed by the recognition of cultural difference and historical circumstance. As Parker Pearson notes in relation to Madagascar:

Not always did contact lead inexorably to discontinuity, disease or emulatory changes within Indigenous societies. In certain cases the intensive contact, exchange of European material goods and imposition of material styles belied the maintenance of local cultural continuity.

(Parker Pearson 1997:394)

Continuity in traditions despite the acceptance of the material trappings of European life or the dominance of colonial powers is an important theme in the chapters by Phillips, Mitchell, Clarke, McBryde, Frederick, Hemming *et al.* and Birmingham.

The emphasis in *The Archaeology of Difference* on the analysis of local contexts and on listening to other voices is an important innovation, but it also has echoes in the recent field of postcolonialism (e.g. Thomas 1994; review and case study by van Dommelen 1997). In this approach there is a shift away from the binary opposition of colonizer and colonized to 'a much more complex, ambiguous or disorganised and contradictory appearance' (van Dommelen 1997: 310) which better fits the historical reconstructions presented here by Phillips (Chapter 4), Rose (Chapter 8), McBryde (Chapter 9), and Birmingham (Chapter 13). Whereas there is much to offer in this new subfield, we feel the

emphasis in much postcolonial writing on the processes of *hybridization* and *creolization* (Bhabha 1994; van Dommelen 1997:309) is reminiscent of previous studies in contact archaeology which emphasized acculturation (cf. Ferguson 1992 for a different use of creolization which is followed up by Birmingham, Chapter 13). Lightfoot's (1995:206–7) critique of studies which have used acculturation as a fundamental concept points out the flaws of assuming the existence of passive recipients of superior technology from a dominant culture. Postcolonialism is a major conceptual advance on the older studies because the colonized are viewed as active agents, but this body of theory still privileges the dominant outsider who has introduced the new ways. Consequently, the very creative responses of Indigenous groups can be overlooked and generally have not been given precedence.

In a more balanced approach, as for example in the case studies by Torrence (Chapter 5) and Birmingham (Chapter 13), innovative behaviour is recognized. The Admiralty Islanders studied by Torrence invented new techniques of manufacture (e.g. carved hafts) and new decorative motifs (e.g. carved human figures, incised turtles, etc.) in order to market their artefacts more successfully. Rather than incorporating European materials or concepts into their spears and daggers, they modified their own cultural repertoire to satisfy European conceptions of the primitive savage. Their understanding of European tastes goes far beyond that implied by a mixing of two cultures. Similarly, Birmingham notes that Australian Aborigines treated most European artefacts as sources of new raw materials rather than as objects in themselves. They developed new methods of manufacture to use these and invented novel tool types for their own use. Both these examples illustrate behaviour that goes beyond simply incorporating new items into established cultural patterns as implied by hybridization.

CONTACT, ENCOUNTER OR ENGAGEMENT?

The terms 'contact' and especially 'first contact' are meant to symbolize the emotion and surprise of those singular and initial points in time when European voyagers came upon what were to them unknown Indigenous inhabitants of hitherto unexplored lands. In most of its uses 'contact' is one-sided behaviour ascribing dominance to the outsider who carries out the action; the other party 'is contacted' by the dynamic foreigners and is therefore implicitly conceived of as a passive player (cf. Torrence, Chapter 5). For example, contact in the view of Todorov (1984:3) is 'the discovery the self makes of the other'. Furthermore, like many traditional histories of contact between Indigenous peoples and outsiders, the interactions between Oceanic peoples and colonizers have generally been perceived in terms of the 'impact' of the superior outsider on the 'primitive' and less capable Indigenous population. As with 'contact', 'impact' has also been conceived from the European perspective, with action on the part of the outsiders and passive reception by the native populations. The other major

problem with 'contact', 'impact' and especially 'fatal impact' is the assumption that the outcome is linear and therefore inevitable (cf. Bedford 1996:413, 415). A corollary of this view is that the Indigenous societies were static and so any source of change must come from outsiders. This view denies the original inhabitants an active role in the process of intercultural exchange.

In general it has been assumed that the populations which survived disease, dislocation, and genocide became acculturated, whereby they took up the superior technological items offered by the more advanced and therefore more successful invaders. The concentration on impact coupled with the theme of technological determinism places native peoples in the role of passive receivers and imitators of European technologies and precludes research into Indigenous initiatives in economic, political or social spheres of interaction with outsiders (cf. critical reviews of older studies by Wilson and Rogers 1993:17-18; Ferguson 1992; Lightfoot 1995; Kelly 1997:353). Moreover, since colonial expansion and the destruction of native institutions have been seen as inevitable, there has been no incentive to study other responses, such as resistance, innovation, or persistence. The assumption of European dominance as 'natural' is particularly problematic in many parts of Oceania where former colonies are now independent countries. The study of European contact and impacts in these countries leads to a serious questioning of the approaches which have generally been developed to discuss the subjugation of Fourth World peoples. Given the biases implied and limitations of these value-laden terms, we feel that 'contact' and the associated emphasis on 'impact' are inappropriate for describing the many types of interaction that occurred when two or more peoples met in Oceania, even for the first time.

Another difficulty with current use of 'contact' is that it has been used rather loosely in archaeological studies, particularly in relation to time. As noted above, it may refer to first contact, literally the first footsteps on foreign soil and the first exchanges of words or armaments between cultural strangers, but it has also been used to describe both the ongoing relationships between outsider and indigene and the time period during which these have taken place. As several authors have noted (e.g. Kreller 1992; Colley and Bickford 1996:17) 'contact' is a problematic term since it folds a complex and continuing set of social processes into a concentrated moment of historical time. One could argue that this establishes a convenient psychological and temporal distance between the deliberate events of cultural dispossession and destruction and the social and political actions of modern everyday life. In some cases it may be appropriate to talk about special 'ethnographic moments, when both parties found that their social and philosophical categories were inadequate, and had to be expanded to comprehend new realities' (Meleisea and Schoeffel 1997:121; cf. Dening 1980; 1992), but a better explanation for the emphasis on 'first contact' in historical studies is provided by Meleisea and Schoeffel: 'First-contact [sic] encounters are so called not because they were certainly the first cross-cultural meetings, but because they occurred in an era of purposeful European exploration by navigators, philosophers and scientists who defined the events as historic' (Meleisea and Schoeffel 1997:120). They also point out that it is unlikely that the famous explorers such as Cook and Bougainville in the late eighteenth century actually represented the very first visits by outsiders in the recent past (Meleisea and Schoeffel 1997:120; cf. Langdon 1997; Swadling 1996). Still, as Sahlins (1995:188) has noted, 'For Europeans, of course, the great rupture in the history of the rest of the world is initiated by their own appearance there.' In other words, the emphasis on an *event* by the eighteenth- and nineteenth-century chroniclers was deliberate, but this does not need to be mirrored by modern scholarship, since it is quite clear that cross-cultural interaction in Oceania has been a very prolonged and complex *process*.

Problems also arise when contact is used to define a period. Rarely is it clear why the action of contact is considered to have ended or indeed when or how this behaviour elided into something different. There seems to be an assumption that at some point, perhaps when the dominant outsider culture has taken total political control, that 'meaningful' interaction with Indigenous populations has ended. Wilson (1993:20), for example, falls into this trap when he states that he is undertaking an 'ethnohistoric project in the Greater Antilles, which deals with events from the contact period, 1492–1520' without specifying why the endpoint is designated to be 1520. This is in direct contrast to studies in Australia, for example, where Mulvaney (1989) carries his catalogue of 'contact' sites up to 1985, which is the date of the return of Uluru to its traditional owners. In another case, which considers contact in the Kimberley region of northwestern Australia, Head and Fullagar (1997) examine the processes of change and continuity in hunter-gatherer land use extending over the last hundred years up to the present day.

In other cases it seems that the moniker 'culture contact' has been used in a generalizing sense to describe the early or formative periods on colonial sites and associated Indigenous settlements where there is an admixture of European and Indigenous material culture. In these contexts, the contact period is implicitly assumed to have been followed by colonialism, modernism and industrialization with the underlying assumption that the impacts of cross-cultural interaction ultimately led to breakdown and assimilation of Indigenous social institutions and practices. Under this developmental model, however, where do twentieth-century Aboriginal town reserves and fringe camps fit? Colley and Bickford (1996) and Murray (1996) have labelled these as Aboriginal historical sites but this approach simply supports the prehistoric and historical archaeology divide that Lightfoot (1995) rightly considers artificial in studies of contact archaeology. Furthermore, the use of contact as a definite period of time obscures the continuity of the process of intercultural interaction as pointed out by Nasseny.

A major dilemma in culture contact studies is the reconciliation of two obvious but seemingly contradictory viewpoints. On the one hand, Native American societies and ways of life changed drastically after European contact; yet at the same time Native American ethnic identities and societies persisted.

(Nasseny 1989:78)

Since the use of 'contact' to create a period of history brings into play this serious contradiction whereby contact has never ended, a better term should be sought in studies of European interaction with Indigenous societies.

Encounters

The term 'encounter' is often used by Oceanic scholars in concert or synonymously with 'contact'. Dening (1980; 1992; 1995a; 1995b) introduced the concept of encounter to Pacific history to explain the multi-valent and reflexive nature of cross-cultural relationships. His notion of encounter is important because it enfolds not only the individual and collective events of contact but also the processes set in train by prolonged encounter. Encounter relationships are viewed as transformational for both the colonizer (e.g. Smith 1985; Greenblatt 1991; Pagden 1993; Hempenstall 1978; Dening 1992; Sahlins 1995) and the colonized. Anthropological studies, for example, have described how outsiders and the variegated experiences of encounters can become socialised within Indigenous institutions (Rose 1991; Ballard 1995). Quite a number of very insightful recent studies have been carried out using encounter as a key concept.

Unfortunately, encounter has become a sort of buzz word for many people studying cross-cultural interaction in Oceania but neither of its dictionary meanings accurately expresses the wide range of interactions that took place when foreigners explored/colonized/missionized Oceania, nor is the term generally appropriate for the contexts discussed above where it has been used. On the one hand, an encounter is usually defined as a face-to-face meeting with a hostile purpose (e.g. Shorter Oxford English Dictionary). This meaning is probably what Dening (1980; 1992; 1995a) had in mind since his work focuses on conflicts due to the inability of the two cultures to understand each other. The oppositional character of this term gives both actors some agency, but certainly not all meetings were combative. Furthermore, an encounter of this type is a oneoff occasion and so it is not suited to characterizing the ongoing process of cultural interaction that followed, which is the subject of most archaeological interest. The second definition of encounter -a coming upon usually in a casual manner-also fails to suit our needs because the lack of purpose of the participants is certainly inaccurate for the European explorers and in this definition only one side is active. Certainly meetings between cultural groups which could be accurately described by both these definitions of encounter did take place in Oceania, but as a key concept, we think encounter fails to adequately describe the processes discussed in the chapters in this book.

Engagements

We therefore feel it is appropriate to introduce a new term to describe the kinds of processes that have taken place in Oceania between outsiders and the local inhabitants. We have selected 'engagement' for this purpose because this word stresses the active involvement of both sides, it is not necessarily a once-only event, and it can refer to a process. Engagement also implies that both sides have made a conscious decision to be involved. It must be remembered that not all native peoples chose to engage with visitors to their lands. Many times they did not reveal themselves, but this too was a conscious decision. Admittedly, the term is not completely comprehensive since some of the processes that occurred in Oceania, such as the spread of disease and consequent depopulation which often resulted from fleeting contact by Europeans (e.g. Sand, Chapter 3; Phillips, Chapter 4; Mitchell, Chapter 7), can only marginally be explained as the result of engagement. Nevertheless, it seems to us that 'engagement' best characterizes the purposeful meetings involving at least two sentient and purposeful actors which we think have dominated intercultural interaction in Oceania. The term also expresses the long-term processes that are best studied by archaeology.

NEGOTIATED OUTCOMES

The interpretations of the archaeological and historical records presented in the chapters in this volume are all based on the concept that the outcomes which can be reconstructed, particularly from the archaeological record but also from historical documents and oral history, are the result of the process of negotiation between Indigenous people and others which has been carried out over the long term. By assuming that the Indigenous groups were active participants, new interpretations of old behaviour become possible. Although we are certainly advocating that the balance in studies of European incursion and colonization be shifted away from the outsiders to incorporate Indigenous actors, this does not mean neglecting more traditional studies of European dominated sites or their remembered history. Chapters in this volume by Rose (Chapter 8), McBryde (Chapter 9), Birmingham (Chapter 13) and Hemming et al. (Chapter 12) show that the most commonly used data in contact archaeology, e.g. documents and mission sites, can be reinterpreted in new ways when the process of negotiation is put to the fore. Furthermore, some aspects of European behaviour that previously have not been questioned and have been considered as problematic are found to be so and are usefully reinterpreted in terms of negotiations within their own societies and with outsiders.

Looking at negotiation as a process has also opened up the sources of data that are available for study, so that, for example, museum collections of weapons have a story to tell (Torrence, Chapter 5), rock art using traditional motifs can be analysed in new ways (Frederick, Chapter 11), and so-called prehistoric sites can also be brought into the realm of research (Colley, Chapter 10; Sand, Chapter 3).

Moving from an event-based account to one of process also means that the time and space components of the research are opened up leaving the way for new approaches, as for example Clarke's (Chapter 6) conception of temporal periods on Groote Evlandt and in the study of landscapes offered by a number of chapters (particularly Rainbird, Chapter 2; Sand, Chapter 3; Phillips, Chapter 4; Frederick, Chapter 11). Expanding time also means that a fuller range of intercultural negotiations are identified for study, as for example between archaeologists and Aboriginal groups (Clarke, Chapter 6; Hemming et al., Chapter 12) or for Chinese communities and the wider Australian community (e.g. Gaughwin 1994). Negotiations are also seen as part of an ongoing process that extends right up to the present day and one that plays a large part in conditioning the nature of modern archaeological practice in Oceania. In the chapters in this volume a number of specific themes have been addressed which well illustrate how emphasizing negotiation among active participants can provide new interpretations of the past. We now turn our attention to a discussion of themes raised by the case studies: barter, material culture, landscape, intensification, disease, continuity and change.

Barter

Barter is an especially appropriate form of behaviour to study in terms of the process of negotiation within intercultural engagement because, as argued by a number of scholars (cf. Torrence, Chapter 5; McBryde, Chapter 9), for a deal to be struck, both sides must be satisfied. In this view there are no losers, just winners. One of the consequences of adopting this approach is that the reason for the exchange becomes problematic. Whereas previously it has often been assumed that Indigenous people must have desired the 'better' and 'more efficient' technology of the outsiders, the new conceptualization of barter on equal terms means that the reason for the exchange is no longer obvious and one must seek a new explanation for Indigenous engagement in barter and discover what they sought to gain.

Both Mitchell (Chapter 7) and McBryde (Chapter 9) attack the view that European goods were necessarily prized for the same reasons that Europeans valued them, e.g. that axes are good for chopping wood, but cloth and beads have little practical value. Clearly this was not the case. As demonstrated in the European accounts, Aboriginal people did not behave in ways that Europeans thought were sensible. Nevertheless, scholars have ignored these facts and have still assumed that the superior technology was superior for utilitarian reasons. Mitchell, however, shows that European values were not shared by the people of northern Australia who passed valuable goods on rather than using or hoarding them. What were valuable to the Aborigines were the social relations forged by the exchange of gifts, particularly with people outside their immediate group. Exchange also played a critical role in mediating disputes and reducing conflict. Consequently, Aborigines were eager for barter with Europeans not for utilitarian reasons but for social ones. In addition, the exchange system and its relationship to outsiders as a source of goods had a long history in the region, as his study of the distribution of raw materials in the Cobourg Peninsula shows. The Aborigines were simply incorporating new goods into their own established system of values and exchange. Mitchell goes on to argue that the simple presence of new and more trade items did not on its own cause an inflationary boom that altered ceremonial systems. Instead, he proposes that introduced diseases led to high female mortality which in turn caused increased conflicts about potential marriage partners. Since conflicts were mediated through exchange, there was a socially generated need for trade goods. The boom in the exchange of these items, therefore, was fuelled by traditional needs not because of their intrinsic value as superior technological items.

McBryde (Chapter 9) examines how different systems of value led to the same outcomes among both Europeans and Aboriginal peoples. By standing outside the two separate systems of value, she shows that both Europeans and Australian Aborigines traded for what the other side thought were useless baubles; both sides thought they were gaining precious objects for worthless trash. The historical accounts yield the biased European view that the natives would hand over priceless objects for cheap goods like hatchets or hats. In contrast, McBryde argues that the Europeans were doing exactly the same thing because they were also willing to pay good prices for 'curiosities' like spears or boomerangs which also had no utilitarian value in their own society and were intrinsically useless trinkets. Like the goods that the Aborigines were trading for, however, these 'curiosities' fetched high prices back in the European setting purely for cultural reasons. Both the British and the Aboriginal peoples were trading for identical reasons: to obtain social status and profit by procuring goods that had high value in their own society.

A serious problem in understanding intercultural barter is the lack of data concerning how the Indigenous actors valued the goods that they gave and received. Torrence (Chapter 5) has attempted to address this problem by examining the Indigenous production of trade goods from the Admiralty Islands, Papua New Guinea. This study has focused on interaction in terms of European demand versus Indigenous maker responses and innovations. She shows that during the past 120 years the people who made the spears and daggers which explorers and traders eagerly sought have made decisions which sought to minimize their investment of time and labour within the constraints posed by the European consumers' tastes. The Admiralty Island craft producers were also very creative in the way they markedly changed the nature of the goods they marketed in order to satisfy changing demands. This case demonstrates that Indigenous people were often well aware of the value system of the outsiders and took this into account when achieving their own aims within bartering.
Material culture

Artefacts have always been a critical source of data for studies of intercultural engagement since they provide the most common evidence for interaction with outsiders and are often used to measure the degree and nature of it (cf. Lightfoot 1995:206-7). As Colley (Chapter 10) and Mitchell (Chapter 7) have shown, however, the absence of foreign artefacts does not necessarily indicate the absence of contact. It is not unusual for Indigenous people to carry on relatively unchanged in their material culture despite access to foreign goods (cf. Bedford 1996; Head and Fullagar 1997; Phillips, Chapter 4) and this is especially true for places which are distant from the locales frequented by the outsiders and/or at which traditional activities are practised. This point is made dramatically clear by the almost complete lack of European artefacts at Gleenglade rock shelter (Colley, Chapter 10) and the sharp fall-off from Killalpininna in European materials recorded by Birmingham (Chapter 13). Birmingham's study also demonstrates that Aboriginal people were highly selective in the foreign materials that they incorporated into their lives, in most cases choosing to use the mission as a quarry for raw materials to be used in traditional technology, rather than as a source of new culture. The Australian case studies serve to emphasize results from other parts of the world, e.g. West Africa as described by DeCorse.

The presence or absence of certain categories of material goods does not automatically imply certain sociocultural changes or the assimilation of a certain suite of European cultural traits. Cultures were incorporated into European economic and colonial spheres at different times and through different mechanisms. Within these contexts European trade items were utilised in disparate ways.

(DeCorse 1996:41)

Influenced by Marxist theory and following from insights by Hodder (1982) that material culture plays an active role in social action, a number of studies within the genre of historical archaeology have tried to show that material culture was used by native peoples to express resistance to domination by invaders (e.g. Birmingham 1992), but this approach has been criticized by Beaudry *et al.* (1991). Although these interpretations may be correct for the cases considered, resistance was certainly not the only response to domination expressed through material culture. As demonstrated in Birmingham's study of Killalpaninna mission (Chapter 13), Aborigines were often very innovative and creative in their use of new material culture. The distribution of Aboriginal traditional technology close to and on the mission also demonstrates that the degree of control the church held over the population was limited and varied in time and space (cf. Rose, Chapter 8).

Frederick's study of rock art (Chapter 11) provides an excellent demonstration of how material culture was used in an innovative manner in the face of closure

of traditional land through increasing pastoral activity. She has examined changes in the nature of rock art in the George Gill ranges of central Australia in response to the changing contexts of European settlement. Far from restricting the analysis of rock art to a study of the depiction of foreign and exotic animals and material culture, she looked at media, techniques and graphic forms. Frederick was able to identify a continuing yet transformed graphic vocabulary of motifs that extracted and amplified elements of the previous art into an elaborated design system during the time of intercultural engagement. The contact motifs, including both figurative and geometric designs, were predominantly drawn in charcoal, in response to restricted access to normal sources of ochre. The study emphasizes a positive and creative use of material culture by Aboriginal people in spite of blatant domination and the loss of their land and traditional livelihood.

Landscape

Several case studies in this volume illustrate the general principle put forward earlier that negotiation has a spatial dimension. The analysis of landscapes is well developed in archaeology and makes important contributions to the understanding of intercultural engagements in the recent period because it demonstrates the importance of looking at large fields of interaction rather than small subsets. In particular, Rainbird (Chapter 2), Sand (Chapter 3), Phillips (Chapter 4), Clarke (Chapter 6), Mitchell (Chapter 7), and Colley (Chapter 10) all show how important it is to go beyond the spatial bounds of the places where direct interaction took place in order to understand the nature and scale of the so-called impacts of European contact and colonization. For example, Mitchell (Chapter 7) considers how areas which were not in face-to-face contact with outsiders were nevertheless part of the wider system of negotiation because they were linked through a system of exchange. The implication is that although the Macassans or the Europeans restricted their activities to the coast, the influence of this presence was spread over a large region.

Sand (Chapter 3) and Phillips (Chapter 4) show that the scale of landscape changes that must be considered in studies of cross-cultural engagement can be very large. Phillips has analysed changes through time in the physical configuration of the landscape as well as in its social manifestations. In a very short period of time an entire river system was abandoned and then recolonized, whereas Sand (Chapter 3) describes the depopulation of the interior of La Grande Terre in New Caledonia. In Sand's view the complex nature of the Indigenous, pre-contact society has been completely misinterpreted by historians because they have not looked at the evidence for dense population and high agricultural intensity which exists outside the main centres of European settlement. If his population estimates are correct, then his landscape approach will force a serious reinterpretation of the recent history of New Caledonia.

Landscapes are not simply referential, they are also social entities as illustrated in the chapters by Clarke (Chapter 6), Frederick (Chapter 11), and Rainbird (Chapter 2). In particular, Clarke develops the idea of landscapes defined by both Western (archaeological) and Indigenous perceptions of time and history. In her chapter the sites excavated on Groote Eylandt are interpreted in a sequence which recognizes a prehistoric past as defined by archaeological research and a remembered past as defined by Indigenous views of cultural history.

The notion of social geographies is used by Frederick (Chapter 11) to examine changes in rock art production in response to the changing nature of European settlement. Through time, dry charcoal drawings were gradually restricted to particular regions away from European activities. The use of charcoal and the spatial placing of the drawings demonstrate a closure of country. Analysed individually, each of these rapidly executed charcoal drawings might have been dismissed as merely graffiti-like scribblings. Conceived across a landscape of interaction with outsiders, they are transformed into a document of Indigenous innovation and solution to problems posed by the pastoral seizure of traditional lands.

Finally, Rainbird (Chapter 2) uses the concept of habitus to chart how the Japanese temporarily transformed the world of the Chuukese through agricultural and military operations undertaken during the Second World War. He demonstrates how the resulting landscape has different meanings for the participants. For the Chuukese 'it is remembered but not actively acted upon in the present'. There is an active attempt to forget the past by totally withdrawing from and neglecting the landscape created by the Japanese. Rainbird argues that the act of forgetting is often overlooked but is as important as using the landscape. In contrast, Japanese compatriots have erected a memorial to the servicemen who died there. This is used in association with visits to the island to preserve the habitus that they created. As Rainbird notes, the monument is not actually addressed to the local inhabitants but to people back home so that they will not forget those survivors and their suffering in the war. His study shows that landscapes are meaningful and play a very important part in the daily lives of people. Using the concepts of remembering and forgetting, a study of changes in landscapes within and beyond the period of cross-cultural engagement could provide important information about differences in how the various groups conceive of themselves and their role within society.

Intensification

An important new insight about cultural continuity in the face of externally imposed change can be gained from the landscape approach. In contradiction to what might be expected, the archaeological record shows intensification in the use of certain places with no obvious European connections. Schrire (1972) was one of the first archaeologists to recognize that changes in social landscapes could be used as a measure of the nature of interaction with outsiders. She argued that the presence of exotic goods on sites was not necessarily a good indicator of contact and provided little information about the nature of the interaction. Rather, Aboriginal settlement patterns in Arnhem Land, as in many other parts of the world, had been radically altered as a consequence of European presence. In her view, hunters and gatherers 'tended to gravitate towards centres of contact... There they set up camp, remaining in one place, with only occasional forays into the wilds' (Schrire 1972:659). As a consequence of this behaviour, Schrire (1972: 667) predicted that dietary remains would reflect a restricted diet of permanently available foods collected from the immediate area. Schrire's gravitational pull can be observed in many of the case studies presented here (chapters by Phillips, Sand, Clarke, Rose, McBryde, Birmingham), although her insights about using subsistence data to monitor the nature of contact have only been followed up by Clarke (Chapter 6). Colley (Chapter 10) found no evidence for a change in the composition of fauna at Greenglade shelter during the past 400 years or so, but the quantity of material deposited did increase markedly.

Due to the abundance of archaeological material many studies of intercultural interaction have focused on the places where Indigenous peoples were susceptible to the gravitational pull and became relatively sedentary, as for example Killalpaninna Mission studied by Birmingham (Chapter 13), and Macassan sites such as Malmudinga excavated by Clarke (Chapter 6). As a consequence, the wider landscape has generally been ignored. Contrary to the view that Aboriginal people totally abandoned their country and their seasonal round when they established camps near European settlements, the studies by Colley (Chapter 10) and Frederick (Chapter 11) in particular show that people still used the wider countryside, but were restricted to a smaller set of the places than previously and that such trips probably took place at certain times of the year. During the summer, Aboriginal people employed by the whaling industry on the New South Wales south coast would have been able to visit their traditional lands. In Frederick's case Aboriginal stockmen probably visited the rock shelters whenever they could get away. In landscape terms, a consequence of this behaviour was intensification of behaviour at particular localities. Some of these could be confused with prehistoric sites because they lack European material culture (such as Colley's Greenglade site or the rock art sites located in Watarrka National Park described by Frederick).

Head and Fullagar (1997) discuss another example of intensified site use in specific times of the year. In the Kimberley region of northwest Australia, stockmen were able to return to their country during the wet season when they were laid off from the cattle stations. Since the rainy weather limited movement, they could only visit a certain number of sites. Ceremonies had to be carried out in the few months available. As a result, there has been an intensification in the amount of rock art in a few rock shelters. The only difference between recent and pre-contact rock art is the increased use of yellow rather than red ochre because it is available locally, the same reason that Aboriginal people in South Australia switched to charcoal (Frederick, Chapter 11).

Without the benefit of informants, it is likely that archaeologists would have assigned the Kimberley sites to the prehistoric period and might have assumed that the few shelters with large amounts of art had special significance. In fact their key properties were good shelter from rain, room for many people to crowd in, and some ceremonial significance. Intensification in their use was not caused by changes in subsistence or their ceremonial system, but was due to social and economic circumstances established by their position in a much wider multi-ethnic society. This conclusion has very important implications for many areas of the world, including Australia, because there is often evidence for intensification in the so-called late prehistoric period. In how many cases is this in fact the consequence of attempts to maintain or protect culture in the face of extinction by European or other invaders?

We can, therefore, identify two types of gravitational pull that might be expected to be visible through studies of post-contact landscapes in other areas of the world. In the first well-known case, Indigenous groups are attracted to easy sources of food, social ties through barter, employment, etc. In this instance, people make a deliberate choice to restrict their movements within their own territory and so many previously used places are abandoned. The second is a consequence of restricted access to traditional land and incorporation as an underclass within a colonial society. In this case the gravitational pull is in the opposite direction: back to traditional lands and away from foreign-dominated centres. Free choice is not available, however, and people deliberately return to isolated places in order to carry out traditional activities, such as fishing and ceremonies, and to renew and reinforce their ties to their country. This second pattern will be difficult to detect through the presence of the alien, exotic artefacts usually used to date sites to the recent period, but may be observable through intensification of site use at particular sites in relatively isolated locations.

These places are extremely important for archaeology, for it is here that cultural continuity is best expressed. Whereas one may get a picture of acculturation at places dominated by foreigners, places controlled, if only briefly, by Indigenous communities will exhibit the extent to which people have maintained and innovated within their traditional culture. For archaeology to achieve a balanced picture of the negotiation process, then, whole landscapes must be identified and explored.

Continuity and change

One of the major themes of this book is that there is no one, simple pattern of changes that occur as a result of negotiation between groups. Each engagement resulted in a unique outcome. In some cases the meetings were brief and rare, whereas in others they were intense and continue up to the present day. Both parties were altered by these negotiations, sometimes to very fundamental degrees. One cannot deny, for example, the enormous effects that introduced

diseases had on most communities in Oceania, often altering the cultural landscape beyond recognition, as in the case of New Caledonia (Sand, Chapter 3), or nearly annihilating the population and taking with it a storehouse of cultural knowledge that was certainly lost. It is the loss of population and culture which is most often stressed in studies of cross-cultural interaction: the so-called 'fatal impact'.

In contrast, most of the studies in this volume have presented evidence for continuity in the face of radical changes. For instance, the studies of intensification discussed previously are good examples of how cultural traditions were maintained. Phillips' (Chapter 4) study of Maori settlement pattern changes presents a serious challenge to established views. She argues that the abandonment of the Waihou valley in New Zealand was not a direct consequence of European incursion but probably would have happened anyway due to Maori responses to warfare. Mitchell (Chapter 7) also presents a novel account of the effects of introduced diseases in Australian Aboriginal society. He argues that despite high mortality, people maintained their value system concerning marriage and the importance of exchange in the settlement of disputes. Instead of cultural loss, one witnessed an intensification of traditional behaviour which led to an increase in the desire for Macassan and European trade goods. This is the direct opposite of the proposition commonly put forward in other parts of the world that introduced goods cause intensification of trade. Mitchell emphasizes continuity whereas others, who assume superiority on the part of the outsiders, have focused on change. As Mitchell points out, rather than accepting that change is inevitable and therefore needs no explanation, archaeologists should be trying to explain how Indigenous people were agents in the changes that occurred. Finally, Clarke (Chapter 6) discusses how changes take place within long-lasting traditions using Turner's (1974) concepts.

SUMMARY

Although this book is not a comprehensive treatment of cross-cultural engagements, the chapters have addressed many important key issues and as such should be useful for people working outside Oceania. The various chapters have demonstrated that intercultural interaction is best envisaged as a complex process of negotiation that takes place over time and space, rather than as one or more discrete events. All the parties involved in this process are active participants, although everyone may not always be on equal footing. Relationships are not necessarily stable and positions of dominance can change over time and across space. Consequently, concepts such as contact, impact, and encounter are inappropriate since they emphasize action on the part of a single dominant party.

Following these basic principles, the chapters have shown that the sources of data relevant for studying engagements in the recent past can be expanded beyond historical documents and centres of European occupation to include oral history, sites with no recent exotic material culture, rock art, museum



Figure 1.2 Political cartoon by Michael Leunig representing the popular views of 'first contact' which have dominated many past studies of intercultural interaction in Oceania and elsewhere. Reproduced by permission of Leunig and *The Age*.

collections, and most importantly, landscapes. Emphases on engagement and negotiation enables a re-analysis of historical material and what was considered to be 'obvious' or 'normal' behaviour on the part of Europeans is shown to be generated by identical motives as those held by the contemporary Indigenous peoples. It has been argued that the temporal dimension of studies should also be expanded to compare processes operating in the past 400 years or so with those from the distant past: Europeans may not have been the first or only aliens to interact with people in one's study area. Since for Fourth World peoples negotiation continues up to the present day, the use of 'contact' to specify a time period is unhelpful and restricting. For these people the study of the remembered past is of critical importance and archaeology can play an important part in modern political processes, as discussed below.

Finally, the tremendous diversity in cultural and physical space and time that is covered by these studies of intercultural engagements in Oceania has highlighted the importance of context in the analysis. Although general principles in terms of method may be shared, each study has had to account for the specific cultural context of interaction. There are some important similarities in process, as for example with the equivalence in actors established by barter or the gravitational pull towards and away from places dominated by outsiders, but there are also many differences in the way negotiation was carried out. These have led to the variation in the way ethnic groups interact within and between countries in the Pacific region today.

IMPLICATIONS FOR FUTURE RESEARCH

A recent political cartoon satirizing the Howard federal government in Australia beautifully captures popular views of European contact at Port Jackson, Sydney harbour and well characterizes the implicit assumptions of past studies of intercultural engagement in many parts of the world (Figure 1.2). First, the picture depicts what is considered to be a very significant *event*, the 'first contact' by Europeans. Second, everything about the outsiders expresses *dominance*. They outnumber the Indigenous group; they are white, larger in size, clothed in an elaborate uniform, and carry weapons which are obviously more *efficient* than the small pathetic-looking spear on the ground next to the symbolic Aboriginal person. The small, black, sexless, naked persons are passively seated but the British men are *active* and are bringing a new and *superior* economy that will *transform* the country. In response, the Indigenous people are wide-eyed in bewilderment (because they are too ignorant to understand) or paralysed by fear.

Although never so boldly expressed as in this cartoon, these beliefs have been implicit in much scholarship concerning intercultural engagement in the recent period. Emphasis has been placed on 'contact' by active outsiders and their subsequent 'impacts' on native societies. Acculturation models have assumed superiority on the part of new technologies and life-styles and the whole process has been assumed to lead to inevitable assimilation. But this has clearly not happened in Oceania. Fourth World peoples are still a distinct group and the independent Pacific nations have clearly maintained their many distinctive cultural identities. In terms of Chuuk Lagoon Rainbird (Chapter 2) sums up the broader situation quite nicely: 'There is no sign of domination here, the colonial powers have ostensibly left and the Chuukese have retained only those fragments of colonial culture which suited them' (Rainbird, Chapter 2). In other parts of the world the more self-reflective style of recent research often combined with explicit political agendas has gone a long way to correct the one-sided view of past encounters presented in the Leunig cartoon (e.g. cf. reviews in Orser 1996a).

The point of the cartoon is contemporary: the role of the global economy and economic rationalism in affecting the Howard government's position on Aboriginal affairs in Australia. This aspect of the cartoon is nevertheless relevant to our book because it reminds us that all views of the past, including archaeological ones, are necessarily coloured by contemporary life. There is no doubt that modern archaeological practice in Oceania—the outcome of political processes—and debates within the wider community about land tenure, Indigenous rights, and racial conflicts have forced scholars to recognize that intercultural engagements are not the product of some invisible linear process but are actively negotiated on a day-to-day basis. Power, dominance, and resistance are key processes, but one can also observe innovation and creativity. So it is not surprising that changes in our perceptions of the past have come about during the time of Wik and Mabo in Australia, independence movements in New Caledonia, land rights claims in New Zealand, and negotiations with governments and landowners for permission to carry out research in New Caledonia, Chuuk Lagoon or Papua New Guinea.

The emphasis we have placed on negotiation does not deny that radical changes have occurred as a consequence of culture contact, that disease and genocide have radically reduced populations, or that new religions and material culture have transformed Indigenous societies. In contrast, the chapters presented here have explored the ways that Indigenous people shaped these changes, processes that have largely been ignored by scholars. Archaeology plays an essential part in revealing the active role played by native populations because historical records which were made by necessarily biased observers do not provide a full picture of Indigenous life (e.g. Attenbrow and Steele 1995). By expanding the sources of data to take in long time spans, including the precontact period and extending up to the present day, as well as the whole landscapes occupied by the Indigenous people, this book demonstrates that there is a rich archaeological record relevant to understanding negotiation. In addition, the search for both sides of the story has led Phillips (Chapter 4), Rose (Chapter 8) and McBryde (Chapter 9) to re-interpret historical documents in light of Indigenous responses to European colonizers and missionaries.

The enterprise which we have embarked on, the balanced study of negotiation in intercultural engagements, has many important political ramifications. Indigenous peoples have many reasons for wanting to recover their recent past, some of which archaeologists may or may not share. Rubertone takes the perspective that the archaeology of European contact is an archaeology of political resistance because there is an explicit link with contemporary political and social issues facing Native American peoples.

Yet, the failure to account for these political actions on the part of native Indian societies, groups or individuals impedes our understanding of historical processes in the 17th century. Without political histories, we are denying the politics of the past...but also we are dismissing issues about the past that concern Indian people today, including their struggles to preserve their traditional religious beliefs and graves of their ancestors.

(Rubertone 1989:32–3)

Her words apply equally to Oceania. A recent booklet about post-contact Aboriginal graves and cemeteries (Byrne 1998) is very explicit on the role of archaeology in the modern world.

One measure of the gap in understanding between the Indigenous and non-Indigenous citizens of NSW may be the difference in the awareness each

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has of the Aboriginal cemeteries which belong to the period of the last 200 years. Few non-Aboriginal people are likely to know these places even exist in the landscape of NSW and yet they mean more to Aboriginal people that almost any other places. For Aboriginal people they are sites of memory and emotion which have no equal. In the spirit of Reconciliation this booklet attempts to bridge this gap in understanding. Not so that non-Aboriginal people will come to feel and think the same way about the graves and cemeteries as Aboriginal people do, rather, that in better appreciating the attachment Aboriginal people have to these places we will have gone some way towards understanding these events of the last 200 years which makes the objective of Reconciliation a priority.

(Byrne 1998:7)

The kinds of projects presented here offer archaeologists a role in the process of reconciliation because they seek to understand cross-cultural interactions in terms of social and historical relations to place by documenting culturally negotiated solutions and strategies for survival. They also engage in a very direct sense with Indigenous narratives of time, land and history. The archaeology of negotiated engagements is part of a nexus, a place where fundamental questions have been and will continue to be raised, about how the past is studied, about how it is interpreted, about different ways of knowing, about the relationships between objective and relative knowledge, and about the transformational and recursive relationships between Indigenous peoples and outsiders. It is a process which continues into the present day and demonstrates that the archaeology of negotiating difference is indeed an archaeology of us.

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'Round, black and lustrous': a view of encounters with difference in Chuuk Lagoon, Federated States of Micronesia PAUL RAINBIRD

INTRODUCTION

The quote 'round, black and lustrous' is taken from the *Missionary Herald* dating to 1881, the year following the establishment of the first mission in Chuuk Lagoon. It refers to the eyes of the indigenous people which were 'not dimmed by the use of [k]ava or toddy from the cocoanut blossom' (Doanne 1881:209, quoted in Marshall and Marshall 1975:450). The inhabitants of Chuuk Lagoon at this time had no history of using psychoactive substances, unlike their island neighbours to the west and east who chewed betel nut and drank kava respectively. By 1886 the Reverend Robert Logan was able to predict that '[d] oubtless white men will some time teach them to drink' (1886:18, quoted in Marshall 1979:37). These comments were made at the very beginning of prolonged encounters between the Chuukese and outsiders.

In this chapter I discuss the process of encounters in the Pacific and in particular that between various colonial representatives and the islanders of Chuuk Lagoon. As I illustrate below, in the colonial encounters experienced by the societies of Chuuk Lagoon, they may be considered an ideal case study in the recognition and interpretation of the archaeology of encounters with difference. I wish to focus on the material remains of encounter with particular emphasis on the late Japanese period. First, I must define what I consider to be the meaning of 'encounters with difference' and the role of material culture in assessing these encounters.

ENCOUNTERS WITH DIFFERENCE AS LONG-TERM HISTORY

'Culture contact' is a term which has been popular in the anthropological literature for a number of years. It describes the study of encounters between two or more societies of different structural types. Typically, it relates to meetings between Europeans and indigenous people (often called 'natives') and includes accounts of the colonial experience. All too often these accounts have been

viewed from a European perspective, usually one of perceived domination. Even those who have taken a sympathetic view of the colonized have regarded the encounter as one of domination by the colonizer and of 'fatal impact' for the indigenes (e.g., Moorehead 1966).

Happily this view of one-sided domination is now obsolete. In the introduction to a recent volume devoted to encounters between Europeans and indigenous Americans the editors state:

[T]he culture change undergone by Native Americans was neither onesided nor solely governed by European intentions and strategies. Rather, it is evident...that the attitudes and actions of Native Americans played a large part in determining the impact of contact.

(Wilson and Rogers 1993:3, emphasis removed)

Stoler (1989; 1991) has pursued the one-sided nature of past studies of 'culture contact' by examining the heterogeneous composition of the colonizers. Stoler states that '[h]aving focused on how colonizers have viewed the indigenous Other, we are beginning to sort out how Europeans in colonies imagined themselves and constructed communities built on asymmetries of race, class, and gender' (Stoler 1991:51).

Sahlins (1994:42–8) has viewed these changes in analyses as a historical movement from colonizing to decolonizing and on to post-colonial propositions, and finds them lacking due to their inability to account for the complexity inherent in the process of encounter. He finds the earliest colonizing interpretations were ones which assumed an evolutionary advantage over the natives and the natural result of the civilizing process was domination of the 'natives'. The 'decolonizers' were embarrassed by the carnage and terror inflicted, but still held for the asymmetrical wielding of power. For Sahlins postcolonialism brought with it a total swing in asymmetry towards the indigenous people which negated consideration of the colonizers' influence. Although I would say that we are still in the postcolonial era, and not necessarily as defined by Sahlins, the following discussion which sees the negotiation of the two parties must, following the argument of Sahlins, be a post-postcolonialist discourse!

It is the differences among and between the colonizers, and the recognition of the ability of the local indigenous community to construct their own perception and attitude to encounter, which has led to the realization that each example of encounter has to be interpreted in its particular context. General models of encounter are of little use. Even one nation, for example Britain, had incredibly different approaches to colonialism when one views the historical experiences of the Australian Aborigines, the Maori of Aotearoa (New Zealand) and the indigenous Fijians, let alone further afield with the Indians of the sub-continent. Clearly the ideology and procedures of French colonialism, based on an egalitarian Enlightenment assumption of the fundamental sameness of all human beings and the unity of the human race, and therefore designed to assimilate colonial peoples to French civilization, differed very substantially from the indirect-rule policies of the British which were based on an assumption of difference and of inequality, or from those of the German or the Portuguese.

(Young 1995:164)

Following a study of the colonial experience on Pacific islands Nicholas Thomas concludes that

[c]olonial cultural studies can draw attention to these fissures and failures [in postcolonialism] most effectively by evading total objects such as 'colonial discourse' that obscure the multiplicity of colonizing projects and the plurality of potential subversions of them.

(Thomas 1994:195)

Elsewhere, Thomas (1991) has illustrated the complexity of the encounter experience by a study of the transformations in the meaning of material culture which occurs on both sides of the encounter. He shows that Pacific societies appropriated and transformed foreign material objects into something meaningful within their own society, and that the foreigners themselves did the same with the objects that they received. Eventually, through the process of encounter, the islanders were able to provide, by manipulation of their own material culture, exactly the objects of an idealized Pacific which were desired in Europe (cf. Torrence, Chapter 5).

Encounters with difference, which used to be termed 'culture contact', are now seen as a process within which events occur (Wilson and Rogers 1993: 3). Following the criticisms levelled at the concept by Greg Dening (1992a) I have abandoned the term 'culture contact' as he argues that on its own 'contact' is fine for an individual moment, but is too static a term for dynamic events and processes in which both parties to the encounter continually remake themselves in the light of new experience. This reflexivity is produced by an encounter in bounded space. Actors are grouped into a binary structure, the oppositions, the differences are stark-language, skin colour, and material culture are for a moment alien, and perhaps that moment is contact. But communication is possible as similarities in the physical body and perhaps in the adornment of that body are realized. So begins the process of the encounter with difference, the manipulation through negotiation of those initial oppositions into something meaningful for a different society. Dening (1980:33-4; 1992b: Act Two; 1995: 145; 1996) has frequently made the point that in the Pacific the beach often provides the stage for the theatrics of encounters. He finds that being situated between land and sea it is a place which eases negotiation due to its perception as a 'marginal space, where neither otherness nor familiarity holds sway' (Dening 1992b:179).

In this context the encounter on a beach is at what Giddens (1984:377) has labelled a 'time-space edge' in which there are 'connections, whether conflictual or symbiotic between societies of different structural types'. According to Giddens, these encounters form 'the edges of actual or potential social transformation' (1981:83). Dening (1992a:4) stresses that though ethnocentricity is maintained on both sides, '[b]oth experience a touch of relativism: inevitably both sides must see themselves in relation to the other'. As long as the groups remain separate and do not mix on a regular basis then McCall (1992) sees these encounters as being performed in 'hyper-reality'. In his study of encounters on Rapanui (Easter Island) McCall postulates that the space of actual encounters was very different to the 'realities' of life on either side. In the 'real' world the separate groups on either side of the colonial divide act in different ways than when in direct contact with the other camp.

The Rapanui [the islanders] use rituals of differentiation in routine daily affairs, such as joking and ridiculing (in their own language!) of the outsider, and exaggerated mimicry of the outsider's appearance and behaviour. The foreigners, too, have their rituals of differentiation in the colonial club, at special social functions, and at formal occasions.

(McCall 1992:21)

Resistance, assimilation, acculturation, decimation, and domination all have varying parts to play in the complex process of encounters with difference. It is a requirement that any or all of these expressions of encounter are demonstrated and not assumed. For archaeologists it is material culture upon which we are dependent for demonstrating such notions.

In all its forms, material culture is a durable and persistent component of human activity, and from portable objects to skyscrapers and aeroplanes, it pervades all aspects of human existence. Pierre Bourdieu (1977) has linked the role played by material culture in the formation of both self and society. Through the concept of *habitus* Bourdieu has shown that the material environment affects how a person comes to understand the individual and collective practices necessary to conform to family and wider social circumstances. It is the material things which objectify the parameters of the individual's world. The socialized being becomes familiar with how to operate successfully within the society defined by the material world. The person and society are mentally tied to the material culture through *habitus*—a history of use and familiarity. In this sense material culture is extremely important to both the socialization of the individual and the reproduction of society. Miller (1987) has taken this concept further and finds that as material culture will have an effect on the constitution of society.



Figure 2.1 Location of Chuuk Lagoon.

From this theoretical discussion I now turn to the archaeological record of Chuuk Lagoon in an attempt to understand transformations on both sides of the time-space edge as a response to the experience of Japanese colonizers on the island and in the region. It is important here to note that I have not picked a case study involving the Japanese because I am English and they represent one of the few examples in the Pacific of eastern imperialism, but because a recent survey on Fefen, an island in Chuuk Lagoon, produced far more sites from the Japanese period than any other (Rainbird 1994b).

CHUUK LAGOON

Chuuk (formerly Truk) Lagoon is located in the eastern Caroline Islands, Federated States of Micronesia of the northwest tropical Pacific (Figure 2.1). It has a tropical climate consistent with its location 7.3 degrees north of the Equator and an average annual rainfall of 363 cm (Karolle 1993:78). The lagoon itself is formed by a barrier reef which supports a number of reef islands, most of which are currently uninhabited. Within this barrier reef are fifteen islands defined as high, in that they are volcanically formed and support dense and diverse vegetation, that is, they are not coral or low limestone islands or atolls.

The islands within the lagoon exist in a wider sea of islands, and there have probably been few, if any, times in the past when the inhabitants of Chuuk Lagoon have not been in contact with the communities on neighbouring atolls, and almost certainly with the high islands further 'asea'. Epeli Hau'ofa (1993:7) notes the negative connotations that are implied by non-Pacific scholars who, unaware of islander sailing skills, wrongly view the islands as isolated dots on a map. He continues that in contrast the inhabitants' perception of these 'dots' is one of a 'sea of islands'.

HISTORICAL BACKGROUND

A common theme in oral history pertaining to the late prehistory of Chuuk Lagoon indicates that this period is dominated by inter- and intra-island feuding (see references in Rainbird 1996). Most, if not all, of the high islands within the lagoon have one or more hilltop enclosures which, from the evidence of material culture and radiocarbon determinations, appear to date to this period (Rainbird 1994a:318; 1996:468–70).

The Spanish had been in the area since Magellan's famous circumnavigation in the first half of the sixteenth century and in 1565 the first recorded visit was made to the lagoon. The small ship San Lucas although on a purportedly friendly mission was violently driven off by seaborne islanders (Sharp 1961:30-1; Hezel 1979:27). The Spanish pursued their colonial desires in the region and built a fort on neighbouring Pohnpei, yet they seem to have had little interest in Chuuk Lagoon. There are records of brief visits starting in the early nineteenth century; however, a few violent incidents were enough to give the islands a bad reputation (see Hezel 1973). In 1852 Andrew Cheyne, a trader in the region, published a warning that 'no vessel should visit this group...unless well-manned and armed' (Cheyne 1852:56, quoted in Hezel 1973:65). However, Hezel (1973:65) regards this warning as unwarranted because initial contacts with many of the other islands in the region had resulted in violent confrontations with no such admonitions being issued. It is possible, I suggest, that Cheyne may have been hoping to monopolize the trade potential of the Chuuk islands and issued the warning in an attempt to ward off potential competitors. However, although he pursued trading ventures in Palau and New Guinea, Cheyne does not appear to have returned to Chuuk (Dunmore 1992:56).

Constant foreign settlement does not appear to have started in Chuuk Lagoon until *circa* 1880 when permanent traders and Protestant missionaries arrived (Marshall and Marshall 1975). By 1899 when the Germans bought the islands from Spain, Japanese, German, British and Chinese traders were established there (King and Parker 1984:83). Although not exerting strict control over the islands it appears that the Germans were the first to demonstrate their colonial strength, requiring what Dening (1992a:4) has aptly termed for colonial encounters a 'charade'. The performance involved the presence of a warship in the lagoon which bombarded and virtually destroyed a small islet (King and Parker 1984:84, 510). Apparently a result of this demonstration of power, and probably other displays of military might, was the surrender of 436 guns, which the Chuukese had accumulated through trade, to German authorities (Fischer and Fischer 1957:48). This was in fulfilment of a ruling made by German authorities in 1899. It had taken nearly five years for the Chuukese to comply with the

decree and perhaps illustrates not only the indirect nature of the German colonial rule, but the lack of respect given by the islanders to external control.

For Hezel (1992:63) this was a time when the Chuukese people realized in the Germans what they had from 'time immemorial' needed: 'a strong central government'. It is probably an anachronistic assumption on the part of Hezel to consider that the Chuukese had any idea of what a strong central government consisted of or entailed at the beginning of this century, and the suggestion that they voluntarily and happily wanted to adopt one must be erroneous. As Hezel (1973:70–1) has previously commented, the Chuukese had spent many years avoiding centralization of any kind, and it appears to me that for the fragmented population to arrive at lagoon-wide consensus, let alone an invitation to a little-known external authority, within five years seems hardly likely. Indeed, the intervilage and inter-island feuds may have been reduced at this time, possibly through colonial intervention and further 'charades', but it is unlikely that the islanders actually wanted the erosion of their means to power. The feuding for which the Chuukese were notorious continued and is documented well into this century (e.g. see Marshall 1979).

At the outbreak of World War I the Japanese seized the islands from the German nation. The phosphate mines in the western Carolines were of particular economic interest to the Japanese, as was the potential for sugar cane and copra production on some of the other islands. Apart from a little interest shown in an assessment of possible marine-life exploitation, the islands of Chuuk Lagoon do not appear to have been favoured in terms of economic potential, but became the headquarters for Japanese military operations in the region (Purcell 1976:207; Hezel 1995:151, 186).

In 1920 under covenant from the League of Nations a Japanese civil administration took over and by 1937 there were over 3,500 Japanese living on the islands within the lagoon (Nishi 1968:15). Most lived on Dublon (Tonowas) where the fishing industry flourished (Hezel 1995:186–8). The militarization of Chuuk started in 1941 with the establishment of the Japanese Fourth Fleet headquarters in the lagoon (Peattie 1988:253). During 1944 the American advance and bombardment of Chuuk isolated it from outside contact and annihilated its offensive capabilities. The Japanese forces surrendered in September 1945 and the US Navy took over administration of the islands heralding a new phase of colonial government (Hezel 1995:242).

Chuuk Lagoon along with the other islands in the region now became administered by the US as a Trust Territory under United Nations mandate. The US realized in the islands of the northwest tropical Pacific a strategic requirement: Guam became a major navy and air force base and the Marshall Islands provided a location for detonating nuclear devices (sixty-six in total), and the base at Kwajalein Atoll continues this tradition, acting as a target for testing US Intercontinental Ballistic Missiles (Smith 1991:18–21). The people of Chuuk Lagoon were left pretty much to themselves early in the US administration as the islands were not required for military activities. There were many proposals to

develop the economic resource but these were not acted upon (Hanlon 1994). In the 1960s as anti-colonial movements around the world began to gather pace and doubts grew that US military bases in Okinawa and the Philippines could be maintained indefinitely, the US government began negotiations in an effort to formalize its military use of the islands (Kluge 1991).

In 1986, following years of negotiation, the islands of Chuuk Lagoon became incorporated within Chuuk State of the Federated States of Micronesia under a Compact of Free Association with the United States (Hezel 1992: 63). The compact provides money for the islanders but allows for US military use of the islands whenever required. The people of the Republic of Belau in the western Carolines were the last to resist the lure of American dollars in return for their island's strategic importance. On Belau 'Independence Day' in September 1994 the nation's president, Kuniwo Nakamura, said that, 'if you were to categorize by saying whether [Belau] is independent or not independent, I would say that it is independent with certain conditions. We are married to the United States, politically married' (*Pacific News Bulletin* 9(11):3 [November 1994]). The other Caroline Islands, including Chuuk, are similarly united in this polygamous relationship.

The archaeology of encounter

Below the peak of Chukuchad in the north of Fefen (Fefan) Island in Chuuk Lagoon there is to the south and east an upland plateau. This plateau consists of open grassland and clumps of dense vegetation. The landscape of this entire area attests to the Japanese occupation of the island. Figure 2.2 illustrates the archaeological sites located on the plateau and indicates that, apart from the Chuukese promontory enclosure in the northeast edge of the plateau (marked as 'fort'), all the other symbols indicate the location of sites thought to date to the end of the Japanese period (1941–5). The diamonds represent military installations (cf. Figure 2.3), the squares clusters of buildings, and the stars identify the position of cairn groups.

The following interpretation is a pastiche of written history, oral history and theoretical bias which is prompted by and mediated through the surviving material remains of the period. It is the archaeological survey, the encountering of the material remains, which initiated this study and prompted the collection of oral history and textual evidence. The archaeological remains provide the impetus and location for the meeting of many strands of evidence which I have formed into a contextual interpretation.

The altered landscape is both agricultural and symbolic and it does (and has) work(ed) on at least these two levels for both the Chuukese and the Japanese, but in rather different ways. For the Chuukese it is remembered but not actively acted upon in the present, it is there but neglected, known of but not exploited, either economically or politically. For the Japanese who encountered the people and this landscape, in rather more direct terms than McCall's hyper-reality, it



Figure 2.2 Chukuchad mountain and plateau area, illustrating general location of archaeological features. Contours in 50-metre intervals. Inset shows the location of the study area in Chuuk Lagoon.

Source: Base map produced by Aspect Consulting Inc., Honolulu.

will not be forgotten. Some twenty years after their repatriation to Japan a concrete monument was erected on a small hill overlooking the field system; the Japanese inscription on the south side of the four sided pillar reads *Senbotsusha no haka* (Figure 2.4). It is a memorial in remembrance of the Japanese servicemen who died in Chuuk Lagoon during the Pacific War and was erected by the compatriots who survived them.

Chuuk Lagoon was not a wartime success for them or their country; it was fine while Japan maintained the offensive, but once the tide of the war changed towards the opposing side the island bases were found to be easily isolated and vulnerable to attack. On 16 and 17 February 1944 Operation Hailstorm was unleashed on the naval base at Chuuk Lagoon. Like the Americans at Pearl Harbor three years before, the Japanese managed to have most of their fleet out of the lagoon at the time of the attack. The airstrips were devastated by bombs and of the forty-one ships that were sunk most were carrying supplies. Hailstorm heralded the effective isolation of Chuuk from supply routes and continued



Figure 2.3 Japanese stone and earth emplacement on Chukuchad mountain. bombing ensured that as a military base it was not able to function (Hezel 1995: 232–4).

Following the American decision to bypass the lagoon and strike on west, the inhabitants of Chuuk were left to fend for themselves as best they could. At the end of the war 38,000 Japanese soldiers and sailors and several thousand east Asian civilians were repatriated from Chuuk and, along with the 15,000 Chuukese, they all had required sustenance during the blockade (Nishi 1968:15; Peattie 1988:310). Cockrum notes that '[e]very square foot of land [was] planted in sweet potatoes' (1970:317, quoted in Hezel 1995:240).

Pelzer (1947) writing soon after the war found that the Japanese on Chuuk had eradicated a large number of coconut and breadfruit trees in the desire to grow crops of sweet potato and manioc. The Chuukese, who had no previous experience of intensive agriculture, as there is no evidence of pre-encounter field systems, were required to labour in the fields. Denfield (1981:13) found that Fefen 'was the main agricultural place for the Japanese military. One third of the island was farmed. There were workers' barracks, military barracks and provision warehouses.' The archaeology of Fefen confirms Denfield's statement and shows that the islanders piled stones into cairns, built low kerbs around the edges of the fields to prevent erosion, and destroyed the internal features of the traditional enclosure to allow for the plough. These activities physically altered the landscape and created new and alien forms of material culture.



Figure 2.4 The Japanese memorial.

In thick vegetation substantial remains survive of stone-built houses, ovens, and wells forming a settlement located below the emplacement of six coastal

guns at Winifouchi on the west side of the plateau. This settlement, according to informants, quartered the foremen who had in their charge the Chuukese and Okinawans who toiled in the fields. These foremen were relatively lucky, as they did not have to face the steep climb up to the fields each day. On Yap, in the western Caroline Islands, it is recorded that women and children were forced by the Japanese to labour in the sweet potato fields (Hunter-Anderson and Moore 1995:270); such a division of labour was not recorded for Fefen but no females were interviewed so it is possible that such information was missed.

In terms of their relationship to land and their ancestors, the Chuukese who worked in the fields and survived the experience were altered by this encounter. They found the space with which they were previously acquainted had been ordered into unfamiliar ways by field boundaries and roads and their time had been organized according to foreign principles. The cumulative effect of the changes in their previously conceived perceptions of the ordering of time and space—that is the physical over-lapping of the time-space edge— in turn affected their *habitus*.

The abandoned enclosures which occupy most of the peaks and upland spurs of the islands in the lagoon are the most obvious surviving examples of traditional Chuukese architecture. The upland location of these sites brought them into close contact with the Japanese military who recognized their suitability for defensive emplacements. This was notwithstanding the effort the locals were required to expend in delivering the large coastal guns into position. Ashby (1987:81) notes that on the neighbouring island of Pohnpei the local islanders were required to drag guns to the top of hills, a task which often took many months to complete. A number of the abandoned Chuukese enclosures were damaged in the fortification process, with their stone walls and platforms providing a useful quarry for defences. The enclosure in the area discussed here does not appear to have formed part of the Japanese defensive system, but became an extension of the adjacent field system. Furrows on the ground in the interior of the enclosure replace the stone platforms and shell middens typical of these sites.

What is difficult to assess is the effect that the disturbance of these traditional sites had on the Chuukese. Many Chuukese believe that the hilltops are the location of supernatural power and 'magic' (e.g., Goodenough 1986: 560; Rainbird 1996). The impact of the Japanese occupation and alteration of these 'dangerous' sites may have had the unforeseen effect of replacing a traditional form of power with that of the colonial authority. The 'thunder gods' who had historically inhabited these peaks were now usurped by the Japanese with their metal barrels able to produce their own unnatural thunder.

Rarely visited in the present, far from the beaten track, parts in grassland and others virtually lost in full tropical vegetation, the landscape of today is an artefact of a negotiated encounter. The Japanese forced an alien landscape on to the Chuukese: a landscape of roads, fields, and stone-built villages. They were also able to force the Chuukese to work in the fields, removing stones, ploughing



Figure 2.5 The Chuukese enclosure wall.

and planting potatoes, which were all unfamiliar activities. But the Japanese too suffered from unfamiliarity. They had to contend with a tropical climate much warmer and more humid than they were used to and the problems caused to agriculture by the lush vegetation. They also had to force the Chuukese people to perform tasks for which they had little understanding. And in the final analysis they found that the Chuukese remained healthier through the blockade than they did (Hezel 1995:241). Falgout (1990:288) reports that on the eastern Caroline island of Kosrae, 'Japanese soldiers, unaccustomed to island foods and environment, did not fare well... The sight of Japanese soldiers who had degenerated to "stick men" is one that many ...cannot forget.'

It is clear from the above discussion that both parties to the encounter were relativized by the experience. The experiences affected the *habitus* of both the islanders and the invaders. In some ways the Japanese suffered from their *habitus:* their inculcated knowledge of how space should be used and ordered were at odds with the geography of Chuuk. The desperation they resorted to in destroying indigenous crops and replacing them with their preferred varieties required the introduction of intensive labour in areas of poor access such as the upland plateau area of Fefen and the interior of the Chuukese enclosure. Only the large main wall of the enclosure (Figure 2.5) survived and this is probably due to the fact that the effort required to effect its demolition would not have been worth the relatively small amount of land gained.

The Japanese garrison had little opportunity to engage the Americans in combat; rather, the last years of the war were a losing battle against an environment both socially and physically resistant to intensive agricultural practices. The 'liberation' when it came was perhaps more of a relief to the Japanese than the Chuukese because the latter had to contend with the next imperial pretender.

Many items of colonial repertoire are visible in contemporary Chuukese society. Dresses and decorative combs adorning the head remind of the Spanish influence, as does the Catholic religion which embraces virtually half of the population with the Protestants claiming the rest. Many Japanese loan-words for introduced items such as toilets and footwear have been retained, and many of the docks and roads the colonizers constructed still provide a practical purpose. But the fields of upland Fefen and the sweet potato are not part of contemporary Chuukese culture, and many of the mountain peaks are still places of importance where the spirits, not the Japanese, reside. Breadfruit continues to be served with the dinner each day, and although some of the older people have Japanese as a second language, and the younger islanders speak American English, the conversation is performed in Chuukese. There is no sign of domination here, the colonial powers have ostensibly left and the Chuukese have retained only those fragments of colonial culture which suited them. Through a negotiation between colonial and Chuukese cultures, although rarely explicit, the societies of Chuuk Lagoon have changed through the experience, but have retained the difference which makes them distinctively Chuukese.

ON REMEMBERING AND FORGETTING

The majority of studies concerned with memory appear to privilege remembering over that related aspect of mind, forgetting. Thus *habitus* is concerned more with those items retained rather than those lost. This, of course, leads to much of the teleological nature of archaeological and historical anthropological interpretation in that we reconstruct those items from the past that have been retained in the present rather than those items, be they social rites or items of material culture, that have been discarded, abandoned and forgotten. Where the material items have survived, as with the Japanese sites on Fefen, they may be used as a mnemonic device to reactivate memories that were in the process of being lost from the communal corpus—that is memories that remain only in the minds of the older members of the society and are not actively passed on to the younger generations.

Forgetting is as important as remembering. The Russian psychologist Luria found that not forgetting would be quite debilitating (cited in Fentress and Wickham 1992:39). Like individuals, societies are likely to find it impossible to continue if everything is remembered. All the embarrassments and inconsequences of a society's history are both actively and habitually forgotten. Therefore, societies can choose to retain or forget items. Of course some of those

that are chosen to be retained are actively manipulated, for example, the withdrawals from Gallipoli and Dunkirk become remembered as victories for Australian and British societies, respectively.

On Fefen it appears that the, probably unconscious, community consensus has turned to the desire to forget the hardships of the later war years with their forced labour and deprivations. The Japanese, however, who shared this experience with the Chuukese wanted to remember this period and commemorate it with a monument. It may be that this commemoration has little to do with the Fefen landscape, but with desires to remind other Japanese of the suffering and deaths caused by war. The memorial is located on Fefen, but the message may be directed to a very different place.

In the introductory chapter to their edited volume of Pacific islander representations of World War II Lindstrom and White state:

Conversations with older men and women on many Pacific islands not uncommonly call forth memories of how things were during the war.... World War II has sedimented into an intense—if narrow—band in the stratigraphy of social and individual histories. Sometimes exciting, sometimes tragic, wartime events made vivid and enduring impressions. (Lindstrom and White 1990:3)

If Lindstrom and White are generally right about the solidly stratified nature of the war as a historic episode in Pacific island societies, and the collected papers in their book and elsewhere would support their contention, then how is it that the sedimented material relics of the event in the Fefen landscape are neglected? While playing on L.P.Hartley's notion that 'the past is a foreign country', Salman Rushdie has reflected from his perspective as an Indian immigrant in Britain.

It may be argued that the past is a country from which we have all emigrated, that its loss is part of our common humanity. Which seems to me evidently true; but I suggest that the writer who is out-of-country and even out-of-language may experience this loss in intensified form. It is made more concrete...by the physical fact of discontinuity, of present being in a different place from past, of...being 'elsewhere'.

(Rushdie 1991:12)

Can it be that what Rushdie talks about in terms of leaving a country can also apply in some way to deserting a landscape? That is, following Rushdie's logic, a landscape with its associated remembrances may be intensified by its abandonment, by a discontinuity in its use. In fact, the abandoned landscape may be as much a memorial as is the structure erected for the purpose by the Japanese.

CONCLUSION

Each encounter with difference affects the individual *habitus* which in turn affects the community. Past experience is acted upon in a recursive manner in order to allow practical action in the present and expectations for the future. Some encounters will have more consequence than others—it is likely that direct colonization by an imperial power will have more of an effect on indigenous society than the encounter with, for example, a foreign archaeologist who may alter the way that some people think about their past but is unlikely to do this except for few members of the population.

The war in the Pacific provides a chronological marker which throughout the Caroline Islands is remembered as 'the greatest hardship' (Falgout *et al.* 1995). In Chuuk it marks the transition from Japanese to American administration and a consequent change in the experience of encounter. Apart from the foreigners who briefly dock to transfer fish to the fleet of motherships within the lagoon, it is the traces of the war, the sunken fleet, which is responsible for most encounters with foreigners in the present day. Diving on the wrecks is becoming big business and as resorts are built to meet the tourist demand, the process of encounters with difference will continue.

The study of Chuuk Lagoon presented above has shown that the continuing process of encounter may be revealed in the archaeological record. In Chuuk Lagoon the changes in society which in part are due to the experience of colonial encounters have not been revolutionary. The long-term encounter between the islanders and those outsiders attempting (either consciously or unconsciously) to impose a hegemonic relationship over them has a compounding effect upon *habitus*, and leads through the recursiveness of past experience to the continual remaking and revitalization of the island society.

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Reconstructing 'traditional' Kanak society in New Caledonia: the role of archaeology in the study of European contact CHRISTOPHE SAND

Our ancestors were numerous and wise. We are neither the one nor the other.

(Brenchley 1873:347)

INTRODUCTION

Largely as a consequence of recent political events, a new appraisal of the history of New Caledonia is being carried out by the current inhabitants. For instance, a history book for schools has been drawn up for the first time by a group of New Caledonian authors and it shows that it is becoming possible to study historical events from the two last centuries more critically, by examining controversial subjects such as convicts or the massive introduction of workers from Asia for development purposes. Archaeology also has a role to play in the reconstruction of New Caledonian history because it provides a good characterization of the indigenous societies which the first European navigators encountered. Often the archaeology is better than ethnographic accounts which were written largely in the early twentieth century. Modern Kanaks searching for their social and cultural origins have generally looked to anthropological accounts, but these sources date long after the initiation of European contact and can therefore present a distorted picture of indigenous social organization. Through an analysis of the demography of New Caledonia's pre-European indigenous population, this chapter demonstrates the important role of archaeology in the reconstruction of traditional Kanak society.

Archaeological research carried out since 1990 as part of an inventory of the archipelago's archaeological resources has registered more than 800 new prehistoric sites (Figure 3.1). Particular attention has been paid to habitation sites as well as to the study of horticultural structures like abandoned taro terraces or stone constructions. The existence of a densely populated prehistoric landscape which was strongly restructured by human agency, as revealed by the archaeological research, questions previous estimates of population made in the nineteenth century. These data also raise the problem of the correspondence



Figure 3.1 Location of New Caledonia in the Western Pacific and archaeological sites mentioned in the text.

between the reconstruction of 'prehistory' through archaeological study and the reconstruction of 'traditional' Kanak society on the basis of ethnographic studies made long after first contact (Guiart 1981; Bensa 1992).

As I will try to show, the archaeological analysis of socio-cultural change may provide a better understanding of past events because it encompasses the whole prehistoric sequence, from first human colonization to the present, and is based on concrete data like settlement structures or monumental constructions. The results of this study are particularly important for the history of European contact in the Pacific region because it has previously been argued that New Caledonia stood out as having experienced relatively little population decline or social change. The new interpretation of demography, settlement, and social organization based on the archaeological data presented in this chapter differs markedly from the 'traditional' model and offers an alternative to modern Kanaks who are trying to reconstruct their ancestral past as well as more generally to the populations of New Caledonia who are trying to build a common future.

Recent archaeological research, described below, suggests that this model of Kanak society, which is based on information obtained almost one hundred years after Cook's visit, is inappropriate for describing the situation before European contact. It appears that the small size of the groups, clan organization, and high mobility witnessed in the nineteenth century were a product of a massive decrease in population caused by introduced diseases. This chapter presents archaeological data that shows that the population may have been much higher prior to initial European contact. For this reason it is likely that the social organization was different from the 'traditional' model. I will begin by evaluating the historical evidence for low population levels at the time of European contact and will then turn to the archaeological evidence for an independent assessment of Kanak population and social organization before European contact. Finally, I will show how the new archaeological data can be reconciled with an improved understanding of demographic processes.

A MODEL FOR TRADITIONAL KANAK SOCIETY

The New Caledonian archipelago is situated at the southern end of the Melanesian chain, at the limit of the tropical area (Figure 3.1). The main island, the Grande Terre, is 400 km long and 50 km wide and is surrounded by smaller islands. The archipelago is characterized by an important variety of environments: e.g. the unfertile zones of the lateritic plateaux; the elevated coral reefs of the Loyalty Islands; and the sedimentary blocks of the rest of Grande Terre (Paris 1981). Such ecological diversity is common in the Pacific region (Kirch 1984).

A model of what has been called the 'traditional' Kanak society of New Caledonia has been built using ethnographic observations and anthropological studies which date from the turn of the century (e.g. Lambert 1900). The most important contribution to the definition of the model of indigenous society was made by the Protestant minister Maurice Leenhardt (1937) who lived among the people of the valley of Houailou, on the east coast, between 1903 and 1935 and spoke their language. He recorded a vast quantity of oral stories, trained people to write in their own language, and tried to define the socio-political principle of the Kanak way of life. More recent studies have mainly focused on the complexity of the social patterns in various parts of the archipelago (Guiart 1963; Bensa and Rivierre 1982; Godin 1990).

Based on these studies, 'traditional' Kanak society is classified as 'Melanesian', i.e. having a multitude of groups related by inter-family links and lacking centralized power. The population of the entire archipelago at European contact has been variously estimated as 50,000–80,000 (Metais 1953; Rallu 1990; Kasarhérou 1992). One of the important characteristics of Kanak society was its fairly large number of languages (up to 37 including dialects). These languages are sub-divided into seven distinct groups, all of Austronesian origin. In the 'traditional' model the basic unit of social organization is what is commonly called the 'clan', that is a group of people claiming descent from the same ancestor (Guiart 1983:42–3). Normally the leader of the clan is the eldest son, who is considered to be sacred (Leenhardt 1953:150–2). A second level of power, formed by a group of the elders and the traditional landowners, was in


Figure 3.2 'Orthodox' model of Kanak population decline.

charge of the real organization of the human groups. There was little hierarchy and decision-making was by consensus. A common tradition was to establish the 'stranger', the leader of the most recently arrived clan, as the chief of the village or valley (Bensa and Rivierre 1982:90)

Beyond the fourth generation, the genealogies of the clans are presented as a succession of geographical locations, characterized by old village sites. The cartography of these locations supposedly indicates that during prehistoric times the population was highly mobile and moved from valley to valley, leading to the creation of multiple habitation sites and horticultural structures which are thought to have been only occupied for a short period (Guiart 1983; 1992).

THE ORTHODOX POPULATION MODEL AND ITS LIMITS

Since France took over New Caledonia in the middle of the nineteenth century, the size of the indigenous population at the time of European contact has been a matter of debate. The most recent demographic studies by J.L. Rallu (1990) and by C.Kasarhérou (1992) support the 'orthodox model' which is a direct result of the traditional reconstruction of Kanak society discussed above (Metais 1953). Due to the supposed low level of social hierarchy and high mobility of people, these authors favour a low population ranging between 50,000 and 80,000 inhabitants. Since the population was thought to have been divided into small mobile groups, it has been assumed that they would not have been much affected by the different diseases brought in by Europeans (Rallu 1990:280). In spite of the contradictory figures proposed during the first half century of colonization (Kasarhérou 1992) and serious problems with the first census carried out at the

end of the nineteenth century (Shineberg 1983; Kasarhérou 1984), this version of Kanak society and population has varied little (e.g. Brou 1989:38; Tidjine and Wedoye 1992: 76) (Figure 3.2).

There are two problems raised by the orthodox population model. First, the population estimate yields the lowest population density per square kilometre of arable soil for the Pacific region. The figure of 80,000 inhabitants (the highest estimate) spread over an estimated 560,000 hectares of arable soil for the Grande Terre (Saussol 1981) leads to an estimate of 14 persons per square kilometre. The estimate itself is suspect because it does not reflect the total amount of soil suitable for cultivation (Sand and Ouetcho 1993a) and omits the Loyalty Islands, for which data on amount of cultivable soils are not available. Furthermore, this very low population density compares poorly with other areas of the Pacific region for which population densities have been calculated for total land area rather than just arable soils as for the Grande Terre estimate: New Guinea Highlands (50 per km²) (Stannard 1989); Hawaii varied between 60 and several hundred people per km² (Stannard 1989:38–40); Tahiti 65 per km² (Rallu 1989: 123); Navua valley, Fiji, greater than 180 per km² (Parry 1981:72); and Rewa valley, Fiji, more than 680 per km² (Parry 1977:83). I find no evidence that the agricultural capacity of New Caledonia is so poor as to explain the discrepancy between the estimated population density and other regions of the Pacific.

Second, if these figures are correct, then the indigenous population, numbering around 27,000 in 1921 (Rallu 1990:278), would have only decreased by about two-thirds since initial European contact (Figure 3.2). This contrasts markedly with the rest of the Pacific where depopulation of the indigenous population after first contact is in the order of 85–90 per cent or greater (Rallu 1990). Again, there are no convincing reasons why New Caledonia should be unique.

A number of explanations have been put forward to explain the extremely low population size for New Caledonia, but they are not convincing: e.g. malaria; wars; and birth control through infanticide, abortion and/or cannibalism (Mc Arthur 1968). Mc Arthur (1968) notes that malaria probably never occurred in New Caledonia during the last three thousand years, in contrast to other islands in Melanesia. Descriptions of traditional tribal wars in New Caledonia (Garnier 1867–68:64–5) show that the numbers of dead were often low. Since adult males are the main fatality, warfare is unlikely to have had a major effect in maintaining a low population. An aversion to cannibalism was reported by Cook (Beaglehole 1961). Assumptions made about infanticide and abortion based on data from the end of the nineteenth century (Brou 1980, criticized by Kasarhérou 1984:63–5) cannot be traced back to the pre-European period. In summary, there is no good demographic explanation for

Date	Contact with	Result
1774	James Cook	First contacts in Balade Good relations
1788	La Pérouse?	West Coast?
From 1790 1791	Ships from/to Sydney Bowen	Irregular relations Île des Pins Expelled from the island
1793	d'Entrecasteaux	Northeast Coast Frequent warfare observed Bad relations Tuberculosis?
1803	Kent	St Vincent Bay (Southwest Coast) Good relations
1810–20	First whalers	First regular relations with the Indigenous population
1820–30	Beachcombers	Tuberculosis?
1840–50	Sandalwood/mission period	Description of epidemics Crew massacre First permanent European settlements
1853-80	Colonization/plundering	Attacks against European settlements Military repression of Indigenous population Population decline

Table 3.1 Summary of the earliest European contacts with Indigenous people in New Caledonia

why New Caledonia should have had such a low population density (Sand 1995:233-5)

A re-analysis of the historical data concerning the Kanak population during the first century after European contact provides another form of critique of the orthodox population model. I will present only the most significant data here (Table 3.1) since a full analysis of the historical data goes beyond the aims of this chapter.

When Captain James Cook landed in Balade in September 1774, he met a courteous, welcoming population, honest to an unmatched degree in the rest of the Pacific (Beaglehole 1961:530–1). He described the inhabitants as strongly built, generally in good health and hardly disposed to violence (ibid.: 539). Balade is described as having a succession of horticultural fields which were cultivated right up to the seashore. Villages were scattered alongside the coast and up into the valley. Groups of people came from the north and the west coast to see the anchored ship, and this fact did not cause hostility from the local inhabitants. Cannibalism seemed to be considered a reprehensible act (Pisier

1974:101–2). Cook noticed that the density of population in Balade was lower than in the other islands visited (Beaglehole 1961).

Forster (1777:22), the naturalist on board, extrapolated from this visit that there were about 50,000 persons on the Grande Terre, although he did not know the full extent of the island. This figure is obviously too low because the small, dry valley of Balade, which has such poor soil that subsequent European colonization in this region was restricted, would have been much less densely populated than the big valleys of the east coast (Tiwaka, Tchamba, Houailou, Canala, etc.) or the regions of Bourail or Koné (Figure 3.1).

The first European ships did not reach the west coast until possibly La Pérouse in 1788 (Dubois 1989). Nineteen years after Cook, d'Entrecasteaux landed in Balade (Pisier 1976). It is notable that the French sailors then found themselves confronted with a violent, cannibalistic, thieving population, fighting with all its neighbours. An expedition conducted in the plain of the Diahot (north coast) discovered deserted, burnt villages, and destroyed fields. The population was suffering from starvation, which is surprising for the month of May. But most of all, d'Entrecasteaux wrote that 'we saw few people perfectly healthy' and the doctor on board diagnosed symptoms not described by Cook, especially rickets which was quite common (Pisier 1976:97).

From the end of the eighteenth century, ships touching New Caledonia on their way between Sydney and the North Pacific were more numerous (cf. summary in Sand 1995:214–17). Unfortunately, until settlement by the Protestant 'teachers' in the south of New Caledonia from 1840, and the Catholic missionaries in 1843, descriptions of the native population are almost non-existent. It is unfortunate that there is little data for the whaling period from 1810 to 1820. Interestingly, English 'beachcombers' were said by Bernard (1894:301) to have introduced the pulmonary tuberculosis on the east coast, which 'had led to the destruction of entire villages'.

Texts about New Caledonia written from the 1840s onward all discuss the following: (1) the population was relatively large, although varied geographically; (2) disease was an important factor in reducing the current population; and (3) according to oral tradition the population had been larger in the past. The effects of disease on the population were especially disastrous. The 'teachers' and the missionaries were the first to describe the effects of diseases which the Kanak, for the most part, seemed not to know and which wreaked havoc, especially during the first outbreaks. In 1850 the tribe of Koumac, who must already have been in particular affected in 1847 by the epidemic described by the missionaries, numbered about 2,000 persons (Carter 1946: 34). By 1860 it had decreased to 800 (Vieillard and Déplanche 1863:10) with no indication of a massive population movement. When the 'teacher' Ta'unga (1980:87-90) described his memories of 1842 at Touaourou (southeast coast), he talked about epidemic cycles brought about by the flu, dysentery or mumps.

In the Isle of Pines, the spreading of a disease in 1842 had led to the attack on the sandalwood ship *Star* and to the slaughter of the whole crew. For the first time the full extent of the disaster was recorded in a written text.

Women and children also died, and the whole island was nothing but stink, for no one had been buried. Anyway, who could dig the graves? And who could carry the corpses? Who was fit to walk? Those who stayed alive tried to bury the dead ones but death also caught up with them. So the dead ones were abandoned, and the ground stunk. People left everything and did nothing at all.

(Ta'unga 1980:74)

In the Loyalty Islands as well, many people died, without any reason (Ta'unga 1980:112–13; Kasarhérou 1992:228). Marist missionaries provide a description of a dramatic epidemic which took the life of thousands of persons from the north-east coast and in the plain of the Diahot in January 1847.

We found in several huts clay pots full of half cooked taros, and those who were cooking them were lying dead next to their fire ...With no exaggeration, near half of the population died in the various tribes that we know.

(Letter by Father Rougeron quoted in Rosier 1990:190–1; translation mine)

When inquisitive travellers such as Jules Gamier wandered around the Grande Terre in the middle of the 1860s, he could only take note of the dramatic depopulation:

I often asked them where this chest complaint which killed them came from, and all agreed to say that it was the whites who brought it in. One of them, Zacchario, chief of the island Ouen, even told me that when the first English coasters came into his tribe, about twenty-five or thirty years ago, the Koturé village where his father lived, was nearly all destroyed by this illness: the survivors who escaped this plague deserted the country, and went to meet up with the Uara village, which is more or less today the only lived in spot of the island.

(Gamier 1867-68:198; translation mine)

For the period following 1840 similar documents are relatively numerous. Clearly, disease had a disastrous effect on the indigenous population.

Shortly after French colonization in 1853, a debate concerning the total number of Kanak inhabitants of New Caledonia began. On one side were the partisans of a small population (Vieillard and Déplanche 1863) and on the other those who believed the population was still large (Patouillet 1873):

We therefore see the official census take it [the native population] to be about 40,000 people. There are great reasons to believe that this figure is far from being correct. A resident of several years inside the island has allowed us to collect information from which we would not hesitate to double it.

(Patouillet 1873:4)

From historical data available for the north-east coast of the Grande Terre (Kasarhérou 1992), it appears that the population of the Balade and Pouébo tribes decreased by 80 per cent between 1855 and 1900. The whole of the area had lost more than 65 per cent of its population between 1862 and 1911, a figure which does not take into consideration mortality from the various diseases known to have been experienced earlier.

Any demographic calculation from the 1860s should show dramatic decline from decade to decade, the case of the north-east coast repeating itself for the majority of the Grande Terre (Kasarhérou 1992:75). Yet, using the official censuses from 1887 and in 1891, the pre-contact population was estimated as having been between 35,000 and 40,000 (1887) and then about 30,000 (1898) (ibid. 1992:80–2). A re-evaluation of the 'orthodox' population model which estimates a population of more than 50,000 for the 1840s and 1850s is therefore highly desirable and an alternative, archaeological, approach to the estimation of the pre-contact population is necessary.

ARCHAEOLOGICAL CHALLENGE TO THE ORTHODOX MODEL

The archaeological surveys started in 1990 by our local Department of Archaeology have enabled the study of a wide range of prehistoric sites apart from the ceramic sites which have been the usual focus of previous research in New Caledonia. Rapidly my two Kanak colleagues and I realized it was very difficult to understand the archaeological landscape by using ethnographical data. By mapping and surveying habitation sites, settlement sites, and stone structures, we have attempted a new interpretation of prehistoric chronology (Sand 1995). In addition, our work has focused on the human transformation of the landscape, intensification of horticultural structures, and evolution of social organization.

In contrast to the view presented by anthropological research or oral history in which 'traditional' Kanak society is presented as relatively stable and unchanging, archaeological research on New Caledonia has shown that prehistoric society has been dynamic during the past 3,000 years. The particular society that was transformed partly due to disease and depopulation resulting from European contact was the result of a process of subsistence intensification that probably began more than one thousand years previously. In order to understand the nature of indigenous social organization immediately before



Figure 3.3 Partial view of the Hnakudotit fortification after restoration. The walls are more than four metres high.

European contact, it is important to place it in its wider prehistoric context and to understand how and why it had developed.

The New Caledonian archipelago was probably colonized at the end of the second millennium BC by Austronesian speakers who produced ceramics with distinctive designs called Lapita pottery (Green 1991; Sand 1995:76–94; 1996b; 1997a). The first groups settled prominently on the seashore but some moved rapidly inland (Sand 1995; 1997b; 1996c; Sand and Ouetcho 1993a:21; Sémah *et al.* 1995) and had an economy based on the harvesting of sea products, on hunting wild birds and on slash and burn horticulture (Sand 1995). Changes in ceramics show that after about one thousand years of settlement, probably due to a slow increase in population, the founding society had split into different cultural units and the breaking up of languages had probably been initiated (Sand 1995:117–27; 1999b).

In addition, the archaeological data seem to indicate that the first millennium AD was characterized by the highest demographic increase in New Caledonian prehistory. This millennium was also characterized by a dramatic change in ceramics (Sand 1995:117–27). As might be expected, it is in the smaller islands that the first signs of high population can be identified. Around AD 250 in the central plateau of Maré in the Loyalty Islands huge structures, made up of coral walls several hundred metres long, 10 metres wide and more than 4 metres high were constructed (Sand and Ouetcho 1993b:61–73) (Figure 3.3). These sites are described in oral traditions as fortified sites (Dubois 1970). As discussed in Sand



Figure 3.4 General view of the abandoned taro pondfields at Col des Roussettes, illustrating the large extent of horticultural terraces.

(1996a), the very existence of these constructions indicates the presence of a relatively large population as well as some form of social hierarchy.

Definitive colonization of the upper valleys on the Grande Terre also took place during the first millennium AD. The destruction of the primary vegetation resulting from slash and burn agriculture caused massive erosion and the accumulation of thick and fertile terrigenous deposits in the bottom of the valleys and a significant increase in the coastal, alluvial plains (Avias 1950: 129; Sand 1995:134–8).

It is likely that during the first millennium AD large parts of the Grande Terre, the Loyalty Islands, and the Isle of Pines reached the maximum demographic capacity using slash and burn horticulture. This threshold may have been marked by periods of strain between groups for the conquest of new territories and may explain the impressive development of petroglyph sites (Monnin 1986), some of which were used as boundary markers.

The previous slash and burn cultivation technique with long fallow periods must have progressively reached its limits in terms of the population size that it could support. Consequently, a more intensive form of horticulture which involved the construction of terraces to reduce soil erosion and allow the cultivation of tubers in permanent structures began (Sand 1996d). The earliest evidence for the construction of permanent terraces to grow *Colocasia*, wet taro, was found at the taro pondfield WPT069 at the site of WPT034 at Col de la



Figure 3.5 Raised mounds in the lower Tchamba valley; these were used for the cultivation of dry tubers.

Pirogue on the southwest coast, whose earliest level has been dated to 1245+/-70 BP (Beta-61956, CAMS-6499), calibrated to AD 690 (810) 975 (Sand 1994:60).

During most of the second millennium AD, terracing for wet taro cultivation developed on the hills of the Grande Terre (Figure 3.4). The first stage was probably characterized by the creation of terraces in the most favourable locations with good soil and close to reliable water. Over the centuries these systems expanded to reach less favourable environments. Water channels as much as several kilometres long were constructed, sometimes necessitating the removal of large rocks. Terraces up to hundreds of metres long were considerably expanded to cover much of some hillsides.

In a first attempt to evaluate the extent of these structures using aerial photography Antheaume (1981) recorded their occurrence over approximately 10,000 ha. Our subsequent archaeological fieldwork, described below, has substantially increased the area covered by terraces. For example, in the region of Païta on the south-west coast archaeological survey has recorded twice the number of hectares with terraces than was known through aerial photography (Sand 1994:74). In regions deserted today (e.g. most of the valley interiors) impressive terraced sites covering hundreds of hectares are under forest cover and are therefore not visible using aerial photography. In other regions, like the Pouébo-Balade area on the north-east coast, an unfavourable orientation of the sun has made it impossible to detect terraces on the photos. Sand (1995: 235–41) estimates that the area covered by terraces for cultivating wet taro on the Grand

Terre far exceeds the 10,000 ha previously estimated by aerial photography but the full extent will not be known until archaeological surveys have been undertaken in all areas.

The setting of taro pondfields in terraces for the growth of the swamp taro was not the only large work intensified in the second millennium AD on the Grande Terre. In the upper valleys, the inhabitants constructed stone walls to create flat areas and stop erosion. For example, in the Hienghène valley on the north-east coast some such walls are 100 metres long and up to 3 metres high. In most of the flat valley areas abandoned horticultural structures, such as long, raised earthen mounds which are occasionally more than one metre high and hundreds of metres long can be observed (Figure 3.5). These structures were mainly built for growing yams.

The terrace walls, water channels, earthen mounds, etc. represent the existence of permanent horticulture and also a substantial workforce. The development of horticultural structures is paralleled by the impressive development of habitation sites, some of which have over 100 habitation mounds. During the last millennium before European contact, the construction of agricultural and domestic structures led to an important humanizing of the landscape, which Jacques Barrau (1956:56) has aptly termed 'agricultural sedentism'.

The still incomplete archaeological data (Sand 1995:165–70; 1997b) indicate that in the fifteenth century the human colonization of the upper valley was probably completed. The majority of the ridge top and valley settlements and horticultural structures, therefore, date to hundreds of years before the first European contact. My reconstruction of New Caledonian prehistory indicates that in order to be able to produce enough food and other cultural necessities for the life of a community, huge horticultural works involving a large labour force, probably organized by some form of hierarchical society, were required (Sand 1999a). Archaeological data record that the process did not happen quickly but unfolded slowly over nearly three millennia. In contrast, most oral traditions are probably only relevant for understanding human history in the past few centuries.

It seems likely that in New Caledonia as anywhere else in the Pacific (e.g. Kelly 1989; Kirch 1994), the appearance of complex horticultural structures before the end of the first millennium AD was at least a partial solution to the need for a reduced fallow period and higher levels of productivity in response to increased population size, although social factors may also have been relevant. As noted by Yen (1973:81), 'the rate of change may be largely dependent on the social environment, having its fundamental basis in population numbers and their change'. Different terraces of a taro pondfield area were cultivated in a turning cycle, but used the same water channel so that the landowners remained in the same geographical area. Consequently, the presence of permanent horticultural structures in the second millennium AD and the need for a complex social organization to sustain maintenance of these fragile constructions indicate the



Figure 3.6 Map of the Païta region, showing the extent of the prehistoric taro terraces.

existence of relatively large and geographically stable populations that were tied to precise territories (Sand *et al.* 2000).

INTENSIFICATION OF SUBSISTENCE: SOME EXAMPLES

The archaeological reconstruction of society during the second millennium AD presented above contrasts quite markedly with the semi-egalitarian, small, mobile groups described in the early part of this century. Since the divergence is so marked, it is important to examine the archaeological data in more detail. I therefore present several concrete archaeological cases which demonstrate that intensification in human use of the landscape for horticultural purposes occurred before the first European contacts at the end of the eighteenth century.

The first example involves a survey which focused on recording terraces associated with taro pondfields in the Commune of Païta (Sand 1994). Over 1150 ha of terraces scattered in an area about 30 km long in the first 500 m altitude of the mountains were mapped (Figure 3.6). Not all areas were thoroughly searched and so this density is a minimum figure for what was there in the past. In some sites, terraces span over the total surface of the hills, running kilometres from the limit of the unfertile peridotite soils and c. 400–500 m down to the plains. At the same time that the terraces were used for taro pondfields, the plains were also cultivated for both wet and dry crops. It is argued that the terraces indicate a desire for increased production beyond what could be produced in the flat areas.

The building of terraces first started in the most favourable areas and then in a second stage were expanded to less favourable hills, with poorer soils. Archaeological data indicate that these more recent terraces were created by bringing in part of the fertile soil from elsewhere and trapping it with wooden palisades. The base of a terrace on site WPT059 by St-Laurent (Païta), comprising these types of characteristics, has been dated 300+/-100 BP (Beta 59963), calibrated to AD 1460 (1640) 1954 (Sand 1994:63). Intensification continued until the nineteenth century, as indicated by the dating of the upper layer of the same site to 130+/-90 BP (Beta-59962), calibrated to AD 1640 (1810) 1955 (ibid.).

Archaeological research at Touaourou in the commune of Yaté, southeast coast of Grande Terre provides a second case study (Figure 3.1). Here, the narrow, habitable, flat coastal area is only about one kilometre wide and rests at the foot of the sterile peridotite mountains. Nevertheless, in the past people cultivated most of the useable space, up to the uplifted coral platforms present on the seaside, sometimes encircling their fields with low walls (Sand and Ouetcho 1993c: Fig. 2). Archaeological survey in the narrow valleys has identified several large dams, exceeding 100 m long, 20 m wide, and up to 4 metres high: i.e. necessitating the movement of over 5,000 m³ of rock (Sand and Ouetcho 1992:81–3). The clear intention of the dams was to deviate some of the streams that created swampy areas in the low-lying land, allowing them to be used for cultivation. The huge workforce needed to construct these structures together with the desire to extend the field systems suggests a much larger population than the 500 Kanaks (one person per 8 hectares of arable land) who resided in this region in 1862 (Vieillard and Déplanche 1863).

A second example of subsistence intensification comes from the island of Ouvea in the Loyalty Islands (Figure 3.1). Ouvea is a semi-atoll, with a large lagoon and a habitable area formed by a succession of sand dunes. Archaeological survey in the contact zone between the sand dune and the uplifted coral platform has revealed a large quantity of pits dug in the sand mainly for the cultivation of wet taro, *Colocasia* (Sand and Ouetcho 1993e). In the centre of the island, long, wet horticultural gardens hundreds of metres long have also been identified. In the south, holes more than 30 m wide and sometimes exceeding 2 metres deep were dug in the sand to reach fresh water. The total surface of the prehistoric wet field system far exceeds the 5.6 km² in current use (Latham and Merckey 1983: Tables 7, 10). The enormous amount of work needed to dig these structures, representing the movement of hundreds of cubic metres of sand, and the continual maintenance needed to keep them clean demonstrates again that complex techniques requiring a large workforce were in use in New Caledonia during prehistory.

On several plains on the east coast of the Grande Terre it seems that the intensification of subsistence has been pushed to its extreme limit. It is almost as if each parcel of land had been modified for a definite use. Although a complete listing and description of all these sites is out of place here, their analysis can be



Figure 3.7 Aerial photograph of various archaeological structures on the Tiwaka plain.

presented in more general terms, by taking the example of the lower Tiwaka valley (Touho Commune) (Sand and Ouetcho 1993a:47–9; Sand 1995:184–5) (Figure 3.1). The analysis of approximately 35 ha by aerial photography (Figure 3.7) has identified several different settlements, each composed of 10 to 20 habitation mounds. These areas are completely surrounded by over 250 horticultural mounds, some over 150 m long and 10 m wide. The combined length of these mounds is over 17 km. In most of the regions suitable for horticulture on the Grand Terre and where the sites have not been destroyed by erosion or modern activities, a similar situation can be observed. The landscape has been almost completely humanized to increase the intensification of horticulture.

Using the information from these studies one can mount a serious critique of the orthodox population model. To begin with the estimated figure of 14 persons per km² or roughly 7 ha per person of arable soil on the Grande Terre (Saussol 1981) is completely at odds with both ethnographic and archaeological data. It has been shown that even on poor soils a family requires only about 1 to 2 hectares including fallow land (Doumenge 1982). Second, how could such a low population density account for the presence of a system of intensive agriculture as noted in the case studies? Such a calculation would mean, for example, that all the horticultural mounds noted above, which are spread over 35 ha in the Tiwaka valley, would have been constructed for the use of five people!

Returning to the archaeological survey of the Commune of Païta and using a calculation of 1 year cultivation followed by 6 years fallow, 10 tonnes of taro per ha and 200 kg per person per year (discussed at length in Sand 1995: 220–4), we

would obtain a total population of more than 8,000 people, subsisting only on taro. The preliminary surveys conducted on Mont Dore (Sand *et al.* 1994), Dumbéa (Sand and Ouetcho 1993d), Boulouparis (Sand *et al.* 1996) and observations on La Foa, which are just in one area of the island, indicate the existence of taro terraces over around 4,000 ha. By using the same calculation method, we reach a general number of nearly 30,000 people, without even considering the contribution of dry land agriculture or marine products (Sand 1995:218–23). The most parsimonious explanation for the population estimate of 40,000 given previously for the entire Grande Terre is that by the time of the ethnographic accounts on which the estimate is based, the indigenous population had been seriously decimated by disease. There can be little doubt that before European contact, when the terraces, mounds, dams, etc. were in use, the population of New Caledonia was of an order of magnitude higher than that presented by the 'orthodox' population model.

SETTLEMENT PATTERNS AND SOCIAL ORGANIZATION

Having shown that the 'orthodox' population model for pre-European 'traditional' Kanak society is seriously in error, I turn now to a consideration of implications of the new archaeological data for understanding settlement pattern and social organization. Due to the symbolic importance of the dwelling site in Kanak society, much has been written on their social significance (e.g. Boulay 1990). Long lists of village names were published, but none of the actual places was mapped.

Our recent archaeological surveys have shown that in contrast to the ethnographic reconstruction, the spatial organization of villages differed among the various regions of the archipelago (Sand 1995:165–70, 241–6). For instance, archaeological survey in the region of Bopope in the central mountains of the Grande Terre in 1992 (Sand and Ouetcho 1993a) showed that there were habitation sites on every hill as well as in the valley bottoms or near the rivers. Analysis has also revealed a long history of settlement, starting before the middle of the first millennium BC with the first intrusion of populations in the upper valley and ending before the middle of the second millennium AD, with the last development of permanent habitation sites (Sand 1997b) (Figure 3.8).

To show how the presence of a large number of dwellings necessarily reflects a demographic evolution, a hypothetical model can be constructed. In the traditional social pattern the younger brother is supposed to leave his father's village to create a new one (Bensa and Rivierre 1982:90). Logically, after one century, 16 villages could be created, after two centuries about 250, and after three centuries more than 4,000 (Sand 1997b:63). Although there are problems with such a simplistic model, it shows that the numerous habitation sites recorded in the archaeological surveys need not be explained by a highly mobile population as reconstructed by ethnographers, since fairly rapidly all the empty



Figure 3.8 Map of the prehistoric village of Tipalet.

space would be taken up with new villages budding off from older, established ones. In less than two millennia the landscape would have been filled up with settlements.

This intensification of the landscape use and settlement to its limits can be illustrated with the example of the Bounou site (ETO046) (Sand and Ouetcho 1993a:37-45) which is dated at 560+/-80 BP (Beta-59965, CAMS-5353), calibrated to AD 1290 (1405) 1470. It is situated in the centre of the Grande Terre at the latitude of Poindimié, where the red unfertile peridotite soils of Kunten mountain begin to appear. The lower part of the site is constructed on a flat plateau of sedimentary soils, about 450 m long and 100 m wide. Most of the surface of this plateau is taken up with long raised fields for dry cultivation. The upper part of the site spreads up the steep peridotite hill. Although the red soil is a most unpleasant surface to live on and colours every object that comes into contact with it, house mounds were constructed on it by excavating into the hill. Such a choice would certainly not have been made if there were alternatives in the surrounding landscape. This example shows that when pushed by the need to use the majority of their land for cultivation, the inhabitants of Bounou chose to live on unpleasant soil. In Bounou, people sacrificed part of their quality of life for larger gardens.

ORAL HISTORY AND ARCHAEOLOGY

When we compared our archaeological survey of the Bopope region to maps of traditional sites registered at the end of the 1970s as a result of indigenous land claims (Roux 1990), there was a poor match (Sand 1995). We have mapped over thirty villages in the Bopope region, in an area where only four villages had been recorded during the general survey at the end of the 1970s (Sand 1995:169–70). Part of the problem with the maps of traditional sites was probably the reluctance on the part of Kanaks to reveal information to outsiders, but the discrepancy is still very large. Apparently, most of the sites mapped were not occupied after the middle of the nineteenth century, again highlighting a contrast with the densely occupied pre-European landscape.

This example can be repeated all over the Grande Terre, confirming that the maps of so-called pre-contact villages derived through oral history are incomplete. This is especially the case for the interesting general synthesis by J.C.Roux (1990) using the 1970s maps to reconstruct 'traditional', pre-contact Kanak land occupation (defined by him as before 1835, i.e. sixty years after first contact). The maps indicate the existence of approximately 2,700 villages, scattered in various densities over the Grande Terre. Comparing these to 56,980 ha of field systems, which were calculated through the observation of aerial photographs, Roux (1990:161, 166, 171) derived a population estimate of 100, 000, which is more than double the orthodox figure. Even this revised figure must be unreliable, however, because archaeological surveys have shown that the number and chronology of the settlement and horticultural structures have not been adequately accounted for (Sand 1995:241).

ARCHAEOLOGICAL MODEL FOR INDIGENOUS SOCIAL ORGANIZATION

The picture of indigenous social organization obtained from archaeological research must account for the evidence of an intensive horticultural system derived as a result of a high population density which had reached its carrying capacity. These data are incompatible with the 'traditional' model of Kanak society in which people are claimed to have moved their villages from one valley to another at relatively frequent intervals. Such high mobility is highly unlikely because the horticultural structures were fragile and required continuous maintenance and would not have been sustainable in a situation of constant conflict and warfare. Finally, the complexity of the agricultural systems and, in particular, the organization of the water supply and land allocation would have required a relatively complex social and political system. I believe that the type of political organization that can be reconstructed from this archaeological data is one based on relatively stable, sedentary groups organized into large political entities which were tied to specific geographical areas.

On the other hand, the evidence does not point to a hierarchical political system as in some Polynesian societies (Sahlins 1968). Oral history indicates that there was a central functioning of power in some regions, in the form of a central sacred position which embodied the social group and looked after the horticultural calendar, i.e. a 'chief', but that political power was held by the representatives of the oldest landowners. Although there is evidence of some centralization of power, it appears to have been organized differently from other areas of the Pacific. The relationships among political organization, population history, warfare, environment, and so on, clearly require further research. Certainly a great deal more work needs to be done to clarify the nature of the social system which only recently has been highlighted through archaeological research.

CHANGE AND STABILITY

This chapter has emphasized major differences between population, settlement, and social organization between pre-European society as portrayed by archaeological data and the post-European societies described by ethnographers. It appears that the societies described long after initial contact in the eighteenth century cannot be used as a model of pre-European society. Nevertheless, one must not think of this major event in Kanak history as simply the replacement of one culture by another. Many traditions remained. The purpose of the chapter has not been to criticize the reconstruction of the 'traditional' Kanak society that was functioning in the earlier part of this century, but to place the ethnographic descriptions within their proper chronological perspective and to argue that they do not represent the totality of Kanak history.

Despite the devastating effects of diseases, many traditions have persisted. A very interesting and important example of the interplay of stability and change in indigenous culture is a type of adze characteristic of New Caledonia, called *hache ostensoir* (Kasarhérou 1990). This object has been described mainly as a representation of power and it was exchanged between the Grande Terre and the Loyalty Islands in a formalized trading cycle linking related groups. The adzes were made out of nephrite, a type of stone mainly found in Ouen Island (south of the archipelago). Although not reported by James Cook in 1774, the artefact was noted nineteen years later by d'Entrecasteaux (Pisier 1976). During the nineteenth century it became an object of curiosity and was occasionally made from stones other than nephrite.

Until recently, some authors thought that the *hache ostensoir* and related trading system had been mainly developed within the context of trade with Europeans (Leenhardt 1937:95–6). The recent discovery of a small *hache ostensoir* in a dune site on Maré Island, in the Loyalty Islands, dated to AD 1, 000, now shows that the exchange cycle was more than 700 years older than the arrival of Captain Cook (Sand 1995:155–8).

In contrast, some forms of material culture were replaced as a consequence of European contact. An interesting example is the absence of pottery in the southern part of the archipelago. Since the middle of the twentieth century attempts to get oral traditions about pottery production have failed and consequently it was thought that pottery had disappeared in this region before European contact (Galipaud 1992:196). A more detailed analysis of European accounts from the 1850s has shown that ceramics were still made around Nouméa at the beginning of French colonization. Pottery was rapidly replaced by iron products and traditional memory about these items was lost (Sand 1995:150–5). It would be very interesting to know why pottery was so easily replaced in some regions and not in others. Nevertheless, the point is made that although Kanak society went through a major transformation as a result of European contact, it was not completely altered.

DEMOGRAPHY AND DISEASE

How realistic is it to assume that there was a large population in New Caledonia at the time of Cook's visit? I have already noted that dense populations are not unusual in other areas of the Pacific. It is also easy to show with a simple simulation how a relatively large population could arise after initial colonization. Demographers usually consider that the first centuries of settlement of a virgin archipelago are characterized by an unusually large increase of the population (Kirch 1984:96–122). For New Caledonia, I propose to take a low rate of 0.9 per cent annual increase for the first 300 years and then 0.5 per cent for the remainder. An arbitrary founding population of 100 persons would increase to around 1470 after three hundred years. Continuing for another 700 years, there would be about 55,000 persons at AD 0. Archaeological research indicates that, by this time, large parts of the interior of the Grande Terre still had very low population densities. By only the fifth century AD, however, the calculations reach 500,000 persons. This exercise merely shows that there is no theoretical reason to assume a low population for New Caledonia when Cook arrived in the eighteenth century AD. By assuming reasonable rates of increase, relatively high levels of population can be achieved in a fairly short period.

The next issue to consider is whether disease could have reduced the high population predicted by archaeology to the low figure observed in the 1850s. It is worth noting that Stannard's (1989) detailed study of Hawaii demonstrates that a wide range of diseases would have been carried by European seamen. There are numerous specific cases of the disastrous consequences of disease among Pacific Islanders. For instance in the east of Fiji, contact with the crew of the *Argo*, the first ship to be stranded in this archipelago in 1803, was followed by a massive outbreak of what was probably cholera, followed by an epidemic of dysentery brought in by the *El Plumier*. In these cases, contact with only ten or so sailors was enough to provoke a catastrophe known as *lila balavu* in Fijian traditions (Best 1984).

In the Marquesas Islands, the population declined by more than 95 per cent in a little more than one century (Rallu 1990). A re-evaluation of the population in Tahiti to 70,000 inhabitants at the time of the arrival of the Europeans (Rallu 1989:129–32; 1990) shows a demographic drop of 92 per cent between Cook's arrival and 1881. The decline in Hawaii (Stannard 1989; Bushnell 1993) and in Fiji (Hunt 1990) is in the order of nearly 90 per cent. In short, it therefore appears that at the end of the first century of contacts between islanders and European navigators, the ratio of depopulation was about 7–10 to 1, and sometimes more than 20 to 1 (Rallu 1990). The first decades are often the ones to be marked by the largest mortality. Once only 5–15 per cent of the population is left, the decline appears to tail off and stability is reached (Stannard 1989; Rallu 1990).

One of the major problems in the study of diseases in New Caledonia is to know when the demographic collapse of the Kanak population started. It may be significant that the Kanak traditions recorded by the Europeans do not mention the demographic drop before the 1840s (Kasarhérou 1992). The description of the population of Balade by d'Entrecasteaux compared to Cook's account of 1774 suggests that the visit of the British crew had left its marks. The presence of rickets in a large part of the population which had been described as healthy by Cook nineteen years earlier is striking. It seems likely that the inhabitants of Balade may have been seriously affected by diseases introduced then or perhaps by La Pérouse's visit (e.g. Dubois 1989). When we know that tuberculosis, for instance, existed in nearly half the British population at the end of the eighteenth century (Hildesheimer 1993:28), the transformation of the society at Balade before d'Entrecasteaux's arrival makes more sense than the theory proposed by some ethnographers (Guiart 1966) that the original population had been replaced. Physical anthropological studies of skeletons might help resolve this dispute.

As argued above, in many cases depopulation in the Pacific islands took place in the first half-century after first contact, then slowed down when about 5 to 15 per cent of the population remained. This pattern is exactly the opposite of that usually presented for New Caledonia during the second half of the nineteenth century (e.g. Metais 1953; Tidjine and Wedoye 1992:76) because the early decline in the eighteenth and early nineteenth centuries is not accounted for. Rallu (1990:277) remarks that 'the situation on the Grande Terre at the end of the nineteenth century is quite similar to the one of the Marquesas islands at the same period', but misses the point that, like the Marquesas population, decline had begun much earlier. By ignoring earlier depopulation, he derives a figure for New Caledonia which is many orders of magnitude smaller than for similar islands in the remainder of the Pacific region (Figure 3.9).

The contrast between real population decline and oral tradition known in New Caledonia is also known for Tonga (Spennemann 1989:265–6). It is also worth noting that in Samoa the densely occupied valley bottoms were abandoned after first contact but well before the first real colonization (Davidson 1969; Jennings *et al.* 1982). The scale of depopulation in New Caledonia was such that after



Figure 3.9 Comparison of population collapse in the Marquesas Islands and New Caledonia.

several generations, people could only say their numbers had been more numerous previously. In other words, the effects of the very early epidemics in the first half century after European contact were conflated with more recent population decline.

A reconsideration of the demography of the Kanak population of New Caledonia following European contact is clearly required. Unfortunately there are no reliable census figures to assist in this exercise (Shineberg 1983; Kasarhérou 1992). The data to quantify the extent of the Kanak depopulation before 1897 must therefore come from an archaeological survey of pre-European sites (Sand 1994), although it will be some time before a general inventory of the archaeological heritage of New Caledonia's archipelago is completed. Nevertheless, I propose that a general figure in excess of 100,000 persons is not an unrealistic estimate of the pre-European population for the New Caledonian archipelago. Even this estimate would mean that depopulation among the indigenous Kanak population was lower than elsewhere in the Pacific, but we are much hindered by the lack of historical data for the first 65 years after Cook's visit, when on theoretical grounds it can be expected that the highest mortality took place. It seems likely that the descriptions by the missionaries in the mid-nineteenth century only describe a situation that had begun much earlier.

CONCLUSIONS

The aim of this chapter was to present an alternative view of the demographic history of New Caledonia before and after the arrival of Europeans. On the basis of historical accounts from the middle of the nineteenth century, I argued that the image of a stable Kanak population of 50,000 to 80,000 persons between Cook's arrival in 1774 and the middle of the nineteenth century was inaccurate. I have also presented archaeological data which show that before European contact a dense population must have existed in order to occupy the abundant habitation sites and maintain the intensive system of horticulture inferred from the dense distribution of terraces, mounds, and water control systems. There is clear evidence for a drastic decline in population since these sites were utilized, but at this stage the data are not yet rich enough to enable us to derive a precise figure for the pre-contact indigenous population.

The difference between the large population size indicated by the archaeological data and the much reduced number provided by ethnographic data must reflect a radical change in the indigenous society between 1774 and the end of the nineteenth century. As in other parts of the Pacific, the introduction of diseases by Europeans must have caused a huge population decline even before France took over in 1853. This enormous loss of population led to the disappearance of numerous clans, the development of wars, the collapse of most of the political hierarchy, and, in an increasingly empty landscape, the beginning of the population movements (Sand 1995:248–53). It was in this historical context that information collected in the twentieth century by ethnographers led some authors to comment that 'nothing is known of the situation at first European contact' (Guiart 1992:83–4) or 'there is a New Caledonian prehistory still to be discovered' (Leenhardt 1930).

The traditional accounts may record situations and events that are hundreds, if not thousands of years old (like the founding of the first settlements) and others may relate to socio-political transformation resulting from events following the effects of initial European contact. If the population crash was as large as indicated by the archaeological data, then it is unlikely that the small remnant population was able to retain more than a small proportion of traditional history.

Even after more than a century and a half after they were abandoned, the old terraces of the big irrigated taro pondfields still stand out on the hillsides of the Grande Terre. Starting from the archaeological evidence that the New Caledonian landscape has been markedly transformed by three millennia of human history, it seems that there is still a great deal to be learned. Specialists in other fields (e.g. historians, anthropologists, demographers) should be challenged by the archaeological data to engage in a useful debate and perhaps to join in multidisciplinary projects to further our understanding of pre-European Kanak society.

With these results in hand, archaeologists are now faced with a major definitional problem which can be summarized in a question: exactly what should we consider to be 'traditional' Kanak society? We still have not found the answer, my Kanak colleagues and myself.

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Post-contact landscapes of change in Hauraki, New Zealand CAROLINE PHILLIPS

INTRODUCTION

What can archaeologists say about the initial period of contact between Europeans and indigenous peoples? To date, discussion has principally focused either on the adoption of exotic technology or on rapid population decline as indicators of culture change. But does the cultivation of potatoes really signal the end of traditional gardening, the use of a musket mean that all wars are fought along European lines, and does a lessening number of people result in the adoption of foreign lifestyles? If not, how does an archaeologist chart the cultural transformations; what material can produce useful information about the degree and type of changes; and more importantly, how are these to be interpreted?

Human interaction with the landscape embodies the social use of space, economic resource use and environmental constraints (Gosden and Head 1994: 113–16). In New Zealand the focus on landscape relates to regional studies which have long been a strength in the discipline of archaeology (cf. Barber 1996; Challis 1991; Irwin 1985; Leach and Leach 1979; Phillips 1994). This research extends the landscape approach by integrating multi-disciplinary studies to achieve a more sophisticated analysis of culture change.

As a case study this chapter looks at the early post-contact period of Maori settlement along the lower Waihou River, on the Hauraki Plains, in the North Island of New Zealand (Figure 4.1). The region is particularly rich in information concerning the early contact period, including Maori documents, European histories, settlement distribution and archaeological excavations. Also work has been undertaken in reconstructing the former landscapes (Phillips 1994). Investigation of these sources identifies a series of settlement, political, economic, technological and demographic transformations experienced by Maori society during the first half of the nineteenth century. This research first identifies two different phases of occupation and the changes between them. It then discusses some of the causes and processes using comparisons with other related studies to assist in this interpretation. It is then that the true impact of European



Figure 4.1 Ecological zones bordering the lower Waihou River, Hauraki (based on Phillips 1994:99, Figure 3.6). Inset shows location of study area and relevant place names in the North Island.

contact, the potatoes, muskets and influenza, can be seen against the fluid, complex nature of Maori society.

THE BACKGROUND

The Hauraki Plains comprise a 12 km wide and 30 km long down-faulted block, which is drained by two major rivers, the Waihou and the Piako (Suggate et al. 1978). The study area (some 25×5 km in extent) consists of the flat ground either side of the lower Waihou from its junction with the Ohinemuri River to its outlet in the Firth of Thames. Rising to the east of the Waihou are the steep Coromandel Ranges, from which fast-flowing streams feed the river (Figure 4.1). Towards the coast (below the junction of the Hikutaia Stream with the Waihou) the Hauraki Plains are subject to frequent shallow tidal floods, and therefore elevated ground suitable for occupation or cultivation is rare. This lowlying land was originally covered predominantly in kahikatea (Podocarpus dacrydioides, a 40 m tall pine) forest, interspersed by swamp and peat bogs (Fleet 1986). Since the mid-nineteenth century, increasing sedimentation associated with forest clearance along the river banks and on the foothills has altered the course of the river and caused coastal progradation (Phillips 1994:113-23). Therefore the maps in this chapter show the river course as it was in the late eighteenth and early nineteenth centuries.

Original settlers came to New Zealand from Polynesia approximately 800 years ago and, while the first Maori occupations were largely coastal, around 500 BP the settlement of inland areas began in earnest. One of these inland regions was along the banks of the lower Waihou River (Davidson 1984: 222–3). Discovery of unusually rich artefact assemblages from certain sites contrast with what was physically a very unfavourable location for settlement. In fact, the combined data show that a vibrant, rich society had emerged along the Waihou River, forming a central part of the Marutuahu territory. At the time of contact the Marutuahu confederation (made up of related tribes descended from the eponymous ancestor Marutuahu who lived during the seventeenth century), were one of the most powerful peoples in New Zealand (see also comments by Tuki-tahua to Lieutenant-Governor King cited in Salmond [1997:223]).

In 1769, Captain James Cook and his crew, on board the *Endeavour*, were the first Europeans to land on New Zealand shores (Beaglehole 1955). They briefly explored the first 18 km of the Waihou River and remarked on the tall straight trees found growing there. These comments attracted at least six timber merchants, who visited the Waihou between 1794 and 1820 (McNab 1914; Salmond 1997). In the early 1800s more northernly tribes acquired a significant number of muskets through trade with Europeans, with which they attacked Marutuahu settlements (Vennell 1976). The Waihou inhabitants fled south, returning in 1830 when they led very different lives than before. By that time flax traders were moving through the region, soon to be followed by the first

European settlers. In 1840 the Treaty of Waitangi was signed by Maori chiefs ceding governance to the British Crown.

LANDSCAPES OF CHANGE

The first half of the nineteenth century is well documented by both Maori and European accounts, as well as by archaeological investigations. From these it is evident that the inhabitants of the Waihou River experienced dramatic changes to their lives during this period in settlement types and numbers, political hierarchies, economic practices and trading partners, technologies, and population numbers, especially associated with new infectious diseases. Linked to, and sometimes effecting these was the increasing contact with Europeans. Two distinctly different phases of Maori occupation along the Waihou River can be distinguished, separated by one of almost complete abandonment.

The early contact phase, 1800–1822

In the first two decades of the nineteenth century three timber merchants called at the Waihou River. Two, the *Royal Admiral* in 1801 and the *Coromandel* in 1820, were accompanied by missionaries who left detailed accounts of their stay: a group of London Missionary Society missionaries on board the *Royal Admiral* and Rev. Samuel Marsden on the *Coromandel* (Anonymous missionary 1801; Elder 1932). These visits lasted between two and five months, during which time the European captains negotiated with local chiefs for the sale of the trees and the labour of Maori workmen, as well as for food and water, in exchange for a range of iron tools, trade beads and cloth (Roche 1990). The 'inhabitants of Hauraki adopted a confident, entrepreneurial approach' (Salmond 1997:252) to these European ships that had arrived in their territory.

Hauraki was a crossroads in pre-European as well as in post-contact times... The Hauraki people were used to engaging with outsiders and defending their resources... In these early contacts, Hauraki tribes were unabashed and assertive, Europeans who cut down trees without permission were confronted and made to change their behaviour. Those who treated local people with contempt...were tormented and sent away.

(Salmond 1997:280-1)

Although direct contact along the Waihou during this period was infrequent, it should be noted that Marutuahu also travelled north to the Bay of Islands where they encountered the permanent European mission and trading settlements, which had existed there from 1815.

In the beginning of the nineteenth century *pa* and *kainga* were the two main types of Maori settlement along the Waihou River. *Pa* were palisaded ditch and bank fortifications constructed for defence, to secure food stores and as markers

of land ownership. These were built by resident members of one or more hapu (sub-tribes). Larger pa were also ceremonial centres reflecting the status of chiefs and occupied by several hapu, including some from different tribes. Kainga were undefended settlements comprised of one or more houses with associated storage and cooking facilities, and occupied by a family or small group of people who were usually employed in gardening. A major concentration of settlements of both pa and kainga existed near the mouth of the Waihou River, while there was sparse occupation elsewhere (Anonymous missionary 1801). Notably, these settlements were nearly all constructed on 0.2–2.0 m thick foundations of sub-fossil shell, transported from natural shell banks, effectively raising the living surface above the flood waters. The settlement concentration probably reflected a desire to be near the pa of the ariki (paramount chief) who at this time lived at Oruarangi, some 6 km from the river mouth (Figure 4.2). In the 1820s another ariki resided at Raupa pa, located 30 km further upstream and the excavations of some outlying settlements suggest that it too might have been the focus for a similar concentration of settlements (Elder 1932:256; Phillips 1994:405–17). These two pa proved to be very substantial imposing monuments, having been recently enlarged by the addition of vast amounts of sub-fossil shell, redeposited midden and clay to elevate the interior above the surrounding flat land, and by the erection of palisades 40-50 cm in diameter and possibly 3-5 m high enclosing a defended area 20,000 m² in extent.¹ Pa associated with secondary chiefs which existed at the same time were approximately half that size.

Maori chiefs were partly chosen by heredity and partly by their own abilities, especially in warfare. Ariki were spiritual as well as political leaders, revered by more than one hapu, and were therefore able to attract large numbers of people (Allen 1996:670). They provided a stabilizing influence internally and a focus for warfare externally. On several occasions the most important people, such as principal chiefs or ariki and secondary chiefs, were mentioned by the European observers, demonstrating that a hierarchy of chiefs was present along the Waihou at this time. In 1801 the LMS missionaries remarked: 'It seems the greatest chief in these parts is Taurange and probably he is also an high priest. He is an aged man of sober and mild aspect' (Anonymous missionary 1801:28). Thus, 'Taurange' was the name of the ariki who resided at Oruarangi, while Te Haupa was the chief of the pa second in importance at Kakaramea. Nineteen years later, Marsden commented that the two secondary chiefs were Te Horeta at Kopu pa and Te Puhi at Te Totara pa, while the ariki resided at Raupa, who he described as 'an old man, apparently not far from seventy years of age, well made and of great muscular strength. His mother was still alive with three generations by her' (Elder 1932: 255).

External threats from other tribes increased in importance as Marutuahu strove not only to maintain their political control in Hauraki but tried to extend it even further afield, fighting with other tribes to the north-west, south and south-east (respectively Ngati Paoa in Tamaki/Auckland, Ngati Haua in Waikato and



Figure 4.2 Location of settlements along the lower Waihou River occupied between 1769 and 1820 (from Phillips 1994:458, Figure 8.4). Inset shows place names and the extent of Marutuahu territory claimed in 1871.

Source: McKay (1871).

Ngaiterangi in the Bay of Plenty). In 1801 the LMS missionaries obviously arrived in a time of conflict between the Hauraki and Waikato peoples (Anonymous missionary 1801:20, 23–5). Over three weeks during May and June thousands of warriors from the surrounding region gathered at Oruarangi, after which the combined force from Oruarangi and other eastern Coromandel *pa* went over to the western shore (possibly Whakatiwai) (Figure 4.2 inset). However, the *Royal Admiral* left before the result of all these preparations could be witnessed.

One of the major processes Marutuahu employed to retain the territory they had won in battle was the system of *ahi kaa:* maintaining rights to occupy and use land by resettling it at regular intervals (Phillips 1994:487–8). As land ownership and use were inherited by ambilineal descent, individuals obtained rights to occupy a number of different areas associated with various ancestors. Some individuals recorded in the Maori Land Court claimed up to twelve different land blocks along the Waihou (and more elsewhere in the Marutuahu territory), through three to four ancestors from several different *hapu* and two or more tribes (ibid.: 219–24). This resulted in a very flexible settlement system in which people could utilize a range of natural resources and ally themselves with different political groups, in several districts throughout the Marutuahu region. Reoccupation was necessary not only for political and social reasons but also for economic purposes (due to soil exhaustion gardening settlements lasted often no more than two to three years).

The local economy was largely based on the natural foods of fruits and birds from the forests, eels from the swamps and streams, and fish from the Firth of Thames (Phillips 1994:191-201). Cultivation of kumara (Ipomoea batatas), taro (Colocasia esculenta) and gourd (Lagenaria siceraria) although marginal on the flatland, occurred on some of the slightly more elevated areas along the river bank, as well as on the foothills of the Coromandel Ranges. Introduced potatoes, corn and other crops were readily taken up after the 1790s by Marutuahu, possibly because they could be more easily grown on the rather heavy, wet soils than traditional crops. Also important were the fibre resources, especially flax (Phormium tenax) used for clothing and cordage. It may be that concentration of production on eels and flax, less prolific elsewhere, was the reason for the energy put into settlement along the Waihou. Foodstuffs (fish, shark and eels) and certain artefacts (such as fishhooks and other bone items, flax garments and wooden articles) may have been traded with other groups. In contrast, adzes seem to have been imported ready-made, and other stone such as obsidian and greenstone also came from outside the region.

Maori technology was based on the working of stone (mainly greywacke for adzes and obsidian for cutting flakes), bone (especially dog), wood and fibre (especially flax). At this time Marutuahu were very wealthy, especially those who lived at Oruarangi and other fortifications near the mouth of the Waihou. Collections of artefacts from these sites reveal an extensive range of implements for catching fish and birds and processing fernroot, tools for manufacturing

wooden and fibre articles, as well as personal ornaments, tattooing and musical instruments, weapons and red ochre (Green and Green 1963; Furey 1996). The range and number of these artefacts, amounting to some 3,000 individual items from Oruarangi alone, are in stark contrast to excavated pa elsewhere from which only a few articles are usually recovered, especially in the realm of prestige goods (Phillips 1994:67; Furey 1996:187). It seems that these status items emphasized the importance of the ariki. As Furey (1996:183) comments, 'There is no doubt that the people of Hauraki were experts in decorative arts. This is seen in their bone and stone working, and ability to carve wood and make fine textured and high quality textiles.' Certainly flax garments were highly valued in 1814 when Rev. Samuel Marsden and John Nicholas visited the region and tried to trade axes for them. Nicholas (1817:403) remarked that 'the common mats [cloaks] they parted with readily enough; but the dress ones were not to be bought, unless by articles that they considered of adequate intrinsic value'. Although European articles had been traded since first contact, they only became visible in archaeological sites around 1810, with items such as trade beads, clay pipes, as well as pendants made from drilled pig's tusks and pottery fragments.

Estimates of the size of the resident population along the Waihou River must obviously be a generalization. As the description of the preparations for war related above show, at some times very large numbers gathered together, while at other times they might be dispersed when people were gardening and fishing. However, based upon European observations and the number and size of *pa* sites occupied at this time, it is calculated that there may have been approximately 2, 000 people commonly living in the area (Figure 4.3; Phillips 1994:323–4).

Less favourable introductions also occurred at this time. Visiting Europeans unwittingly brought various diseases to which Maori had little resistance. In their summary of observations the LMS missionaries referred to the health of the people they met.

we never saw more but two or three instances of any sickness or disease among these natives, but of late we have some reason to suppose that, that destructive disease the venereal is among them, communicated no doubt by some European.

(Anonymous missionary 1801:28-9)

However, other more deadly episodes of infectious disease were also reported (Pool 1991:45; Phillips 1994:218, 325). One poignant description of two epidemics which affected residents at Te Komata prior to 1820 was recorded in the Maori Land Court by Wikiriwhi Hautonga. In the second 'Tohi [Hautonga's grandfather] also died and many others of my ancestors. They who died of the disease were not buried, the house in which they died was closed up and the body left' (Hautonga and Tinipoaka 1870:318–19). This may also be the episode which was connected to one of Marsden's visits to the region (1815 or 1820), as Dumont D'Urville was told by two men in 1827 that:



Figure 4.3 Graph showing the population estimates for total, Marutuahu and lower Waihou Maori (based on Phillips 1994:323, Figure 6.14), compared to total and Auckland European.

Source: Hardie (1954), House of Representatives (1881).

their real father was Houpa [Te Haupa]...who had succumbed, however, with many of his warriors in a terrible epidemic that they attributed to the anger of the God of the English. According to their superstitious ideas, Mr Marsden's appearance among them and the intercession of this *tohunga* or powerful prophet, had brought this terrible scourge upon them.

(Wright 1950:158)

The hiatus, 1822–1830

By the 1820s Ngapuhi (the major tribe of the Bay of Islands) had acquired sufficient muskets, through trade with Europeans, to feel confident about conducting a campaign on other tribes further south in retaliation for previous raids. The acquisition of these new weapons reverberated throughout New Zealand (Urlich 1969). Large numbers of people migrated away from the

Ngapuhi threat resulting in a series of conflicts and movements throughout the North Island, even spreading into the South Island. An estimated 30,000, possibly one-third of all Maori, shifted residence and some never returned (Urlich 1969: Appendix III). In 1821, and again in 1822, Ngapuhi attacked the Waihou River inhabitants and at Te Totara *pa*, near the mouth of the river, there was a significant loss of life (Vennell 1976:20–4). Consequently, the Hauraki people fled, principally south to the Waikato (Figure 4.2 inset), where Marutuahu resided in peace with their sometime enemies for mutual protection. However, in 1824 peace was made with Ngapuhi.

Before long the country was commanded by not less than twenty Marutuahu fortifications; every village had its stockaded and rifle-pitted pa, and the fierce and encroaching Marutuahu commenced a series of aggressions on the Waikato people, plundering their villages, driving them from their cultivated lands, and doing everything possible to provoke war, in which the Marutuahu hoped, no doubt, to oust the Waikato tribes from their large and fertile country.

(Fenton 1879:111)

These events culminated in the battle of Taumatawiwi in 1830, after which the Waihou people returned to their former lands.

The later contact phase, 1830–1850

When they returned to the Waihou, the Hauraki people found flax traders already resident at Kopu (Vennell 1976:25). Traders travelled throughout the district obtaining dressed flax, pork and potatoes and taking them to Kauaeranga, the Waikato River mouth, Tauranga and Kawhia where trading vessels called in (Figure 4.1 inset). Trader-settlers such as Webster and Nicholas (both of whom lived outside the Waihou but traded extensively through it), married the daughter of the chief on whose land they were residing. Webster married Te Horeta's daughter and Nicholas later married Ngahuia, daughter of Te Whiri at Hikutaia (Scholefield 1990; Phillips 1994:377; Tahawera and Te Kakahi 1867). In 1833 a CMS mission station was set up along the Puriri Stream, served by two communicants and their families, but after four years it was shifted to be closer to Kauaeranga pa, where most Maori had moved to (Figure 4.4). The missionaries' aim, as expressed by Marsden, was to introduce iron tools so that 'as their comforts increase so will their wants stimulate their industry and lay a solid foundation not only for their civilization and mental improvement in the civil arts but also for the introduction of Christianity' (Elder 1932:130).

The missionaries also took part in peace negotiations, set up churches and schools, as well as visited and treated the sick (Phillips 1994:254–8, 290). In 1840 Preece (ms) claimed that 2,000 Maori or 55 per cent of the total population in his district (west coast Coromandel and Waihou River) were literate. Between


Figure 4.4 Location of settlements along the lower Waihou River occupied between 1830 and 1850 (from Phillips 1994:458, Figure 8.4).

1831 and 1850 Marutuahu sold land at Kopu, Hikutaia and Opukeko (amounting to 11 per cent of the lower Waihou River flats), to a few European farmers and timber millers in exchange for muskets, gunpowder and other goods. The establishment of New Zealand as a British colony in 1840, with the associated rule of British law and the colonization programme resulted in resident magistrates, such as Shortland who travelled along the Waihou, adjudicating in disputes between Maori and European (Shortland ms). In the 1840s the European population throughout New Zealand grew rapidly, especially in Auckland (only 40 km by sea from the mouth of the Waihou) which reached 8,000 by the end of the decade² (Figure 4.3).

When Marutuahu returned from the Waikato, some never lived again on their land, although the elders pointed out the boundaries to their younger relatives as they passed by in their canoes. Of the land blocks later claimed in the Maori Land Court some 20 per cent containing detailed records of occupation before 1822 were not resettled afterwards, although in many cases the resources such as fruit, flax, timber and eels continued to be utilised³ (Phillips 1994:551-9). In a few instances the reason was that the land was declared tapu (sacred) due to the number of deaths from battles. Pa were now defended in accordance with the new styles developed for musket warfare, however, they were smaller and fewer than before (Figure 4.5). Te Kari, second in importance in the early 1830s, measured only 5,200 m² and others were even smaller, such as Kopu occupied in c. 1830-40 which was 2,100 m², while Opita occupied in 1842-46 was only 1, 500 m² (Phillips 1996; 1994: 409). Kauaeranga, two kilometres north of the Waihou River mouth, was the principal pa, and in the 1840s was joined by the people from Te Kari, after which it became the centre for settlement. Rev. James Preece stated that Kauaeranga was 'the largest native village in New Zealand, and contains about five hundred individuals' (cited in Jameson 1842:298). Eventually, Kauaeranga too was abandoned as a fortification and by 1849 there was no pa there (Cooper 1851:8). Kainga were also fewer and more scattered along the river. Some houses constructed in the 1840s, such as those excavated at Opita and Puriri, were built with squared rather than round or slabbed timbers and to a different ground plan without internal hearths and porches, thereby breaking the traditional pattern which had been established for many centuries (Prickett 1982).

On their return from Waikato, Marutuahu sought to reclaim their former territory and even extend their boundaries further to the south and east. The practice of *ahi kaa* continued, with the Waihou residents taking advantage of different gardening lands throughout the Marutuahu territory, which extended over some 150 by 80 km (Figure 4.2 inset). In 1833 Te Horeta was chief of Kauaeranga and Potiki chief at Te Kari. Seven years later, George Clarke, Protector of Aborigines, visited the Hauraki and Waikato districts with a view to purchasing land for European settlement. He was escorted down the Waihou by 'the principal chief Hou' and met 'a powerful chief, whose name is Taraia' at what was probably Ngahinapouri (Clarke 1970 [3]:443). Taraia was a fighting



Figure 4.5 'Opita on the Thames [Waihou River], New Zealand.' Sketch of Opita *pa* built in 1842 where peace was made in 1846. Showing low palisade with internal ditch (not visible), which are typical gunfighter defences, also external raised store houses, sleeping houses and European pig trader's house (by Merrett 1848). Reproduced with permission from the National Library of New Zealand.

chief, who did not sign the Treaty of Waitangi and continued to resolve disputes traditionally. In the 1840s Ngaiterangi began fortifying several *pa* in the Bay of Plenty, due to feelings of unease by the continued presence of Marutuahu (their former enemies) who had fled there after the Ngapuhi raids. Minor battles ensued, culminating in Taraia's attack in 1842 on Ongare *pa* at which many of Ngaiterangi were killed and the chief Te Whanake was eaten (Stokes 1980:43). Taraia's response to government officials who reprimanded him was as follows: 'What relation is the Governor to Whanake that

Table 4.1 Changing value of firearms in the Bay of Islands, associated with the number of guns per warrior

Date	Exchange value	Guns/warrior
1812	150 baskets potatoes AND 8 pigs	
1820	200 baskets potatoes OR 15 pigs	1:2
1827	120 basket potatoes OR 10 pigs	1:1

Date	Exchange value	Guns/warrior
1835	896 lbs flax	
Source:	Ulrich 1969:52	

he should love him so much? I have no objection to pay his people provided they pay me for all my relations whom they have killed' (Gifford and Williams cited in Stokes 1980:43). Peace was eventually established between Marutuahu and both Ngati Haua and Ngaiterangi in 1846.

After the Ngapuhi attack a new factor was introduced into the Maori economy, as one of the main aims of every tribe was to obtain muskets in order to defend themselves. Vast quantities of dressed flax, timber, potatoes and pigs were taken to European trading vessels and exchanged for the new weapons (Table 4.1). During their time in Waikato Marutuahu had been engaged in this trade and amazingly, by 1832 most northern tribes (including Hauraki Maori) had sufficient guns to create a balance of firepower (Urlich 1969:56–81). Consequently, when the Hauraki people returned they encouraged European traders and missionaries to settle 'and then they would be able to obtain blankets hoes adzes axes etc.' (Fairburn ms).

During this phase, the forest and wetland resources continued to be used as before and crops were still being cultivated along the river bank although some food procurement methods may have altered. In places gardening become more sedentary so that by the 1860s production 'on the Kauaeranga flats was hampered by soil exhaustion due to 20 years of continuous harvests' (Monin 1995:204). The presence of Auckland further stimulated economic innovation and during the mid-1840s the majority of Maori in easy reach of Auckland, including those along the Waihou, were engaged in the cultivation of crops in order to feed the large European population. Shortland (ms) estimated that 1,600 acres of potatoes, 500 of maize and 300 of kumara were being cultivated in 1843 at Kauaeranga and along the banks of the Waihou River.⁴ This was a period in which Hauraki Maori engaged in a 'vigorous commercial production' (Monin 1995:197). Marutuahu also purchased many costly European goods such as flour mills and schooners which they used, together with their traditional canoes, to take produce to market. 'These high-profile assets...were as unsuccessful as long-term investments as they were successful as immediate symbols of hapu wealth and mana' (ibid. 1995:201).

Excavation at post-contact sites shows an increasing use of European artefacts over time (Phillips 1994:315). By 1840 the changes in material culture had become more significant, with nails, pottery and writing slates appearing in

Occupation layers										
	IV	1880	III	1840	II	1750	Ι	1690		
	MN	frags	MN	frags	MN	frags	MN	frags		
INTRODU CED										
Fauna										
pig	2	13	5	140						
sheep			1	2						
cattle	1	8								
Total	3	21	6	142						
Flora										
peach stones	6	6								
Total	6	6								
Artefacts										
metal nails	22	22	18	18						
metal misc.	18	47	1	4						
clay pipes	5	26	7	55						
pottery	11	62	3	6						
glass bottles	4	6								
glass beads etc.	6	6	3	8						
slates			2	6						
ballast			1	12						
bricks	3	3								
Total	69	172	35	109						
INDIGEN OUS										
Fauna										
dog			2	19	1	14				
rat			1	2						
bird	1	6	2	24	1	2				
fish			5	58	3	48				
shellfish			1343	2496	2408	4732				
Total	1	6	1353	2599	2413	4796				
Flora										
forest trees			10	27	3	16				
kauri gum	1	10								
shrubs etc.	6	26	1	6						

Table 4.2 Changing proportions of introduced and indigenous finds found in four phases of occupation at the undefended settlement of Opita

Occupation layers											
	IV	1880	III	1840	II	1750	Ι	1690			
	MN	frags	MN	frags	MN	frags	MN	frags			
manuka	1	32	1	39	1	4					
Total	1	32	18	102	5	26					
Artefacts											
obsidian			3	11	4	35	4	40			
chert							?	5			
greenstone	1	1									
adze	1	1									
Total			3	11	4	35	6	47			

Note: frags represent total number of fragments, sherds and flakes, MN is minimum number.

Note that shells are from samples only, the indigenous flora is from charcoal and wood samples.

Source: From Phillips 1994:415, Fig. 7.32.

the archaeological record, while only some obsidian was still in use (Table 4.2). Significantly, the richness and variety evident in the principal settlements of the early nineteenth century seem to have disappeared by this time. At present no excavations have been undertaken at the principal site of Kauaeranga pa (occupied in the 1830s–1850s), which might assist in determining changes in the type, range and number of high status artefacts. Unfortunately, the excavations at undefended settlements from both pre- and post-contact times reveal few artefacts for comparison (Phillips 1994:427–32).

In the mid-1830s there were probably less than half the number of people who had lived along the lower Waihou River in 1800: a drop to approximately 1,000 (ibid.: 324–5). This decline continued, until by 1850 there were possibly only a quarter the number of those who had been living there fifty years previously (Figure 4.3). One reason for the decline was the movement away from inland areas to the coastal trading settlements 'for where shipping can come there will the natives be' (Fairburn ms). In 1840 Dr Jameson stayed at Webster's Waiheke Island establishment (Figure 4.2 inset) for several weeks, where he found two ships taking on timber bound for Sydney, and one loading firewood for Valparaiso.

In loading these ships, upwards of a hundred natives, chiefly of the Ngatimatera [Ngati Tamatera] tribe, were employed by Mr Webster, at an expense in blankets, printed goods, and tobacco, I was given to understand of 1*s*. 6*d*. per day for each man.

(Jameson 1842:288–9)

Webster's main settlement at Waiau was, as Jameson (ibid.: 293) suggested, one of the principal establishments in New Zealand.

The other main reason for the population decline was the prevalence of infectious disease. Preece remarked in his annual report for the year ended March 31, 1839 that their work had been 'considerably interrupted by influenza in April and May 1838, which epidemics attacked the natives again in January and February' (CMS ms). It is probable that epidemics became more common as the town of Auckland was set up, with its regular trade to Australia. Frequent episodes of influenza in areas in contact with ships have been recorded, as well as nationwide epidemics of influenza in the early 1840s and 1850s, possibly whooping cough in 1846 and mumps in 1850, and various respiratory disorders (Pool 1991:81–7). However:

in contrast with other parts of Polynesia, it is worth stressing that there is no record of any of the great apocalyptic diseases—yellow fever, bubonic plague, cholera, malaria, typhus, and, most particularly, smallpox—striking New Zealand...

(Pool 1991:46)

DISCUSSION

Dramatic transformations in the lives of the inhabitants of the lower Waihou River over the first half of the nineteenth century have been outlined, involving mass migration, changed settlement size and distribution, reduction of political hierarchies, new elements in economy and technology, and population decline. On the surface the biggest, and apparently most disruptive event, caused indirectly by European introductions, was the migration of the majority of the inhabitants from Hauraki to Waikato. Interestingly, in pre-contact times, a similar event had occurred in Tamaki (Auckland) around the mid-1700s, where a large population was united under the *ariki* Kiwi Tamaki (Sullivan n.d: 66–9, Appendix 5). A series of raids conducted against other tribes to the north eventually resulted in the defeat of Kiwi Tamaki's people who fled to the south, and some of the victors annexed part of the region. That event and other later ones in the Auckland area demonstrated that processes of abandonment of a home territory, temporary residence with another group, followed by a return, and subsequent reciprocity to their hosts were well worked out (ibid.: 100–5).

People fleeing from a territory did not move haphazardly, nor make random choices of refuge zones. Selection of a refuge appears to have been determined by a range of socio-economic considerations... Displaced people normally made for occupied regions where they lived by

arrangement, sharing with recognised occupiers the resources of the territory.

(ibid.: 100)

Therefore, the move inland was probably a normal cycle of pre-contact Maori economic and political life. The only difference in the Hauraki case was that Ngapuhi owned the newly introduced and much feared muskets. Extreme mobility of groups and flexibility of alliances were a noted aspect of Maori society. As Allen has stated:

the mosaic of groups scattered across the landscape not only provided access to different resource zones and thereby allowed the intensification of production but also intensified social life through exchanges between residents, visitors, landowners, guests, and commoners and chiefs.

(Allen 1996:670)

Along the Waihou River after the return from Waikato, settlements were different in their number, type and form, with *pa* being initially smaller (probably half the size they were previously, although the dimensions of Kauaeranga pa are unknown at present), and refortified along the new gunfighter lines, until by the mid-1840s fortifications were no longer being built in the region at all. Presumably the size related to the number of defenders present, e.g. Opita with 50 people measured only 1,500 m² and Te Kari at 5,200 m² contained between 100 and 200 people (Phillips 1994:301, 324). In this later phase internal organization within the pa may also have been different, but unfortunately there are no data yet available. Some ordinary houses were constructed along new lines but Te Pai o Hauraki meeting house, built at Waiau in the late 1830s and still used to this day at Paeroa, was carved with metal tools but contains no nails or bolts, being jointed and bound with fibre. The focus of settlement also changed, from the large pa of the ariki with outlying smaller fortifications and kainga located along the river, to that of Kauaeranga which was closer to shipping. Consequently, the Waihou became a relative backwater mainly used for gardening, eeling and timber milling.

Although Te Horeta, Potiki, Hou and Taraia were named as major chiefs in the 1830s and 1840s, the hierarchy of chiefs with *ariki* at the apex no longer seemed to be present. This was despite the fact that *ariki* had lived in Hauraki and Tamaki in pre-contact times, and existed elsewhere after contact, including Hongi Hika of Ngapuhi, who had seen the advantage of muskets, and was a war leader from 1807 until his death in 1828 and Te Wherowhero of Waikato, powerful from *c*. 1820 until his death in 1860, and installed as the first Maori King in 1858 (Scholefield 1990:201–2, 526–8). Certainly, Taraia sought to maintain the power relations of previous times in fighting his people's traditional enemies. However, at this time peace was being encouraged from all sides. It should be noted that peacemaking was not the preserve of the missionaries and government agencies,

but was well known in the region in the pre-contact era (Phillips 1994:182, 401– 2). Implications for other aspects of Maori life, as the over-riding political power of the chiefs waned, have not been fully studied. However, despite the apparent lessening of inter-tribal conflict and existence of permanent towns, such as Kauaeranga, *ahi kaa* was still very important in maintaining tribal lands for economic, as well as political and social purposes. Consequently, individuals were still extremely mobile, frequently moving from place to place.

On the surface, economic relations were very different after the Ngapuhi raid. In the Bay of Islands new crops formed the basis for an expansion in production after 1815, especially as it was 'the great quantity of potatoes and pigs required by Europeans for each musket [which] made it imperative for Maoris who were ambitious to acquire quantities of firearms to expand their food production to a maximum' (Shawcross 1966:270). Similar developments may not have occurred until the 1830s and 1840s in Hauraki. The evidence seems to indicate that when Marutuahu returned to the Waihou they quickly began gardening, as well as collecting natural foods (which must have had a chance to recover during their absence). It has also been suggested that potatoes and pigs enabled cultivation, and hence occupation, of areas not previously possible, as well as improving the diet with a greater protein content (Louise Furey pers. comm. 1995; Sutton 1986: 321-4). Certainly findings from excavations at Waiwhau (near Opita pa) indicate that the clay soils could only have been cultivated after the advent of the potato (Phillips and Green 1991: 165). The single exception is the settlement of Opita which Cooper described in December 1849 as being:

a wretched place, containing about a dozen miserable raupo houses all tumbling to pieces. We found the natives in a very poor condition, not a living animal had they, save four geese, a hen with a brood of young chickens, and a few skeleton-looking dogs; they had neither potatoes nor kumeras, but were living on fern foot and a few eels which they catch now and then.

(Cooper 1851:18)

Interestingly the pa had been visited shortly after it had been built in October 1842 by Shortland who observed several gardens being planted. It may be therefore that some isolated event had caused the scene observed in 1849.

Clearly, Maori eagerly sought European goods, not only those with obvious economic benefits (such as iron, cloth and muskets) but also those which had acquired a high status. In fact, they 'engaged in the European order, selectively and adaptively, to serve Maori purposes' (Monin 1995:197). A consequence of the development of new trade relationships, both in cultivating and harvesting for sale and the replacement of traditional materials by European goods, must have been a contraction of the former trade and exchange networks, and possibly a focus on a narrower range of goods. Further work is necessary at settlements of this date to delineate more clearly what the implications might have been.

Studies of technology in post-contact research are dominated by the introduction of new materials. Clearly, metal, glass, pottery and other objects are found in increasing quantity and range in the Waihou settlements over the first half of the nineteenth century.⁵ The main introduced items were metal tools replacing stone, and blankets and clothing replacing flax garments (thereby releasing flax as a resource for trade). Comparisons with later settlements suggest that cooking utensils and building materials remained traditional at this time and that tableware, metal tools, nails, etc., very common in sites dating to the 1870s and 1880s, were rare or non-existent in the 1840s (Table 4.2; Bedford 1996). This was despite modifications to their diet, and the altered shape of some dwellings. The number and range of prestige artefacts also seem to have declined, although larger European goods, such as schooners and flour mills were regarded as high status items, but the extent to which these replaced traditional items has not been examined in detail.

At this point it is necessary to address in more detail the contentious issue of post-contact population decline. Calculations of the Maori population at contact have ranged from 70,000 to 175,000, or even higher (Pool 1991:43; Sutton 1995). Estimates from Hawaii and French Polynesia suggested that over the first hundred years after contact only between one-seventh and one-twentieth of the pre-contact population remained (Stannard 1991:534; Rallu quoted in Pool 1991: 57). The high loss of population argued for Polynesia, as well as the Americas, depends on the existence of early unrecorded episodes which swept through the indigenous peoples, reducing them by 50 per cent before early European settlement (Sutton 1995; Ramenofsky 1991:431-4). Ramenofsky (1990:41-3) has suggested that a population's settlement form, type and location have a direct bearing on its vulnerability to introduced disease. Certainly, Maori with their relatively dispersed and mobile settlements would have been less susceptible than other nucleated and sedentary groups. Other factors were the sporadic and very localized nature of European contact and the great distance from infective centres. Therefore 'the "six months in a leaky boat" of the popular [Split Enz] song of the 1980s, gave Maori a modest advantage; sickly crew or passengers often would have died before their ship reached New Zealand' (Pool 1991:46). Notably the most devastating European diseases did not reach New Zealand, whereas they did affect other parts of Polynesia and the Americas. Thus the more likely figures for Maori decline in New Zealand are much lower, representing a drop to between one-half and one-quarter over the first hundred years of contact.

Among the Waihou people a slight drop may have occurred prior to 1820, with a greater decline subsequently, the primary cause of which was probably infectious diseases (Figure 4.3). However, it is estimated that the relative proportion of Marutuahu dropped from 7 to 4 per cent of the total Maori population over this time, against the northern tribes (experiencing the greatest contact with Europeans) who increased from 14 to 18 per cent, while the Waikato tribes doubled in proportion to the total (Urlich 1969, Appendix II). This may indicate that many of the Hauraki people did not return with the others

after 1830, but remained in their new homes. Movement to ports within Marutuahu territory, such as Kauaeranga, Waiau and Waiheke, was also a contributory factor in the drop of the Waihou population.

CONCLUSION

Significant transformations in the lives of the Waihou inhabitants have been identified during the first half of the nineteenth century, specifically a move to a scattered settlement pattern, smaller sites, loss of *ariki*, new trading partners, new tools but fewer prestige items, and population decline. The problem is to determine which of these related to indigenous actions, European intrusion or a combination of events.

Generally post-contact changes in Maori culture have been attributed to the influence of European settlement. Typically, the concept of a 'fatal impact' has been employed by archaeologists, historians and anthropologists, whereby the presence of European ideas, technology and religion immediately transformed indigenous societies (Bedford 1996). Much of the debate in New Zealand archaeology has concerned changes in demography and modes of warfare. However, the effects of both are problematic. Certainly there was a steep drop in Maori population between 1800 and 1850. Along the Waihou this was compounded by a migration to other areas, and this is shown by the proportionally higher loss. However, temporary abandonment and later reoccupation of lands were a known occurrence in pre-contact times, as was the 'process of periodic fission and fusion' between groups (Davidson 1984: 169). Therefore, the effect was probably much less disruptive than it would have been in a sedentary population.

Contact with Europeans certainly affected patterns of trade and exchange, resulting in the introduction of new tools, as well as causing population movement due to the new trading requirements. The degree to which they influenced other aspects of the Waihou inhabitants' lives is, however, debatable. Despite the European presence, the Waihou was still a Marutuahu landscape, owned and used by them, and it may well be that many of the events which occurred after 1820 would have happened in any case. Certainly all the protagonists in the political arena were Maori, as were reasons for the events, and Maori were selective in their adoption of European goods and behaviour. The most significant differences along the Waihou River after 1830 were the lack of a settlement concentration, large numbers of people, monumental sites and numbers of prestige goods, all of which were attracted by the presence of an ariki, or the higher level of political complexity. This hierarchy of chieftainship did not seem to exist previously along the Waihou or in the nearby Kauaeranga, which resulted in the lessening in importance of the Marutuahu confederation. War, population decline and proximity to Auckland were associated with the changes, but were not the ultimate cause in the loss of the ariki level of political organization. It may be that this larger polity was a relatively new development

attempted by several tribes throughout the eighteenth and nineteenth centuries (Sullivan n.d.; Phillips 1994:477–90; Sissons *et al.* 1987:147–50), however, as it was not firmly entrenched in the existing socio-political organizational structures, it may have been inherently unstable.

To go beyond the study of trade goods and diseases, and arrive at a detailed analysis of this period of interaction between these two very different cultures, it is necessary to employ a multi-disciplinary approach. In this instance three main sources of evidence were studied. The first was based on Maori oral histories reported in the Maori Land Court Records, many of which included information about economic and social activities, the location and type of settlements, as well as movements of individuals, *hapu* and tribes (Phillips 1994: 177–228). Criticism surrounding the use of this material focuses on the context in which the histories were recounted and the 100-year time gap between first contact and the time of the hearings. In contrast, it should be noted that the mass of material presented included much incidental information and many details are consistent with archaeological findings (e.g. site location, type and date). Moreover, much of the evidence has been rigorously tested on cross-examination (ibid.: 234–8; Gilling 1994:120).

The second source was derived from the journals and maps of early European voyagers, residents and visitors to the region, which documented in great detail particular Maori people, settlements, practices and events (Phillips 1994:247–9). Although some archaeologists have used these texts uncritically, Lightfoot, referring to the American situation, asserts 'The question we should be asking is not whether...archaeologists should use ethnohistorical and ethnographic documents, but rather *how* they are employed most effectively in archaeological research (1995:204–5, emphasis original).'

The final source was archaeological data derived from assemblages of portable artefacts recovered from certain sites, together with intensive site surveys and a series of excavations undertaken at thirteen settlements in five different localities (Phillips 1994:334-6). When combined, these data sets yielded information about the material culture, the number, size and surface features of the settlements, the processes of site construction, chronology and their relationship with the environment. However, as most of the rich assemblages of artefacts were fossicked, some of the arguments over their interpretation concerned the age and context of the items, and unfortunately, recent excavations have not been able to resolve all these issues. One of the major problems with the survey data included the loss of sites in the southern stretch of the river due to flood protection measures, although these have to some extent been supplemented by historical information (Allen et al. 1994: 58-61). Dating sites is also a problem. As the contact period is less than 200 years old, radiocarbon dating is ineffective. Historical references and the presence or absence of European trade goods are used instead. Obsidian hydration, currently being developed, promises a much smaller error (in the range of ± 5 years) and will be useful for sites spanning initial contact up until the 1840s when obsidian use declined (Sheppard *et al.* 1996).

It was the complementary, contrasting and sometimes contradictory evidence of the independent sources of information which enabled a more sophisticated analysis of culture change in this early post-contact period. Moreover, the addition of indigenous material shifts the emphasis away from a totally Eurocentric view of the past.

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NOTES

- 1 In fact, the residents of Oruarangi in its last stage employed 18,000 m³ of fill to raise the entire surface by 40 cm. Some internally elevated areas were a further 1.2 m above the rest of the site. Raupa, a naturally raised point at the junction of the Ohinemuri and Waihou Rivers was less prone to flooding, nevertheless the people there used 800 m³ of fill to raise part of the interior 1.0 m above the surrounding ground (Phillips 1994:419, Figure 7.33).
- 2 Whereas in the 1820s there were only a few hundred living throughout New Zealand, by 1833 there were approximately 1,000, and this figure doubled over the next five years. At this time half were living in the Bay of Islands (Sinclair 1969). However, during the 1840s migration policies following colonization resulted in an explosion of the European population, which rose to over 30,000. By the late 1850s the growing European population equalled the declining Maori one. This rapid growth was especially marked at the new township of Auckland, which grew from 3,000 in 1842 to 8,000 by 1849 (Hardie 1954: Table 10).
- 3 Of the 135 blocks, 57 were said to be occupied and settlements on them were dated by genealogies in 51 cases. Although the majority were occupied before 1822, 11 of the blocks (20 per cent) were not reoccupied after this time.
- 4 Shortland (ms) did say that as 'the cultivations of each tribe are scattered over a large tract of Country, small patches of the best land only being selected here and there, I have found it very difficult to arrive at an approximation of the truth'.
- 5 There is the problem of the survival of certain items, and not only those of organic material. Interestingly steel axes, which were a major article of currency, are seldom found on sites and not in any of the Waihou excavations.

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Just another trader? An archaeological perspective on European barter with Admiralty Islanders, Papua New Guinea ROBIN TORRENCE

The Europeans thought food cheap, shell worth two or three shillings buying a thousand pounds of *kaukau* [sweet potato] or a fair-sized pig. Enga thought the line paid amazingly well: a *kina* for a big pig, priceless salt for mere vegetables. Once sure the line's goods were safe, they traded eagerly but hard. They would demand an axe for a piglet, a *kina* for vegetables, bargaining to the limit, for a good bargain was admired... The profits were enormous. People took care not to show that they were being overpaid, but fifty years later they recalled the trading gleefully.

(Gammage 1998:58)

ARCHAEOLOGY AND BARTER

The arrival of European explorers and traders in the Pacific region during the nineteenth century is usually portrayed by their descendants as a unique event that had a radical and permanent effect on the lives of the indigenous inhabitants. The value-laden terms commonly used to describe interaction between Europeans and Papua New Guineans, e.g. 'contact' (i.e. 'we touch them') between our 'civilized' and their 'primitive' worlds, between 'capitalist' and 'non-market' economies, or between the 'core' and the 'periphery', well represent the emphasis placed on European dominance by this version of history. When asked, Melanesians do not necessarily concur with this interpretation nor do they agree that the central elements of their culture have been significantly altered as a consequence of interaction with Europeans and the global economy (cf. Narokobi 1980). A number of historians and anthropologists who have studied the European incursion and colonization in the Pacific region (e.g. Dening 1992; Firth 1982; Hempenstall 1978; Sahlins 1995; Thomas 1991; 1992; 1994) have also questioned models which emphasize dominance versus dependency and a simple dichotomy between active and passive actors. In contrast, their work has shown how the foreigners were also influenced and controlled by local people through resistance and negotiation.



Figure 5.1 The regional setting of the Admiralty Islands, Papua New Guinea.

The case study presented here, an analysis of changes in the production of one type of trade good by people living in the Admiralty Islands (Manus Province), Papua New Guinea (Figure 5.1), examines the applicability of negotiation as a framework for understanding the response of these indigenous people to the various foreign incursions (trade, invasion, colonialism, and tourism) that were experienced over the past 120 years or so. The chapter focuses on barter since this is an arena in which it is often thought that indigenous populations were ignorant of basic market processes and therefore powerless. Europeans commonly portray themselves as successfully tricking innocent natives into giving them highly valuable goods for mere trinkets (e.g. Meleisea and Schoeffel 1997:140–3). The major aim of this chapter is to evaluate this perspective by looking more closely at the nature of one category of object for which European traders bartered: obsidian-tipped spears and daggers made in the Admiralty Islands. The results of an analysis of changes in the nature of production through time support an alternative view that the relative value of these objects was not imposed by a dominant group but was negotiated to the satisfaction of both parties through bartering.

In addition to my aim to explore the process of negotiation in the barter of trade goods, a second goal of this chapter is to demonstrate that archaeology can make a useful contribution to the debates about the impact of European expansion and colonialism. Archaeology offers an important alternative way of understanding culture history, one which is inherently a non-participant view of the interaction between indigenous peoples and the colonizers, business people, and travellers who have sought their fortunes in an alien land. The discipline can contribute to the study of cultural interaction in three ways. First, unlike the necessarily coloured texts and oral accounts of the participants or their descendants, archaeologists are forced to reconstruct behaviour by studying the material traces left behind. As with any academic pursuit, archaeologists bring biases and theoretical perspectives to this endeavour. Nevertheless, I think the analysis of *concrete things* resulting from behaviour as opposed to *stories about events* allows a very important 'outsider's' view of the past. It is not necessarily a better record of the past, but it is a very different one that facilitates an alternative perspective.

Second, by the nature of its data, archaeology must focus on process rather than event. European written texts and Melanesian oral history are descriptions of individual happenings which were thought by the actors and their descendants significant enough to be recorded and remembered. This may help explain why many scholars have focused on the concept of culture 'contact', with the implicit assumption that everything significant happened quickly. Stringing the various vignettes together into a narrative may not, however, lead to an understanding of an ongoing process which operated over many years. In contrast, archaeology can rarely provide an episodic picture of the past because the results of many incidents are blended together during the formation of the archaeological record. Instead, archaeological methods allow us to monitor gross changes in material traces that represent major reorientations of behaviour. In assessing the character of the interactions between Europeans and Papua New Guineans, for example, the direction and scale of changes in the archaeological record should provide a useful measure for how the overall process influenced the daily lives of the inhabitants.

The limitations of archaeology are in reality a bonus. Although single events may have had significant repercussions, the major changes that resulted were played out over a period of time. So that, for example, if the brief visit by one ship exposed an individual to a disease which led to a major epidemic and widescale depopulation, we are still dealing with a set of processes involving the spread of the disease and the way the population coped with this disaster. Although population crash may be rapid in archaeological terms, it is still better to characterize it as a process rather than an event (cf. Baker and Kealhofer 1996). The longer-term response of the population may have been to return to previous higher population levels and simply re-create the previous lifestyle. That this did not happen in many parts of the world is probably because Europeans helped to create a whole new social environment. It seems likely, therefore, that significant alterations in the lifestyles of the Papua New Guineans must have necessitated repeated and sustained interaction with Europeans which involved negotiation. In other words, what has often been called 'European contact' was in fact a process that is best examined over the long time scales of several centuries that archaeologists typically deal with.

A third advantage of archaeology is that it can contextualize recent history by comparing and contrasting it with the character of changes that had occurred previously. From the long-term perspective that archaeology utilizes, the past few centuries of European contact turn out to represent the most recent example of other encounters experienced by Papua New Guineans during the last several millennia. In summary, archaeological data offer a useful third person perspective on when, how fast, and in what ways people have changed their behaviour. These data then provide the basis for evaluating to what degree and in what ways the European incursion into the Pacific was part of an ongoing process of change or represented a radical and significant departure from the past.

BARTER AS NEGOTIATION

Studies of the effects of European contact on indigenous peoples have often focused on the role of trade. A widely shared assumption by anthropologists and historians is that people located on the peripheries of market economies were so eager to obtain new goods, in particular metal tools and firearms, that they were willing to sustain 'losses' in exchange for their products and labour.

In some of these histories, peripheral barter figures as the origin of dependency; the allure of European goods appears as the beginning of asymmetry, the seed of a transformation which some would render positively as progress, and others regret as a corrosion of culture.

(Thomas 1992:21)

Pacific Islanders, for example, were seen as having given up valuable products such as pearl shell and turtle shell in return for poorly made metal tools and worthless glass beads, i.e. 'the natives were ripped off' (Thomas 1991; 1992; Meleisea and Schoeffel 1997). Incidents such as Moseley (1877: 412) describes for the Admiralty Islands in which locals accepted old German newspapers 'thinking them to be fine cloth, until rain had fallen' are common in the early accounts. Furthermore, in some readings of history, the presumably unequal exchanges represent the onset of the asymmetrical power relations that were to follow with colonialization (cf. Thomas 1991:21). There is an implicit assumption by the Westerners that their goods would necessarily be considered desirable by 'savages' because of course they were derived from 'civilized' contexts. These views are informed by various versions of dependency theory, such as the world systems model, in which the societies of the First World are motivated by competition between classes to seek raw materials to fuel production as well as foreign markets for their products. Exploitation of the periphery is argued to be the inevitable consequence (e.g. Wallerstein 1974; Smith 1983).

There are notable dissenters. For example, some archaeologists have focused on 'resistance' to domination from outsiders (e.g. Adams 1989; Miller *et al.* 1989; Deagan 1990; Parker Pearson 1997; Paynter and McGuire 1991) and this is a common theme in recent histories of the Pacific region (e.g. Hempenstall 1978; Firth 1982). In relation to Melanesia the concept of resistance is extremely pertinent, especially during the early periods before the local inhabitants were dispossessed of their lands. One only has to turn to the accounts of early traders in the region to find how little control they had over their interactions with local people. For example, Hernsheim, one of the early European traders in the region, was sceptical about ever making a profit because the people were simply not very interested in European trade goods. Discussing a trip in 1878–9 he writes:

In general it soon became plain that it would take years for any really profitable trade to develop here. Business was confined to the most primitive type of barter. The people had no needs and although the goods in demand here—beads, hoop-iron, and empty bottles—cost practically nothing, on the other hand it was quite impossible to buy at one time any substantial quantity of any of the export commodities available.

(Hernsheim 1983:48)

Clearly at this time the people in the Bismarck Archipelago where Hernsheim was trading were not being dominated through capitalistic forms of exchange. Instead the local people made cogent decisions concerning with whom they wished to barter and what the appropriate items for exchange were. It seems likely that they were careful about carrying out exchange with foreigners because these created social relationships that they did not want. In some cases they demanded that the traders obtain traditional valuables (e.g. certain types of shells; cf. Meleisea and Schoeffel 1997:143 for a similar case in the Solomons) before they would trade their coconuts and nothing could persuade them to process the copra (Hempenstall 1978:123).

Hernsheim had to make a colossal effort to engage people in trade at all. His most ingenious response was to establish 'smoking schools' to create a dependence on tobacco so that he would have continuous demand and therefore stimulate production for the copra that he was seeking.

The tobacco habit first had to be artificially inculcated in the natives in order to create a constant demand for a quickly consumed commodity, in place of goods made of iron which remained serviceable over a long period. The natives who had been at Matupi brought back pipes and tobacco and soon schools for smoking were set up with the traders as instructors, in which the new pastime was propagated, so that in a few years' time tobacco was the most coveted and indispensable commodity among the natives.

(Hernsheim 1983:60)

The situation rapidly changed, trade/barter became an important part of European-Papua New Guinean interaction, and eventually the region was taken over by various foreign powers. Even after the colonies were established, very few of the traders or the plantation owners ever made much profit, merely a living (cf. Hernsheim 1983:115; Buckley and Klugman 1983).

Although the concepts of dominance and resistance have been very useful for acknowledging that indigenous actors had some choice in their interaction with Europeans, their use implies that dominance was always the key factor. Furthermore, these concepts are too broad a gloss for the variety of ways people negotiated their interaction with Europeans. Post-colonial theorists take issue with the all-encompassing global view of dependency, preferring to focus on variability of response to the spread of world capitalism according to differences in place, class, race, and gender (e.g. Said 1978; Stoler 1989; Thomas 1994; van Dommelen 1997; Williams and Chrisman 1993). The emphasis has therefore switched from the general process of dominance to the specific context in which power relations are played out. This approach has important implications for studying the nature of trading relations between indigenous groups and outsiders.

It is interesting that the debate about whether Papua New Guineans are winning or losing in their dealings with outside traders is still very active, as illustrated in a recent discussion of the role of expatriate artefact dealers. Some government officials have complained that artefact makers make huge profits for little work, whereas others blame foreigners for paying too little and making all the profits (May 1977).

Barter means equality

Along these lines, Humphrey and Hugh-Jones' (1992) analysis of barter, the major form of trade in which Indigenous people and Europeans engaged until very recently (e.g. Hernsheim 1983; Thomas 1989; 1991; 1992) is very cogent. They argue that barter is a legitimate mode of exchange that operates within well-defined social contexts. Although they decline to give it too hard and fast a definition, barter is described as a form of exchange in which the value of the goods cannot be compared because each side has an independent means for determining worth.

The transactors are on their own: if they decide that one object is worth another one that is all that matters. In other words, the objects are not measured against one another by some external criterion, but substituted for another by an internal balance.

(Humphrey and Hugh-Jones 1992:8)

The act of bartering creates equality out of the exchange of goods and neither side wins or loses because in order for the exchange to take place, each must be satisfied with the bargain. Negotiation leading to a solution acceptable to both sides is therefore implicit in all forms of barter. This understanding of barter argues against assuming that trade between powerful outsiders and local people was simply a poorly developed type of market exchange, in which profit was the key motive.

In terms of the Pacific region Thomas (1992:38) has further argued that the process of dispossession...did not grow out of the dynamics of peripheral exchange'. His re-analysis of historical data from Niue and the Marquesas Islands demonstrates that the indigenous people brought a different set of values from the Europeans into the arena of barter. They chose which goods to offer (e.g. the value of pigs within their society was so high that they were not bartered) and received what they considered to be a fair return. The quote from Gammage (1998) which starts this chapter is based on interviews with people in Highland New Guinea whose memory of trade with the first white people to enter their area is that the trade was very unbalanced in favour of the Highlanders! Thomas (1991; 1992) has successfully shown that Pacific Islanders were not passive players during their negotiations with Europeans. His work is extremely valuable because it demonstrates that the societies did not desire European goods because they were superior to their own but incorporated these new objects into their own systems of value and used them to achieve their self-defined goals. As a consequence of this source of new materials, the indigenous systems were altered and redefined to some degree, but this process was an internal one and was not forced upon the people by outside forces.

These anthropological re-analyses of barter focus on European goods and largely discuss how they were used and consumed locally. Recent studies in archaeology have also made useful contributions to the understanding of the specific context of acceptance of European goods rather than assuming that all things foreign or new are desirable (e.g. Kelly 1997; Marshall and Maas 1997). Historical archaeologists interested in tracing the spread of capitalism or the development of modernization (cf. Orser and Pagan 1995:5) often focus on consumption, typically following theoretical leads from Deetz (1991) and Miller (1987; 1994). Unlike post-colonial studies, however, archaeological studies of the spread of modernism have typically emphasized dominance and resistance or other forms of behaviour related to power relations rather than negotiation (e.g. Orser 1996:178; Little and Shackel 1996). The focus on power has rightly been criticized as overly Eurocentric (DeCorse 1996).

FOCUS ON PRODUCTION

Regardless of theoretical orientation, most analyses of trade goods only consider one side of the bargain—the European/foreign items—and neglect the materials given in return by the indigenous people. Although admittedly much of

what was given, labour and raw materials, lack concrete material traces that are amenable to study, implicit in the bias on European trade goods is a value judgement about their higher relative worth. Furthermore, when indigenous trade items have been analysed, as for example in studies of museum collections of artefacts which were purchased by European traders, the focus has been on consumption by Europeans. Collections of indigenous artefacts have been used to inform about European attitudes and behaviour (e.g. Thomas 1989; 1991; Stocking 1985a; 1985b; Cantwell *et al.* 1981; Pearce 1989; Karp and Levine 1991; Karp *et al.* 1992) but not to understand the behaviour of their makers or the nature of indigenous-European interaction.

Surprisingly, studies of European 'contact' and colonialism have largely ignored the active behaviour of the indigenous people who made the goods and chose which items were appropriate for barter. Since they were actively shaping the social relationships in which barter occurred, the nature of the goods themselves should inform about the social contexts from which they were derived. The omission of studies in anthropology on the nature of production is particularly serious because it is highly conditioned by social relationships which determine the type of exchange in which the goods circulate (Torrence 1986). Consequently, an analysis of manufacturing strategies as reflected in these goods should provide an important source of data concerning the economic contexts for which they were made and therefore inform about the nature of intercultural engagement. This study of production has had a long history within ceramic analyses (e.g. Balfet 1965; Van der Leeuw 1977; 1981; Peacock 1982; Rathje 1975; Rice 1987) and to some extent in lithic studies (e.g. Torrence 1986; 1993). Furthermore, studies of production for trade by modern peoples in the Third and Fourth Worlds have demonstrated that despite their lower economic status, the artisans nevertheless make active decisions and are very sensitive to their market (e.g. Graburn 1976b). An analysis of changes in which trade goods were offered for barter with Europeans and how they were produced is therefore likely to yield an important alternative picture of the actions taken by Pacific Islanders in these settings.

In addition, a careful reading of historical texts about the Admiralty Islands indicates that the results may not support the view that the local inhabitants were dominated through the market process. Moseley notes that the villagers were quick to size up the demands of the ship's crew and they

soon took to making trade goods, shell hatchets and models of canoes, e.g., which were as badly made as the trade gear which we gave in exchange. They understand the rules of barter well... They pretended, with many expressive grimaces, to be unable to bend pieces of tortoiseshell which they offered for sale, and of the thickness (*i.e.*, fine quality) of which they wished to impress the purchaser. They often pretended to try ineffectually to bend very thin pieces indeed, and fully entered into the joke when we

did the same with thin bits of hoop iron. They always required to see the hoop-iron tested by bending before accepting it.

(Moseley 1892:390)

In the analyses that follow I focus on one category of goods made by Admiralty Islanders for trade over a period of about 130 years. An archaeological analysis of changes in the form and decoration of these artefacts provides an interesting picture of how producers responded to changes in the economic context in which they were situated. By studying how the objects were made, one can reconstruct the values placed on exchange by their makers in the changing cultural settings which existed over this relatively long time period. Changes in production techniques and in the investment of time and energy into the spears and daggers demonstrate that Admiralty Islanders were both sensitive to market forces and when bartering with Europeans were successful in negotiating terms that are surprisingly reasonable when calculated in purely capitalistic terms.

ADMIRALTY ISLANDS SPEARS AND DAGGERS

In order to use production as a means of monitoring the active participation of local people in exchange with outsiders, I have studied obsidian-tipped spears and daggers from the Admiralty Islands (Manus Province) of Papua New Guinea currently incorporated in museum collections around the world (Torrence 1989; 1993): results from a representative sample of 487 artefacts of the *c*. 1500 which I have studied are presented here. Given their relative abundance and widespread occurrence in museums, these objects were consistently offered for barter by Admiralty Islanders and were obviously popular with European consumers over a long period of time. A wide range of other objects were also bartered along with these weapons and these also must have had interesting histories, but I have chosen the spears and daggers for study because they are the most consistently represented item over the longest period.

Obsidian-tipped spears and daggers occur in the earliest ethnographic collections from the Admiralty Islands dating to around the 1860s (collections in the British Museum and Pitt Rivers Museum: cf. Moseley 1892:386) and were still produced for trade until the 1980s (Mitton 1979; De'Ath 1989). Two types of hafts were used to hold the large obsidian blades and each was decorated in a distinctive manner. In one, the haft was formed from a putty which was applied over a loose bundle of sago fibres. Next it was either incised or painted (Figures 5.2 a; 5.3; 5.4 c; 5.5). In the second group, comprising mainly spears, twine was wound around a wooden collar which joined the blade to the shaft (e.g. Moseley 1877: pl. XX; Figure 5.2 b). The design created by the intricate wrapping was usually painted. Sometimes the base of the wooden collar was also carved and painted (Figure 5.2 c, d). Unfortunately, there are no historical data which would explain why there are two widely differing forms of hafting, i.e. whether these had different functions or symbolic meanings or whether there were two distinct



Figure 5.2 Chronological changes in Admiralty Islands spears.

Scale is 10 cm. Note the increasing elaboration of the wrapped designs and carving on the haft, whereas the real and relative length of the obsidian blade decreases. The amount of retouch on the blade also decreases as the form becomes more irregular through time: (a) Period 3, incised frigate design on haft (Australian Museum E784); (b) Period 3, one-dimensional wrapped design (Australian Museum E872); (c) Period 4, two-dimensional wrapped design with simple carved crocodile (Australian Museum E19987); (d) Period 4, two-dimensional wrapped design, diamond carved motif with hole and double crocodile (Australian Museum E24578).

centres of manufacture. It is interesting to note that both wrapped and incised spears and daggers were collected from a single social group by members of the *Challenger* expedition (cf. Moseley 1877: pl. xx), although it is not known if the artefacts were made locally and/or traded from other areas.

During the past 130 years the relative occurrence, nature of decoration, and nature of manufacture of these two types have changed radically. It is these alterations in behaviour on the part of the makers that form the basis for making inferences about the nature of European-Admiralty Islanders interaction. Ideally, one would like to have independent information about the contemporary social contexts of the spears and daggers within the Admiralty Islands as this would help to explain why these artefacts were offered in barter. Information along these lines is very scarce. Spears and daggers are only rarely mentioned by traders and travellers except as examples of weapon types (see below) and no reliable ethnographic information was obtained until Mead (e.g. 1930; 1934; 1963) began her work in the 1920s.

Both Parkinson's (1905; 1907) accounts and archaeological data from the site of Umleang on Lou Island (Fullagar and Torrence 1991; Fredericksen 1994) support the commonly held assumption that the obsidian used in the spears is derived ultimately from outcrops on Lou and Pam Lin islands. Parkinson (1907: 327) notes that both obsidian blocks and spear points were traded from Lou Island, but archaeological evidence supports the view that the majority of the obsidian was traded as unworked blocks (cf. Fullagar and Torrence 1991), so some tools may have been made locally. In this light it is interesting that Parkinson (1907:327) states that unworked obsidian had a higher value than the spear points.

During Mead's (1930:119) fieldwork, obsidian (form unknown) was traded by a group of specialist middlemen. How long this system had been operating is unknown, although I suspect it may post-date pacification in the region (cf. Ambrose 1976). There are a few descriptions from the nineteenth century of people knapping obsidian (Parkinson 1905; 1907:373, Mikloucho-Maclay in Nevermann 1934:234), but I am not aware of a pre-1970s account which describes how the hafts were manufactured and decorated.

Period	Date	Summary
(1)	<i>c</i> . 1500–1800	European exploration involving very brief, hostile encounters. No museum collections.
(2)	1801–1875	Bartering is carried out from boats but hostility continues. In 1875 HMS <i>Challenger</i> sends first Europeans ashore. Earliest collections.
(3)	1876–1910	Traders establish stations and buy artefacts for private collectors and museums. Local warfare accelerates.
(4)	1911–1920	Pacification takes place. Plantations are established and wage labour begins. Scientific expeditions collect artefacts.
(5)	1921–1940	Plantation economy continues. Missionaries operate successfully. Mead carries out anthropological fieldwork. Very few artefacts collected.

Table 5.1 History of European interactions and museum collections

Period	Date	Summary
(6)	1941–1990	American military bases stimulate the production of souvenirs. Paliau movement rejects traditional values. Market economy dominates. Only daggers collected.

Historical context

For the purposes of analysing European interaction with Admiralty Islanders, I have divided the recent history into six periods which are summarized in Table 5.1. The European discovery of the Admiralty Islands took place in 1528 with a visit by the Spanish ship captained by Alvaro de Saavedra Ceron and was followed by a few brief visits by other Spanish ships who passed by (Sharp 1960: 19–20). The earliest observation of obsidian-tipped spears by Europeans took place in 1767 when a hostile group of islanders threw them in an attack on Carteret's ship (Wallis 1966:193–6).

Sustained contact with the West did not really begin until the middle of the nineteenth century, but even at this time only brief forays were made into the area in search of marine products. At this time bartering was conducted at sea between ships and canoes (e.g. Cayley-Webster 1898; Langdon 1984: 184; King 1978). The earliest Admiralty Islands artefacts in museum collections date from late in Period 2 and are currently housed in the British Museum (e.g. Moseley 1892:386). The visit of the *Challenger* to Nares Harbour in the northwestern part of Manus Island in 1875 signalled an important change in the nature of interaction, since the scientists stayed in the area for several days, actually went ashore, and were interested in recording native culture (Moseley 1877; 1892; Campbell 1877; Linklater 1972; Spry 1877). For the purposes of the analyses presented here, I adopt the assumption of the *Challenger* scientists that the artefacts collected during Period 2 were primarily made for local consumption rather than for trade with foreigners because the objects which they purchased had been observed in daily use.

The natives possess an enormous store of these weapons. They have piles of them lying on the outriggers of the canoes. On shore the men commonly carried two or three in their hands. In a dispute alongside the ship one of the lances was instantly snatched up and made ready. They are used for hunting wild pigs as well as for fighting.

(Moseley 1877:409)

On the other hand, the possibility that only the least valued items were put up for barter must also be considered (cf. below).

It seems likely, however, that even by this date the production of weapons for exchange had begun to a limited extent because bartering for local products such as tortoise shell and coconuts had been under way for half a century. Both Moseley (1877:389) and Spry (1877:268) mention that weapons were among the goods which were offered for exchange when the islanders first approached the ship. Campbell's (1877:309–10) story of how people began making canoe models because one was quickly bartered does lend a note of caution about assuming the weapons offered for barter had been made for local use.

The abundance of artefacts dating to Period 3 in collections is remarkable contemporary reputation of Admiralty given the Islanders as 'particularly independent and wild' (Hempenstall 1978:153). During this period traders attempted to set up outposts in the Admiralties, but they were largely unsuccessful due to the acceleration in local warfare (e.g. Hernsheim 1983; Robson 1965), which in turn was probably caused by competition over access to European trade and especially guns (King 1978). Many traders were murdered, European ships were frequently plundered, and the crews massacred (Hempenstall 1978:153). Germany annexed the Admiralty Islands in 1884 but was unable to dominate the aggressive population despite sending frequent punitive expeditions (ibid.: 153-5).

Based on visitors' reports (e.g. Moseley 1892:405; Spry 1877:269; Nevermann 1934), it has been assumed that at least during Periods 1–3 the obsidian-tipped spears mainly functioned within the local societies as utilitarian objects for killing pigs and people. There are numerous descriptions of spears having been used in local warfare and against Europeans during the latter part of the nineteenth century (e.g. Mikloucho-Maclay quoted in Fredericksen 1994:46). Since the highly decorated examples appear to be far too heavy to be effective weapons, one might assume that they functioned to carry information about the status of the owner, whereas the plainer variety might have been the more functional objects, but there is no direct historical information to support this hypothesis. Although a small number of daggers occur in the earliest museum collections, there is very little historical evidence about their use prior to Mitton's (1979; cf. De'Ath 1989) study of dagger manufacture on Lou Island which places it firmly within a market context since the Second World War.

The production of artefacts for barter to European traders may have developed during Period 3 and the role of weapons in Admiralty Island society may have expanded to take in two roles: weapon and object for barter with Europeans. Certainly artefacts were in demand by traders both because they had difficulty in stimulating the local people to barter other marketable commodities (cf. Hernsheim 1983:31, 42; Hempenstall 1978:12) and because they were easy to sell. In addition, Period 3 represents the 'great foundation period of museum anthropology' (Stocking 1985a:7; cf. Sturtevant 1969:622) when demand for artefacts from private individuals and the new museums was very high. As a result of the boom in collecting in the late nineteenth century, the demand for certain artefacts in Fiji was so high that Europeans had begun making them for sale to travellers (Thomas 1989:45).

Period 4 represents a major turning point in Admiralty Islander-European interaction since it marks the beginning of effective pacification by the German

authorities. At this time the plantation economy finally gained a foothold and a number of scientific expeditions made extensive collections of artefacts in the area (Vogel 1911; Nevermann 1934; Welsch 1998). Oral history collected from Lou Island (Mitton 1979:68; De'Ath 1989:23) claims that German administrators prevented the mining and production of obsidian spear points and forced the islanders to throw their weapons into the sea. In contrast, King (1978) has argued that around 1910 the islanders themselves made the decision to end the local warfare, since it had become intolerable and the costs too high. How and in what ways the role of the spears changed as a consequence of pacification has not been documented historically, but the local demand for weapons must have diminished radically. Based on an unpublished report by Leber in 1914, Fredericksen (1994:48) suggests that the primary function of spears changed from weapons to personal adornment, but I am not sure how much weight should be placed on this single account. It is probably simplistic to assume that with a decrease in warfare weapons necessarily changed their role fundamentally.

Judging from the scarcity of objects in collections in Period 5, following the First World War, trade in artefacts was extremely rare, probably because of the rising importance of wage labour (e.g. Hempenstall 1978). Previously, all exchange with foreigners would have been carried out as barter, but from Period 5, the trade in artefacts was probably fully monetarized. Missionaries also secured a large number of converts at this time. During this period Mead (e.g. 1930; 1934; 1963) carried out her seminal ethnographic work in the region. She described exchange between specialized producers but she did not mention barter with foreigners.

During the Second World War the production of artefacts took off again because the American soldiers provided a new market for tourist items (Mitton 1979:69–70; De'Ath 1989). Since that time the 'artefact industry' (May 1977) has been an important source of income for many communities in Papua New Guinea. After the war traditional culture was further transformed by a cargo cult which dominated life in the islands (Schwartz 1962). Production of obsidiantipped artefacts for sale ceased in the mid-1980s because it came to the attention of the National Museum in Port Moresby that people were scavenging obsidian points from archaeological sites for this purpose. Daggers were confiscated from tourist shops and further sales were banned (Swadling pers. comm.).

Methodology

An analysis of changes in the efficiency with which spears and daggers were produced through the six periods is a useful way to monitor how their makers responded to the different social and economic contexts in which they lived during the past 130 years. The basic assumption of the study is that the degree of efficiency achieved in the manufacture of spears and daggers should vary according to the overall value which the manufacturers placed on the products. Efficiency as used here is defined as the ratio of costs to benefits in terms of time, energy, and raw material and is therefore one way of defining 'profit'. From the point of the maker efficiency increases if less investment is made into the final product as long as the return remains constant. If the return decreases, then further reductions of inputs must be made to retain high levels of efficiency. In the following analyses the main emphasis has been placed on monitoring changes in time and energy investments in relationship to increases in the amount of raw materials used in the manufacture of the spears and

	Period									
	2		3		4		5		6	
Sample size										
Spears	59		160		79		12		7	
Daggers	5		7		54		3		53	
Measurements	х	sd	x	sd	х	sd	x	sd	x	sd
Blade length	13.1	3.8	14.4	3.6	13.7	3.5	11.8	1.7	12.5	2.3
Blade width	4.4	1.2	4.6	1.1	4.3	1.7	4.1	0.8	4.2	0.9
Blade thickness	1.4	0.5	1.6	1.1	1.5	0.5	1.5	0.2	1.7	0.5
Blade: no. of directions	2.9	1.1	3.8	1.6	3.8	1.2	3.6	1.4	2.9	0.9
Tip width	0.9	0.6	0.9	0.8	1.2	1.3	1.3	0.4	1.3	0.3
Percentage with cortex	4	10	4	12	9	1.5	11	18	9	20
Length of retouch	12.6	9.5	11.8	8.2	8.9	7.8	12.8	9.0	20.6	10.2
Serrations per 2 cm	9	1	9	3	7	2	5	1	3	2
Incised line width	0.6	0.2	0.7	0.2	0.9	0.5	0.8	0.2	1.6	1.5
Spears: blade length	12.8	3.4	17.4	3.4	13.5	4.4	11.8	1.7	12.5	1.7
Spears: haft length	16.7	5.9	17.7	4.2	25.9	8.7	21.7	6.6	25.6	9.2
Spears: blade/haft	0.9	0.3	0.9	0.3	0.5	0.2	0.6	0.2	0.8	0.1
Spears: wrapped length	11.9	3.7	12.5	3.3	13.5	4.9	15.2	2.4	_	_
Spears: carved length	5.4	2.0	8.0	3.0	10.8	4.2	11.3	6.3	_	
Daggers: blade length	14.0	4.7	13.2	2.8	12.8	2.9			12.5	3.7
Daggers: haft length	16.8	4.1	16.4	3.4	16.5	1.8	16.5	2.0	13.5	3.0
Daggers: blade/haft	1.0	0.4	0.9	0.2	0.8	0.1	0.7	0.2	1.0	0.5

Table 5.2 Chronological comparison of metrical traits

daggers. I have measured efficiency in terms of the degree of simplification, standardization, and craftsmanship of products since these are typical ways in which people have been observed to increase gains in efficiency (cf. Torrence 1986; 1993; Graburn 1976a:15). A series of variables were used to record the size and character of the obsidian blades and the hafts, complexity of artefact and of design, and standardization in form and decoration (Torrence 1993: Table 5.2).



Figure 5.3 Chronological changes in Admiralty Islands daggers.

Scale is 5 cm. Note the decrease in detail and complexity of the incised designs and the increase in the amount of retouch and the size of the marginal flake scars. Through time the blades become less narrow and slightly smaller: (a) Period 6, incised v motif (Australian Museum E75431); (b) Period 3, incised swirl motif (Australian Museum E19704); (c) Period 2, incised frigate bird and hourglass motifs (Australian Museum E6471).

By monitoring changes in value within the differing social and political contexts during the past 130 years, one can evaluate the proposition that barter with Europeans created dependency for the Admiralty Islanders. Along these lines, four expectations will be evaluated. First, if the makers maintained their own conception of value, then there should be little or no change in efficiency through time. Second, in contrast, if the Admiralty Islanders were dominated by traders who demanded larger and/or more elaborate items for the same payment, then one would expect to observe a shift to greater inputs per artefact, resulting in lower levels of efficiency. Third, if barter was negotiated as predicted by the theoretical writings of Humphrey and Hugh-Jones (1992) and Thomas (1991; 1992), then one would expect to see differences in efficiency which are independent of the demands of European consumers. Finally, I would expect efficiency to increase through time in response to the shift to a fully monetarized, market economy.

It is important to emphasize that the artefacts in this study are currently incorporated in museum collections. I have only included examples for which the date of collection in the Admiralty Islands is fairly secure and have concentrated on examples for which there is good information about the collector. Since the objects were first selected by traders and/or collectors and then again by museum curators, they may well represent a biased sample of what was originally produced. Despite this sampling problem, the spears and daggers are still legitimate products of people in the Admiralty Islands and therefore contain information about local values. Changes in design and technique within the museum collections are so marked that it is hard to believe that they are simply reflections of European fashions. Although one must be cautious in interpreting the results in light of the ways they were collected and curated, I think we can be reasonably secure in accepting these collections as legitimate data for tracing changes in the nature of negotiation between Europeans and Admiralty Islanders during the past 130 years.

	Period										
	2	2		3		4		5		6	
Туре	No.	%	No.	%	No.	%	No.	%	No.	%	
Painted	11	18	35	22	1	1	0	0	0	0	
Incised	13	22	58	35	9	11	6	50	5	71	
Wrapped	31	52	43	27	2	3	0	0	0	0	
Wrapped/carved	2	3	21	13	61	77	6	50	0	0	
Moulded	1	2	1	1	2	3	0	0	0	0	
Other	2	3	4	2	4	5	0	0	2	29	
Total	60		162		79		12		7		

Table 5.3 Frequency of spear types



Figure 5.4 Chronological changes in obsidian blades on Admiralty Islands spears. Scale is 5 cm. (a) Period 2, irregular, unretouched blade (Australian Museum E935); (b) Period 2, careful marginal retouch on a trapezoidal blade (Australian Museum E812); (c) Period 2, extensive invasive retouch to transform a trapezoidal blade into a triangular cross-section at the tip (Australian Museum E742); (d) Period 3, irregular marginal retouch on a short, squat crested blade, which is part of the core-forming process for prismatic blade cores (i.e. a waste by-product of production rather than an end product) (Australian Museum E19989); (e) Period 3, wrapped spear with two very small blades (cf. Figure 5.2). Note that only one of the blades has been retouched (Australian Museum E24578).

A HISTORY OF PRODUCTION

The major historical trends in Admiralty Islands spears and daggers are summarized in Tables 5.2–5.7 and illustrated by the examples in Figures 5.2–5.4 (cf. Torrence 1989; 1993). During the initial boom in artefact trading—in Periods 2 and 3—obsidian blades on spears were considerably larger than in later periods (Table 5.2; Figures 5.2, 5.4). In Periods 4 and 5 the case is reversed: the emphasis switched to the haft, which became significantly larger in actual and relative size (Table 5.2; Figure 5.2). Period 6 represents a return to relatively larger blades. As shown in Table 5.3 and Figure 5.2, the wrapped style diversified in Period 3 when carved handles were added and these then completely dominated the collections in Period 4 (Figure 5.2). Also in Period 4 daggers became much more numerous and eventually replaced spears as the more common form in collections (Table 5.2). As shown in Figure 5.2, between Periods 2 and 4 the number and complexity of the incised and carved designs increased and double blades were added to the basic form, but this pattern was reversed from Period 5 onward.

In order to understand these and other changes in production, I begin by identifying how these trends reflect changes in the role of the artefacts within European and Admiralty Islands societies. I then turn to an analysis of efficiency as an alternative, archaeological perspective for monitoring how these changes represent negotiation on the part of the producers.

Changes in European tastes

The history of the spears and daggers can be at least partly understood as a direct reflection of the changing tastes of the European collectors. My preliminary analyses of British auction catalogues (Stevens' Auction House, London and Webster's Illustrated Catalogues, Oxford; cf. Figure 5.5) show that in Periods 1-3 the major artefact types for sale were weapons, so it is not surprising that Admiralty Island spears and daggers were a popular item. It is interesting that the title of the Webster's catalogue explicitly mentions weapons and Admiralty Islands spears were commonly featured on the frontispiece as shown in Figure 5.5. Thomas (1989) has argued that Europeans were fascinated with collecting weapons because they signified a cannibal past of savages and this reinforced their preconceptions of South Sea Islanders. In the last part of the nineteenth century changes in tools and weapons as a way of understanding social evolution were also the primary concern of collectors and scholars like General Pitt-Rivers, some of whose Admiralty Islands spears are still in the Pitt-Rivers Museum (cf. Stocking 1985a; Thomas 1991: 125-84). Not surprisingly, these consumers preferred spears with the most impressive 'business end' and therefore the largest obsidian blades. For this reason the change in Period 3 toward longer, wider and thicker blades (Table 5.2; Figure 5.4) makes sense.

SIDS Scola 74 0 10 11 Scals 25 12 VEW GUINEA

Figure 5.5 Frontispiece of a typical Webster catalogue on which Admiralty Islands spears figure prominently. The majority of the catalogue contents comprise 'weapons' like these reflecting the contemporary tastes of the collectors. The depicted spears have hafts fashioned from gum and incised with elaborate renderings of the frigate bird. The tips comprise large, regular obsidian blades with minimal retouch. In addition to the large spears, smaller, less regular bladed weapons were also on sale.

In comparison to the professional collectors that dominated in Period 3, the *Challenger* crew may also not have been very selective in their choice of
weapons, taking whatever was offered. Moseley (1877:426) notes that many of the blades he collected were 'curiously bent and contorted forms which, produced by accidental flaking, are nevertheless mounted as serviceable weapons' (e.g. Figure 5.4 a; Figure 5.5, spear 5). One wonders if the poorest quality weapons were deliberately offered for barter or if because this area is quite distant from the obsidian sources, the inhabitants did not have access to more regular blades. In any case, it is not surprising that in Period 3 the fulltime, resident traders provided larger and more regular blades for the growing artefact business back home.

In contrast, beginning late in Period 3 and continuing into Period 4, the auction catalogues reflect a major shift in tastes of consumers. There is a marked decrease in the number of weapons represented and an increase in decorated artefacts of many kinds, including costumes and household objects.

				00							
	Perio	od									
	2		3		4		5		6		
Motif	No.	%	No.	%	No.	%	No.	%	No.	%	
Diamond	0	0	0	0	6	12	0	0	1	100	
Diamond/hole	3	60	8	35	10	20	1	20	0	0	
Petal	0	0	3	13	0	0	0	0	0	0	
Petal/hole	0	0	1	4	0	0	0	0	0	0	
Plain hole	0	0	4	17	1	2	0	0	0	0	
Crocodile	0	0	3	13	21	41	3	60	0	0	
Palm	0	0	0	0	6	12	0	0	0	0	
Frigate bird	0	0	1	4	0	0	0	0	0	0	
Human	0	0	0	0	4	8	1	20	0	0	
Other	0	0	3	13	3	6	0	0	0	0	
Totals ¹	3		23		51		5		1		

Table 5.4 Carved motifs for spear and dagger hafts

Note: ¹ Note that data on motif is not available for all the spears listed in Table 5.3

	Period										
	2		3		4		5		6		
Motif	No.	%	No.	%	No.	%	No.	%	No.	%	
Frigate bird	20	71	49	82	13	21	6	75	13	24	
Swirl	1	4	1	2	13	21	1	13	2	4	
Swirl/Crocodile	0	0	0	0	12	19	0	0	0	0	
V	3	10	1	2	1	2	0	0	31	57	
Human	0	0	0	0	16	26	1	13	2	4	

Table 5.5 Incised motifs for spear and dagger hafts

	Period										
	2		3		4		5		6		
Motif	No.	%	No.	%	No.	%	No.	%	No.	%	
Animal	0	0	0	0	5	88	0	0	0	0	
Hourglass	0	0	3	5	0	0	0	0	0	0	
Plain	3	10	1	2	0	0	0	0	2	4	
Other	1	4	5	8	2	3	0	0	4	7	
Total	28		60		62		8		54		

This fashion is reflected in the smaller blades and greatly enlarged (both in relative and absolute terms) spear hafts which bear the decorations (e.g. Figures 5.2, 5.4). In contrast, dagger hafts in Period 4 are not larger than in the previous period except in relation to the smaller blade length (Figure 5.3).

The emphasis on ornament is well represented by examining the nature of the decoration added to the artefacts through carving the wooden collar which joined the wrapping to the spear shaft (Table 5.4; Figure 5.2 c, d) or the incision on the moulded handles (Table 5.5; Figures 5.3, 5.5). First, it is notable that the simple parallel bands which were painted in relatively dark colours on moulded handles have almost disappeared by Period 4 and were replaced by brightly painted carved designs on wrapped handles. The earliest carved handles have a series of diamonds arranged around a perforation. The number of carved designs proliferates in Periods 3 and 4 (Table 5.4). The diamond motif is still the most popular (Figure 5.2 d), but the range of treatment is expanded to include a petal design which is occasionally perforated and plain holes are also produced. Period 4 is the most innovative for carving, however, with the addition of a palm and, most significantly, human and crocodile figures (Figure 5.3 c, d). A similar expansion in the range of motifs occurs with the incised technique but does not really take off until Period 4. Figure 5.3 shows how one basic motif changed through time.

Many of the changes in decoration can be directly ascribed to European tastes. The addition of carving and perforations simply made the items larger, more decorative, and more colourful. The character of the change in motifs has been witnessed frequently in European collections. As Graburn (1976a: 17–18) and May (1977:4) have noted, collectors prefer objects with understandable symbols of the 'primitive' or 'savage'. The crocodile and the human form fit these criteria nicely. In contrast, the frigate bird which would not have been recognizable to Europeans and would only have had meaning within local society becomes a simple design.

At the time of the height of the artefact trade in Period 4 the product range also diversified to include a larger proportion of daggers (Table 5.3). For instance, it is interesting to compare the collection purchased from the early trader Farrell by the Australian Museum in 1884 (Period 3) with the assemblage which was sold to A.B.Lewis in the Admiralty Islands in 1911 (Period 4) by a Japanese

plantation owner and is now housed in both the Australian Museum and the Field Museum. The former has 179 spears and 1 dagger whereas in the latter there are 142 spears and 191 daggers. Clearly this represents a major reorientation in the nature of production.

We have no information about exactly how and why this shift took place. The local producers might have initiated the shift to daggers because their importance in relation to spears had declined, possibly with the cessation of warfare. Alternatively, Komine, the Japanese entrepreneur who organized the Lewis purchase (Welsch 1998), could have encouraged people to make this type of artefact because it would sell better (cf. Specht's 1999:xxi comment that Parkinson may have supervised the manufacture of artefacts by Solomon Islander plantation labourers). Their popularity could be due to the fact that having eliminated the spear shaft, they provided the collector with a larger proportion of decoration per size of artefact. They were also easier to transport in bulk. It is interesting to note that many of the shafts from the spears collected by members of the *Challenger* crew (British Museum and Pitt-Rivers collections) were sawn off just below the hafts (cf. Moseley 1877: pl. XX). Daggers might also have been favoured by the less wealthy collectors who could get a distinctive item for less money.

By Period 6 wealthy collectors in Europe were replaced by American sailors looking for a souvenir as the major consumers of Admiralty Island obsidiantipped artefacts. May (1977:4) notes that modern buyers of Papua New Guinea artefacts fall into groups: those who want something 'primitive' and those who demand an item 'which is decorative, useful, or "amusing," and clean.' However, 'the most dominant preference seems to be for objects which are small and inexpensive'. According to Graburn (1976a:15), mass market 'airport art' must be cheap, portable, understandable, and dustable. The most recent daggers fit these criteria admirably.

Role of spears and daggers in Admiralty Islands society

The artefacts were exchanged through barter and so we must assume that the Admiralty Islanders were satisfied with the outcome or they would not have engaged further. Since the alterations in the artefacts were not imposed on the makers, they must have consciously altered spear and dagger forms in the ways noted above. We now need to ask whether the changes represented in the museum collections reflect internal social processes that are unrelated to consumer demands. It may have been fortuitous that the artefacts changed in ways that were also appealing to European fashions.

For example, the dramatic increase in the size of the spear blades in Period 3 (Table 5.2; Figures 5.2 a, b; 5.3 c) could be explained as a response to the rise in warfare among Admiralty Islands societies at this time (King 1978) and consequently an increase in the local consumption of weapons (cf. Fredericksen 1994:192). I am sceptical about this explanation because spears with larger

points would have been quite difficult to control and therefore not necessarily more effective as weapons. They might have been an improvement for thrusting in close combat warfare, which is described for traditional warfare (King 1978: 28), but many accounts of their use suggest that they were thrown (e.g. Moseley 1892:405; King 1978:81; Fredericksen 1994:46). The increased weight on what was already a top heavy spear (cf. Moseley 1892:405) could have made them more difficult to hurl and might have reduced their accuracy.

A further problem is that the blades are less regular in shape as measured by the number of changes in direction along the edges (Table 5.2) which is significantly higher in Period 3 than in Period 2 (cf. discussion below). One might argue that in Period 3 the Admiralty Islanders deliberately selected the least desirable spears for trade, i.e. those with large, irregular blades. It is nevertheless difficult to reconcile the proposition that the spears were primarily made for warfare with the fact that a significant number of Period 3 spears had carved hafts, a relatively new element in the repertoire (Table 5.3). Finally, one must ask if the artefacts' major use was for warfare, why did the blades in the daggers decrease in size at this time (Table 5.2)? In summary, the data are most compatible with the hypothesis that the Period 3 spears that have ended up in museum collections were primarily made for trade and may therefore differ quite significantly from those used in warfare at the time and which were not offered for barter.

Fredericksen (1994) may be correct in assuming that the function of spears changed from weapons to personal ornaments in Period 4. If this were so, then the major shift in relative sizes of the haft and the blade towards the decorative elements (Table 5.2) makes good sense. I find it strange, however, that whereas depictions of Admiralty Islands men in Periods 2 and 3 frequently show them with their spears, as in the case of a portrait from 1907 (reproduced in Fredericksen 1994: pl. 1) which is labelled as a 'bigman', this is not the case after pacification in 1910. For example, in the 1933 portrait of Pominis, an important leader (Hempenstall 1978: pl. XVII), and of a group of men from Pak Island c. 1919 (ibid.) they do not have spears, although the elaborately carved breastplates that were noted by Moseley (1892:399, 406) are in evidence in the photographs from both Periods 3 and 4. I am not convinced that spears became ornaments during Period 4, except in the eyes of Europeans, but we lack adequate historic or ethnographic data either to support or to deny this hypothesis. The analysis of production presented below, however, is relevant for assessing whether a primarily social or economic shift best explains changes in the spears and daggers.

The almost complete loss of spears and daggers during Period 5 is not surprising given the magnitude of social change in the Admiralty Islands after the First World War. By this time foreigners had established plantations and were putting their effort into producing copra rather than bartering with the local inhabitants (cf. Buckley and Klugman 1983:87–236). Although Mead (e.g. 1930; 1934; 1963) generally tried to present her ethnography as representing a

pristine, traditional society, in her later book, *New Lives for Old* (Mead 1956), she presents a picture of rapid and significant social change following her fieldwork. Traditional weapons would certainly have lost their meaning by this time and ornaments representing traditional status positions, etc. might well have been largely abandoned.

I was fortunate to examine a number of spears collected by Mead and now at the American Museum of Natural History. Their form and evidence of use suggest that many of them were heirlooms and had not been made during the time she was there. They were therefore not included in the sample presented in this chapter. If my reading of these artefacts is correct, then it suggests that the function of the spears and daggers had changed again in Period 5 and now no longer played an active role within day-to-day life, although they might have served as important and powerful symbols of the past for some of the people. I suspect that if they still had a social role within the indigenous society during Period 5, the spears and daggers made at this time were mainly symbols of traditional, ethnic identity.

Finally, in Period 6 the major if not the sole value of daggers for the Lou Islanders who produced them was as marketable items (cf. Mitton 1979; De'Ath 1989).

Analysis of efficiency

Whether or in what combination changes in obsidian-tipped spears were due primarily to consumer demand or to the function of these objects in Admiralty Island society is an unanswerable question. The final configuration of the artefacts is more likely to have been the outcome of a complex process of negotiation in which both producers and consumers shifted their expectations in terms of previous interactions. That negotiation took place is clearly witnessed in the nature of changes in production. If the Admiralty Islanders had offered spears and daggers that were only made for use within their own society, I do not think that we would observe the scale and nature of the alterations which are reflected in the products. Furthermore, not all the changes would have suited European tastes.

Both the shifts to more impressive weapons in Period 3 and later to large ornaments with gaudy decoration in Periods 4 and 5 would have demanded greater inputs of raw material, time, and energy on the part of the makers. Does this mean that the producers were giving more and more for less and less in order to get the cheap goods (hoop-iron, red beads, etc.) or the guns we are told they desired so highly? The evidence presents a very different picture. On closer inspection of the data, it is clear that the makers not only compensated for the increased demands on them by the European consumers, but actually made substantial improvements in their overall efficiency. In market terms they appear to have achieved real profits.

	Period										
	2		3		4		5		6		
Quality	No.	%	No.	%	No.	%	No.	%	No.	%	
0	0	0	0	0	0	0	0	0	15	25	
1	1	2	6	4	3	3	2	18	20	34	
2	4	7	20	12	23	24	6	55	14	24	
3	13	22	50	31	41	42	3	27	7	12	
4	20	34	58	36	24	25	0	0	3	5	
5	21	36	27	17	6	6	0	0	0	0	
Totals	59		161		97		11		59		

Table 5.6 Quality of craftsmanship on the haft

First, savings were made by reducing the accuracy of the workmanship in the production of the decorated hafts. This is witnessed in decreases in the tightness of the binding, care in the application of paint, precision of the wood carving, quantity of serrations per centimetre, and thickness of incised lines (Table 5.2). A good example is a comparison of changes in the incised lines shown in Figure 5.3. In the earliest example all the incised lines are serrated with small neat cuts; in the Period 3 example half of the lines are not serrated; and in the most recent example the serrations are extremely large and sloppily executed. An assessment of the quality of craftsmanship of the haft as a whole was made using a relative scale of 0-5. The results presented in Table 5.6 show a consistent and striking decrease through time beginning in Period 3. The original scale of 1-5, which was established for a pilot study at the Australian Museum (Torrence 1989), had to be enlarged when I encountered the large number of very poorly made daggers produced in the 1980s which are housed at the National Museum of Papua New Guinea. It is fascinating to observe on the artefacts themselves the trade-off between the European

	<u> </u>									
	Period									
	2		3		4		5		6	
Quality	No.	%	No.	%	No.	%	No.	%	No.	%
0	0	0	0	0	0	0	0	0	5	9
1	2	4	2	1	2	2	0	0	20	34
2	2	4	8	5	18	21	6	67	27	46
3	9	18	26	17	32	36	2	22	3	5
4	14	29	53	35	26	30	1	11	2	3
5	22	45	63	41	10	11	0	0	2	3
Total	49		152		88		9		59	

Table 5.7 Quality of blade form

consumers who desired larger and flashier artefacts, but who were also willing to accept (or were not aware of) a decline in the level of craftsmanship.

Second, as consumer taste demanded more decoration, the producer responded by decreasing inputs into the obsidian blades (Table 5.2), although the major decline begins slightly later than for the decoration of the hafts— in Period 4 (Table 5.7). Quality of blades was defined in this study in terms of the degree to which the following were present: straight, parallel edges; a long, well-formed point; and retouch, if present, characterized by small, continuous scars. A further measure of the consistency of shape is the number of changes in direction along an edge. A straight edge is measured as one direction. Any changes in angle of more than twenty degrees was counted as a change in direction. As shown in Table 5.2, the most irregular blades on average were during Periods 3–5. This trend is well illustrated in Figure 5.4 whereby the amount of retouch generally declines through time. Also the size of the scars increases and the placement is less regular.

In Period 2 long, slender blades were struck from prepared cores, and where necessary were retouched, to yield a blade with long, straight sides and a very long, sharp point (e.g. Figure 5.3 a). Although Period 3 blades are larger overall, they have less retouch than in Period 2 and the amount of retouch continued to decrease in Period 4. The point is less predominant through time as shown by the increase in tip width (Table 5.2; cf. Figure 5.4). In Periods 4 and 5 there is a significant decline in blade size which offsets the major enlargement of the hafts. The ratio of blade to haft remains relatively stable. Also through time a larger proportion of blade length was retouched to obtain regular edges.

In Period 5, after the First World War, primary manufacture of obsidian blades ceased altogether. Producers scavenged old artefacts and by Period 6 an increasing number of waste by-products left over from the time when blades were manufactured were hafted. As a result, blade size declined further, shapes became more irregular, and an increasingly large number bear traces of cortex on them. Initially, economies were also made by reducing the amount of retouch used, but beginning in Period 5 and markedly increasing in Period 6, scavenging yielded such irregular blanks that more shaping was needed to produce a satisfactory artefact. Savings were achieved by employing heavy-handed and sloppy retouch.

Third, the work involved in spear and dagger production increasingly became routinized. From Period 4 fewer spear types were produced consistently (Table 5.3) and the designs are more standardized. For example, each of the *Challenger* artefacts is unique (cf. Moseley 1877: pl. XX), but in the collection purchased by A.B.Lewis in 1911 (Welsch 1998; examples in both the Australian Museum and the Field Museum) there are many identical hafts, as if they had been turned out on an assembly line. A study of design symmetry by Crowe and Torrence (1993: Table 5.2) has shown that fewer, less complex designs predominate in Period 4. Previously eight three colour patterns (red and black on

a white background) were used for the wrapped designs but in Period 4 two new styles which use only two colours (red on a white background) are predominant.

In contrast, as noted above, the range of carved and incised designs increases between Periods 2 and 4 (Tables 5.4, 5.5) since the producers were actively trying to please European tastes. Economies were achieved in producing them. In the fourth strategy the carved and incised designs became simplified through time, i.e. there are fewer lines. For example, in the elaborate rendering of a frigate bird on an 1877 artefact (shown in Figure 5.3 c), the head, body and wing tips of four birds are well distinguished. By 1883, the haft depicts only two birds and the design is reduced to a swirl (Figure 5.3 b). After the Second World War, the frigate bird outline was entirely replaced by a simple v-shape (Figure 5.3 a). The highest energy investment in carving was in Period 3, but this was notably reduced in Period 4 by the decrease in perforations and by focusing on the much simpler crocodile motif

A fifth strategy which increased efficiency was to diversify the product range. After the turn of the century, daggers with incised hafts gradually began to replace spears of the same haft form and from Period 4 there was an explosion in their numbers. It seems likely that the producers diversified into two classes, a cheap memento for the casual buyer (a dagger) and a large, elaborate, expensive object (a spear) for the serious collector. After 1940 daggers are virtually the only form which was sold. Daggers are especially interesting because they rapidly acquired all the attributes of market-oriented, mass production.

DOMINANCE AND THE ARTEFACT TRADE

The analysis of changes in spear and dagger production strongly supports the hypothesis that from as early as Period 3, the artefacts that have ended up in museum collections were made primarily for sale to traders. The results also make it highly questionable to suppose that the Admiralty Island producers were dominated by Europeans in the context of this barter. Their very active participation in altering goods to fit consumer tastes suggests that they were eager to engage in economic transactions with outsiders. A key issue addressed in this chapter, therefore, is whether the willingness by the producers to respond represents *dependency* on Europeans or *creative enterprise* by producers in obtaining desired goods.

The data on production suggest that both sides negotiated in the barter of obsidian-tipped spears and daggers. The traders obtained goods of a form they could sell elsewhere although the quality of craftsmanship declined as the demands for larger and more highly decorated objects increased. In return, the makers did not sustain losses in terms of time and energy investments. The producers were very sensitive to market demands and altered artefact form considerably in order to attract trade. In order to engage successfully, they changed the nature of their product to appeal to European tastes, but they did not make significant sacrifices to do so. The increased investments which entailed

enlarging artefacts and elaborating the decoration were cleverly offset by reductions in the investment of time and energy in manufacturing the objects. It seems likely that the actual investment in a Period 4 spear was not significantly greater than in the simpler Period 2 or 3 artefacts.

Unfortunately, there are no historical data about how the process that we can observe from the museum collections actually took place. For example, it is unknown whether various traders instructed the makers to emphasize certain traits or if the makers merely observed which items were most desired and altered their behaviour to take account of these choices. We also lack data on whether the buyers and collectors were aware that despite increases in size and showiness of the goods, other aspects such as the detail of carving declined at the same time. Although the actual, on the spot, interactions between Admiralty Islanders and foreigners are poorly recorded, changes in the spears and daggers are best described as negotiated, since both makers and consumers made adjustments in their notion of value. Much of the negotiation process was probably carried out over a period of months or years as both sides adjusted their goals on the basis of previous interactions.

The analysis of the production of trade goods as opposed to their consumption has been important as a framework for studying indigenous-European interaction because it demonstrates that it must have been more than a series of unrelated events. The systematic changes in behaviour recorded in the weapons must have been part of a larger process that unfolded over a relatively long period of time. In order to understand how both sides altered their behaviour, one would need to look beyond the individual episodes of barter which comprised the interaction to the larger process of negotiation that arose as a consequence. Furthermore, the appropriate scale for understanding how the process operated is more likely to be in terms of decades rather than the short scales which many scholars associate with 'contact' studies.

EXCHANGE OVER THE VERY LONG TERM

The results of the analysis of changes in production raise a further question. Why were the spear makers so successful in altering their behaviour in response to differing demands? Was their culture highly innovative or did they already have previous experience in negotiating with consumers? Here is another area in which archaeology can make a significant contribution to the understanding of European-Admiralty Islander inter-cultural engagement because of its ability to put the recent history of a hundred years into the wider temporal context of economic transactions carried out during the past several thousand years.

To begin with, it is important to know whether Admiralty Islanders had extensive experience bartering with 'foreigners' before Europeans frequented their shores. If so, then one might ask about the character of such previous engagements. A very widespread view of Pacific Islanders, one which was probably conceived during early European encounters in the region, is that they were all very isolated. This view is based on the European notion of the sea as a barrier as opposed to the Oceanic concept of the sea as a highway (cf. Gosden and Pavlides 1994). For instance, the *Challenger* expedition believed that the Admiralty Islanders had no knowledge of mainland Papua New Guinea (Moseley 1892:390). In contrast, the archaeological evidence demonstrates that widespread, regional interaction in both Melanesia and Polynesia was common throughout prehistory (e.g. Weisler 1997).

The Admiralty Islands fit this typical pattern. The archaeological data summarized in Table 5.8 demonstrate that obsidian from several sources in the Admiralty Islands was first transported to other sites within the local region from about 12,000 years ago (Fredericksen 1994; 1997). Beginning from about 3,500 years ago and continuing until roughly 2,500 BP, the scale of distribution increased radically and included a very large area stretching from a rare find in Sabah to more common material in the Bismarck Archipelago and then a scattering of material as far away as Vanuatu (Fredericksen 1997). From around 2,000 BP the large-scale distribution of obsidian from the Admiralty sources included only the Bismarck Archipelago and the north coast of New Guinea, but obsidian was consistently moved (traded?) within this region

Obsidian trade and production
Obsidian from local sources transported (exchanged?) to various localities within the Admiralty Islands. Unspecialized production of simple, irregular artefacts made on flakes.
Obsidian nodules and unretouched flakes exchanged over a wide region stretching from Sabah to Vanuatu, although most material remains within the local area and the Bismarck Archipelago. Unspecialized production of simple, irregular artefacts made on flakes.
Obsidian in the form of irregular pieces exported to various places in the Bismarck Archipelago. Evidence from the Sasi site shows mass production of partially retouched points probably by specialists for export beyond the manufacturing locality.
Obsidian in the form of irregular pieces exported to various places in the Bismarck Archipelago and the New Guinea mainland. Production of highly retouched, standardized points (status items?) at the Emsin site probably by specialists for export beyond the site itself.
Obsidian in the form of irregular pieces exported to various places in the Bismarck Archipelago and the New Guinea mainland. Decrease in amount of effort and standardization witnessed in the production of tanged blades at Umleang.

Table 5.8 Prehistory of obsidian production in the Admiralty Islands

Source: Data synthesized from Ambrose 1998; Fredericksen 1994; 1997; Terrell and Welsch 1997; White 1996.

throughout the remainder of the prehistoric period (cf. Ambrose *et al.* 1981; White 1996; Terrell and Welsch 1997).

The mechanism for the dispersal of obsidian is not known. The amount of material involved and the distances involved are too great to be explained solely by the movement of consumers in the normal course of subsistence tasks, etc. It seems likely that people from the Admiralty Islands never visited the far-flung places where their raw material ended up, having been passed through a series of hands. Nevertheless, obsidian must have initially left the source either in the possession of foreign visitors or within Admiralty Islands canoes sailed by traders or travellers who perhaps only moved the material to its first destination. In any case, the evidence therefore implies that some sort of exchange relationship with 'others' had been established by 3,500 years ago, if not much earlier, and carried on at least until the time the first Europeans arrived in the region. In this light it is interesting that Parkinson (1907:295) mentions longdistance trading expeditions by Admiralty Islanders to New Hanover (New Ireland Province) and islands off the north coast of New Guinea. It seems unlikely that Admiralty Islanders were unfamiliar with the practice and principles of barter, even if, as documented in Hernsheim's account mentioned earlier, many people were not at first very interested in engaging in this activity with European traders.

During prehistory most of the obsidian that was exported outside the Admiralty Islands appears to have been in the form of unworked or unfinished pieces and not as completed, recognizable implements (Fredericksen 1997). Given the small quantities involved, it also seems likely that obsidian was not valued highly and was not in high demand. In contrast, recent research at archaeological sites on Lou Island, where there are several obsidian sources, has yielded a very different picture in which there were significant changes in the type of artefact produced during the past 2,000 years or so (Antcliff 1988; Fredericksen 1994). Alterations in the scale and quality of production suggest variations in the nature of the economic setting in which the tools were made and set the scene for the changes in spears and daggers during the past 130 years.

The earliest recognizable obsidian spear points were excavated at the Sasi site dating to around 2200–1860 BP (Fredericksen 1994:110, 137, Figure 6.14; Ambrose 1988). The site appears to be a workshop where the points were made for export; 747 broken and partially worked, unifacial and bifacially retouched points made on blades were recovered from a relatively small excavation (Fredericksen 1994:109–16). Sites of this period are not well known in this region which may explain why Sasi spear points have not been reported widely. It is interesting, however, that a bronze artefact sourced to Southeast Asia was also recovered at the same site (Ambrose 1988). Exchange relations between these two regions are not out of the question, especially given Swadling's (1996: 53–9) persuasive arguments for widespread trade between New Guinea and Southeast Asia at this time. The role of contact with the Dong-son culture at this time has been debated for some time by archaeologists and anthropologists (Badner 1976). At this stage one can only hypothesize that the mass production

of spear points at the Sasi site might represent the beginning of the trade with foreigners from distant lands that ended with the tourist daggers.

The subsequent period of point production is represented by the Emsin site which dates to *c*. 1650–1950 BP (Fredericksen 1994:117–22, 138). Here 320 fragments of very carefully and highly retouched triangular or quadrangular obsidian points (Fredericksen 1994: fig. 6.3; Antcliff 1988) were recovered. Although points were manufactured at the site, the lower quantity of waste by-products and the relatively labour-intensive form of production suggest a different economic context of production from the previous period, possibly with less emphasis on mass production for exchange. It has been proposed that these highly worked and distinctive tools only circulated within the relatively local region (cf. Kennedy 1997) and had a 'heraldic' function (Fredericksen 1994:167) within some type of ceremonial exchange system, which is why they have not been found outside the Admiralty Islands (Antcliff 1988:46–9). Again it is significant that at this time relations with Southeast Asia are proposed by Swadling (1996:59) to have diminished markedly.

Around 800 years ago the scale of obsidian production increased markedly with the inception of deep shafts for mining obsidian at the site of Umleang (Ambrose *et al.* 1981; Fredericksen 1994:128–37; Fullagar and Torrence 1991). At this time spear points made on blades were largely unretouched except for a small tang at one end (e.g. Fredericksen 1994: Figures 6.49, 6.50). The marked simplification of the tanged points in relation to the previous multi-facially retouched points suggests an acceleration in the scale of production and a change in the nature of exchange.

Production of the unretouched, large blades for the obsidian-tipped spears and daggers analysed in this chapter began about 200 years ago when there was a further reorganization of production at Umleang (Fredericksen 1994: 138; Ambrose 1998). The division of manufacture into stages with block reduction and core preparation carried out at the quarry and spear point manufacture conducted at nearby villages (Fredericksen 1994:137, 138; Fullagar and Torrence 1991) and the simplification in tool form indicate the existence of mass production by craft specialists. The coincidence with the timing of the shift in manufacturing strategy and the increased European presence in the Pacific region is close enough to suggest a potential correlation.

Fredericksen's (1994:166) view is that the changes at Umleang represent the onset of mass production in response to a much higher rate of consumption of the artefacts. He proposes there was a greater demand for weapon points because of an increase in warfare which began about 700–800 years ago and accelerated after European contact (cf. King 1978) as in other parts of the Pacific, e.g. New Zealand, Fiji, Hawaii (Denoon 1997). Coupled with the increase in consumption must have been an extension in the amount of obsidian exchange since obsidian only occurs in a few restricted localities, but obsidian-tipped spears and daggers were used throughout the Admiralty Islands. We cannot be certain that the prehistoric exchange was carried out by specialist traders as described by

Parkinson (1907:326–7) and Mead (1930), but it seems likely that a similar system operated in which barter between people from differently named groups speaking different languages was the major mechanism.

In summary, then, the prehistory of Admiralty Islands' obsidian distribution and production demonstrates that prior to the arrival of Europeans exchange with various kinds of 'foreigners' had taken place for thousands of years over a large area and within a number of contexts. The Europeans were probably conceived of as just other traders operating under established principles of barter. Furthermore, the archaeology also shows that changes in the production of goods in response to different economic contexts had occurred on a number of occasions in the past. The types of changes in production that are documented by the museum collections of spears and daggers fit comfortably within the long-term history of the region.

ARCHAEOLOGY, MATERIAL CULTURE AND NEGOTIATION

The archaeological analysis of obsidian-tipped spears and daggers from the Admiralty Islands makes three important contributions to the analysis of recent history in the Pacific. First, the study of material culture provides a reconstruction of behaviour that complements and enhances one provided by studies of contemporary and oral historical accounts. What distinguishes the analysis of the obsidian-tipped spears and daggers from many other material culture studies concerning European/indigenous interaction is (1) the focus on indigenous objects traded to Europeans; (2) the emphasis on production rather than consumption; and (3) the use of museum collections as a source of data.

The second major contribution of this chapter is the attempt to study engagement with Europeans as a process by looking at change over the relatively long period of 130 years and continuing almost up to the present day. Third, the reconstruction of processes which unfolded over the longer term of thousands of years has led to the refusal to be overwhelmed by the importance of the arrival of Europeans in the Admiralty Islands. Previous changes in the context of barter had already led to alterations in spear point production. Rather than assume that a fundamental transformation occurred overnight, I have argued that a balanced and detailed picture of the continuing negotiations between local and foreign actors will produce a more accurate and richer picture of inter-cultural engagements.

From the perspective of negotiation one limitation of the chapter has been the emphasis on only one side of the process: the indigenous producer. This was deliberate since in so many previous studies the active voices of artefact makers have not been heard. The picture which I have presented could be tested against a fuller analysis of how the European collectors valued these objects. I have made suggestions on the basis of changes in the size of the objects and in the relative importance of blade and decoration, but these need to be evaluated by fuller historical work. The analysis of auction catalogues to monitor changing tastes and prices is potentially a rich source of information which is independent of the museum collections.

Studies of intercultural engagement, both in the recent and distant past, need to re-examine the assumption that interaction between so-called 'complex' and 'simple' societies is necessarily based on dominance and dependency and that the typical response on the part of indigenous people to European expansion and colonialism is 'resistance'. The authors in this book, anthropologists, and historians (e.g. Dening 1992; Humphrey and Hugh-Jones 1992; Sahlins 1995; Thomas 1992; 1994) and recent assessments of the utility of world systems theory (e.g. Sherratt 1993; Edens and Kohl 1993) have all argued that in both the prehistoric and the relatively modern world, the nature of interactions between groups was characterized by active participants, each with their own agenda. Furthermore, the negotiation that results from their engagement is a process whose outcome is not necessarily stable over time, particularly when they are engaged in barter and exchange.

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Time, tradition and transformation: the negotiation of cross-cultural engagements on Groote Eylandt, northern Australia ANNE CLARKE

INTRODUCTION

This chapter is concerned with a study of cross-cultural engagements from coastal northern Australia (Figure 6.1). It aims to weave together three interconnected threads to present an example of an inclusive, multi-vocal archaeology of cross-cultural engagement. The first thread places the study within the structure of a community-based approach to the design and conduct of a fieldwork project. The second thread presents some results of archaeological research concerned with trajectories of change and continuity in settlement and subsistence patterns across a time period spanning the late Holocene from approximately 2,500 years ago to the present day. The third thread connects an indigenous understanding of landscape, time and history together with the archaeology to present an account of the processes of cross-cultural engagement within the framework of a landscape stratified according to different cultural constructions of time.

The research project described in this chapter is situated in the Groote Eylandt archipelago in northern Australia (Figure 6.2) located about 630 km east of Darwin and 43 km east of the Arnhem Land coast, on the western side of the Gulf of Carpentaria (Figure 6.1). Groote Eylandt is the largest landmass (2260 km²) in the archipelago which consists of over one hundred islands, ranging in size from rocky outcrops tens of metres across to substantial islands, such as Bickerton Island (210 km²), which is capable of sustaining a permanent human population. Groote Eylandt is a geological and biogeographical extension of mainland Arnhem Land (Plumb and Roberts 1992) with three main physiographic zones: a central sandstone plateau; coastal plains and dunefields; sand spits and sand plains (Shulmeister 1991:58). The climate is typical of the sub-humid tropics, with a monsoonal wet season that lasts from December/January through until March/April, and a dry season, which begins in May and ends in November.

In the very recent past the Aboriginal population of the archipelago experienced contact with two different groups of outsiders. The first set of encounters involved a seasonal bartering relationship with Indonesian trepang



Figure 6.1 Map showing the location of the Groote Eylandt archipelago in northern Australia.

(bêche de mer) fishing fleets from the city state of Macassar in southern Sulawesi from around AD 1720 onwards (Macknight 1976). The Macassan visits to northern Australia ceased in 1907 when the Australian Government declared the northern coast off-limits to the Indonesian fleets (ibid.). The second set of encounters was the prolonged and continuing engagement with European society which began sporadically in the nineteenth century but which became permanent in 1921 when a mission was established by the Anglican Church Missionary Society (CMS) (Warren [1918] in Macknight 1969:186–203; Cole 1971:20–8; Dewar 1992:13).

The Aboriginal people of Groote Eylandt speak the *Anindilyakwa* language and have social and cultural ties to Aboriginal groups on the mainland of eastern Arnhem Land. They maintain their cultural relationships to the mainland through



Figure 6.2 Groote Eylandt archipelago.

shared ceremonies, trade and exchange networks, song cycles describing the routes taken by ancestral beings, marriage alliances and through the migrations of people to Groote Eylandt in the past one hundred years (Tindale 1925–26; Worsley 1954; Rose 1960; Turner 1974; Waddy 1988). Groote Eylandt people also share a common history of cross-cultural encounters with the mainland coastal groups (Hill 1951; Berndt and Berndt 1954; Cole 1971; 1983; Powell 1982; Dewar 1992). This includes the seasonal visits of Macassans, the establishment of mission settlements in the late nineteenth and early twentieth centuries, and the declaration, in 1931, of the Arnhem Land Reserve as an area of land set aside for Aboriginal people. In the last thirty years the construction of mining sites and mining towns at Nhulunbhuy in north-east Arnhem Land and Alyangula on Groote Eylandt (Figure 6.2) has created a different era of relationships between Aboriginal people and Australian society.

LANDSCAPES OF CONTACT

At first glance, it might seem that the archaeology of the immediate, recent past does not hold much promise of providing anything other than empirical confirmation of what we already know, in general terms, about ethnographically documented, contemporary hunter-gatherer societies. In northern Australia there are a number of studies (for example Altman 1987; Thomson 1939; Peterson 1973; Meehan 1982) which show how Aboriginal people collect foodstuffs from locally available sources and make camp within clan estates at a range of places including home bases and temporary 'dinner time' camps (Meehan 1988). The material remains resulting from these recent activities (Meehan 1982; 1988; Roberts 1991; Clarke 1994) can be interpreted as being somewhat refractory in nature and rather limited in terms of their potential contribution to an understanding of indigenous land use practices. However, if these recent sites are placed together under the rubric of cross-cultural contact and encounter, they are transformed from the archaeology of ethnographic confirmation into places that contribute to an overall understanding of the material correlates of short-term social change. Individually, these sites may not contain large amounts of data, but collectively at the level of landscape they provide a powerful statement about the continuities, discontinuities and changes in hunter-gatherer land use practices within the social and historical context of encounters with outsiders.

The landscape is one medium through which cross-cultural encounters were, and continue to be, negotiated. Outsiders, stepping down from boats, from horses and from wagons, moved in those singular moments from the tangible and symbolic manifestations of their own familiar territories onto structured, culturally encoded indigenous landscapes. It is not, however, those highly specific and localized events that provide any great degree of transparency for archaeological analysis. It is at the organizational level of landscape rather than through the particularizing analyses of individual sites that we can begin to understand and demonstrate the fundamental and central importance of indigenous social relations to land in structuring cultural responses to the processes of cross-cultural engagement. The processes of cross-cultural encounter will only become visible archaeologically by tracing across the land the trajectories of continuity, discontinuity and change in settlement and subsistence patterns, trade and exchange networks, technology and graphic systems from the pre-contact period of the late Holocene into the past two hundred years.

How did indigenous communities negotiate the ideological and physical challenges presented by outsiders; how did they interpret and translate the effects of cultural loss and the shock of the new within indigenous social institutions and practices; and how are these manifested in the material record? Archaeological research which examines these questions through the variegated landscapes of encounter provides an opportunity to move away from the somewhat simplistic renderings of encounter as a mix of fatal impact and acculturation to a more broadly based understanding of the complex suite of processes encompassed within the historical reality of cross-cultural encounters and engagements.

In northern Australia the history of Aboriginal experiences of encounters the relationships, conflicts, negotiations and exchanges between coastal groups and the Macassans and Europeans-are documented in both oral traditions and archaeological sites. Stories, song cycles, place names, personal names, ceremonies, loan words, rock paintings, trepang processing sites and the old peoples' camping places, all offer an indigenous view beyond text of the consequences of contact with peoples from other worlds. Dening (1980:31-4), writing about the Pacific, uses the beach as a metaphor for the liminal space of encounter between the oppositional worlds of the colonized and the colonizers. In northern Australia, however, the beach is a central place not a liminal space; it is the focus of the daily domestic lives of Aboriginal people and forms the industrial and bartering landscape of the Macassans. The paths of ancestral beings enter and leave the land at the coast. It is a shared landscape where places often carry different names, an Aboriginal name, a Macassan name and/or a European name, illustrating not the submergence of indigenous culture but the incorporation of the outside systems of knowledge into native lands.

The archaeology, history and operation of the trepang industry have been described and analysed in extensive detail by Macknight (1969; 1976; 1986) and Mulvaney (1975; 1989) and more recently, by Mitchell (1994; 1996, Chapter 7). Macassan is used in this chapter as a convenient short-hand term to describe ethnically diverse groups of Indonesian fishermen (Macassans, Bugis, Javanese and Bajau peoples) from the city port of Macassar (present-day Ujung Pandang in Sulawesi) (Macknight 1972:283). The trepang fleets arrived on northern Australian shores during the wet season, sailing on the north-west monsoon winds and left several months later at the beginning of the dry season on the south-east trade winds. The Macassan crews set up camps on beaches, building smokehouses and stone lines to hold the trepang boilers. They brought dugout canoes, metal axes, knives and fishhooks, tobacco, cloth, pottery, rice, tamarinds and alcohol, all of which were bartered for labour and left as gifts for Aboriginal people. There are also accounts of Aboriginal people travelling as crew on the Macassan praus (Worsley 1954).

The archaeology of European expansion and settlement in northern Australia has been little studied (Allen, F.J. 1969; 1978; Crosby 1978). There is, in contrast, a wealth of historical studies concerning European explorers, British settlements, mineral exploration and mining, pastoralism and the establishment of missions (see Powell 1982 for a summary). The coast of Arnhem Land was initially visited by Dutch ships as early as 1623 (Sharp 1963; Schilder 1989) and was later mapped in detail by Matthew Flinders (1814) during his circumnavigation of Australia in 1802–3. Early attempts to establish military settlements on the north Australian coast were made by the British government from 1824–49 (Allen 1969; Spillett 1972; Mulvaney and Green 1992). The city of Darwin (originally called Palmerston) and the surrounding region were surveyed and established in

1869 and the construction of the Overland Telegraph from 1870–72 marked the expansion of European settlement in northern Australia. Arnhem Land, particularly the landmass of eastern Arnhem Land was, however, little known even up until the 1940s (Thomson 1949; Berndt and Berndt 1954). Prolonged European contact in parts of eastern Arnhem Land is a very recent phenomenon when compared to the colonial history of southeastern Australia, Queensland, and indeed, other parts of the world where European expansion was experienced. The first European settlement at the Emerald River on Groote Eylandt was established as recently as 1921.

LANDSCAPES OF TIME

As a number of Aboriginal writers have noted (Langford 1983; Tasmanian Aboriginal Land Council 1996; Fourmile 1989) the main point of contention between archaeologists and Aboriginal people is who controls the past. This dispute is not just about access to places for research and conservation but also control over the writing of Aboriginal history, that is, the form and shape of the archaeological narrative.

Australian archaeology has a tendency to take as its central form of narrative a developmental and somewhat cumulative construction of time and culture. Although we now have a number of regional case studies in which we argue for punctuated, episodic occupation, abandonment and re-settlement, our dominant account culminates in a model of increasing cultural complexity and continent wide settlement patterns until 200 years ago. This trajectory of progression is seen as fatally disrupted by the events of 1788 onwards with Aboriginal identity and cultural history largely sublimated beneath the grand narrative of colonial/settler achievement. Although we no longer dress our explanations of the past in the overtly recognizable outer garments of Enlightenment apparel, our more intimate and closely worn raiments are perhaps not as distant as we might like to imagine from this particular body of knowledge.

We place antiquity, longevity and the importance of deep time at the forefront of our archaeological narratives and the temporal scales available to us through radiometric dating methods bracket time in units of 100, 1,000, or 10,000 years. Trajectories of change and continuity in the production of material culture, graphic systems, settlement and subsistence practices are rarely tracked into the last 200 years. Archaeological texts predominantly present archaeology sequentially from the distant past to the present with the last 200 years mentioned in passing as a disjunctive coda hidden beneath a radiocarbon label of 'modern' and relegated to a brief description of foreign, non-indigenous objects in the surface and uppermost units of deposits.

From ethnographic research in northern Australia (for example Meehan 1982; Lewis and Rose 1988; Williams and Mununggurr 1989) and from archaeological research (Goulding pers. comm.) in eastern Victoria, in New South Wales (Byrne 1998) and Cape York (Greer 1996), it is clear that Aboriginal people turn this archaeological concern with antiquity completely around. It is recent time, time which falls within the ambit of personal and community remembrance, and which is etched in the landscape through the associations of place, people and memory, that is given prominence in Aboriginal constructions of history.

Underlying this difference is perhaps the fact that we are dealing with different approaches to time. In Cape York time, there are different categories of time that exist co-terminously. *Bifor taim*, for example, is based on a concept of timelessness which does not incorporate historical or chronological time, but rather exists in the interstices of normal secular life. The past and present meet in the stories, beliefs and practices that are associated with these sites.

(Greer 1996:106)

Similarly, in their discussion of the cosmology of rock art from the Victoria River District, Lewis and Rose describe how Aboriginal people discern time as being constructed of the Dreaming and of the present:

Most elderly people trace their genealogies back two or three generations. Grandparents, according to most senior people, were not born, but emerged directly from the Dreaming. The Dreaming, then is not the distant past; rather, the present is directly emergent from the Dreaming.

(Lewis and Rose 1988:50)

Meehan (1982:165–8) in the conclusion to her study of contemporary shellfish collecting by the Anbarra people of northern Arnhem Land described how they recognized the presence of dead men sites and Dreaming sites in their cultural landscape. Dead men sites were shell middens where people did not know or did not want to identify the particular ancestors who had lived there. Dreaming sites, on the other hand, were larger, discrete shell mounds for which there were no remembered ancestors and which Meehan interpreted as relating to the settlement of an older coastal landscape. This account seems to suggest that there is also a temporal stratification of places within the Anbarra landscape. There is a clear remembrance of places occupied within the last two or three generations. Beyond that period the old camping places become part of the Dreaming landscape.

In an Australian context, time and land appear to be irrevocably linked in the study of cross-cultural interactions. A focus on landscape and social relations to land is central to developing archaeological, as opposed to historical, models of cross-cultural engagement. In considering the processes of cross-cultural interaction, one of the great challenges is to move away from the dominant linear narrative of archaeological writing to develop more inclusive explanations of the archaeological record, explanations which engage quite directly and explicitly with different cultural notions of time, land and history.

Greer's research in Cape York is one example of such an approach. She has noted how 'archaeological views tend to focus on sites as repositories of a past, this being trapped in the artefacts and surrounding deposit' (1996:103). She goes on to describe how archaeological sites in northern Cape York are woven into contemporary cosmology and can be seen as monuments to the continuing practice of culture. She looked at a number of archaeological sites in Newcastle Bay and examined how these places were under a continual process of transformation defined by identity and confirmed by continuity of use. She sought to understand the concept of heritage from a community-based perspective, focusing on the contemporary and historical associations of places, landscapes and people rather than through the linear temporal framework of conventional archaeology.

CROSS-CULTURAL INTERACTION IS A CONTINUING PROCESS

From an archaeological perspective, the study of cross-cultural encounter occupies a problematic position in space and time. Because contact archaeology engages directly with the history of indigenous experiences of colonial/settler society, it forces into sharp focus a number of methodological, theoretical and political challenges to the way that archaeology is practised. Contact archaeology is concerned with the immediate and very recent past, and as a consequence directly confronts a number of problematic relationships between data and evidence. Wilson (1993:19), for example, considers contact archaeology to be haunted by a problem of 'mixed epistemologies'. His study of the contact period in the Caribbean is an attempt to synthesize the different scales of explanation represented by archaeological, historical and ethnographic data. He comments (ibid.: 21) that a common assumption of contact period studies is that the sum of these conjunctive sets of data will provide a more detailed and holistic picture of society and change in the period of contact. Wilson identifies macroscale processes, such as intensification, population growth and changes in burial. These occur over long spans of time and are observable from archaeological data. He contrasts these with micro-scale processes which occur over much shorter spans of time, and which are evident from ethnohistorical sources. In his conclusion (ibid.: 28) he states that a synthesis of these two scales of process is not yet achievable and suggests that the different ethnohistorical and archaeological data sets can provide hypotheses for each other to test.

As well as problems of scale, the archaeology of cross-cultural engagement is conducted in contexts where the contrast between western and indigenous systems of knowledge and meaning is quite apparent. It is also an archaeology carried out in landscapes marked by culturally different experiences of possession and dispossession, in contexts marked by the disparity between known and hidden histories (after Rose 1991), and where there is a divergence between text and remembrance. It also deals with a time period where the outcome of the histories of relations between indigenous peoples and colonial/ settler societies are, at one level, already known and which has been subsequently enacted in social and political policies and practices. If, as Murray has stated, the historical archaeology of Aboriginal Australia is 'an archaeology of dispossession, assimilation, multiculturalism and reconciliation' (1996:210), then archaeological narratives of this time period cannot help but touch upon the long-term social and political consequences of the relationships between indigenous and settler societies (Rubertone 1989). In recognition of the overtly political context within which the archaeology of cross-cultural encounter and engagement operates, archaeologists should engage more directly and inclusively with Aboriginal communities to re-examine how the past is both researched and written about.

It has been stated that the archaeology of contact is about shared histories and shared identities (Murray 1996). However, unless archaeologists can begin to develop truly inclusive approaches to the study of contact, we will continue to lay ourselves open to accusations from indigenous communities that we are maintaining the processes of cultural appropriation and dispossession. We need to engage quite directly with Aboriginal people and communities, not merely for the purposes of gaining research permission and for the physical extraction of archaeological data from the landscape but also in the creation of archaeological narratives (Langford 1983; Davidson *et al.* 1995; Tasmanian Aboriginal Land Council 1996). It is in this context that new community-based approaches to archaeological research seek to find ways of reconciling archaeological research aims with Aboriginal views of place and history (Davidson *et al.* 1995; Greer 1996; Ross *et al.* 1996).

NEGOTIATION

In this chapter, cross-cultural engagement is framed as a process of negotiation. This perspective allows for an active and negotiated relationship between Aboriginal people and outsiders. Indigenous social practices are viewed as being transformed as an interactive and culturally negotiated response to the experiences of encounter. Changes and continuities in indigenous social practices are seen as mediated through the foundations of existing social, ideological and technological traditions. The introduction and incorporation of new externally derived elements into indigenous life are thus partly due to culturally negotiated choice and partly due to enforced external change. In this way the concept of negotiation provides a contrast to the impact models that have tended to dominate contact studies until relatively recently.

Historical, anthropological, and more recently, archaeological research has presented a critique of fatal impact as a colonial construct of domination (see Thomas 1994:11–32). A unifying theme of many recent archaeological studies is that cultural change in the period of contact was not a one-sided process, directed only by European actions and policies (Rogers and Wilson 1993:3). Encounter is

used as a heuristic device by Dening (1980; 1995a; 1995b) to draw out the twosided and interactive nature of cross-cultural relations. The notion of encounter is important because it enfolds not only the individual and collective events of contact but also the processes set in train by prolonged encounter. Encounter relationships are viewed as transformational for both the colonizer (for example, Smith 1985; Greenblatt 1991; Pagden 1993) and the colonized. Anthropological studies have described how outsiders and the diverse experiences of encounters can become socialized within indigenous institutions (Rose 1991; Thomas 1991; Ballard 1992 cited in Sahlins 1995).

The problem with impact models of intercultural encounters is their onedimensional and linear nature. Such models assume action on the part of settlers and passive reception by indigenous societies. This, for example, has been the predominant interpretation of the relationship between coastal Aboriginal communities in northern Australia and Macassan trepang (bêche de mer) fishermen from Indonesia (Warner 1932; Mulvaney 1975; 1989; Macknight 1976; White with O'Connell 1982). Placed in this passive role, Aboriginal people are seen to receive superior technological items which enable them to extract resources more efficiently and quickly. It is a utilitarian and adaptive view of hunter-gatherer society which sees material culture and behaviour as predominantly determined by environmental rather than social and ideational variables (Conkey 1984; Schrire 1984; Jones 1990). It also reinforces the perception of Aboriginal society as inherently static by maintaining that, despite the expansion of knowledge and experience offered through contact, changes in social institutions and practices were minimal. The concentration on impact coupled with the theme of technological determinism does not allow for Aboriginal people to have engaged in active and culturally negotiated roles in their relationships with Macassan fishermen nor indeed with European society.

COMMUNITY-BASED ARCHAEOLOGY AS A NEGOTIATED ARCHAEOLOGY

In the past thirty years archaeology in Australia has undergone a transformation of practice. This has been brought about by the increasing involvement of Aboriginal people in the control, management and research of their own cultural heritage. In northern Australia, archaeologists have worked with Aboriginal people in their research projects since the 1960s (e.g. Kamminga and Allen 1973; Jones 1985; 1993; Meehan 1982; Schrire 1982). The involvement of Aboriginal people in archaeological projects in northern Australia arose out of a practice of cultural courtesy in landscapes which were and are still very much part of an indigenous way of life. In contrast, in south-eastern Australia the process of consultation has arisen more as a result of the political demands of Aboriginal people to have control of their own cultural heritage. Archaeologists now consult with Aboriginal communities about field research as a matter of professional practice for both academic and applied projects (e.g. Creamer 1983; Rose and Lewis 1984; Sullivan 1985; Davidson *et al.* 1995). The relationship between Aboriginal people, archaeologists, research and the ownership of cultural heritage has been the subject of continual debate over this period (e.g. Allen, H. 1978; Langford 1983; Rose and Lewis 1984; Sullivan 1983; 1985; McBryde 1985; Richardson 1989; Pardoe 1990; 1992; Mulvaney 1991; Birckhead *et al.* 1992; Davidson *et al.* 1995).

For archaeologists of the current generation, community consultation has become a routine part of professional practice. Today, archaeologists negotiate with Aboriginal organizations for permission to carry out field research and Aboriginal community representatives are often employed as assistants during fieldwork. Recognition of the relationship between archaeology, archaeologists and indigenous people has been formalized in the Australian Archaeology Association's (AAA) Code of Ethics (Davidson 1991). The Code of Ethics sets out the parameters for interaction between the researcher and the host community and is based on the code produced by the World Archaeology Congress in 1990 (Williams and Johnston 1991).

In a community approach, consultation and the negotiation of research access are only the first stages. The premise behind a community approach is that research is a negotiated process and that the boundaries of a project are open to reassessment and renegotiation by any of the parties involved. The research goals and the mechanisms needed to achieve those goals are negotiated. Another fundamental constituent of a community approach is that it acknowledges the subversion of power relations between the representatives of the dominant culture carrying out the research and the indigenous minority who are the subject of the research. In this shift of power relations the researcher acknowledges the right of the community to stop the research at any point. A community approach is not merely one of courtesy, as in a host-guest relationship, it is an explicit restructuring of power relations and a political recognition of the rights of the communities to have a role in directing how research about their lives (past or present) is conducted. An integral component of a community approach is the return and distillation of research results in formats that are both intelligible to a non-specialist audience and useful in a community context.

The ideological reasons behind a community archaeology are to do with a particular view of archaeological practice. It is an explicit recognition that archaeology is a socio-political endeavour (Gero *et al.* 1983; Shanks and Tilley 1987; Wylie 1989) and that even though it is clothed in the outer garments of objective science, it is also intimately apparelled as a form of intellectual inquiry designed by people to find out about the human past. All of this is carried out within landscapes shaped, constructed and understood by people through the subtle interactions of social, political and natural processes. Archaeologists are now much more aware of the ways in which their work can have a profound effect on the communities in which they conduct their research. The results of archaeological activities reach beyond academic discussions of the human past to

have a very real impact on the lives of peoples whose past has been the subject of investigation (for example, the papers in Layton 1989; Shennan 1989).

The pragmatic reasons for taking a community approach are more straightforward, particularly when working on Aboriginal land with people who speak their own language first and use English as a second language. It is not possible to get access to areas for research without community approval. Part of the process of getting approval is to explain the reasons for wanting to do the research in a way that is comprehensible, culturally polite and importantly, interesting to the community (Rose and Lewis 1984).

The pragmatic and ideological underpinnings of a community archaeology are not mutually exclusive. Community archaeology is one end of the continuum of archaeological practice that operates within a framework of contemporary social theories of post-colonialism. Under this theoretical umbrella the relationships between the researcher and the researched are re-examined with an explicit recognition that both academic descriptions and public perceptions of the studied other are formed from the ideological and political constructions of the dominant self.

In the late twentieth century, researchers have been required to understand that their understanding emerges from their engagements with their subjects of study. Whether the impetus comes from quantum physics, from radical feminism, or from the demands of colonised peoples, the issue is the same: for better and for worse, the 'observers' are part of the systems they study. Reflexive anthropology...can be traced in part to the fact that the subjects of study have started talking back, demanding to be taken seriously on their own terms, demanding accountability, and demanding reciprocal relationships with the people and institutions who have studied them.

(Rose 1993:6)

Research autonomy was a basic assumption for archaeological field projects twenty or more years ago. The political context of fieldwork has changed over this period. At the wider level there is now a structured and formal recognition within the discipline of archaeology that Aboriginal people have control over the conduct of research on their land and about their sites. At a community level individual archaeologists work within a set of culturally defined protocols and constraints. Fieldwork in this context is a continually negotiated and reciprocal process. The eventual outcomes of fieldwork can be seen as a mediation between an archaeological view of what should be done to meet research goals and what is acceptable within an Aboriginal cultural environment.

LANDSCAPES OF NEGOTIATION

The concept of negotiation establishes a conceptual link between the processes of cross-cultural engagement in the past and the research relationship between the Aboriginal community and archaeologists in the present. In the section below I have explained how fieldwork on Groote Eylandt was negotiated and carried out for the simple reason that the act of doing research within a cultural landscape defined and identified by Aboriginal people was the medium through which the focus on the archaeology of contact arose.

With field projects it is usually the physical and time constraints of fieldwork that cause a re-orientation of research goals and aims. In the research on Groote Eylandt the transformation of the project occurred through the medium of the cultural environment. The research focus of the project shifted as a direct result of the way in which the Aboriginal people interpreted my interest in old peoples' camping places in terms of their own cultural understanding of their particular historical landscapes. The most striking elements of the fieldwork were the differences between my own archaeologically based reading of the cultural landscape and the one that was presented by Aboriginal people. It was this interaction which transformed the project from one orientated towards the location and excavation of a few, deeply stratified sites in sandstone rock shelters, to one concerned with a suite of contact period sites spread across the recent coastal landscape.

Archaeological fieldwork and cultural constraints

Archaeological research carried out within the context of an Aboriginal community tends to be structured according to cultural events and processes rather than to a timetable based on conventional approaches to fieldwork. Generally, archaeological fieldwork is a staged process. The first stage is a preliminary examination of an area to gauge the nature and range of archaeological sites. From this a sampling strategy is devised to structure a more intensive and systematic survey of an area. The third stage usually involves the excavation of test-pits at a sample of sites identified in stage two. In the fourth and final stage, key sites are excavated in greater detail.

With fieldwork in an Aboriginal community all these stages tended to get rolled into one. The Aboriginal people who showed me sites within their clan lands did not have large amounts of time to help me set up a staged project. When we went out into the bush to camp it usually meant that people took time off from their normal community life and activities. For example, when we visited an area called *Marngkala* in the far south-east of Groote Eylandt (Figures 6.3, 6.4 and 6.7) the Aboriginal woman with whom I was working had to get permission to take her children out of school for that period so they could come with us. On other occasions people temporarily left community employment schemes to help me with my fieldwork. This meant that I had only a limited





amount of time in which to make decisions about the sites to excavate. People would show me sites over the first couple of days of our camping trips and we would start excavating almost immediately. The excavated sites were selected as a compromise between the ones that people knew to be old camping places and wanted to have investigated and the ones that I considered had excavation potential.

Another example which highlights the different characteristics of fieldwork in an Aboriginal community are the events surrounding death. On Groote Eylandt, when people die, access to areas of the landscape is forbidden until funeral ceremonies are completed. This is to allow the spirit of the deceased person to be sung across the totemic landscape of his or her traditional country. This restriction applies to the deceased person's clan lands and to places where that person also fished and camped on weekends and holidays. The length of time that country is closed varies according to the status of the person and sometimes the manner of his or her death. For example, when one important elderly man died, access to the entire south-east of the island was restricted for two years. The final part of the funeral ceremonies involves relatives returning to the clan lands of the



Figure 6.4 Excavation in progress at *Marngkala* Cave in 1991 showing (from the left) Mary Amagula, Charlie Jaragba and Nicholas Amagula excavating.

deceased person to 'smoke' the country. After this, restrictions on access are lifted.

Twice in 1991, while camped out with Aboriginal families in the bush, deaths occurred in one of the Aboriginal towns. On each occasion relatives of the deceased person drove out to our camp to fetch us back into town so that the country could be closed and proper arrangements for the funeral ceremonies could begin. As a result when the country was closed, I had to change my fieldwork plans. I either had to arrange to visit other areas or remain in town until funeral ceremonies were completed and the country was opened up again.

In archaeological literature fieldwork constraints tend to be framed in terms of difficulties of physical access or problems of ground surface visibility. Working with Aboriginal people on Aboriginal land the constraints on fieldwork access are more likely to be cultural in nature. Archaeologists have developed sampling methods that enable the nature, range and density of sites in a landscape to be quantified, and research questions are based on the assumption that there is potential access to all components of the landscape. This is certainly not the case when working on land owned and maintained by Aboriginal people. The researcher must observe cultural protocols related to working on Aboriginal land. These may involve restrictions in terms of access to areas that appear to be of archaeological interest. Sometimes these restrictions are related to the presence of secret/sacred places in the area, at other times it is because

Aboriginal people worry about the physical safety of non-Aboriginal researchers unfamiliar with the landscape. This poses obvious problems for conventional methods of field sampling which involve dividing the landscape into strata according to physiographical criteria and walking random transects.

Different landscapes

When I began to go out with Aboriginal family groups to locate archaeological sites, the question that I asked was, 'Where did the old people camp?' In response I was taken around the coast to places which were known to have been old camping areas. In some cases these were still used on weekends and holidays and in others people no longer chose to camp in those same locations. The old camping places were invariably located within the present-day coastal zone at the back of beaches immediately above the high water mark. These camps were often associated with evidence of some form of engagement with Macassans. This included pottery sherds and pieces of glass and metal mixed in with shell midden remains. Sometimes former trepang processing sites containing the stone lines on which the boiling pots were placed (Macknight 1976, Plates 34 and 35) and the shallow, charcoal rich depressions at the back of the beach where smoke houses had been placed were identified as places where the old people had once camped with the Macassans. On other occasions I was taken to locations where no material evidence of cultural activities existed but which were places known and named as camping areas. Many of the areas remembered as old people's camping sites were obviously recent in age and on examination produced no evidence of archaeological deposits below the ground surface. The beaches where people slept, ate and collected most of their food were the focus of the indigenous landscape. In complete contrast, my orientation as an archaeologist was always towards locations such as the sandstone cliffs or towards the relict dunes and sand ridges behind the active beach zones where I expected to find rock shelters and shell middens with stratified deposits.

During my first field season in 1991 I mostly excavated sites that I was taken to by Aboriginal people and which were known to be old camping places (Table 6.1). The radiocarbon dates for all of these sites proved to be recent in age (see Table 6.2). The one exception to this was a small rock shelter located on the eastern side of the island about 1 km from the coast in an area called *Ararrkba* (Figure 6.3). I found the site surveying some low sandstone outcrops while some of the Aboriginal women were digging for yams (*Dioscorea transvera*) in the monsoonal vine thickets nearby. The ceiling of the shelter contained some red ochre hand stencils together with a number of paintings of fish, canoes and dolphins. It had a sandy floor containing a

Site name	General location	Site type	Contents	Temporal phases represented
Makbumanja	North-west peninsula	Open midden on dune	Shell, bone, glass, glass bead, metal, pottery, lithics, ground stone, ochre, charcoal	Macassan
Lerrumunguma nja Midden	Marble Point, north-west peninsula	Open midden on dune	Shell, bone, pottery, ground stone, lithics, charcoal	Mission, Macassan
Lerrumunguma nja Rock shelter	Marble Point, north-west peninsula	Rock shelter	Lithics, ochre, shell, ground stone, charcoal	Mission, Macassan
Dirrangmurum anja	Marble Point, north-west peninsula	Open midden on beach deposit (storm disturbed)	Shell, bone, ochre, ground stone, charcoal	Mission
Yingilgalyuma nja	Marble Point, north-west peninsula	Open midden on dune	Shell, bone, charcoal	Mission
Malmudinga	Marble Point, north-west peninsula	Open midden on dune	Shell, bone, ochre, lithics, ground stone, charcoal	Mission, Macassan, arakbawiya
Murnerriburna	Marble Point, north-west peninsula	Shell scatters on beach ridge	Shell, ochre, lithics, antbed, ground stone axe fragment, ground stone	Mission
Old People's Waterhole	Marble Point, north-west peninsula	Surface shell scatters	Shells, glass	Mission
Mamiyarrka	Salt Lake	Open midden on beach	Shell, metal	Mission
Murrumurrirra binilangwa	Salt Lake	Open midden on dunes	Shell, bone	Mission
Ararrkba	East Coast	Rock shelter	Lithics, ochre, shell, bone, glass, ground stone, charcoal	Mission, Macassan, arakbawiya

Table 6.1 List of sites excavated on Groote Eylandt and Bickerton Island in 1991 and 1992
Site name	General location	Site type	Contents	Temporal phases represented
Angwurrkburn a	Salt Lake	Rock shelter	Lithics, ochre, bone, shell, charcoal	Mission, Macassan, <i>arakbawiya</i>
Marngkala Cave	South-east peninsula	Rock shelter	Shell, bone, lithics, ground stone axe fragments, iron, glass, glass bead, pottery, ochre, charcoal	Mission, Macassan
Marngkala Rock shelter	South-east peninsula	Rock shelter	Shell, bone, glass, pottery, metal, lithics, charcoal	Macassan
Mungwujirra	Bickerton Island	Discrete concentration of shell in rock shelter	Shell, charcoal	Mission
Milyipilyuman ja	Bickerton Island	Discrete shell piles on dune surface	Shell, lithics	Mission
Arumumanja	Bickerton Island	Discrete shell pile on dune surface	Shell, bone, hearth stones	Mission
Aburrkbumanj a	Bickerton Island	Open midden	Shell, bone, lithics, glass bead, charcoal	Mission, Macassan
Dadirringka	West Coast inland	Rock shelter	Lithics, ochre, pottery, metal, shell, charcoal	Mission, Macassan, <i>arakbawiya</i>

Table 6.1 Continued

Table 6.2 Dominant shell species in the sites from the period of the remembered past on Groote Eylandt and Bickerton Island.

Site name	Dominant shellfish species	Percentage of assemblage
Murnerriburna	Anadara granosa	70
Yingilalyumanja	Tapes hiantina	80
Old People Waterhole	Anadara granosa	100
Mamiyarrka	Ostrea echinata	100
Murrumurrirrabinilangwa	Ostrea echinata	50
Arumumanja	Pinna bicolor	50

Site name	Dominant shellfish species	Percentage of assemblage
	Modiolus sp.	50
Milyipilyumanja	Tapes hiantina	100
Mungwujirra	Tapes turgida	100
Aburrkbumanja TP1	Tapes hiantina	90

scatter of marine shells and faceted ochre crayons. Interestingly, the Aboriginal people in whose clan lands the site was situated did not remember or know of the shelter as an old camping place. The basal radiocarbon date for this site was 1260 years BP (Table 6.2), the oldest date from the 1991 field season. Because *Ararrkba* had proved to be the oldest site documented during the first field season, Aboriginal people became interested in locating other places of similar or greater antiquity. So in 1992 we began to explore the foothills around the southern shore of Salt Lake (Figure 6.3). We located a number of sites with paintings and excavated another small rock shelter in an area of land called *Angwurrkburna* (Figure 6.5). As with *Ararrkba* this site was not part of the remembered landscape and returned a basal date for occupation of 2300 years BP.

Over the course of four long seasons of fieldwork from 1991 to 1996 the nature of the negotiated relationship changed. In the first two field seasons in 1991 and 1992 access to the landscape was expressly in terms of where Aboriginal people took me. However, in 1995 and 1996 when I returned for two further periods of fieldwork, I was asked instead, where did I want to carry out my research? Although there were still coastal places that Aboriginal people wanted to show me, I was also able to negotiate to survey the central sandstone plateau which had up until that point been closed. Again, the individual sites located around the base of the plateau were not part of the actively maintained cultural landscape of Groote Eylandt and appeared to fall within an older temporal stratum beyond community memory.

From the fieldwork it became apparent that there were different temporal strata within the cultural landscape of Groote Eylandt. There were remembered landscapes associated with old people (deceased relatives and known ancestors) and with Macassans. There was also another, older landscape that no longer appeared to be part of the remembered landscape and which was revealed through the medium of archaeological research.

MODELS OF CONTACT

David Turner's (1974) anthropological study of tradition and transformation on Groote Eylandt in the 1970s provides a conceptual model of changes and continuities in social practice arising out of prolonged engagement with nonindigenous society. Turner proposed a model that incorporated the idea of change within tradition resulting from sporadic contact with Macassans leading



Figure 6.5 *Angwurrkburna* rock shelter, one of the sites from the prehistoric past on Groote Eylandt.

to the transformation of social institutions under the influence of prolonged contact with European society. His research was concerned with examining changes in Aboriginal society since European settlement. Turner (1974: 183–97) was interested in locating changes in traditional institutions and in specifying the processes through which change occurred as a result of contact. He aimed to identify what was rejected from the process of contact and what was incorporated into indigenous ideas and practices. Turner examined three recurrent situations in Aboriginal life: how people dealt with the appearance of new people in terms of kinship and marriage; death; and how they coped with the existence of scarce resources. He investigated how people normally defined and responded to these situations prior to and during permanent settlement at the Mission. He concluded that changes in thought and activities had occurred recently and had developed out of prolonged contact with white society. He suggested that the source of change was located in the personal experiences of groups of individuals who decided to alter existing social forms and ideas. Prolonged contact forced people to re-examine their beliefs and values and change began when they decided in favour of the alien viewpoint in opposition to traditional beliefs. In this analysis we can again see in operation a process of mediation between external forces of change and the internal traditions of social practice.

Turner further considered that change initially occurred in the economic sphere prompted by the decision to move into the Mission settlement. This economic decision led to the formation of the social context in which the *transformations* of belief began to occur. When alien elements did not oppose indigenous ones, the process was one of *change within the bounds of tradition* (Turner 1974:194). Turner (ibid.: 193–4) considered this to be the essential nature of contact with Macassans. As Macassans only appeared sporadically on the coast of Groote Eylandt, this precluded people from gaining any deep understanding of alien ideas and practices, and under these conditions, change occurred within tradition. It is probably pertinent to ask how Turner was able to establish on empirical grounds the nature of pre-contact social practices and subsequent Macassan influence from oral testimonies recorded in the 1960s. It is here that archaeological evidence may provide material evidence to evaluate Turner's model. His model of change through tradition and transformation is important, however, because it presents the process of contact as mediated through existing indigenous social practices and beliefs, and acknowledges continuities in many aspects of Aboriginal life.

An important question to ask is what sort of archaeological remains are considered to constitute evidence of cultural contact. Generally, archaeologists infer contact through the presence of exotic artefacts, such as glass or metal or through the painted and engraved images of non-Aboriginal and non-Australian artefacts and animals (see Plates 2–27 in Mulvaney 1989). On European historical sites, the presence of stone artefacts at the base of the site is taken to indicate contact (for example, Murray 1993). Carmel Schrire took a different approach in her analysis of the Borngolo site in Port Bradshaw, eastern Arnhem Land.

Archaeologists might therefore be tempted to consider that exotic artefacts constitute the main indicators of culture-contact. In this paper I have presented two models of aboriginal *[sic]* subsistence behaviour which suggest that, in Arnhem Land at least, certain foreign influences induced a marked change in the range, mobility and diet of the traditional foragers. Thus, interaction between indigenes and aliens may be inferred from an analysis of the dietary remains found in an aboriginal living site.

(Schrire 1972:667)

Although the influence of Macassans is recognized through the presence of exotic artefacts, her analysis takes a broader view of the consequences of contact by examining changes in resource use and residence patterns. Schrire also incorporated her own observations of contemporary land use patterns in a model of pre- and post-contact foraging strategies. This model is an important attempt to look beyond the technologically driven models of adaptive advantage which consider that the introduction of new and better items of material culture is the primary cause of changes in land use patterns. In this model pre-contact huntergatherers were envisaged as working relatively short hours, exploiting a range of ecological zones to achieve a varied diet. Seasonal changes in climate were seen

to affect residence patterns, group sizes and diet. The wet season was the most difficult time of the year because cross-country movement and dietary variation were restricted by climatic conditions. Pre-contact sites were predicted to contain evidence of the exploitation of a wide variety of local resources, often with evidence of a high degree of seasonality.

Post-contact hunter-gatherers who lived away from direct contact such as missions would have had more permanent patterns of residence to allow for maximum interaction with outsiders. The foraging range was thus likely to be have been smaller and the diet less varied. Schrire also considered that postcontact hunter-gatherers would tend to concentrate on permanent food sources, such as marine foods, throughout the year. Post-contact sites were predicted to contain evidence of the exploitation of a more limited range of resources from the immediate environment, with less emphasis on seasonality. Introduced artefacts, obtained from outsiders, would also occur in post-contact sites.

Schrire's archaeological model does not recognize the differences between the periods of Macassan and Mission contact. It folds these two distinct periods of contact into the one explanation. Turner's model of change through tradition and transformation, on the other hand, does attempt to separate out these two culturally and temporally distinct phases of contact. His conceptualization of cross-cultural encounter is important for two main reasons. First, it presents the process of contact as interactional. This recognizes the role of indigenous social practices and beliefs in the process of contact and acknowledges continuities in many aspects of Aboriginal life. Second, from an archaeological point of view, Turner's model provides a framework to examine contact using subsistence and settlement data because it proposes economic change as the vehicle for social transformation.

TIME, TRADITION AND TRANSFORMATION

Turning to the archaeological data, the material presented in this chapter is based on my 1991 and 1992 field seasons. Eighteen archaeological sites were subjected to test excavations including inland and coastal rock shelter sites, stratified coastal shell middens and single event middens or 'dinnertime' camps (after Meehan 1988) consisting of discrete, isolated piles of shellfish. Tables 6.1–6.3 present the site data. Three main areas of Groote Eylandt were investigated (Figure 6.3); Marble Point on the western coast of the north-west peninsula, *Angurrkwurrikba* (Salt Lake) (Figures 6.5, 6.6) on the central, eastern coast and *Marngkala* (Figures 6.4, 6.7) located in the southeast of the island. One site at *Makbumanja* on the northwestern side of the northern peninsula, one inland site at *Dadirringka* (Castle Rock) on the western side of the island and four sites on Bickerton Island were also excavated (Table 6.1). The dates for occupation range from approximately 2300 years BP to the present day (Clarke 1994:135, Table 6.3).



Figure 6.6 Nabi Yantarrnga at *Mamiyarrka*, one of the middens from the remembered past on Groote Eylandt.

Archaeological research identified a landscape stratified according to cultural definitions of time (Clarke 1994). There are three temporal components to

Site name	Number of shellfish species in Macassan period units
Makbumanja	22
Lerrumungumanja Rock shelter	0
Lerrumungumanja Midden	28
Malmudinga	27
Angwurrkburna	1
Marngkala Cave	19
Marngkala Rock shelter	19
Aburrkbumanja	11
Dadirringka	0

Table 6.3 Number of shellfish species present in the Macassan period units

this landscape, each with its own material record. The archaeological record of this temporally stratified landscape reveals both continuities and changes between elements and places. The narrative presented below reverses the chronological structure typically found in archaeological texts. The most recent past is presented first and the prehistoric past last. This structure is used to reflect how the landscape of Groote Eylandt was ordered according to an indigenous view of time and history.

The archaeology of the remembered past

The most recent component is the remembered past of the Mission period. This is a real time past, populated by the known parents, grandparents and greatgrandparents of the present population. It is identifiable through oral testimony, ethnography, archives and archaeology. This past is encoded within the Groote Eylandt landscape through the medium of memory. Some of the places associated with this past can be identified by the presence of material remains, but other places are marked only by remembrance and have no physical traces relating to their former use. In one sense this is a transient and shifting past. The camping places of today will become the old peoples' camping places of tomorrow.

The association of these sites with recent dates for occupation suggests that the places recognized as old camping places occur in real time, within a remembered past, and were occupied during the lifetime of grandparents and great-grandparents. The archaeological evidence seems to tie into the Aboriginal construction of time whereby, as Lewis and Rose (1988:50) note, the present is 'directly emergent from the dreaming'. On Groote Eylandt, Aboriginal people also talk about *alawurawada*, the Dreamtime and *arakbawiya*, a long time ago. This Aboriginal view of time and history is also evident from the way in which people identified their cultural landscape over the course of the fieldwork project.

These recent sites of the remembered past share a number of archaeological characteristics. Each of the sites listed in Table 6.2 is located at the back of the present-day including Mamiyarrka beach system, (Figure **6.6**) and Murrumurrirrabinilangwa on the shores of Salt Lake. All of the sites contained a single stratum of occupation. Some of the sites, for example Murnerriburna, consisted of discrete piles of shells spread across a beach ridge. Others such as Mamiyarrka were made up of dense scatters of a single species of shellfish. At all but one of the sites (Table 6.2) the shellfish assemblage was dominated by one main species. These species were available from the coastal or lacustrine environment immediately adjacent to each site. The dominant shell species also all share the characteristic of being available in large shell beds and of being easily collectable in large quantities in a relatively short period of time.

An explanation for the limited diversity of materials present in these midden sites can be found in the ethnographic and archival records relating to life at the two mission settlements of Angurugu and Umbakumba (Figure 6.2) from 1921 to 1950 (Clarke 1994). These records provide a context within which the changes in land use that accompanied the transition to settled life can be interpreted.

As people became more settled around the mission settlements they had fewer opportunities for extended camping trips. When people did go out into the bush, they targeted accessible and favoured bush foods. Today, for example, people collect a much more limited range of shellfish than that found in the older midden deposits. On camping trips made during the course of this fieldwork people would target one or two shellfish species such as *Tapes hiantina, Anadara granosa,* or one of the oyster (*Ostrea* sp.) species. Occasionally, other species such as *Gafrarium tumidum, Turbo cinerea* or *Tectus* sp. would also be collected. In the 1970s Turner (1989:151–2) recorded that people regularly collected 17 edible shellfish species from Bickerton Island. In contrast, the older shell middens contain 25–30 edible shell species (Table 6.3).

Few stone artefacts, ground stone fragments or ochre pieces were recovered from any of these deposits and very few exotic items of material culture such as glass or metal were present (cf. Colley, Chapter 10). The exposed surfaces of shallow midden deposits are unlikely to provide environments conducive to the preservation of materials such as iron or cloth, but glass and pottery would be expected to be preserved. The reasons for the absence of contact materials may also be due to social rather than taphonomic factors. The Mission archives and Worsley's (1954) study of Umbakumba in the 1950s provide a potential explanation of this paucity of introduced materials. Even though there was a greater availability of introduced items during the Mission period, people found these items difficult to acquire because they could only be obtained through credit built up from working or from selling craft items. Worsley (1954:295–6) commented on the limited range of personal goods owned by individuals at Umbakumba. If these items were hard to obtain, they may not have been discarded at temporary camps unless they were no longer of any use.

Apart from the general absence of introduced items of material culture in these recent middens, the patterns of food debris conform to Schrire's (1972) model of post-contact land use. As predicted by Schrire, the sites contain a restricted range of resources with a reliance on permanently and easily accessible shell beds.

During the Mission period both the temporal and social context of food production changed. Attwood (1989) has described how missionaries changed the social and temporal geography of Aboriginal people in Victoria in the nineteenth century by relocating people to missions away from traditional lands and by establishing a daily schedule of work and school. Similarly, Birmingham (1992) has outlined the ideological concerns that underpinned the Wybalenna settlement. The missions aimed to create a village life by turning people from unproductive hunter-gatherers into productive farmers. At Wybalenna the continued consumption and discard of bush foods around the cottages were interpreted as evidence of resistance to this ideology.

The situation on Groote Eylandt seems to have been a little different. Because of the problems of trying to establish any form of agricultural endeavour in a tropical environment, right from the start of the Mission, bush food was always an important part of the food supply for Aboriginal people and missionaries alike. People were also not physically dislocated from their own lands. The archives record the constant movement of people to and from the Mission into the bush when particular seasonal resources were plentiful, or when Mission food stocks were low (cf. Rose, Chapter 8; Birmingham, Chapter 13). Although it may have been difficult to get access to the more remote parts of the island in the past, the use of vehicles has meant that people now visit these areas on a regular basis.

Urry and Walsh (1981) in their paper on the use of Macassan loan words in Aboriginal languages of Arnhem Land posed the question of how quickly introduced forms of social practice became interpreted as something indigenous. The current mode of subsistence practice is seen by Aboriginal people as indigenous and different from that of the Europeans. For example, when one of the Aboriginal women with whom I worked sat down to talk to me about one of our trips, she enumerated all the things that she considered I had learnt about Aboriginal culture. She told me that I had learnt how to camp the Aboriginal way. This included sleeping on the beach, making damper, eating bush foods such as turtle eggs, oysters and fish and making tea in the Aboriginal way. These subsistence practices obviously incorporate introduced elements, but they have become integrated and interpreted as indigenous. Importantly, they are also perceived as being different to European ways. It would seem that these sorts of transformations in subsistence practice can occur within the short time span of one or two generations, creating a potential problem for the archaeological identification of such changes, because this sort of time scale is difficult to resolve on either chronometric or taphonomic grounds.

The changes in subsistence practice during the period of Mission settlement can be seen in terms of a rational and strategic response to the problems posed by prolonged contact with European society (Trigger 1991). Aboriginal people have acted to incorporate elements of their former subsistence practice into the new social and geographical contexts created by this prolonged contact. The changes visible in the material record indicate that these are changes of degree rather than of kind. It is not a change, for example, from a hunter-gatherer lifestyle to that of horticulture or agriculture. In the Mission period there are evident continuities in the places where people choose to camp, in the bush foods collected and in the methods of food processing.

Turner (1974) identified transformations in social practice, in kinship, marriage and death. He considered the economic sphere to be the medium through which these social transformations began. However, it is also within the economic or subsistence sphere where there are abiding continuities of practice. People on Groote Eylandt have not transformed the fundamentals of their subsistence practices. The social and temporal context of food production has been transformed, but the geographical context has remained. People operate a dual subsistence system that has a commodity-based component involving the purchase of imported produce from the town shop and a hunter-gatherer lifestyle that integrates traditional practice with elements of the new. It is a negotiated transformation of subsistence and social practices in the sense that people continue to integrate new technologies and resources into existing patterns of land use. At the same time the impact of new elements is mitigated through a process which involves re-interpreting them as indigenous social practice.

notion of compromise is inherent in the concept of negotiation. A compromise between the competing demands of town life and the maintenance of traditional social practices is seen, from an archaeological perspective, in the way in which restricted access to traditional lands is mirrored in the restricted diversity of traditional food resources found in the midden deposits. Traditional places and resources continue to be part of Aboriginal peoples' lives but their context has been renegotiated in response to changes in the social landscape brought about by prolonged engagement with settler society.

The archaeology of the 'Golden Age'

The second component of this temporal landscape belongs to the Macassan era. It is a time beyond immediate community memory, but many of the places visited by Macassans are known and identified by Aboriginal people as belonging to that time. This past is identified within the Groote Eylandt landscape through place names, totemic locations, paintings in rock shelters (Figure 6.7), tamarind trees and the stone lines of the trepang processing sites. It is also a coastal landscape and shows that the primary relationship of Macassans and Aboriginal people was orientated towards the sea. The anthropologist Peter Worsley (1955: 8–10) has described how Aboriginal people transformed their history of Macassan contact into a mythical and idealized 'Golden Age' (ibid.: 8–10). Worsley was of the opinion that this transformation was a result of the problems that Aboriginal people faced in their dealings with white society and that their history of Macassan contact had become an idealized past.

Their evaluation of the Makasserese era is thus determined by their existing social relations and not by the preservation of objective record, and 'memory' of this era serves as an expression of and stimulus to anti-White feeling today.

(ibid.: 9)

The sites of the Macassan era (Table 6.3) share a number of characteristics. All the sites apart from *Malmudinga* were first occupied during the period of Macassan contact. This can be interpreted as indicating a change in the social geography of Groote Eylandt with people occupying new locations in response to the presence of Macassan fishermen on the beaches of their clan estates. The occupation of new locations along the coast may be a seasonal pattern, related to the wet season aggregation of people in places close to Macassan activities. People may also have moved away from their traditional camping areas because of problems with Macassan visitors as has been documented by Mitchell (1994) on the Cobourg Peninsula. At *Malmudinga*, for example, there is some evidence that the site was used less intensively during the time encompassed by Macassan visits than during the most recent period of site use. In Unit 3 at the base of the midden (2300 to 1000 years BP) shell was deposited at a rate of 12 kg/m³. In



Figure 6.7 Polychrome ochre paintings of Macassan praus from *Mamgkala* Cave, Groote Eylandt.

Unit 2 (1000 to 300 years BP) shell was deposited at a rate of 29 kg/m³ and in Unit 1 (modern), the uppermost stratum the rate of deposition is 120 kg/m^3 .

In broad terms, the shellfish assemblages show that people exploited the shell beds in the immediate site environments. Two trends are apparent in the shellfish assemblages. At several of the sites there is evidence of an increased targeting of sand/mud shell beds in the Macassan period. This could be interpreted as being a strategy designed to provide for larger groups of people camped at the one location for longer periods of time.

In the analysis I have assumed, rather than tested, that the middens represent the wet season aggregation of people in locations in close proximity to Macassan activities. It is also possible, following Worsley (1955), that people also began to aggregate at these locations during the dry season to stockpile commodities such as turtle shell and pearl shell to trade with the Macassans the following wet season. The Macassan period middens also contain a greater diversity of shell species than that found in the later Mission period middens or in the preceding pre-contact period (Tables 6.2, 6.3). So, as well as targeting the productive sand/ mud shell beds, people were also diversifying their shell-collecting strategies to collect species from all available habitats. Unfortunately, there is too little evidence from pre-contact midden deposits to provide substantial data for a detailed comparison between pre- and post-contact shell-fish assemblages. However, the small amount of data that does exist from *Malmudinga* and Aburrkbumanja seems to suggest that the earliest period of shellfish collecting represents a less intensive targeting of sand/mud habitats and a more mobile resource use strategy. The greater diversity of shellfish species apparent in the Macassan period middens can be interpreted as part of the strategy developed to cope with aggregated populations. With more people to feed, the shell gatherers brought all of the locally available, edible species back to the site. This stands in direct contrast to Schrire's (1972) model of post-contact foraging strategies which predicted less diversity in post-contact assemblages. This returns to the point made above that her model collapses two quite distinct periods of cross-cultural engagement under the one explanatory framework.

These sites also contained fragments of introduced material culture. The small size of the pieces of pottery, metal and glass and the small quantities of these items indicate that they were carefully curated and only discarded when too fragmented for further use. At *Marngkala* Cave the deposit contained flakes of a fine-grained silcrete and of volcanic rock used to make edge ground axes. Neither of these materials are local to Groote Eylandt and they provide evidence of trade links with the mainland during the period of Macassan contact (Thomson 1949; Mitchell, Chapter 7). Thomson (1949) and Worsley (1954; 1955) both acknowledged a complexity of Aboriginal and Macassan interactions from their anthropological research in eastern Arnhem Land and on Groote Eylandt, respectively. Thomson (1949:82–94) considered that the extensive ceremonial exchange network in eastern Arnhem Land had been amplified by the regular presence of Macassans and the continuing supply of exotic goods (cf. Mitchell, Chapter 7).

Worsley (1955:3–6) considered that there were both material and non-material effects of Macassan contact. He noted that the most obvious indications of Macassan influence could be seen in the few items of material culture such as pipes and dugout canoes and in the presence of former camp sites with tamarind trees. He also described how Aboriginal people worked as wage-labourers for Macassans and that the goods they received were not gifts, as often perceived, but were commodity-based wages, paid in kind for labour. He also described how kinship terms were extended to include Macassans. Aboriginal people traded turtle shell, fish, pearl shell and trepang with the Macassans and began to accumulate these materials during the dry season, in anticipation of the return of the Macassan fleets the following wet season. Worsley noted Macassan influence on artistic practice through the development of techniques of carving in the round. Macassan elements were also incorporated into ceremonies and the totemic system on Groote Eylandt was modified to include a ship totem and wind totems.

If all these other aspects of Macassan influence outlined by Worsley (1955) and Thomson (1949) are brought into this account of Aboriginal and Macassan interactions, then an overall picture of diversity and change can be established. The changes in residence patterns, subsistence art, totemic systems, trade and exchange networks are all indicative of a strategic and active engagement with

the Macassans by indigenous people. This was not merely a time when 'technological colour' (Macknight 1972:18) was added to the fabric of local Aboriginal society. The archaeological evidence points to what Turner (1974) described as change within the bounds of traditional practice. The Macassan period can be seen as a time when the trajectories of change and continuity in resource use and residence patterns evident in archaeology of the Mission period are initiated. Social practices were re-negotiated in relation to the opportunities and challenges offered by the seasonal presence of the Macassans. People amplified their use of local marine resources to cope with changes in wet season settlement patterns and to meet Macassan demands for marine resources such as pearl and turtle shell (Mitchell 1996).

One final aspect to consider is the extent to which gender roles were renegotiated as part of the process of engagement with Macassans. Oral testimonies and historical records documenting Macassan and Aboriginal relationships (Mitchell 1994) show that over time and in different localities across northern Australia, the nature of this encounter was highly variable. On the Cobourg Peninsula Mitchell (1994) has proposed a chronology of changing relationships between Macassan and Aboriginal people, originally marked by hostility but later mediated from the late 1830s onwards by the presence of the British garrison at Port Essington. In some places the relationship was characterized by conflict, particularly where Macassans were accused of stealing Aboriginal 'women, while in other areas culturally sanctioned, long-term ties of marriage and kinship appear to have been established. Aboriginal men worked for the Macassans and as noted above, there are accounts of Aboriginal men joining the crews of praus and travelling to Macassar.

If Aboriginal men were engaged in working for Macassans over the wet season, what did this mean in terms of traditional gender-based subsistence roles? It can be hypothesized that over the period of Macassan encounter, Aboriginal women may have engaged, on a seasonal basis at least, in a broader range of subsistence practices than in the pre-contact period. Identifying this from the archaeological record is, however, more problematic due to problems of preservation in the archaeological deposits.

From ethnographic records it appears that on Groote Eylandt metal fish hooks were introduced by Macassans.

Fish ('akwaia') are plentiful around the island, and various devices are employed to catch them, fishing over the reefs with hook and line being the principal mode. Bait is obtained by digging out of the sand with the hands various beach crabs (*Ocypoda*). They are usually dismembered and placed in a bark dish shielded from the sun. The canoe is anchored over a suitable spot, the hooks baited with the fleshy part of the crab, the hard parts being used as groundbait. The line is made of hibiscus bark cord, and the presentday hook is an iron nail ('biangi'). Endeavours were made to find out what hooks were in use previously, but they have obtained metal for so long a period, from Malay traders, from wreckage, and in recent years by trade from mainland tribes, that no other hooks are now known.

(Tindale 1925–26:80–1)

What is of interest from this account is that only metal hooks were used for line fishing. Because of the long history of access to metal hooks, there is no strong community memory of what material was used to make hooks in earlier times. No shell fish hooks or blanks were identified from the archaeological deposits and inquiries to people about non-metal hooks elicited the information that eagle or possum claws were used in the old days. Turner (1989: 148) has recorded a similar story. While this is quite feasible from a technical point of view, it also seems unlikely given the number of eagles, possums and claws that would be needed to sustain daily supplies of hooks for line fishing.

Another explanation is that prior to Macassan contact, line fishing was not, in fact, part of traditional subsistence practice, and fish were either speared or caught in tidal traps. Fishing nets do not appear to have been part of Groote Eylandt material culture within ethnographically observed time (Tindale 1925–26:81). Unfortunately, the preservation of fish bones in pre-Macassan deposits was not good enough to provide any archaeologically based resolution of this problem.

It may also be the case that the excavated samples from each site are too small for the remains of discarded hooks, pre-forms or blanks to be recovered. Only one bone point was recovered from all the excavations and no worked marine shells such as bevelled or denticulated scrapers were found. It seems odd that if there was a pre-existing shell fish hook technology, this would cease once metal hooks became available. Would the quantity of metal required to make hooks for line fishing all year round be available from the limited seasonal presence of Macassan fishing fleets? Also, if there were years when Macassans did not show up or came in reduced numbers, then suitable metal would be in short supply and people would, surely of necessity, return to making hooks using traditional technology and materials. This seems to be the pattern that occurred in relation to metal and stone knives.

For these purposes stone knives were employed up to the time of our visit, but were soon replaced by metal. It is certain that in former years some metal implements were received by them from the Macassar men, but more recently their absence caused an entire reversion to the use of the older implements.

(Tindale 1925–26:95)

This line of argument rather suggests that line fishing was not a major subsistence practice prior to the introduction of metal. On the other hand, the rock art certainly shows people line fishing from bark canoes (for example, McCarthy 1960:314–15, Figure 3). These paintings may, however, date from the

time of Macassan contact as there is some evidence that dugouts were not locally manufactured until the final period of Macassan visits at the beginning of the twentieth century (Worsley 1954:61–4).

One of the social implications of the introduction of metal fish hooks may have been an expansion of subsistence practices by women (Bowdler 1976). Today, only men use spears for fishing while women, children and men all use hooks and lines to fish. It is likely that women would have had to assume the primary responsibility for food production during the times when the men were working at the Macassan trepang camps, providing fish as well as vegetable foods and shellfish. It can be suggested, then, that the subsistence role of women was renegotiated and expanded as a result of Macassan encounter. The expansion of women's subsistence role in this period can also be understood in terms of its being a rational and strategic response to external changes, but it was also carried out within the framework of existing land use practice.

Men's social roles were also renegotiated at this time. They entered an externally introduced commodity-based labour/wage system whereby they were given food and material items such as knives, fish hooks and metal axes in exchange for their labour. For the Cobourg Peninsula Mitchell (1996) has also argued that there is an increase in the amount of marine mammal bones discarded in Macassan period shell middens. He interpreted this evidence to suggest that men re-orientated their hunting activities towards the capture of marine mammals. He further argues that this focus on the capture of marine mammals was due to the introduction by Macassans of sea-going, dugout canoes and a better harpooning technology.

The archaeology of 'arakbawiya': the prehistoric settlement of Groote Eylandt

The third and oldest component of the temporally stratified landscape of Groote Eylandt is a prehistoric past, part of a linear trajectory of time and cultural history. It is located beyond the realm of documentary records and collective community memory. It is a landscape revealed through the medium of archaeological investigations based around the central sandstone plateau and outliers. These rock shelters were not part of the suite of sites recognized as old camping places by the Aboriginal people I worked with and appear to have dropped out of the remembered landscape. Within this landscape there are the three rock shelter sites of *Angwurkburna* (Figure 6.5), *Ararrkba* and *Dadirringka*, all of which have produced dates for occupation in excess of 1,000 years (Figure 6.3, Table 6.1).

The sparse archaeological data from the four sites with evidence for precontact occupation basically confirm Schrire's predictions about pre-contact resource use. Stone artefacts are predominantly manufactured from locally procured quartz pebbles. There is only a limited amount of subsistence data from this earlier period. At *Malmudinga* the lowest midden unit can be interpreted as representing a pattern of land use involving mobile and temporary camps and the exploitation of a limited range of shellfish habitats from the immediate site environment.

Malmudinga is the only coastal shell midden that has a date for occupation in excess of 500 years. It is also part of the remembered landscape of old camping places and is still used today as a weekend picnic site. This would seem to indicate that coastal sites have been a part of the cultural landscape for the length of the known period of island occupation. The sandstone rock shelters, on the other hand, appear to have dropped out of the remembered landscape. The question to consider is, when did this abandonment occur?

Turner (1973) stated that the painted rock shelters of the south-eastern peninsula were abandoned soon after initial Mission contact in 1921. Captain G.H.Wilkins (1928), who had contact with people along the east coast in 1924, recorded people living in rock shelters. A Mission report (Harris 1944), stating that an old man and his son were the last remaining inhabitants of the area also suggests that the south-east area of the island was abandoned around 1930. The Salt Lake rock shelters were surrounded by dense, monsoon vine thickets, which are fire sensitive. This provides additional evidence that the sandstone foothills and outliers have not been used on a regular basis in the most recent times. It could be suggested that although the sandstone hills and outliers were finally abandoned within this century, this was the end point of a trajectory of change that had begun much earlier as a result of contact with Macassans.

This line of argument returns to one of the questions raised by Fred Rose (1961), who suggested that the introduction of Macassan technology reorientated the subsistence system from a terrestrial to a marine economy. While the archaeological data do not really support this simple dichotomy, there does appear to be some limited evidence that people have re-orientated settlement away from inland sandstone outliers in favour of coastal locations. These coastal locations also include rock shelters (e.g. in the *Marngkala* area). It is not rock shelters *per se* that have been abandoned, it is rather that during the period of Macassan contact the coastal environment became more of a focus for all aspects of life.

CONCLUSIONS

My original research proposal for the Groote Eylandt project (Clarke 1990) was to carry out a study of the sort that has become a tradition within Australian archaeology. Underlying my research design was the notion that I would find and excavate one or two key sites to set up a long chronological and cultural sequence of human occupation much in the vein of Carmel Schrire's pioneering research in western Arnhem Land in the 1960s (Schrire 1982). Even choosing Groote Eylandt as the focus of the research was part of this traditional approach. Very little archaeological research had been carried out on Groote Eylandt and my proposal offered the chance to engage in what has become known colloquially as 'cowboy archaeology'. In this approach to research archaeologically unknown areas are targeted for survey and within these areas landforms with the potential to contain rock shelters with deep, stratified deposits are isolated and investigated. It is an extreme form of purposive sampling, but has been a successful strategy in the formative period of Australian prehistory. Within Australian prehistory these exploratory projects are seen as the keys to explaining the history of settlement of the continent because they have set up the basic frameworks for the chronology of occupation, cultural sequences and human relationships to environmental change. The successful projects in this mould have become the classical case studies of field-based archaeology (e.g. Golson 1986; McBryde 1986).

There are two main elements to these classical Australian studies: first, the identification of Pleistocene occupation and, second, the use of models of palaeoenvironmental change as explanatory frameworks for changes in human land use. Groote Eylandt seemed an ideal location from which to examine the initial human colonization of eastern Arnhem Land for comparison with the wellknown sequences from western Arnhem Land (Kamminga and Allen 1973; Schrire 1982, Jones 1985; Roberts et al. 1990) and to link human settlement to existing palaeo-environmental models. My original proposal did, however, recognize that the archaeology at the most recent end of the time scale was a component of the likely archaeological record on Groote Eylandt. 'The relationship between the Macassans and the Aboriginal population could be tested archaeologically at both a regional level and within a culturally discrete area in the Groote Eylandt group' (Clarke 1990:5). By the time I had returned from my first, nine-month fieldwork season at the end of 1991, any notions I had about analysing one or two major sites had been overturned by the experience of working with Aboriginal people in a cultural landscape. This can be illustrated by the following section from a post-fieldwork seminar paper:

I excavated a total of eleven sites on both Groote Eylandt (7) and Bickerton Island (4). The sites included five rock shelters and six shell middens. The sites appear to have deposits which span a period encompassing pre-Macassan, Macassan and white, Missionary times. I worked exclusively with Aboriginal families after negotiating permission with the Community Government Councils and individual elders. Part of the process of doing fieldwork was that people took me to see the places they regarded as the old peoples' camping places. All of these occurred within the modern coastal zone, with many containing Macassan or European cultural items. This seems to be important in terms of how people responded to and perceived my questions about the old days.

(Clarke 1992:3)

The transformation of the Groote Eylandt project from a focus on culture history and establishing the antiquity of first settlement to a concern with processes of change and continuity over the period of cross-cultural engagement occurred through the medium of the cultural landscape. My research focus shifted as a direct result of the way in which the Aboriginal people interpreted my interest in old peoples' camping places in terms of their own cultural understanding of their historical landscape. The process of negotiating the design of the fieldwork strategy in a community context led to the adoption of negotiation as a concept with which to investigate cross-cultural encounter. Interestingly, as the research project has developed over time and as the process of negotiation over research access has evolved, the focus of recent fieldwork has returned to locating older sites to increase the amount of data relevant for interpreting the oldest temporal component of the landscape.

The study of Groote Eylandt demonstrates that the archaeology of crosscultural encounters provides an opportunity to analyse short-term changes in social practices. These changes can only be understood and measured archaeologically if they are placed within the context of landscape and in relation to longer trajectories of cultural process. In this chapter the archaeological evidence finds a parallel in the Aboriginal conception of the temporal order of the Groote Eylandt landscape. This provides an indication of the rate at which short-term changes in subsistence practices can occur and the rate at which new elements can become incorporated into indigenous systems (Urry and Walsh 1981). This raises an important question for further archaeological research, namely, can these short-term changes be identified in the prehistoric archaeological record without the aid of texts and ethnography, or does the contact period offer the only realistic chance to examine change at this sort of scale?

The act of negotiation provides the conceptual linkage between the archaeological evidence relating to cross-cultural interaction and engagement and the process of conducting field research in an Aboriginal community. This linkage between the analysis of archaeological data and the act of doing field research also grounds the idea that cross-cultural encounter is an ongoing process and not confined to an historical past. The Groote Eylandt case study provides one example of how such an archaeology might be developed and presents a new and different way of doing archaeology in a cross-cultural context.

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Guns or barter? Indigenous exchange networks and the mediation of conflict in postcontact western Arnhem Land SCOTT MITCHELL

ROLE OF TRADE GOODS

One of the most visible consequences of culture contact with outsiders, both in Australia and elsewhere throughout the New World, was the adoption of foreign material culture as trade goods within indigenous societies. Circulating through regional exchange networks, such items could be carried a considerable distance from the places where physical contact with outsiders took place. Even in cases where people continued to practise largely traditional lifeways, the circulation of foreign trade goods often marked the beginning of profound changes to indigenous social and economic structures (e.g. Fitzhugh 1985; Kaplan 1985; Thomas 1985; Brenner 1988; Arkish 1993). Tragically, the process of culture contact was frequently cataclysmic for indigenous societies through the introduction of new diseases, the loss of land and resources and the impact of warfare with foreigners. Consequences of cross-cultural engagement also included the onset and/or intensification of internecine conflict within indigenous societies, as they were forced to deal with territorial dispossession, loss of resources and rapid social and demographic change (Bitterli 1989).

The primary goal of this chapter is to explore the relationship between the exchange of foreign material culture and the resolution of conflict within indigenous societies. Given the capacity for the act of exchange to cement social and political bonds, the exchange of foreign goods within indigenous societies could represent far more than the mere dissemination of utilitarian items. Trade provided a means by which conflict between indigenous people and foreigners could be resolved or avoided (e.g. Thomas 1985:155). It could also be used to express and mediate increasingly competitive relationships within indigenous societies affected by foreign contact (e.g. Thomas 1985: 155–6; Lightfoot 1993).

One example of this process has been explored by Brenner (1988) through an archaeological investigation of seventeenth-century Native American cemeteries in Southern New England in the United States. She demonstrated that imported material culture was used as a marker of political status, and that the display of personally acquired wealth in individual grave plots served to clarify and

objectify political differentiation. She went on to suggest that in New England pressure created by processes such as intensified warfare, introduced disease and rapidly changing social and political relations in native communities

created conditions that intensified competition for positions of politicaleconomic power, status, and authority. New avenues for attaining such positions were opened via interaction with Europeans. Display of symbols of authority, most notably of certain classes of imported goods that required great political effort to acquire was part of a political entrepreneur's strategy for validating his claims to prestige and authority. (Brenner 1988:175–6)

Brenner makes it clear in this example that the circulation of foreign material culture within New England societies represented, at least in part, a response to dramatic social change brought about through the process of culture contact.

Across northern Australia the use of foreign material culture within long distance Aboriginal exchange networks was well documented in the nineteenth and early twentieth centuries (e.g. Stanner 1933; McCarthy 1939; Sharp 1952). Summarizing ethnographic information regarding Aboriginal exchange in northern Australia, McBryde has argued that

the determinants of exchange may be as much social and ceremonial as economic or ecological. Exchange may serve purposes beyond compensation for inequalities in the local resource base or the drive for economic gain. Beyond the 'ostensible lack of real gain' in the transaction may lie important returns in prestige, status, security and influence valuable to individuals and their society as a whole.

(McBryde 1984:134)

In this context, it is possible that the introduction of foreign materials into indigenous exchange networks was linked with significant social and political change.

Perhaps the clearest example of such an association in an Australian context is represented by Sharp's (1952) ethnographic study of steel axe use by the Yir Yiront people of north Queensland in the early 1930s. At this time, the Yir Yiront lived at a considerable distance from the nearest European settlements, but were able to obtain steel axes and other European goods through trade with other Aborigines. Sharp (1952:21) argued that the introduction of steel axes 'is not only replacing the stone axe physically, but is hacking at the supports of the entire cultural system'.

Prior to European settlement stone axes could only be obtained by the Yir Yiront through regional exchange networks because the nearest suitable rock outcrops were hundreds of kilometres to the south. All stone axes were owned by male elders who maintained trading relationships with other groups,



Victoria

Figure 7.1 Macassan voyages to Arnhem Land.

and access to these vital tools by women and young people was controlled through strict patterns of kinship behaviour. As women and young people were able to access steel axes independently of the older men, previously accepted and well defined gender and age-based relationships began to break down. In Sharp's (1952) view, the presence of steel axes was linked to increased instances of aggression, trespass and stealing and had led to a considerable degree of social disruption within Yir Yiront society.

This chapter explores the role of foreign material culture in the regional indigenous exchange networks of northwestern Arnhem Land (for location see Figure 7.1). Archaeological data from the Cobourg Peninsula in northwestern Arnhem Land are used to test arguments based on ethnographic research that foreign (Macassan) contact beginning in the eighteenth century was associated with an increase in and diversification of regional indigenous exchange networks. I argue that the incorporation of foreign material culture within regional networks and the acceleration of regional exchange during the recent past were linked to the need to mediate increasingly competitive and conflicting relationships within Arnhem Land society and probably elsewhere in Australia

as well. This was an internally generated response to the effects of the high mortality caused by introduced diseases.

The Arnhem Land study has important implications for prehistoric archaeology in Australia and elsewhere in the world because it demonstrates that direct historical analogy (e.g. Chang 1967:229) based on ethnographic evidence which has been gathered long after the consequences of foreign contact have begun to be played out is inappropriate. To illustrate this point, the final section of this chapter provides a critique of a theory concerning intensification of hunter-gatherer society in Australia put forward by Lourandos (e.g. 1997). His theory is faulty because it fails to adequately account for the nature and magnitude of changes that were caused by Aboriginal societies' attempt to mediate the consequences of introduced diseases. Although the Australian situation should not be overly generalized to other areas because Aboriginal people responded to decreasing population levels in culturally specific ways, the Arnhem Land and southwest Victorian case studies do highlight the problems for archaeology of using recent ethnographic data to model past processes.

FOREIGN CONTACT IN ARNHEM LAND

From the beginning of the eighteenth century, Aboriginal people in northwestern Arnhem Land had regular contact with Macassans and other foreign visitors. Macassans were Muslim fishermen mainly from the port of Macassar (now known as Udjung Pandang) in southern Sulawesi (Figure 7.1). Macassan voyages to Arnhem Land began in approximately AD 1720 and ceased in AD 1907 (Macknight 1986). From the nineteenth century onwards Arnhem Landers also encountered Europeans (cf. Clarke, Chapter 6).

Taking advantage of the monsoon winds, the Macassans arrived in Australia each year in December or January, and departed between April and June. They were not colonizers and virtually always remained on the coastline (Macknight 1969; 1976; Mitchell 1994; 1996). Their most important task was to gather and preserve trepang (also known as 'bêche-de-mer' or 'sea cucumbers'). The Cobourg Peninsula represented an important region for Macassan activities. Not only does it contain a number of important trepanging grounds, it was the first Australian landfall that the Macassans made on their outward trip from Sulawesi and it was also the area where the fishing vessels mustered before the journey home.

While episodes of violence have been documented, particularly in the early nineteenth century, Aborigines generally established stable economic and social relationships with the Macassan crews. Aborigines frequently assisted Macassans with trepang fishing and a trading relationship developed. Aborigines provided turtle shell, seed pearl, pearl shell and buffalo horns and in return for these goods and their labour, the Macassans gave them dugout canoes, tobacco, rice, cloth, iron and alcohol. Macassans also had sexual relations with Aboriginal women and many Aborigines from the Cobourg Peninsula were fluent in the



Figure 7.2 Map of Arnhem Land showing localities mentioned in the text.

Macassan language. On at least two separate occasions a Macassan man remained in western Arnhem Land during the dry season living and travelling with the Aborigines. Conversely, Aboriginal people from within and adjacent to the area exploited frequently travelled to Macassar on the praus and returned in the following season (Mitchell 1994:95–108).

In contrast, European activities in the area were limited to fleeting voyages of exploration until Britain established three ill-fated military outposts: Fort Dundas (AD 1824–1829), Fort Wellington (AD 1827–1829) and Victoria Settlement (AD 1838–1849) (Figure 7.2). A variety of commercial activities, including buffalo shooting, locally based trepang fishing and timber getting were carried out by Europeans on the Cobourg Peninsula (Figure 7.2) in the late nineteenth and early twentieth centuries. All these industries were small scale and, with the exception of locally based trepang fishing, were unsuccessful and short-lived. Except for a customs station (established at Bowen Straits between 1882 and 1906), and the Cape Don lighthouse (constructed in the early 1900s), no permanent settlements were maintained in the area until just before the Second World War.

Aborigines either provided labour for, or were directly involved in, many of the commercial enterprises in the area. Consequently, there were many opportunities to maintain social and economic relationships with Europeans as well as with Macassans. Rice, alcohol, glass, iron, cloth and tobacco were among the more important goods which Aborigines were able to obtain through working and trading relationships with Europeans and Macassans. The impact of foreign contact with Aboriginal people in Arnhem Land was far-reaching, leading to changes to Aboriginal languages, technology, settlement patterns and marine hunting practices (e.g. Macknight 1972; Schrire 1972; Mitchell 1994; 1996; cf. Clarke 1994a: Chapter 6).

Despite the fact that Macassan fishermen and most Europeans were restricted to coastal areas, the impact of foreign contact extended over a much greater area. Macassan loan words, introduced diseases such as smallpox, and items of Macassan technology were all carried inland, as noted by the ethnographer Donald Thomson:

In 1935 I made a long patrol on foot across Arnhem Land, and I remember well seeing, on the wall of a rock shelter, far inland, the drawing of an iron axe of the special type called *luna linya*, brought in former times by the Macassar people. At the time I felt some surprise, but this feeling disappeared with the subsequent discovery and understanding of the operation of the ceremonial exchange system.

(Thomson 1949:90)

The ceremonial exchange system which Thomson documented allowed Macassan trade items such as iron and cloth to be circulated over an area of more than $80,000 \text{ km}^2$ and carried hundreds of kilometres inland.

Stressing the important role which foreign objects held in the exchange networks of eastern Arnhem Land, Thomson argued that the vast ceremonial exchange cycles developed largely as a result of foreign contact.

There is little doubt that a ceremonial exchange system existed in Arnhem Land before the coming of the visitors from Indonesia ...But its orientation at the present time, and its most important 'drives' certainly owe much to the impact of Indonesian culture.

(ibid.: 91)

He speculated that with the onset of Macassan contact, inland groups would have increased the amount of trade items that they gave to coastal people, with the expectation of obtaining Macassan goods such as steel axes in return. For their part, coastal people were obligated to distribute these highly valued goods to inland peoples as a result of a complex set of social and economic obligations (ibid.).

Following ethnographic work with the Gunwinngu people of western Arnhem Land in the 1940s, Ronald Berndt (1951) also argued that Macassan contact stimulated the growth of regional exchange cycles in Arnhem Land. He described seven sets of exchange ceremonies in which Aboriginal people at Oenpelli participated (Figure 7.3), and suggested 'there can be little doubt that [contact with] Indonesian traders did stimulate the exchange of goods'.



KEY

1a	Eastern Djamalag	Serrated or shovel nosed spears
1b	Northern Djamalag	Nets, bailer shells
2	Rom	Baskets, spears, spearthrowers, stone knives
3	Midjan	Human hair waist-bands
4	Wurbu	Breast mats and bags
5	Mamo:run	Iron axes, knives, cloth
6	Njalaidj	Stone spearheads, ochre

Figure 7.3 Regional exchange networks in western Arnhem Land.

Source: Berndt 1951:159.

Furthermore, Berndt argued that one of the regional trading ceremonies in which the Gunwinngu participated, the *njalaidj*, was developed only after the onset of Macassan contact. He stated that since inland peoples could obtain Macassan items only through regional exchange networks, 'the *njalaidj*... was instituted for this purpose' (Berndt 1951:171).

Both ethnographers, Thomson working in eastern Arnhem Land and Berndt in western Arnhem Land, came to the conclusion that regional trade networks accelerated and intensified after the onset of foreign contact. My study, which focuses on the Cobourg Peninsula in northwestern Arnhem Land, represents the first attempt to employ archaeological data to assess these conclusions. Before turning to the archaeological data, however, I derive a model for exchange from the ethnohistorical evidence concerning indigenous exchange networks on the Cobourg Peninsula.

REGIONAL EXCHANGE ON THE COBOURG PENINSULA

As a result of their contact with foreigners, Aborigines from the Cobourg Peninsula obtained a wide variety of exotic items including dugout canoes, iron, metal, glass and cloth. Many of these materials, however, were not retained by indigenous residents of the area but were exchanged with groups further inland. According to one resident of Victoria Settlement:

we had scarcely been established at Port Essington more than a few weeks, when it became apparent that by far the greater proportion of the axes, iron, clothes &c., the natives obtained from our people, were carried into the interior for the use of the inland tribes.

(Earl 1846:245)

In a similar vein, the commandant of Victoria Settlement indicated that the Aborigines at Port Essington

never ceased to express eagerness after the possession of wearing apparel, and soon after the object is gained it disappears, and we never see it again... We feel much difficulty to account for the manner of their disposing of all the wearing apparel they procure; it vanishes instantly. It seems to be sent off...to the south-east.

(McArthur 1841:1)

Their suspicions were confirmed by the explorer Ludwig Leichhardt while he was travelling through the Alligator Rivers region in 1845. Leichhardt (1847:492) encountered a group of Aborigines possessing English clothes and an iron tomahawk originally deriving from Victoria Settlement approximately 150 kilometres to the north. The goods which Cobourg Peninsula Aborigines are known to have received in return from their regional exchange partners included wooden spears, foodstuffs, slate implements, stone spearheads and red ochre (Earl 1842; 1846:247; McArthur 1842; MacGillivray 1852:148; Allen 1969: 283).

Berndt's (1951) ethnographic work revealed that during the 1940s Aborigines from the Cobourg Peninsula continued to participate in regional exchange networks, trading with Gunwinngu people from Oenpelli in a ceremony called *wurbu*. As Macassan voyages to Australia had ended in 1906, residents of the Cobourg Peninsula no longer contributed Macassan trade goods. Instead, they manufactured breast mats and bags for exchange with people from Oenpelli. As a result of the ceremony, residents of the Cobourg Peninsula had access to a wide range of goods including ochre, stone knives, stone spear heads, nets, spear throwers, human hair waist bands, baskets, dilly bags containing birds' eggs, bamboo spears and bailer shells.

ARCHAEOLOGICAL EVIDENCE FOR REGIONAL EXCHANGE

Stone formed an important component of the trade goods carried into the Cobourg Peninsula during the recent past. If exchange networks altered after Macassan contact, then it is likely that both the diversity and quantity of stone transported into the region would have increased.

A very limited range of rock types outcrop on the Cobourg Peninsula and so it is relatively simple to distinguish between artefacts made from locally derived stone and those of transported raw materials. The limited range of stone suitable for making artefacts is still remarked upon by Aborigines living in the area today. Mary Yarmirr, a senior custodian from Croker Island, informed me that in the past sandstone suitable for making grinding tools could be obtained locally. By contrast, she stated that stone for manufacture into sharp-edged implements, such as spearheads, had to be brought from the 'stone country' beyond the peninsula.

Surface rocks on the peninsula and the land immediately to the southeast are comprised of suitable sandstones of the Bathurst Island Formation, ferruginous pisolitic laterite and Quaternary sands, gravels and marine sediments (Senior and Smart 1976; Hughes 1978). Reflecting a fairly uniform geological structure, only four types of stone suitable for the manufacture of stone artefacts are known to outcrop in the region. Quartz pebbles occur within Quaternary sediments on Croker Island, and it is possible that the largest among these specimens were knapped in the past. Cobbles of laminar siltstone and beds of sandstone, forming components of the Bathurst Island Formation, outcrop widely throughout the region. Finally Allen (n.d.) has recorded a quarry at Reef Point in Port Essington at which weathered cobbles of ferruginous quartzite were exploited. No metamorphic or igneous rocks outcrop within the study area.

The closest source of igneous and metamorphic rocks is approximately 50 km to the southeast of the peninsula in the Wellington Range (Senior and Smart 1976; Hughes 1978). Rocks in this area include hornblende gneiss, schist, granite, dolerite, quartzite sandstone, quartzite and vein quartz. The closest sources of slate and chert are likely to be near the East Alligator River approximately 75 km south of the Cobourg Peninsula. It should be noted that the precise sources for stone artefacts imported to the Cobourg Peninsula can only be conjectured, as no detailed studies of quarry sites across the region have yet been undertaken. Nonetheless, stone artefacts can clearly be divided into two categories based on whether they could have been obtained locally or whether they must have been carried in from beyond the region. Local stone artefacts are



Figure 7.4 Location of Aboriginal archaeological sites, Cobourg Peninsula.

likely to include those made from sandstone, ferruginous quartzite siltstone and quartz pebbles, while non-local stone artefacts represent any other rock types which may be present in archaeological assemblages. I have recorded red ochre, a creamy coloured quartzite, gneiss, dolerite, chert, slate, vein quartz and granite.

Archaeological sites recorded on the Cobourg Peninsula include the remains of Victoria Settlement, Fort Wellington and the customs station, both Macassan and non-Macassan trepang processing sites together with Aboriginal grinding grooves, freshwater wells and a ferruginous quartzite quarry at Reef Point (Allen 1969; Baker 1984; Taçon 1988; 1989; Mitchell 1994). Forty-three midden sites have been recorded or excavated in the region (Figure 7.4). These have been divided into pre-contact and post-contact sites depending on whether they were occupied before or after the onset of Macassan contact in 1720. Criteria used to determine the age of these sites included radiocarbon dating, geomorphological context, the presence or absence of exotic faunal remains such as pig and cattle, and the presence or absence of foreign artefacts such as glass and pottery. The testimony of Aboriginal informants, some of whom had parents or grandparents who had camped at some of the midden sites in the area, also provided evidence (Mitchell 1994).

If the regional exchange of stone artefacts did accelerate during the postcontact period, as ethnographic models suggest, then the following two trends should be apparent in the archaeological record:

- 1 The range of non-local materials deposited on post-contact sites should be greater than the range of non-local stone on pre-contact sites. Post-contact stone artefact assemblages may also contain a wider range of artefact types than pre-contact assemblages. This pattern is expected because ethnographic evidence suggests that the *njalaidj* ceremony, during which certain types of stone spear heads and ochre were distributed throughout northwestern Arnhem Land, began only after the onset of Macassan contact. It is therefore predicted that certain varieties of ochre and stone artefacts should only be present on archaeological sites on the Cobourg Peninsula after the onset of Macassan contact.
- 2 The frequency of post-contact sites with non-local stone artefacts should also be higher than the frequency of pre-contact sites with non-local stone artefacts. Such a pattern is expected to reflect the hypothesized increase in the availability of stone artefacts on the Cobourg Peninsula during the postcontact period.

Pre-contact stone artefact assemblages

A total of twenty-eight midden deposits on the Cobourg Peninsula date to the pre-contact period. The oldest dated site, MM1, is a shell mound from Croker Island which was occupied between 3100 and 2000 years BP (Mitchell 1993). A siltstone core, a siltstone flake, and a small (6 mm long) quartz flake derived from the quartz gravel which outcrops in the area were recovered from the excavation. No imported stone artefacts were found. A sub-surface midden deposit, dating to between 1000 and 600 years BP, at Barlambidj (Copeland Island) has evidence for a particularly diverse range of activities but no stone artefacts of any kind were found within this midden.

The range of stone materials recorded on pre-contact middens is listed in Table 7.1. The most common types, manuports of sandstone or laterite, occurred on a third of the twenty-eight midden sites. A sandstone core was recorded at midden V10, a ferruginous quartzite core was found at Site 20, and a sandstone pestle was found in a midden deposit (Site 24) in Bowen Strait. All of these artefacts were made from stone which could have been obtained on the Cobourg Peninsula. Only two of the twenty-eight pre-contact midden sites were found to contain stone artefacts manufactured from non-local stone. Site 26, a deflating midden deposit at Palm Bay contains a ground-edged axe made from dolerite. In addition, the pre-contact layers of Site 10 at Minto Head contain ochre which must have been transported into the Cobourg Peninsula (Allen 1969:120).

Site ¹	Location	Artefact lithology	Artefact type	Locally available?
V10	Vashon Head	Sandstone	Core	Y

Site ¹	Location	Artefact lithology	Artefact type	Locally available?
V12	Vashon Head	Laterite	Manuports	Y
10 ²	Minto Head	Red ochre	Ochre fragment	Ν
13	Berkeley Bay	Laterite	Manuports	Y
14	Black Point	Laterite	Manuports	Y
15	Black Point	Laterite	Manuports	Y
20	Port Bremer	Ferruginous quartzite	Core	Y
		Laterite	Manuports	Y
21	Lizard Bay	Laterite	Manuports	Y
22	Lizard Bay	Laterite	Manuports	Y
24	Bowen Strait	Sandstone	Pestle	Y
26	Palm Bay	Dolerite	Ground stone axe	Ν
		Laterite	Manuports	Y
MM1	Croker Island	Pebble quartz	Flake	Y
		Siltstone	Core and flake	Y

Notes: ¹ Except where otherwise noted, these sites were recorded by Mitchell (1994). Their location is depicted in Figure 7.4.

² Allen 1969:120.

Post-contact stone artefact assemblages

The picture for post-contact midden deposits on the Cobourg Peninsula is markedly different. Of seventeen post-contact middens, nine contain stone artefacts (Table 7.2). Laterite or sandstone manuports are found at four sites and flakes manufactured from the locally available ferruginous quartzite occur at one midden and one quarry. In contrast, artefacts manufactured from non-local stone, including grindstones manufactured from a highly silicified pink quartzite, bifacial slate points and silcrete flakes, occur at seven middens (or 41.2 per cent of the sample).

One of the most substantial assemblages was recorded at Irgul Point, where a post-contact Aboriginal midden occurs adjacent to a nineteenth-century customs station. Cores and flakes manufactured from vein quartz, cream-coloured quartzite flakes and bifacial points, and dolerite axe fragments were noted. All stone artefacts observed at this site were manufactured from non-local stone. The density of stone artefacts averaged 0.07/m². Given that the midden covers an area of approximately 1,700m², there may be over 100 stone artefacts within the deposit, representing a substantial quantity of imported materials.

Substantial assemblages of non-local stone artefacts have been recorded in two other post-contact contexts on the Cobourg Peninsula. One of these sites is the
stone artefact quarry at Reef Point (Allen 1969:283–4; Allen n.d.). This site consisted of a concentration of stone artefacts covering 80 m^2 and a

Site ¹	Location	Artefact lithology	Artefact type	Locally available?
5	Popham Bay	Ferruginous quartzite	Flake	Y
6 ²	Trepang Bay	Silcrete	Flake	Ν
7	Trepang Bay	Pink quartzite	Grindstone	Ν
		Sandstone	Manuports	Y
9	Knocker Bay	Pink quartzite	Grindstone	Ν
		Sandstone	Manuports	Y
10 ³	Minto Head	Cream quartzite	Flakes, retouched flakes	Ν
		Slate	Retouched flake	Ν
		Ochre	Fragment	Ν
16	Smith Point	Slate	Bifacial points	Ν
		Sandstone	Manuports	Y
25	Irgul Point	Cream quartzite	Bifacial point	Ν
		Silcrete	Flakes	Ν
		Vein quartz	Cores and flakes	Ν
		Dolerite	Ground axe fragments	Ν
Barlambidj	Copeland Island	Siltstone	Flake	Y
27 ²	Greenhill Island	Volcanic	Ground edge axes	Ν
		Laterite	Manuports	Y

Table 7.2 Stone artefacts recorded on post-contact middens

Notes: ¹ Except where otherwise noted, these sites were recorded by Mitchell (1994). Their location is depicted in Figure 7.4.

² Recorded by Taçon (1988:16–17).

³ Allen (1969:128).

thin scatter of *Anadara* sp. shells (Allen n.d.). Cobbles of ferruginous quartzite outcropped at the site and eighteen quartzite hatchet blanks, together with associated flakes and cores were collected (ibid). Three ground-edged axes manufactured from porphyritic dolerite, eighteen dolerite axe fragments and a single pounder made from garnetiferous mica-schist were also recorded. Foreign artefacts, including eight fragments of dark green bottle glass and a single sherd

of porcelain with an Asiatic design were also noted. Allen argued that the presence of Macassan artefacts suggested that the site was occupied relatively recently, and that the geomorphological context of the material and the 'absence of any depth of deposit all suggest that this site was not one of great duration' (ibid.). These data are therefore consistent with the hypothesis regarding increased availability of non-local stone during the post-contact period.

Furthermore, a series of stone artefacts has been collected from the vicinity of Victoria Settlement by both Allen (1969) and Taçon (1988:66). Stone artefacts were found within two European rubbish dumps, and from the immediate vicinity of several European building foundations. A total of thirty stone artefacts, including flakes, cores, retouched flakes, points, a hammerstone, an axe and a pounder have been collected from these areas. With one exception, the context of all of these artefacts indicates that they were deposited after the onset of British occupation at the site. The exception is a granite pounder, which was found during an excavation beneath a European building foundation. As it was not clear whether this building was constructed during the initial British occupation of Victoria Settlement (Allen 1969:73–7), it is not certain whether the pounder pre-dates British occupation of the site. Nonetheless, data provided by Allen (1969) and Taçon (1988) indicate that the remainder of the collected artefacts can be unequivocally attributed to the post-contact period.

These artefacts were manufactured from a variety of raw materials, including chert, a cream-coloured quartzite, hornblende gneiss, granite, ochre, dolerite and slate. None of the stone artefacts collected from the vicinity of Victoria Settlement were manufactured from rocks which outcrop on the Cobourg Peninsula. This pattern prompted Allen (1969:284) to argue that 'the people living in the Victoria area of Port Essington do not appear to have used stone artefacts except those traded or carried into the area'. Archaeological evidence for the use of non-local stone artefacts at Victoria Settlement is therefore consistent with ethnohistoric data and also supports the hypotheses outlined above regarding stone artefact exchange.

Comparing assemblages

Comparison of stone artefact assemblages from pre-contact and post-contact middens reveals there are no major differences in the frequency of local stone artefacts. Of the pre-contact middens, 39.3 per cent contained stone artefacts made from raw materials available on the Cobourg Peninsula (Table 7.3). Similarly, 35.3 per cent of the post-contact middens contain artefacts made of locally available raw material (Table 7.3). The chi-square statistic is not significant (χ^2 =0.001, df=1, p=1.000) demonstrating no significant relationship between the age of the site and the presence or absence of local stone materials.

By contrast, there are major differences in the range and frequency of nonlocal stone artefacts at pre- and post-contact sites (Table 7.4). Only 7.1 per cent of the pre-contact middens contain artefacts manufactured from non-local stone.

17

By contrast, 41.2 per cent of the post-contact middens contain artefacts which must have been carried in from beyond the Cobourg Peninsula. Furthermore, the range of non-local stone materials recorded on post-contact sites is much wider than that recorded from pre-contact sites. Pre-contact sites include only two types of non-local stone: ochre and dolerite. By contrast,

Period	Local stone absent	Local stone present	Total
Pre-contact	17 (60.7%)	11 (39.3%)	28
Post-contact	11 (64.7%)	6 (35.3%)	17
Table 7.4 Prese	ence of non-local stone versus	age of midden	
Period	Non-local stone absent	Non-local stone present	Total
Pre-contact	26 (92.9%)	2 (7.1%)	28

Table 7.3 Presence of local stone versus age of midden

10 (58.8%)

Post-contact

post-contact contexts contain hornblende gneiss, chert, silcrete, several different types of quartzite, granite, slate, vein quartz and schist as well as ochre and dolerite.

7 (41.2%)

I have also explored the relationship between non-local stone and proximity to a foreign settlement. For the purposes of analysis any post-contact midden located within 500 m of a Macassan or European archaeological site was regarded as being adjacent to a foreign settlement. As indicated in Table 7.5, the position of the site was found to have a significant effect on frequency of nonlocal stone artefacts.

These archaeological patterns are consistent with the model that regional exchange accelerated as a result of contact with non-indigenous groups. Given that indigenous exchange goods were carried into the study area in exchange for foreign artefacts, it could be expected that those Aboriginal groups with the maximum access to foreign goods would more readily be able to obtain indigenous trade goods. One strategy for maximizing access to foreign goods would have been to reside at or near foreign settlements and activity areas.

Archaeological data from the Cobourg Peninsula demonstrate that a wider variety and greater quantity of stone artefacts were carried into the region after Macassan contact began and are therefore consistent with ethnographic models regarding the impact of foreign contact on regional exchange networks proposed by Berndt (1951) and Thomson (1949). Furthermore, this pattern indicates that the intensity of regional indigenous exchange networks in northwestern Arnhem Land accelerated after the onset of Macassan contact.

The impact of this economic change is unlikely to have been restricted solely to the exchange of stone. It is possible that a wide range of items, for example, wooden spears, baskets, nets, and apparel such as waist bands, were carried into the Cobourg Peninsula more frequently after the onset of Macassan contact. It is also possible that the transfer of songs and ceremonies across Arnhem Land was stimulated by foreign contact (Berndt 1951:167). Given that such items would not be preserved within the archaeological record, this

		1	
Location	Non-local stone absent	Non-local stone present	Total
Adjacent foreign sites	3 (33.3%)	6 (66.7%)	9
Not adjacent foreign sites	7 (87.5%)	1 (12.5%)	8

Table 7.5 Presence of non-local stone versus location for post-contact middens

suggestion must remain speculation. Nonetheless, the possibility that such a change occurred highlights the enormous consequences of the process of foreign contact for Aboriginal economies in this area. Having shown that dramatic shifts in the regional exchange system occurred in the post-contact period, it is useful to consider causes for these changes.

CONFLICTING MODELS FOR EXCHANGE

While the ethnographers Berndt and Thomson agreed that Macassan contact led to significant increases in the intensity of regional exchange in Arnhem Land, they strongly disagreed over the reasons why coastal peoples participated in the trade networks. Berndt (1951:171) argued that the inhabitants of western Arnhem Land engaged in regional exchange 'with the materialistic aim of obtaining articles which they felt to be essential or desirable'. He argued that throughout Arnhem Land Aboriginal people had developed a concern with 'material values' through their contact with outsiders such as the Macassans, and that this affected their dealings with other Aboriginal people. Exchange, he suggested, was not conducted between individual exchange partners but between groups who met 'for the express purpose of obtaining, through exchange, goods which they desire and need' (ibid.: 174).

In direct contrast to Berndt's *materialist model*, Thomson put forward a *social obligation model* such that 'the ceremonial accompaniment is the important factor, and the exchange or trade, the hard, matter-of-fact, economic aspect of the transaction, is relatively unimportant' (Thomson 1949:53). He demonstrated that in eastern Arnhem Land exchange was not carried out between groups but between individual exchange partners, who ideally maintained their trading relationship throughout their entire lives. He demonstrated that individuals were strongly obligated to make reciprocal gifts for any articles they received through the exchange items provided a means for individuals to fulfil these obligations, as well as to enhance their own personal prestige and cement their social relationships with their exchange partners.

According to Thomson, however, the 'compelling need to build up goodwill and to increase their prestige by the circulation of [foreign artefacts], and especially to make reciprocal gifts for those already received' (ibid.: 91) outweighed any desire an individual might have to retain the physical article. While the materialist model stresses the importance of the material value of trade goods in motivating exchange, the social obligation model stresses the social relationships which could be developed and maintained through the exchange process. In order to determine which of these models is applicable to postcontact exchange on the Cobourg Peninsula in the post-contact period, it is useful to return to the ethnohistoric evidence.

The enthusiasm with which Aboriginal people from the Cobourg Peninsula adopted metal artefacts was well documented in historic records for the area. In extreme cases Aboriginal people were willing to risk a violent response by foreigners in order to obtain metal items. Furthermore, there is evidence that at least some Aborigines regarded metal axes as functionally superior to their stone counterparts. Captain Barker (commandant of Fort Wellington 1827–28) recorded an incident in which an Aboriginal man Merriak (also known as Wellington) was attempting to fell a tree with a stone axe. Despite chopping 'with fresh vigor, using occasionally both hands', Merriak 'got on very slowly... and I think he must have been at work an hour before it fell' (Mulvaney and Green 1992:185). It is perhaps not surprising that while cutting down the tree 'Wellington continually asked for one of our [iron] hatchets' (ibid.).

Thomson (1949:83) noted that in the 1930s Aborigines were trading iron spearheads from Blue Mud Bay to the Roper River. While Blue Mud Bay was then a remote area where iron was coveted and difficult to obtain, iron was readily available to Aborigines living on the Roper River. Since iron was highly valued for its functional qualities by all the residents of eastern Arnhem Land, the exchange process described by Thomson is not readily explicable in terms of Berndt's materialist model. Despite the high value placed on iron tools for their functional qualities, such artefacts were frequently carried out of the Cobourg Peninsula through exchange with inland groups (see above). Berndt's (1951) materialist model of indigenous exchange fits poorly with this pattern. If regional exchange was motivated primarily by a desire to obtain material goods, it would seem unlikely that the highly valued iron objects would be traded out of the Cobourg Peninsula in return for materials such as stone.

Glass, a material which could be used in place of stone, became readily available on the Cobourg Peninsula during the post-contact period. Approximately two-thirds (64.7 per cent, n=17) of the post-contact middens in this sample contained glass objects, and a huge assemblage of flaked glass artefacts has been documented from Victoria Settlement (Allen 1969). If regional exchange was motivated by a need for functional objects, it might be expected that the amount of stone carried into the Cobourg Peninsula would have decreased during the post-contact period as an alternative raw material became available.

Under the provisions of Berndt's materialist model, it might also be expected that the exploitation of local stone sources would have become less important as imported stone became increasingly available. As noted above, there is no evidence that this is the case, since the range and frequency of locally available stone are virtually identical in pre-contact and post-contact midden deposits. The acceleration of stone artefact exchange in northwestern Arnhem Land after the onset of Macassan contact therefore cannot be explained in purely material terms. If residents of the Cobourg Peninsula engaged in regional exchange solely as a means for obtaining material items, as Berndt (1951) has suggested, the increase in the use of non-local raw materials is unlikely to have taken place.

In contrast, Thomson's (1949) social obligation model, which was originally put forward to explain the development of indigenous trade networks in eastern Arnhem Land, more accurately characterizes post-contact regional exchange on the Cobourg Peninsula. This is evident in terms of the manner in which foreign artefacts were obtained by and exchanged between the indigenous residents of the Cobourg Peninsula. Historic evidence suggests that Aboriginal people from the Cobourg Peninsula were eager to obtain certain forms of foreign material culture and foodstuffs. One such article was cloth; for example at Victoria Settlement Aborigines 'never ceased to express eagerness after the possession of wearing apparel' (McArthur 1841). Nonetheless, having obtained articles of clothing, individuals apparently felt no imperative to retain them on a permanent basis. 'The natives are very generous to each other; they divide whatever they get, articles of food or raiment. Give a native a piece of cloth, he tears it up and gives a piece to each of his friends' (Keppel 1853:167). Such incidents are consistent with Thomson's (1949) model, suggesting that the social obligation to pass on an exchange object was more important than the desire to retain it for utilitarian reasons.

Evidence recorded by Captain Barker, commandant of Fort Wellington in 1828 emphasized the importance of exchange between individual trading partners. An Aboriginal man, Merriak, informed Captain Barker that 'when I gave anything to his people, it should be through him, as he was the chief of all' (Mulvaney and Green 1992:111). The expression of competitive relationships through the medium of object exchange emerges clearly in Barker's and Wilson's accounts of Merriak's interaction with his peers at Fort Wellington. In April 1828 Merriak visited Fort Wellington in the company of Yacana and two other men. Barker presented Yacana with an iron hatchet, but 'Wellington took great offence at this, seeming to think that he as chief was undervalued. Waterloo seemed in great fear of what Wellington was saying' (Mulvaney and Green 1992: 92). Merriak's concern, nonetheless, was not to maintain exclusive ownership of the objects themselves. On the same occasion Barker presented Merriak with a number of fish hooks, which the latter immediately distributed amongst his companions (ibid.).

Rivalry in this respect between Merriak and other Aboriginal men who visited the fort was to continue. On a later occasion Wilson recorded that: Miago had lately become rather a favourite in the camp; and, consequently, received many a piece of old iron hoop, and even two or three nails...these favours were far from being relished by Wellington, who occasionally got sulky; as he wished himself to be the only source through which any of his subjects should receive favours.

(Wilson 1835:87)

Merriak appears to have acted as a broker, negotiating with the foreigners on behalf of the group and distributing the foreign trade goods to other Aboriginal people. His status, at least partly, appears to have hinged on the ability to distribute these trade goods rather than ownership of the objects themselves.

Other examples of individual Aborigines acting as 'brokers' or negotiators over trade goods with Europeans have been documented on the Cobourg Peninsula (Cottingham 1874; Sunter 1937). A clear example of this process is reflected in John Lewis' first encounter with 'Flash Poll' in the 1870s. She asked him for some tobacco, saying 'she would hand it to the other people, who, she said, were quite stupid and did not understand a word of English' (Lewis 1922:137). Although there is no direct evidence to indicate whether Aborigines carried out their trading relationships with Macassans in the same manner, historical evidence suggests that they may have done. 'The various head men of the coastal clans were made "kings" by Malay traders... The head men were put in charge of their clansmen in the trepang expeditions' (Warner 1969:451). Trading relationships of this nature, which operated through individuals rather than through the group as a whole are consistent with Thomson's social obligation model.

These comparisons suggest that Thomson's model better explains the archaeological patterning apparent on the Cobourg Peninsula. Stone artefacts were carried onto the peninsula as part of a process by which inland groups demanded Macassan items. Residents of the Cobourg Peninsula were obligated to provide the prized foreign trade goods to their inland trading partners in order to fulfil social obligations generated through competitive trading relationships. Thomson's elegant model, however, does not necessarily explain why exchange relationships between coastal and inland groups continued to be of great importance even after Macassan voyages ceased and foreign trade goods were no longer available on the coast. It is relevant to look at what social conditions may also have motivated regional exchange after the onset of regular foreign contact.

In eastern Arnhem Land Thomson highlighted the important role which the exchange relationships played in encouraging communication between members of widely spaced groups and resolving or averting conflicts. He wrote that disputes

may be averted by explatory or conciliatory payments of food or [trade goods] to appease the injured or offended sentiments of the individual or

group...these presentations are invariably carried out in a ritual or ceremonial manner which gives them the stamp of formal approval of the society acting as a group and so lifts them above the level of more personal or private feuds.

(Thomson 1949:69)

The opposite was also true.

Just as generous presentations of...material wealth...and food promote goodwill, so tardiness in the discharge of these obligations may lead to avenging expeditions and interclan feuds. A man who is unpopular, or who is notorious for his carelessness in these matters is more likely to be named as the victim when a scapegoat is sought to avenge a death or wrong.

(ibid.: 39)

There is also evidence that regional exchange ceremonies played a similar role in western Arnhem Land.

While Berndt stressed material considerations as the dominant motivating factor for regional exchange in western Arnhem Land, he acknowledged that the trade ceremonies provided 'not, then, a purely commercial transaction, comprising merely the handing over of desired commodities...[but]... ideally, opportunities for settling differences as well as for establishing friendly relations' (Berndt 1951:174). During the gatherings associated with the trading ceremonies

betrothal arrangements are discussed, marriages take place, or assignations are made; the routine activities of everyday life are in some degree interrupted, both hosts and guests devoting their time to enjoyment of the ceremonies, of gossiping and making love, of feasting, and of eventually receiving the goods to which they have been looking forward for some time.

(ibid.)

Organized trading of material objects both within and beyond the local group satisfied 'the fulfilment of kinship obligations, marriage contracts, and indemnities for certain offences...and the economic transactions resulting from pre- and extra-marital transactions' (ibid.: 159). Exchange was thus linked to the resolution of interpersonal and inter-group conflict and provided a means to defuse situations which could potentially lead to conflict.

CONFLICT RESOLUTION IN THE POST-CONTACT PERIOD

A number of scholars have suggested that foreign contact was associated with an increase in the level of internecine violence in indigenous societies (e.g. Bitterli 1989; Kimber 1988:64; Lightfoot 1993:186). Campbell (1985) has argued that the introduction of smallpox into Australia was directly associated with increasing levels of conflict in Aboriginal society because young children and women of child-bearing age were particularly vulnerable to the disease. Data from southern Australia regarding the structure of Aboriginal populations in the nineteenth century indicate that they contained on average approximately twice as many males as females after smallpox epidemics (ibid.). Campbell has argued that gender imbalance led to conflict as men competed over the limited number of women, and that 'fighting, where there were few women, was not necessarily traditional behaviour' (ibid.: 357–8).

Levitus (1995:86) has made an analogous argument with respect to the Alligator Rivers region, approximately 100 km to the south of the Cobourg Peninsula. He speculated that levels of internecine Aboriginal conflict in the post-contact period increased in this region as a result of three processes.

- 1 New patterns of migration developed in response to the presence of non-Aboriginal people, bringing into close proximity groups that had maintained little contact before the contact period.
- 2 The death of young people through introduced diseases such as smallpox may have been interpreted as malevolent sorcery.
- 3 New technology available to Aboriginal people such as iron-headed spears and guns meant conflicts could more easily be fatal.

Given that residents of the Cobourg Peninsula maintained contact with residents of the Alligator Rivers region during the post-contact period, it is likely that they could be similarly affected by any increase in the level of conflict.

Ethnohistoric records for the Cobourg Peninsula frequently refer to fighting between Aboriginal people (e.g. Earl 1846:242–3; MacGillivray 1852:152; Keppel 1853:160, 167; Robinson 1880, 1881, 1882; Sunter 1937:101; Allen and Corris 1977:145). A resident of Victoria Settlement wrote of the local Aboriginal tribes that 'they have been making war upon each other to such an extent, that two of these have, within the memories of natives now living, been reduced from numerous bodies to mere scattered remnants' (Earl 1846: 242). Another stated that 'there are no regular battles but constant feuds in consequence of which single deaths occur' (Brierly 1848). Fighting took place between residents of the Cobourg Peninsula as well as with groups further afield such as the Alligator Rivers area (Keppel 1853:155; Wildley 1876: 134).

There are a number of references to conflict on the Cobourg Peninsula caused by the abduction of women by or from distant groups (e.g. Allen and Corris 1977:145; Keppel 1853:160; Robinson 1880). With respect to the Alligator Rivers tribes a newspaper correspondent on the Cobourg Peninsula stated 'Port Essington blacks are kept in constant fear of them, and have lost a great part of their young women, who have been taken by this sanguinary tribe' (*Northern Territory Times and Gazette* 20 April 1875). Aboriginal people from the region were polygamous (e.g. Mulvaney and Green 1992) and there appear to have been competitive relationships between men over the number of wives they could obtain. According to one long-term European resident of the area:

The men have as many wives as they can get, the more renowned the man the more wives he gets... If any one obtains a girl by capture he keeps her as long as he can but someone is sure to take her from him & so on till she becomes the property of some great man whom they are afraid to steal from.

(Robinson 1880)

Disputes caused by the abduction of women were resolved through fighting or through the intervention of a powerful individual (ibid.).

Ethnohistoric data indicate that violent conflict was relatively frequent on the Cobourg Peninsula during the nineteenth century. It is relevant to question, however, whether such conflict may have been of lesser intensity prior to the onset of Macassan contact. The paucity of written records from the area prior to the nineteenth century precludes a direct answer to this question. Nonetheless, there are at least two historically well documented facts which may have led to such an increase in conflict after the beginning of interaction with Macassans: (1) the alteration of traditional perceptions of sorcery, and (2) gender imbalance due to the impact of smallpox.

Introduced disease and perceptions of sorcery

Aboriginal people on the Cobourg Peninsula were subject to a variety of introduced diseases as a result of foreign contact, of which smallpox and venereal diseases seem to have been particularly destructive (Strangman 1908). Although it is not possible to gauge the exact impact of these diseases in terms of Aboriginal population levels, there is no doubt that introduced diseases were catastrophic. For example, an outbreak of smallpox in 1861 reportedly killed so many Aborigines 'that they could not bury them all, but left the corpses lying about' (Foelsche 1881:8).

In northwestern Arnhem Land death was often interpreted as the result of malignant sorcery by a member of another group. In the words of Reverend Lazarus Lamilami, an Aboriginal man from Croker Island:

In the early times people often lived in fear... Whenever someone got injured or sick, or if a person died, the relatives would try to find out how

it came about. Then, if they thought this thing shouldn't have happened, they would know that someone had worked black magic... Then they might decide to kill the person responsible...

(Lamilami 1974:127)

Instances of such 'revenge' killings have been recorded (MacGillivray 1852: 152–3; Keppel 1853:167). For example, an entry in Captain John McArthur's personal diary states that 'going through Bowens Strait, went on shore on Croker Island and met native "old Bucibucki." He told me the natives of Limben Racluer [probably Malay Bay] have killed two of Grants Island for making them sick' (McArthur n.d.: June 28, 1847). According to another European observer, 'It is the belief in the tribes that a man does not rest happy after he is dead unless someone is killed to pay for him' (Robinson 1881). It is likely that the frequency of inter-group conflict increased if people interpreted the results of introduced diseases such as smallpox as the effects of malignant sorcery.

Gender imbalance

As noted above, Aboriginal children and women of child-bearing age were particularly susceptible to smallpox. On the Cobourg Peninsula the introduction of smallpox pre-dated European settlement of the area and was almost certainly the result of Macassan contact (Foelsche 1881:8; Wilson 1835: 170). In a social environment in which there was competition over women, any marked imbalance in the proportion of females could have led to increased conflict.

Unfortunately, the very little data pertinent to the structure of the Aboriginal population on the Cobourg Peninsula date from a relatively late period. In 1881 the Aboriginal population of Raffles Bay and Popham Bay was estimated at 7 men, 12 women, 9 boys and 2 girls (Curr 1886:270). In 1939 the Aboriginal population between Murgenella Creek and Cape Don was estimated to consist of 43 men, 35 women and 36 children (Sweeney 1939). These data suggest that males were slightly more frequent than females, although the virtual absence of young females in the 1881 estimate is intriguing. It is important to note that by the time these observations were made, smallpox would have been present in coastal regions for several generations and some degree of immunity may have developed among the Aboriginal population. It is likely that any gender imbalance was considerably more pronounced during an earlier period of contact for which data regarding the relative frequency of men and women are not available.

Given that competitive relationships existed over the marriage and control of women, any situation which led to an increase in the frequency of males as opposed to females is almost certainly likely to have aggravated inter- and intragroup tensions. Increased competition over women may have been another avenue leading to an increase in group conflict. With the potential for a greatly increased level of conflict throughout the post-contact period, a means to avert or resolve conflict would have become increasingly important. Regional exchange of goods represented one mechanism through which increasingly tense and competitive inter-group relationships could be arbitrated. It therefore seems likely that the increase in exchange of foreign goods in return for non-local stone which is witnessed in the archaeological record following initial Macassan contact can be explained as the result of an attempt to mediate conflicts which resulted from a gender imbalance due to the introduction of disease.

DIRECT HISTORIC ANALOGY AND INTENSIFICATION

The recognition that the nature and frequency of Aboriginal exchange and, by inference, other aspects of social organization first changed markedly after Macassan contact and then again following European presence has important implications for the way that recent ethnographic data can be used to interpret prehistoric social life. One type of argument frequently employed to interpret archaeological remains is the 'direct historical analogy' (e.g. Chang 1967:229; Peterson 1971:240; Gould 1980:34-5; Murray 1988). Use of direct historical analogies rests on the assumption that relatively little change has occurred to the society in question between the time of the ethnographic observations and the time when the archaeological remains were deposited. This type of analogy is seen as applicable where 'the prehistoric adaptation being studied by the archaeologist could be linked stratigraphically and historically in an unbroken sequence to the historic cultural adaptations in the same area' (Gould 1980:35). The ethnographic information on which the analogy is made can be obtained either through the study of people currently living in the area or on the basis of historical records (Peterson 1971:240).

Archaeologists have typically expressed caution over the application of direct historical analogies to the interpretation of Pleistocene Australian archaeological remains (e.g. White and O'Connell 1982:33; Murray 1988:4; Cosgrove *et al.* 1990; Moser 1992), although some have viewed it as an appropriate, or even an essential means of interpreting late Holocene archaeological remains (e.g. Peterson 1968, 1976; Bowdler 1976; Gould 1977; McBryde 1978:3; Flood 1980, 1988). For example, Flood has argued that: 'traditional Aboriginal society as it existed 200 years ago has been recorded by anthropologists... Their data can then be used by archaeologists to provide analogies in the interpretation of prehistoric culture' (Flood 1983:16).

Archaeological research in Arnhem Land has shown that Macassan contact had enormous consequences for Aboriginal marine hunting strategies and coastal settlement patterns, as well as the intensity and scope of regional exchange networks (Mitchell 1994; 1996; Schrire 1972; Clarke 1994a). Furthermore, due to the trading relationships discussed above, significant social and economic changes took place within Aboriginal societies even before their first direct contact with foreigners. As Davidson (1988) has noted, the cultural boundaries between indigenous societies were permeable, and the first physical contact between two different groups of people may not represent the first contact between their cultures. In Arnhem Land, as in other parts of Australia, foreign material culture and introduced diseases are known to have spread long distances from their original entry points. Profound technological and social change also probably took place within Aboriginal society elsewhere in Australia long before the arrival of the first European observers.

If Arnhem Land is typical of other parts of Australia, then one would be extremely wary of using direct historical analogy to interpret the archaeological record as is done for the model of 'intensification' initially proposed by Lourandos (1980a; 1983; 1985) and recently expressed again in a slightly modified form (Lourandos 1997:318-23). Originally developed with respect to southwest Victoria (in southern Australia), the model was subsequently applied to the entire Australian continent (Lourandos 1985). The intensification model centres around ethnohistoric data concerning Aboriginal settlement patterns and social structure in southwestern Victoria in the recent past (Lourandos 1980b). As such, Lourandos stressed the intensely competitive relationships, both at a group and an individual level, which had been documented by European observers in the nineteenth century. Ethnohistoric records depict Aboriginal society in southwest Victoria as non-egalitarian and highly patriarchal. Senior men competed for status and power through organizing mass hunts, through their control of a hierarchical and exclusive ceremonial life and their participation in regional exchange networks. The tense relationships which developed between competing groups of Aborigines were mediated through elaborate indigenous exchange systems and lengthy ceremonial and inter-group gatherings (Lourandos 1983). These data are extremely similar to the picture I have painted for Arnhem Land following the arrival of the Macassans.

Lourandos employed this depiction of Aboriginal society at contact as a direct historic analogy for interpreting chronological changes in the late Holocene archaeological record for the Australian continent as a whole. Rather than ascribing the cause for these as due to recent contact with outsiders, he argued that the society documented during the nineteenth century represented the end product of thousands of years of social evolution. Throughout the late Holocene the hunter-gatherer society was said to have been

transformed through the development of increasing alliance systems between local groups... At the same time the broadly egalitarian nature of the society began to break down so that a form of gerontocracy developed in which clan elders achieved power, prestige and status by such means as polygamy, ceremonial life, shamanism and possibly secular pursuits.

(Lourandos 1983:90)

Lourandos (1983:81; 1985:389) assumed that the result of this process consisted of gradual changes through time in the complexity of social relations, economic growth, sedentism and population growth. Referring to the extensive trading networks documented by Australian ethnographers, Lourandos (1985:409) argued that 'increasingly intensive exchange networks carry overtones of developing social relations as well as individual group status and prestige'. Under the intensification model, elaborate inter-group gatherings and exchange systems were necessary to regulate social relations which had become increasingly competitive throughout the mid- to late Holocene. Sociodemographic change accelerated through the late Holocene and was 'nipped in the bud...by the arrival of the Europeans' (Lourandos 1983:92).

Lourandos' identification of these trends within the archaeological record from southwest Victoria has been questioned on a number of grounds (e.g. Bird and Frankel 1991). An issue which has received less attention is the extent to which the competitive social relationships within Aboriginal society in southwest Victoria during the nineteenth century were not an inevitable result of a process started earlier, but developed as a consequence of processes set in train by recent culture contact with foreigners. Lourandos used two principal historic sources in reconstructing Aboriginal society in southwest Victoria. The first were the journals of George Augustus Robinson who travelled through the region in 1841. By the time Robinson reached the area, the spread of European pastoralism had been so rapid 'that inroads leading to the collapse of the Aboriginal society were well developed...most areas would have been influenced by the European and his diseases' (Lourandos 1977:203). Lourandos' second major source was James Dawson, whose 'information was gathered from aging Aboriginal informants a generation after their traditional society had all but disappeared' (ibid.: 203).

What the intensification model does not consider closely enough are the possible consequences of contact brought about through foreign epidemics. Foreign diseases such as smallpox spread readily throughout Aboriginal populations reaching many areas long before the first direct foreign contact (and correspondingly the first written records) (e.g. Butlin 1983; Campbell 1983, 1985; Kimber 1988). Campbell (1985:357) has demonstrated that fatality rates through smallpox may have been as high as 75 per cent in 'virgin soil' epidemics and 40 per cent on the second outbreak. Women and young children were particularly vulnerable to smallpox, and surviving Aboriginal populations had a ratio of males to females in the order of 2:1 (Kimber 1988: 64; Campbell 1985: 357). Smallpox was recorded amongst Aborigines in southwest Victoria as early as 1803 (Butlin 1983:24), and there are a number of historical references to Aborigines affected by this disease in this area prior to 1841 (Campbell 1985: 349). Campbell (ibid.: 349) has demonstrated that there were many more surviving males than females in the area prior to 1841. Such changes reflected both male perception of their new power and the need to mediate inter-group conflict between groups caused by the shortage of women. Kimber (1988:65-6) noted ethnographic evidence which suggested that the power of women in the ritual domain had decreased dramatically following the onset of foreign epidemics

In summary, Campbell's (1985) reconstruction suggests that recent demographic change in southwest Victoria is likely to have been associated with a number of changes within the social system. These include an increase in the power of males as opposed to women, an increase in the level of competition over the surviving women, and a corresponding increase in the level of ceremonial activity as a means of mediating this competition. All of these phenomena are key elements in Lourandos' explanation of economic change throughout the mid- to late-Holocene, yet all could have been a consequence of recent culture contact.

As I have argued above, in northwestern Arnhem Land intense competition and the regional exchange systems developed to mediate this competition can be viewed as a result of the disruption brought about through foreign contact. Nothing in Lourandos' depiction of Aboriginal society during the post-contact period suggests that the process of culture contact itself could not have been responsible for the aspects of Aboriginal society interpreted as markers of social complexity. As Lourandos (1983:89) has admitted, 'our assessment should also take into account the known demographic decline in historical times, as well as the ongoing results of European contact since around 1800...and their effect on Aboriginal populations, marriage, etc.'. Lourandos (1985:413) has also acknowledged that influences from outside Australia led to changes in northern Australian Aboriginal societies; specifically to ritual and art and the development of 'new status items'. Nonetheless, he has argued that cultural change associated with culture contact 'should be viewed as part of intensification processes taking place outside as well as within Australia during the late Holocene' (Lowandos 1985:412).

Changes in social structure in southwest Victoria may also have been associated with other economic changes, such as a realignment of Aboriginal settlement patterns. Campbell (1983) has argued that following major epidemics, decreased pressure on food and other resources may have allowed surviving Aboriginal populations to concentrate around important water and food sources rather than ephemeral sources. In this respect it is interesting to note that stone circles, often interpreted as hut foundations, appear to have been built in southwestern Victoria only after the onset of European invasion (Bird and Frankel 1991:8). As Clarke (1994b:12) has suggested, it is possible that the semisedentary settlement patterns documented in the ethnohistoric record of southwest Victoria are a consequence of foreign contact.

It cannot be assumed that Aboriginal social structure and economy in southwest Victoria prior to foreign contact were identical to those recorded after European settlement began. Given that the level of group and individual competition over women, and the status of senior males are likely to have increased during the post-contact period, two points can be made regarding the intensification model. First, the factors which Lourandos held responsible for economic intensification (group and individual competition) would have accelerated and not been 'nipped in the bud' by European settlement. Second, if Aboriginal society in southwestern Victoria was more egalitarian and less competitive prior to European contact, the development of individual and intergroup competition may represent a relatively poor explanation for archaeological change throughout the late Holocene. Other explanations must be sought to explain changes visible in the mid- to late Holocene archaeological record.

In some respects the chronological trends apparent on the Cobourg Peninsula are consistent with the model of intensification put forward by Lourandos. Expansion and acceleration in the regional exchange of stone artefacts in northwestern Arnhem Land represented one facet of an indigenous response to social change. Ethnographic evidence demonstrates clearly that exchange represented an important mechanism by which inter-group and intra-group conflict could be resolved or avoided. As those relationships became increasingly competitive in the recent past, there was accordingly a need to expand and elaborate indigenous exchange networks.

There is, however, no evidence to support the notion that the expansion of regional exchange systems on the Cobourg Peninsula in the recent past would have occurred independently of any external stimulus, as the intensification model implies (Lourandos 1985:413). By contrast, archaeological evidence from northwestern Arnhem Land indicates that the onset of foreign contact was followed by rapid and unprecedented social and economic change. To assume that markers of 'social complexity' operating in Arnhem Land society must represent the outcome of a long process of social evolution denies and obscures the complex causal relationships associated with the process of culture contact.

Ultimately, a detailed assessment of the impact of culture contact may necessitate a consideration of the way in which social and economic phenomena are interpreted as markers of evolving 'social complexity' within hunter-gatherer societies. This point has also been made in the context of North America where evidence is emerging to suggest that many aspects of social complexity documented by ethnographers were greatly elaborated by European contact (Lightfoot 1993:185–9). Such markers include predatory warfare, slavery, powerful chiefs and ceremonies such as the potlatch (ibid.: 186). As Lightfoot points out, even the earliest ethnographic accounts from this region were written long after European contact had begun, and it simply cannot be assumed that all markers of 'social complexity' were in place during the prehistoric period.

CONCLUSION

As in many parts of the world, one very visible result of external contact with Aboriginal people in northern Australia in the past 300 years was the widespread distribution of foreign items of material culture. It is clear from the archaeological record of the Cobourg Peninsula, as well as ethnohistoric accounts and more recent ethnographic research, that the scale of exchange systems in Arnhem Land greatly accelerated following contact with Macassan and European outsiders. I have demonstrated that the cause for the increase in exchange was not the utilitarian value of these new goods, since many were not consumed but passed on in return for 'mundane' objects such as non-local stone. Instead, following Thomson's social obligation model, I have argued that the foreign goods helped satisfy another local need which was itself the result of disease introduced from outside.

As a consequence of increased mortality which had differential effects on the population, i.e. higher casualties for women and children, Aboriginal populations experienced an unbalanced gender ratio. The resulting increased competition for wives led in turn to higher levels of inter- and intra-group violence. Since exchange was used to mediate disputes and defuse violence, it accelerated as a consequence of higher levels of conflict. For this reason, then, foreign goods were highly desired by Aboriginal people and were passed quickly over large distances.

The argument I have presented has a number of important implications for studies of inter-group interaction and for prehistoric archaeology. As noted previously, in many parts of the world the growth of exchange and demand for foreign goods has often been ascribed to foreign contact. Generally, the cause is thought to be obvious: the goods themselves were desirable because of their utilitarian value or associations with outsiders. Although that may have been the case, it is likely to be only a partial explanation for the associated acceleration of exchange and elaboration of ceremonies. The northern Australian case illustrates that a complex chain of events triggered by a totally different cause, in this case higher mortality and an imbalanced gender ratio leading to increased levels of violence, may have taken place. One should therefore be wary of discussions that use simple and direct causation when considering the effects of foreign contact with indigenous societies. There is no doubt that foreign contact had profound effects on Aboriginal culture, but understanding these involves a knowledge of the role Aboriginal people took in determining how the impacts were expressed.

Having acknowledged changes that resulted from foreign contact, archaeologists should be suspicious of models of change using direct historical analogies from recent societies. My discussion of Lourandos' model for intensification of Aboriginal society illustrates the dangers of assuming that recent cultural processes are representative of the pre-contact situation. As I have demonstrated, Aboriginal society in northern Australia had undergone significant changes as a result of interaction with Macassans and Europeans by the time that ethnographers recorded their lifeways. Given the rapid spread of disease and changes engendered by the effects of increased mortality, it seems reasonable to believe that ethnographic accounts from the nineteenth century describe cultures markedly different from those of prehistory. Finally, it is important to note that despite the devastating effects of introduced disease on Aboriginal societies, new ways were devised to deal with these impacts. Rather than characterize the impact of foreign contact as the demise of Aboriginal culture, a more accurate approach is to focus on the creative changes that took place in society to cope with new situations.

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Signs of life on a barbarous frontier: intercultural encounters in North Australia DEBORAH BIRD ROSE

INTRODUCTION

Aboriginal people in many parts of Australia have taught me to consider country to be a conscious entity. Place is one kind of embodiment of being, and the encounters of living things are recorded there. Signs are memories; they may become obscured, but not, perhaps, lost. We human beings construct the passages of our lives through our cultures and our actions. Different cultures, different actions: different traces. Contrasts between the concreteness of place and the elusive duality of the signatures of our lives are nowhere more vivid than on the frontiers where intercultural encounters produce dense and provocative material and imaginative traces.

In this chapter I examine twinned processes: attempts by two different sets of people to socialize each other. I examine the frontier along the Daly River of the Northern Territory at the turn of the century, examining some of the ways in which Jesuit missionaries, who thought they were there to civilize and convert Aborigines, were themselves socialized into some Aboriginal ways of doing things. On the one hand, the missionaries were trying to bring Australian Aboriginal people into an agricultural and Christian way of life. On the other hand, Aboriginal people were attempting to socialize missionaries and their teachings into their own social networks and cosmology. Much of this analysis is based on an analysis of the diary the Jesuits kept while at the Daly River from 1886–1899.¹ The questions arising out of this analysis take me beyond the initial encounter, to track some of the effects of these encounters through time and space.

The over-arching frame is an exploration of a specific kind of place: that known as the frontier. By any measure this is a site of violence, since one person's frontier is, almost by definition, someone else's home, and the encounter pits a struggle for dispossession against a struggle for survival. The Jesuit diaries enable us to engage with intercultural encounters precisely at those moments when people glimpse the incommensurability of their endeavours, when contradictory and mutually exclusive efforts confront failure, and when tragedy erupts.

The tension between presence and absence is integral to western frontier ideology as it has been put into practice in North Australia. On the one hand, the conquerors imagine themselves in the midst of savage people and wild places, and they construct these images around a certain moody presence signalled by adjectives such as treacherous, awesome, fearsome, happy-go-lucky, pristine. On the other hand, the savage person and the wild place are defined by the absence of civilized man (the colonizer), and thus as living absences: *tabula rasa* and *terra nullius*. Colonizing practices of the frontier deploy power and knowledge in ways that create absence where before there was specific localised presence. The imagined absence that informs colonizing practices refracts into the land and into the people to become the experience of real absence. The paradoxical dialectic of absence and presence generates a question: how is it that emptiness reproduces itself and grows? What is the power of absence?

'THE BAD AND BEAUTIFUL DALY'

In 1886 a group of Jesuit missionaries trekked out to what they thought was a wild place, specifically the Daly River of North Australia, to make contact with wild savages (Indigenous people). They intended to bring to the place the civilizing influence of the cultivated garden, and to the savage the civilizing influences of agricultural labour, Christian marriage, and salvation. Central to their thinking was the view that savages were open either to corruption or to salvation, and that once corrupted they were no longer suitable material for civilization. They were thus in search of a particular type: the pristine savage (Alroe 1988 is insightful). They imagined this type as an absence —not only the absence of their European civilization, but an absence of all civilization: a veritable tabula rasa on which they would inscribe redemption through their own cultural/colonizing practices and through the spiritual authority of Jesus Christ. The missionaries were to become completely disheartened. One of them went mad, others were found guilty of sexual relations with Indigenous women and one was sent away in disgrace; many of their most promising converts died, and after starting afresh three times in fourteen years, the mission was closed precipitately because of a decision made overseas.

The Daly River, about 160 kilometres south of Darwin (see Figure 8.1), occupies a place in settler Australian frontier folklore as a site of massively conceived European ventures and monumental failures. According to Ernestine Hill (1970:280), 'It was stark tragedy on the bad and beautiful Daly, where wily Nature is ever working to the defeat of man'. Home to 'wild blacks', site of massacres and mines, and host to a fair number of the entrepreneurial disasters so dear to Australians, the Daly is situated between the now densely settled city of Darwin and a large sparsely populated region of Aboriginal reserves.



Figure 8.1 Daly River and environs

The history of the lower reaches of the river is complex by any standard. Well before Europeans came, there was Macassan contact of some sort; the apparent introduction of the dugout canoe had almost certainly led to an intensification of social networks. From about the 1860s the Darwin hinterland was occupied by settlers from a variety of cultural origins: there were Macassan trepangers, other international traders, surveyors and administrators; there were small-scale miners, both European and Chinese, as well as large-scale mining ventures; there were telegraph operators and government drillers; there were agriculturalists, pastoralists, and buffalo shooters; there were Chinese traders; there were plantations; there were commercial fishermen, Chinese and European, and crocodile shooters; there were explorers, naturalists, police and drifters, and other adventurers with a variety of motivations; and of course there were missionaries. Aboriginal people had access not only to the standard tobacco, flour, sugar, and tea, but also to alcohol and opium. They had access not just to one set of international ideas and ideals, but to many sets, and they had ample opportunities to play the different groups off against each other, and to sample for themselves a range of ways of living.

In the Daly region, these factors did not precisely succeed each other in waves, but, rather, were all mixed in together. It makes for a wild and devastating history; in the first few decades of settlement, Aboriginal populations dropped by about 95 per cent (Keen 1980). The Aboriginal people

along the Daly appear to have been similar to other Aboriginal people in their responses to white invasion. On the one hand, they fought Europeans and Chinese, and on the other, they attached themselves to them for protection, for political advantage, and as sources of tobacco and other exotic items.² Little is known of the earliest years. Sowden (1882:107) notes that at Owston's sugar plantation 'the blackfellows give very little trouble now. They did at first—they stole all the stores, but they were punished for it.'

Punishment was likely to have taken the form advocated by the proponents of extreme violence: an indiscriminate slaughter of men, women and children. Such actions succeeded in reducing Aboriginal violence by temporarily reducing local populations. Carried out periodically over large areas, such actions had the effect of drastically reducing Aboriginal populations and demoralizing Aboriginal people for decades. The Coppermine massacres of 1884 are a classic example of the search and destroy method of settling country. Several Aboriginal men who were working with white men at the Coppermine near the Daly killed four white men. If, as seems likely, there was a European trigger to the initial violence, it is now obscure. As soon as the word got out, police and civilian volunteers armed themselves to track down and destroy the murderers. According to Morice, Protector of Aborigines at the time, the 'general belief in the Territory was that they simply shot down every native they saw, women and children included' (quoted in Markus 1974:18).³ Subsequently, diseases devastated local people. The Jesuits witnessed radical population decline, but seemed only to realize the implications of what they were seeing toward the end of their stay.

Such was the situation when the Jesuits arrived: there were European and Chinese settlers, market gardens, plantations, cattle stations, mines, massacres, and commercial fisheries. Their imagined wilderness was an illusion even by their own criteria. The Jesuit writings, and the perspicacious observations of the Norwegian naturalist Knut Dahl (1926), provide an incomparable record of a thin slice of the intense social life on the Daly just before the turn of the century. Since that time the most acute observations have been those of the anthropologist W.E.H.Stanner who was there in the 1930s and 1950s. Aboriginal people were then clustered on farms run by settlers in harsh degrees of poverty; daily life was shot through with violence and degradation. Stanner wrote: 'The river seemed to me a barbarous frontier—more, a rotted frontier with a smell of old failure, vice, and decadence' (1959:80). As I will discuss in greater detail, he found that Aboriginal people were in a state of desperate dependence, that the authority of the old people was in decline, that bush tucker was scarce, and that many people were in a state of spiritual crisis or despondency.

In recent years much of the land has been returned to Aboriginal people's control under the Aboriginal Land Rights (NT) Act 1976 (see Sutton and Palmer 1980; Aboriginal Land Commissioner 1982).⁴ I came into contact with the region through my role in assisting Aboriginal groups in land disputes. At least two major disputes over land among Aboriginal people in the Northern Territory have their roots in the social dynamics of the missionary period at the Daly, and I

have searched all the Jesuit records available to me for information which might assist in understanding the complex history which underlies these disputes.

In 1996 the Daly retains its reputation as a frontier region. It is home to 'feral' whitefellows, pig shooters, weekend fishermen, and settler entrepreneurs. Although the Jesuits left in 1899, Sacred Heart missionaries returned in 1955 to establish a mission settlement called Nauiyu Nambiyu (see Figure 8.1). The Port Keats mission, some 160 kilometres to the south west, was established in 1935 (Forrest 1994:68–9; Pye 1983). Both of these mission settlements remain in place today. Aboriginal people live in and travel between a number of settlements and outstations.

SETTLEMENT AND SOCIALITY

At the time of invasion Aboriginal people were organized into local groups interlinked within a regional sociality. Regional networks brought people into relationships through marriages, reciprocity for subsistence organized through mutual foraging rights, and shared responsibilities in religious ritual. All the dimensions in which sociality was fostered came together in the context of land. Rituals, organized around seasonal abundance, celebrated sources of life; marriage and dispute management were organized in the context of ritual; and religious law and authority were celebrated and regenerated in ritual. In this section I discuss missionary endeavours taking land as the focal point. In the following section I will explore the religious encounter along this frontier of the soul. I do not pursue the issue of marriage. Suffice it to say that the missionaries opposed arranged marriages, and to the extent that they disrupted marriages, they also disrupted the authority of senior men and women. At the same time, their own surreptitious sexual exploits appear to have led local Aboriginal people to consider that the missionaries were trying to marry into the group. On the part of Aboriginal people, there would have been an expectation of reciprocity, while on the part of the Jesuits there was an expectation of submission. All were disappointed.

Many of the missionaries were Austrian; they came to a continent that was foreign to them, and then to a region of the continent that was supremely foreign. One of the most evocative lines from the diary is the description of the Daly River which, the diarist noted with distinct melancholy, looked nothing like the Danube. It had, he proclaimed, 'a soft, soapy taste, like an extract, as it were, of alligators'.

Their intention was to establish a centre to which people would come in order to settle permanently. They followed the model of missionization which had been developed in South America: that of developing self-sufficient agricultural settlements. Knut Dahl commented wryly on the Jesuits' goal of introducing agriculture to Daly River Aborigines: Let us, the Jesuit argues, first of all persuade these savages to give up their roving life, let us teach them to cultivate the soil, and let us make them understand that their work in this way brings them greater happiness, makes them more care-free than their old life. Then possibly their progeny, the new tribes of settled agriculturalists, may be more susceptible to our religious propaganda.⁵

(Dahl 1926:36)

The missionaries complained regularly about the mobility of the people they were trying to convert: 'almost every day new listeners take the place of those who preceded them. (And)...when they come back are as if they had never heard anything about Christianity' (quoted in O'Kelly 1967:49). I will examine some ecological factors involved in mobility shortly, but it is important first to note that missionaries and Aborigines were operating in very different social and geographical worlds.

Missionaries effectively inhabited one place—their mission. They made forays into the surrounding country, and some of them were far more mobile than others, but they almost invariably travelled with mission Aborigines. Over the years a significant number of Aboriginal people in the region must have had some contact with the mission, but the missionaries' close relationships were always with the very small group of people who, at any given time, formed the nucleus of the settlement.⁶

Aboriginal people, in contrast, lived in and through a far more complex set of geographical, social and cultural worlds. They camped in many places and periodically visited many institutions of which the mission was only one, and probably a minor one. They were in and out of the mission at a great rate; they had their home countries, their regular ranges (countries where they had various types of rights), and a variety of settlement sites which included the mission, the Coppermines, the Chinese gardens, farms and cattle properties, railway sidings and more. Their social world included Chinese and European miners, Chinese traders, settlers, police, and travellers, as well as all the Aboriginal people of the region with whom they had ties of marriage, trade, and ceremony, including peoples from coast and inland, from north and south (Dahl 1926:24, 109–10). There was an ongoing social and religious life which was totally external to the missions, and which the missionaries sought to stamp out.

The purpose of the mission, as stated, was twofold: to achieve independence from major external support (funds were always a problem), and to teach the Aborigines the meaning of property, labour and submission to mission authority, by inducting them into an agricultural form of production.

There is a pattern to the missionaries' endeavours. Time and again they drummed up a bit of enthusiasm, praised the Aboriginal people for their work, watched them slack off, completed the work themselves, and attributed the completed work to the Aborigines. This form of self-delusion led to some bitter remarks toward the end, but on the whole it seems to have been a successful strategy-not so much to encourage the Aborigines as to encourage the missionaries.

A series of entries shows Fr Kristen engaged in this process:

14/1/88 Charlie is given garden at Hunger Hill to look after.⁷ He wants to live there.

18/1/88 Charlie is given seeds to plant

shortly thereafter: 'Charlie has already sowed a part of his garden, he will finish it next week. It is a most commendable effort for this barbarian, unaccustomed to toil, and accustomed to unbridled freedom.'

27/1/88 Fr Kristen finished sowing Charlie's garden.

A series of entries shows they were also encouraged to build houses. Here again, Fr Kristen assisted:

11/2/88 Charlie has put up two huts at Hunger Hill, one for self and Zachary, another for Jacky and Albert.

14/2/88 Fr Kristen roofing Charlie's huts.

21/2/88 Fr Kristen built a fence around Charlie's hut.

At the end of the year Fr Kristen was still at it:

24/12/88 Fr Kristen helping Zachary & Bill to build their houses. 26–7/12/88 Kristen putting roofs on native huts.

There is also the story of the missionaries' attempts to establish their own gardens, which is itself remarkable. O'Kelly summed up the last few years, and they are typical:

In '92 a plague of caterpillars necessitated a double sowing of maize; in '93 a visitation of rats made it necessary to plant the African corn four times and reduced the harvest to six tons; in '94 the ravages of field mice meant that some fields had to be sown three times, and then reeds sprang up and ruined many acres; in '96 birds reduced the corn harvest to three tons...; in '97 intense heat defeated their irrigation and reduced an expected six ton crop of corn to two; in '98 the first flood devastated all crops and gardens and the same occurred in '99.

(O'Kelly 1967:59, footnote 60)

These problems ignore all the human factors. Aboriginal people regularly took food from the gardens rather than storing it (often termed 'theft' by missionaries), and regularly destroyed gardens as an expression of anger directed toward the missionaries or toward each other.

The missionaries' fluctuating ability to support Aboriginal people constitutes one of the most contradictory aspects of their endeavour. The lack of understanding of the place and people with whom they interacted ensured that they consistently failed to make the logical connections either between their own practices and the loss of local subsistence, or between Aboriginal people's need to participate in regional networks, and their foraging rights. Thus, when they were flush with food they attempted to bring people in, impose Christian morality on them, induce them to give up their own way of life and take on an agricultural mode of subsistence. Their efforts involved substantial social change. For example, the huts that they required people to build had the important social function of breaking up extended families and residential groups. To this end, the missionaries reported with pride in 1889 that: 'At last the common camp of the blacks has been broken up, & each family lives in its own hut.'

For part of almost every year of the whole fourteen years, Aboriginal people were thrown back on regional subsistence and social networks because the mission simply could not support them. A plaintive entry in the 1890 diary hints at the Jesuits' longing to enforce dependence, and their frustration at their inability in any way to accomplish their sedentarizing project:

They will not stay, however, unless they are supplied with food, they cannot get enough native food for themselves in this region which is largely destitute of it,...we lack money and certainly will lack money in the future.

(22/4/90)

This contradictory aspect of their work seems to have escaped the missionaries until, perhaps, right near the end of their time, and it is not clear that they ever fully realized that from an Aboriginal perspective it would have been completely self-defeating to make a comprehensive social and subsistence commitment to the missionaries. Given that most Aboriginal people could not survive throughout the year with the missionaries, and given that their investments of labour were certain only to yield entirely unreliable and unpredictable results, they had to sustain their relationships to other Aboriginal people and to other settlers.

Indeed, it seems most probable that gardening activities were designed to foster social relationships with missionaries, and, as Dahl (1926:37) suggests, to gain the advantage of the weekly tobacco ration; any realized food harvest was likely to have been an extra, but unpredictable, benefit. Thus the mission was incorporated into Aboriginal social networks as one more centre where people could go for greater or shorter periods for a broad range of purposes, many of which undoubtedly were incommensurate with missionary purposes.

As the mission was being incorporated into Aboriginal networks, so too were the missionaries. Along with their formal study of the local Malak Malak language, which they learned in order to communicate their Christian message, the missionaries themselves were being taught local Aboriginal knowledge sufficient to enable their survival. Most notable was their reliance on bush tucker. Throughout the whole period the missionaries were dependent on local native foods for their survival. Unlike Aboriginal people, their range was restricted by their investment in and commitment to their settlement and their gardens. In fact, they developed a form of settled hunting and gathering that had clearly detrimental effects on the environment.

Changes in the Jesuits' name for the hill beside which they made their first settlement tells the whole story in brief. At first they called this hill Honey Hill because the Aborigines got honey there, but later they renamed it Hunger Hill as a reflection of their own experience.

In 1892 the diarist notes the amount of native game obtained up till August of that year: they had shot 550 kangaroos, 600 geese, 30 pelicans, 50 ducks. It is unfortunate that they did not record figures on how many tons of vegetable foods were harvested. The regular mention of cartloads or boatloads of yams and yillik (corms of the lotus lily, *Nelumbo nucifera*) indicate tons of food being brought in, and Fr Mackillop's comment that lily seeds pickled in brine are quite tasty (1892–3:262) suggests that they were harvesting surpluses for storage. This reliance meant that increasingly the Jesuits' language included local place names and local terms for flora and fauna. Knowledge and use of bush foods, and lack of food at home, eventually led the missionaries to adopt semi-nomadic subsistence strategies themselves.

As Table 8.1 shows in detail, year after year the reliance on bush tucker continued. The results were predictable: regular resource areas close to the mission were over-taxed and became sites of contention. Aboriginal people relied on these resource sites for their subsistence, and organized ceremonial events to take advantage of local abundance, only to find that there was no such abundance.

The events surrounding Nanerain billabong (see Figure 8.1), in August and September of the year 1892, are a good example. This billabong and swamp, and the adjacent Pangerain billabong/swamp, were main sources of yillik, and people had gathered there in preparation for a ceremonial event of regional significance. On 18 August 1892 the diarist reported that Aboriginal people were getting yillik at Nanerain. On 29 August he reported: 'there is a rumour that the Cherites [a local language and group] are to be turned out of Nanerain lest the food of this tribe [Malak Malak people] be quite eaten up by them'.⁸ He also reported a rumour that circumcision ceremonies would be held at Nanerain. Hard on the heels of the rumour of ceremony, Fr Kristen arrived, ostensibly to investigate the food situation, but almost certainly also to investigate rumours of ceremonial activity. On 30 August he went to Nanerain to get yillik, and returned to report that Vogites (Wagaits, a local label referring to coastal peoples) had been there, but had left because Nanerain was overtaxed.⁹ He reports that men were on the watch to prevent more yillik being taken from there, and that the 'Cherites' were still there.

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
188 7		goo se egg s										
188 8	gees e kan garo os fish		fish	egg s	hunt ing							fish
188 9			goo se egg s fish								yilli k	
189 0			fish		fish kan garo os		diru alk (nut s) kan garo os	vala nger k	yilli k		fam ine	fam ine
189 1									yilli k	yilli k	yilli k finis hes, nain	nain
189 2	yili k ding geri			yam s		net fishi ng	fam ine yilli k hunt ing	yilli k (stre ssed) at Nar arai n	yilli k fish (Pa nger ain)		fam ine	
189 3			egg s	goo se egg s yam s							fam ine	
189 4			egg s yam s	wild pota toes						fish		fam ine

Table 8.1 (Calendrical	scheme of	bush tucke	er use, as	noted in	diaries ¹⁰
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	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
189 5		goo se egg s yam s	goo se egg s yam s	yam s							yam s spro utin g, yilli k	
189 6		goo se egg s							yam s	yam s tort oise	yam s	
189 7	yam s	yam s egg s	egg s	yam s	yam s	yam s	yam s	yam s	yilli k, yam s getti ng scar ce		yam s	
189 8			goo se egg s		first yam s			yam s	yam s			
189 9			egg s	yam s								

Probably because of food shortages, but undoubtedly also to keep watch on the Aborigines in the hopes of preventing the ceremony, the missionaries moved out to the swamp region:

14/9/92 Boys sent to Noarain [Nanerain] and Pongerain where still plenty of yillik.

16/9/92 No food. Fr Conrath to take school children to Pangerain swamp...they can live on yillik and fish. There are also there at this time many children and families of Cherites who can be taught....

7/11/92 Food eaten out at Nanerain.

In addition to their own foraging activities, the Jesuits also obtained large amounts of food through exchange. They put a label of commerce on these transactions; tobacco is always the stated or implied medium of exchange.

There is one report in 1894, for example, that 'Natives of every tribe are bringing eggs and yams for tobacco' (12/3/94). The missionaries apparently saw these transactions as a sign of progress in the Aborigines. I believe that the missionaries cloaked their reliance on bush tucker by subsuming it into the category of commerce. In this way they could sustain the illusion that they were

helping the Aborigines to progress, whereas in fact the Aborigines were helping them to survive.

In the short term, the effects of settled hunting and gathering were noticeably destructive. In the long term the missionaries' impacts were only a small part of a much larger set of colonizing practices. Today feral pigs have turned over virtually every square inch of the rich Daly swamps like Nanerain and Pangerain. The noxious weed *Mimosa pigra* is invading the water systems (and during part of the year vast portions of the region are covered with water); it favours ground from which the vegetation has been disturbed (Harley 1992: 11). Both pigs and *Mimosa pigra* are out of control. In 1998 the future of these homelands looks bleak.

TAMING THE CROSS

In this section I examine evidence that hints at or tells how Aboriginal people interpreted Christianity as a spiritual message. First, however, I must contextualize the missionaries' vigorous opposition to Indigenous religious practice. The Jesuits in their own accounts express their theological opposition to Indigenous religion. The Norwegian naturalist Knut Dahl observed and recorded practical action in the robust Christian tradition. Here is his account of missionary involvement in the context of dispute management prior to ceremony. On one occasion in 1894, the Jesuits became involved in the dispute management preceding ritual when one of the mission converts asked for help with a man who had apparently become drunk and was threatening others with a gun. Dahl describes the incident:

Presently I saw a small party of blacks running at top speed for the thickets of the swampy lagoon and Father Mackillop in hot pursuit of them, the tail of his black cassock flapping in the air like a flag in a storm. I came pounding into the swamp on the edge of the jungle-covered lagoon at the moment when Father Mackillop's revolver flew out, forcing a mob of squalling women and children to stop. We shouted at them to tell us the whereabouts of the man with the gun.... They replied that he was quite close, and we told them to go ahead. We drove them splashing in front of us through the swamp, until we caught sight of a native running as hard as he could travel, an old blunderbuss in his fist...[they disarmed him, and Father Mackillop spoke to the crowd] the reverend father was reading the sinner and all the spectators a lesson, the points of which he emphasised with his revolver. I am rather afraid that the sum total of his eloquence was that they were all ...a lot of ne'er-do-wells, who had better remove themselves to their own country, and the sooner the better. Otherwise we would shoot every mother's son of them.

(Dahl 1926:106-7)

People were punished for participation in ceremony, and were not allowed to observe taboos or other markers of ritual status at the mission. The diaries are full of references to punishment, but rarely is the mode of punishment stated. Beatings and floggings are regular occurrences, and threats of the punishment of God are also indicated, as in this entry concerning the death of a senior man named Bede:

Nine weeks ago Fr Conrath told this man not to go to the 'Karamala', which is a pagan festival, threatening him with the punishment of the Almighty God if he did go. 'I shall go', said the native, 'let God punish me'.

(3/8/98)

The quirky manuscript that Fr Kristen wrote while he was recovering from nervous exhaustion offers a glimpse of how Aborigines perceived Christian teachings. He informs us that the Aborigines had formed a punitive view of the crucifixion: 'Of course Fr Conrath spoke mostly on divine mysteries under the cross, the great mysterious sign on the hill. Some Blacks thought that cross was for hanging them up if they would not yield to his counsels....' (Kristen 1899: 197). This interpretation of the cross seems certain to have been drawn from the floggings and other missionary actions. In addition, of course, random violence and all the punitive expeditions and dispersals by other settlers and police contributed to people's understandings of colonization. The quality of mercy was never conspicuous on the frontier; images of a punitive god were given flesh by people's own experiences in this violent frontier culture.

Fr Kristen goes on to tell us that Aboriginal people were querying the social and theological implications of the Christian myth:

In the year 1893 after the usual Sunday instruction in New Uniyah, when I had read and explained the parable of Our Lord, if I remember well, it was the 7th Sunday after Pent, an old man ...came to me and inquired earnestly whether that Master Jesus was a Mallac [Malak], one of their own brown race?

(Kristen 1899:198)

The punitive character of the cross and the story of an Aboriginal Jesus were almost certainly combined in another ritual which appeared to Fr Kristen so violently to invert Christianity as utterly to defile it. The ritual was called Tyaboi, and Fr Mackillop wrote:

I am about to make a strong assertion; but I believe it to be true. I believe they have human sacrifices, that from time to time one man, with his own knowledge and consent, is offered in sacrifice for the good of his people offered to the evil spirit whom they so fear. This is the leading feature in the great religious and highly immoral ceremony, which they celebrate every few years. They call it Jaboi.

(Mackillop 1892–3:261)

Mackillop is incorrect. There are absolutely no reports of human sacrifice among the Aboriginal people of Australia, nor are there, to my knowledge, any practices that could reasonably be misinterpreted as human sacrifice. Fr Mackillop's account of Tyaboi is so clearly an account of Christianity that I would suggest that the 'evil spirit' is likely to be God himself: the Father who killed his own son and who, through the missionaries, threatened to kill other men as well. In short, the evidence suggests that the missionaries introduced to the Aborigines of the Daly the concept of human sacrifice to a punitive God.

Fr Kristen recorded in the diary: "'Tyaboi" begins, and the fight of the devil with Christ for the blacks. Benbenyaga (blacks), Chinese garden, Chinese, Coppermines, all mixed up in it—so we have heard from a Christian boy sufficiently grown up to know...' (17/10/93).

Fr Kristen's discussion of the language of evil includes both his story of a man's question about an Aboriginal Jesus and the term for the 'evil spirit' of indigenous cosmology: 'Jin-man' (Kristen ibid.: 196). The term resonates with Chinaman, and although the similarity may be accidental, the term has a long and disruptive history, as we will see.

On both direct and indirect evidence Tyaboi can be identified as a syncretic cult. Cults such as these have the function of incorporating that which is new and relatively unknown within an indigenous cosmology—to tame, socialize and gain control over that which is wild, unpredictable, and unmanageable. In colonizing contexts syncretic cults have an unruly and imaginative capacity to mirror, mimic, transform, destabilize, deconstruct, parody and politicize the colonizers and the worlds of ideas and material goods they drag along with them (Fabian 1979; Fernandez 1979; Wagner 1979). Koepping (1988) provides an overview of the Australian literature to date; Swain (1993:114–58) takes up these issues.¹¹

The purposes of Tyaboi would have included that of locating new people, places and experiences of colonization in the indigenous cosmography. Fr Kristen tells us of the Chinese, the gardens, the Coppermines and the Aboriginal people. What he does not tell us, but what an anthropological reading assures us, is that the missionaries too would have been included in Tyaboi. The ritual would almost certainly have included long black robes, and mumbo jumbo in pidgin Malak Malak to mimic the missionaries' attempts to preach in that language. There would have been crosses and odd gestures mimicking communion and other Christian rituals and symbols. There would, in short, have been evidence which for Fr Kristen would have confirmed his fears that Satan was alive and well right there on the Daly.

In sum, Tyaboi seems to have been a ritual designed to tame the punitive practices of the cross, to socialize the missionaries within a regional Aboriginal
cosmology, and to bring into being the reciprocities which the missionaries and all the other newcomers on the Daly so constantly refused.

THE END

The mission was brought to an abrupt and unexpected end in mid-1899 by a decision made by the European Superiors.¹² By 1899 the mission consisted of a large house, a church and school, dormitories, native houses, stables, a printery, granary, and steam engine for the irrigation system. There was a sawmill, wells, pipelines, sheds, stores and forges. The mission had 2,000 goats, 150 cattle, 130 pigs, and 33 horses (Forrest 1994:33). And then, over a period of a few days in July 1899 the Aborigines were dismissed, the buildings they had helped to construct were dismantled, and the livestock they had helped herd were sold off. I would guess that the irrigation was cut off to the gardens they had worked as their own. In short, the work of their lives was put up for sale. The former mission was purchased by a well-to-do cattle baron; gardens, irrigation, buildings, livestock—all the product of the labour of Aboriginal people (along with the missionaries) became the property of others.

Absence thus comes full circle, from *terra nullius* and *tabula rasa*, through a dialectic of ecological practices which devastated the land and failed to provide a living, leading to the promotion of a multi-based set of subsistence strategies and the partial Aboriginalization of the missionaries, to an abrupt termination of a venture which was inspired by absence, produced a series of absences, and finally through its dialectic, produced its own absence. And all of this was publicly attributed to the intractability of both the environment and the Indigenous people.

The glimpses we have of the life of one of the senior Aboriginal men of the region, Daly, illuminate the exchanges, reciprocities, failures of reciprocity, and, from a missionary perspective, the final expendability of Aboriginal people. Daly was one of the law men of the region. He had been arrested and tried for murder in conjunction with the Coppermine killings of 1884, and had been acquitted (discussed in Alford 1989:52). A few years later he became one of the missionaries' great allies. They must have known of his reputation, for the first few notes about him are not complimentary: "Daly", the notorious "nigger" of the district paid his first visit to the station' (9/87). He joined the settlement, and within a short period of time they sent him out on a recruiting expedition (31/10)88) from which he subsequently returned with a group of people (18/12/88). Daly built huts and planted gardens, and like the others he came and went. Although he had promised one of the missionaries to refrain from participating in his own religious rituals, he must have continued his participation, because the missionaries took a set against him. In January 1890 (wet season) he came to the mission very ill and seeking admission. The Jesuits decided not to give him food or shelter, and left him lying in the rain to be cared for by his wife. They state:

Daly is in a wretched state, we have judged it better not to admit him to the station because of his hard obstinacy and deceitful character, on the other hand we cannot reject him and expel him by force. He now lies sick out in the open, with his whole family, with no food except what his wife Jinny brings him every day. He has asked whether he is soon going to die.

(10/1/90)

On the 13th of the month the issue was decided: 'The wondrous Providence of God intervened to remove a great impediment to our work by taking Daly from this life', (13/1/90). The missionaries refused him a Christian burial, so his own people were free to take his body back to his own country, to the swamp called Woenelen where he was buried in traditional fashion. The place today, like other swamps, is completely rooted up by pigs.

None of the analyses of the end of the mission discuss the responses of the Aboriginal people to the sudden news that the mission was closing down, that the labour they had invested in it was not theirs, and that the people who taught the religion to which some of them had committed their souls were leaving and would never return.¹³

Missionaries attempted to suppress initiation ceremonies for young women and men, they attempted to suppress other religious activity, they intervened in mortuary rites, they altered marriages, altered authority relations, and had a noticeable impact on the environments on which they depended. To sum this up as a failure to have an impact, or to assume that the impacts had only been superficial, is to reassert the parameters of the frontier: presence disguised as absence.

When the missionaries and others declared that they had actually had no impact on the Aborigines, they began creating their own absence. Denial of impact was also a denial of accountability and responsibility. They and everyone else could rest assured that their departure had no effects because their presence had had no effects. The diarist's statement in 1896 appears to confirm this view: 'The catechumens find great difficulty in eliciting real interior contrition for sin' (19/5). And yet, the simple fact that there were catechumens confirms what the diaries attest throughout: some Aboriginal people took the Jesuit presence seriously. I believe we must consider the implications of the view that some people attached themselves to the missionaries seriously seeking to engage with them on a spiritual/theological level.

SPIRITUAL TRACKS

When Stanner got to the Daly in the early 1930s he encountered a people who were in a state of spiritual despondency. The story of how that came to happen occupied his mind and heart, and his best writings come from his attempt to understand the pain, anger, and emptiness which he felt his close friends to be experiencing, as well as their exhilaration at encountering a new revitalizing cult

(Stanner 1958; 1959). According to Stanner, in 1932 local Aboriginal people had a cultural myth that was in its heart an inversion of the Christian Father and Son. He noted that the two traditions (Christian and local Aboriginal) were 'remarkably parallel institutions about man and his whole situation'. He held the view that there was 'no historical connexion whatever' (Stanner 1958:56). I will suggest, of course, that there was a historical connection, and that the two parallel stories were not only about 'man' but also about the Jesuit presence and absence, and thus about local Aboriginal people's experience of colonizing Christianity.¹⁴

In summary form, the myth tells of a great man, Angamunggi, who was killed by his son. The son was named Tjinimin; he seduced his sisters, and then speared his father, while Angamunggi was engaged in religious ritual. The father lived long enough to generate sources of life: permanent fresh water pools, where he left the spirits of the unborn. 'One patrilineal moiety called him "father's father", the other moiety called him "mother's father". Sometimes he was called by both moieties Yila Neki, the Father of Us All' (ibid.: 55–6).

Stanner proceeded to uncover a universal spiritual and moral content of this myth. I propose to look at it in its precisely local context. The name Tjinimin seems to be related to 'Jin-man', and may also be related to 'Chinaman'. He is a cult hero, or an amalgam of cult heroes, and is clearly connected to what we know of Tyaboi, although by Stanner's time Tyaboi was no longer part of the spiritual life of the Daly.

The Father/Son myth tells of the son named Tjinimin who creates absence: it speaks of a failure to nurture, a failure to reciprocate, a failure to observe sexual rules. These characteristics clearly mark the missionary endeavours as they are likely to have been perceived by those Aboriginal people who cared enough to take them seriously. It was missionaries who promised to nurture

Stanner's account	Historical structure
A great man, Angamunggi, was treacherously killed by his son, who had committed incest with Angamunggi's daughters. The girls were trusting and, we may presume, innocent. The son, Tjinimin, was filled with guile, malice and lust. Having seduced his sisters, he next speared his father, while Angamunggi sat unsuspectingly, surrounded by his many children, at song and music during a festive gathering of all the clans. The forther in group and about to dia	Senior men (Daly, for example), were killed by the missionary figure who had had sex with Aboriginal women, including young women in his care. The missionary figure (filled with guile, malice and lust) attacks senior Aboriginal men (explicitly defined as such). Senior Aboriginal men take on an attribute of the crucified Jesus (once thought perhaps to be a Malak Malak man), as well as the qualities of a culture hero.
lingered on to perform a series of marvels [forming a sacred track].	explicitly brought into one embracing set of social imagery; defined as explicitly Aboriginal.

Table 8.2 Angamunggi and the missionaries

Stanner's account	Historical structure
At each resting place he tried unavailingly	
to staunch the flow of blood from the	
spear wound in his side [creating	
permanent fresh water pools, and leaving	
the spirits of the unborn within them].	
Now, Angamunggiis conceived of as	
man, an immense man of great powers	
One patrilineal moiety called him 'father's	
father', the other moiety called him	
'mother's father'. Sometimes he was	
called by both moieties Yila Neki, the	
Father of Us All.	

and who punished people and turned them away; missionaries who failed to reciprocate, mistaking the nature of the gift, and utterly failing to grasp whose land they used and whose food they consumed. The missionaries disregarded their own sexual code (4/3/95), as well as disrupting Aboriginal people's organization of marriage and sexuality. Finally, the missionaries sought to destroy the authority of the old men (it is not clear that they recognized sufficient authority of old women to want to destroy it), and sought to eradicate indigenous religion.

Table 8.2 is an attempt to discern within a myth collected in the 1930s a temporally distant narrative of the 1886–99 experience. The left-hand column repeats Stanner's account of the myth; the right-hand column, while lacking artistry, seeks a historical structure within the myth.

We can read this terrible myth of patricide as the missionaries' attack on indigenous religious law: 'Angamunggi sat...at song and music during a festive gathering of all the clans'—he could have been Daly, or any of the Aboriginal people who worked so hard to keep their culture alive while accommodating invasion.

In his 1959 essay, Stanner tells us something of what had befallen this myth:

In the 1920s a widespread conviction had grown up on the Daly River that their own culture-hero, Angamunggi...had deserted them. Before I had heard a word of Kunabibi [a religious movement referred to by some as the All-Mother] I had been told that Angamunggi had 'gone away'. Many evidences were cited that he no longer 'looked after' the people: the infertility of the women ..., the spread of sickness, the dwindling of game among them.

(Stanner 1959:84)

A cosmological absence has erupted on this barbarous frontier. An emptiness lurks in the country itself, and in the hearts and minds of its people. Stanner's words suggest that Daly River people had examined their current situation, as if in a looking glass, and had come to the theological conclusion that their life-giving Father (Angamunggi) had abandoned them. The evidence was the loss of life—human life, animal life, and life support systems, the signs of which already were visible in the Jesuit diaries. Life, one might say, was trickling out of the country, and the waters of life no longer seemed perennial.¹⁵

A story recorded by anthropologists Ronald and Catherine Berndt in 1946 is instructive. The Berndts spent a few months on the Daly and collected some stories from a man named Matthew Melbyerk. He was an old man, and had been with the mission when he was young. His account of 'The Allocation of Food by Jesus' describes the relationships pitilessly. It begins with an account of Jesus feeding his Apostles apples (in never-ending abundance). Then they made and ate other foods:

So they returned to their garden. Later they grew wheat, and made flour. Then Jesus made a big damper. When it was ready, they all sat down at the long table and they ate of this damper until they were full. But they did not finish it: Jesus put it away, as he had done with the apple. And the Father talked to Jesus: 'All of this is for white men—they will have iron, houses and everything.' Thus the Baijang [Father] put motorcars, aeroplanes, houses, horses and so on for all the white people; he also made rifles, guns, pannikins and knives; and Baijang spoke to Christ, 'That is the Dreaming for all of you lot.'

Jesus Christ was on the side of the white people—he gave all that food to them.

Adam had only native food, for Adam and Riva [Eve] were Aborigines. They had nothing when they left the garden owned by God.

Chinamen grew rice and made grass houses: white men saw these, and the Chinamen saw the iron houses: the white men saw the rice, and the Chinamen saw the flour: each bought from the other. Only the Aborigines had nothing.

(Berndt 1952:8-9)

Australian Aboriginal people's stories of this type (generally classed under the label 'cargo cult') are only incidentally about material wealth, while in their heart they search for moral relationships between settlers and indigenous peoples (Rose 1992, 1995; Swain 1993; see Burridge (1960) for a classic study). The story of Jesus' Allocation of Food vividly conveys a people's sense of looking at themselves as if from afar, objectifying themselves in a context of absences and losses. It also conveys with brutal force the failure of reciprocity: 'each bought from the other. Only the Aborigines had nothing.'

There is a paradox, and within the paradox a question. The paradox is this: the attempt to transform the wild place and the wild person into civilized place and civilized person was an attempt to fill an emptiness with culture; it resulted in the creation of emptiness. The spiritual question that emerges is thus that of

destruction as a creative principle (Rose 1984): how does emptiness reproduce itself and grow? What cosmic force powers absence?

The frontier is a geographical and conceptual space defined by the invaders as absence. Like wilderness, the frontier is defined as a place where the signs of the central life of the nation are not visible to outsiders. Stated abstractly: where the colonizer cannot see himself, there in the paradoxical presence of his absence will he find wilderness, frontier, untouched Aborigines (and perhaps even himself). There he produces absence through very concrete methods of destruction: massacres, destruction of indigenous systems of authority and reciprocity, interference with indigenous land management practices, destruction of ecological systems, extinction of floral and faunal species, and all the other familiar colonizing practices. Having produced absence, he paradoxically reproduces his own absence by denying that his actions have enduring effects.

Spiritual traces tell another story. Quite provocatively, 'Jin-man' seems to have been carried to other parts of Australia, probably through transformations and exchanges of Tyaboi and related rituals. It is possible that Fr Kristen's teachings were later to arise, transmogrified but still wildly appropriate, in other frontier situations. The anthropologists Petri and Petri-Odermann (1970; 1988) were in Western Australia in the 1960s, and they report the rise of a new cult centred on 'Jinimin-Jesus'. According to what they were told, Jinimin revealed himself to the Aborigines in the east. He had both black and white skin colour, but his message was for Aboriginal people: 'Jinimin had proclaimed that all the land had from the beginning belonged to the Aborigines and that in the future there would be no differences between Aborigines and other Australians—all would share equally in that land' (1970:258).

Petri and Petri-Odermann call this ritual complex the Jinimin religion, and they report that Jinimin is said to have stated that Aborigines could only bring about this desired state of affairs by adhering to their own traditional Law. He was said to have revealed himself while people were singing song cycles of the Worgaia, or Gadjeri, Law. This law is the same as the 'All Mother' cult which Stanner (1959) encountered in the 1930s and which he describes so eloquently in his portrait of Durmugam (see also Stanner 1989). 'I hear this echo: Angamunggi can sing again, and the land can be restored' (Petri and Petri-Odermann 1970:266).

Jinimin, I suggest, is a transformation of Tjinimin and 'Jin-man', metamorphosed through successive exchanges and performances (recall that Fr Kristen recorded the term 'Jin-man' in the context of questions about an Aboriginal Jesus). I suggest further that while Western Australian revitalization cults have their roots in numerous missionary sites (the Daly Jesuits were not, of course, the only missionaries in Australia), the term Jinimin, signifying Jesus, clearly links the Daly of the 1890s with Western Australia in the 1960s through a path we cannot properly detect.¹⁶ Aboriginal people in Western Australia speak to the movement of ideas, and the rituals which socialize, enact, sustain, and communicate them, by reference to tracks and traces:

The return of the Dreamtime beings from the mythical land of Dingari to their original territories took place expressly on the orders of Jinimin-Jesus (or Our Lord Himself). They march on the underground routes, using camels which carry their belongings including the cult objects.

(Petri and Petri-Odermann 1970:263)

These Dreamtime Magi who travel underground with their camels and their sacred objects—toward what devastated homes do they trek? And will they regenerate life, land and law?

The missionaries offered a promise of life, and delivered a punitive god who demanded human sacrifices. They delivered a blow to indigenous law, along with an objectifying awareness of loss and failure. From my western perspective, most of the signs of the passage of their lives are places where the waters of life are drying up—a wilderness of invading settlers, pigs and weeds. But from an Aboriginal perspective it is possible that conquered space is not empty. Stories of Jinimin and the Dreaming speak of an imagination sharpened and expanded by the experience of the most barbarous of frontiers; they offer evidence of a continuing spiritual presence and an indigenous promise of life.

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NOTES

- 1 Translated into English from the original Latin by P.Dalton, and held in the Archives of the Jesuit headquarters in Melbourne, Victoria.
- 2 The addictive quality of tobacco seems to have been seriously underestimated in analyses of black-white relationships. A good corrective to this view is Read and Japaljarri (1978). Stanner (1958:47) is one of the few who gives credence to Aboriginal people's own statements: 'The evidence, and discussions with natives

who had lived there as children in the bush, satisfied me that the Aboriginal explanation is correct. They say that their appetites for tobacco and, to a lesser extent, for tea became so intense that neither man nor woman could bear to be without.'

- 3 Morice was subsequently removed from his job because of his attempts actually to protect Aborigines.
- 4 Britte Duelke's anthropological research and linguistic research by Ian Green, Mark Harvey and Nick Reid are all contributing to the written record of the region.
- 5 Dahl expected that the missionaries would fail in Australia, and although he attributes the failure primarily to mysterious forces within the Aboriginal people, he noted that cultivation was not enabling a more carefree life (1926:37).
- 6 At the time of their last census, the missionaries claimed 219 Christian natives, 39 of whom were at the station, and 180 of whom were in the bush. These figures can be contrasted with other census reports, and while it is clear that the numbers fluctuated enormously in relation to the numbers of settlers in the region (more settlers, more Aborigines), Brown (1906:38) reports an estimate of 1,000 Aboriginal people in the vicinity of the Coppermines in 1905.
- 7 The hill is immediately adjacent to the first site at Uniya.
- 8 Cherite=Djerait or Dektyerety: one of the language-identified groups of people who were prominent in their involvement with the mission. The country in question belonged to Malak Malak people (referred to as 'this tribe'). Dektyerety language is no longer spoken; no group identifies as Dektyerety, but descendants of Dektyerety people live in the region north of the sites discussed here.
- 9 Vogite/Wagait=beach; a regional term for coastal people.
- 10 Lack of entries in the early years represents the hastiness of the diary entries rather than lack of reliance on bush tucker.
- 11 There is a vast literature on this subject; I am attempting briefly to summarize a great deal of insight, as space does not allow a full examination of all of it.
- 12 O'Kelly (1967:63) writes that by 1899 many factors were converging, and only a large natural reversal was needed to ensure the end of the whole Jesuit mission in the north. The 1899 flood was just such a large natural reversal.
- 13 Subsequent reports such as that by Beckett (1911) indicate that many of the Aboriginal people stayed in the vicinity of the mission, scattering to farms along the river and attaching themselves to white or Chinese patrons. It is probable that the full impact of European absence was not felt until the smelter at the Coppermine closed in 1909.
- 14 Swain takes a shot at Stanner, remarking that there was not an obvious connection in the fact that he collected the myth from men on a Sacred Heart Catholic mission founded in 1935. Stanner was well aware of the establishment of Port Keats mission, as he travelled to the area with the missionaries. That a mission which was in its infancy could have offered information which simultaneously became mythologized and queried miles away on the Daly is not credible.
- 15 Stanner's analysis lays the ground for his discussion of the introduction of the 'All-Mother' religious movement from the Victoria River valley. Swain (1993) takes up all these issues in great detail.
- 16 Swain (1993) provides extensive discussion of paths of portions of the cult and its relation to other cults.

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'Barter...immediately commenced to the satisfaction of both parties': cross-cultural exchange at Port Jackson, 1788–1828 ISABEL MCBRYDE

INTRODUCTION

This chapter considers cross-cultural exchange between Aboriginal people and Europeans at Port Jackson during the first forty years of British settlement in Australia. Port Jackson, in the country of the Eora Aboriginal people, was the location chosen for the 1788 penal colony named New South Wales whose administrative centre was the town called Sydney (Figure 9.1). The First Fleet of convict transports and store ships under the command of Captain Arthur Phillip made landfall in January 1788. One of his major tasks as Governor was mediating relationships with the local indigenous peoples. Exchange was fundamental to this and the objects changing hands took on many roles and meanings for both parties involved.

Before we examine the roles of exchange in establishing those relationships, let us first consider more general questions of exchange through some lines from poet Roland Robinson. He presents a story told him by Percy Mumbulla, senior Aboriginal man from the South Coast of New South Wales. The story came to Percy Mumbulla from his father who learned it from an old woman 'over a hundred, easy when she died'. Her tale concerned a visit of explorer James Cook to the Clyde River, 276 kilometres south of Sydney.

He landed on the shore of the river, the other side of where the church is now. When he landed he gave the Kurris clothes, an' those big sea biscuits. Terrible hard biscuits they was. When they were pullin' away to go back to the ships, these wild Kurris were runnin' out of the scrub. They'd stripped right off again. They were throwin' the clothes and biscuits



Figure 9.1 Location of Sydney, site of the first convict settlement at Port Jackson, and Botany Bay where Cook and his crew encountered Aboriginal people. (Drawn by Winifred Mumford).

back at Captain Cook, as his men were pullin' away in the boat.

(Robinson 1989:43)

For us this story, and its 'terrible hard biscuits' could serve as metaphors for Aboriginal experience of European settlement following Cook's exploration. It belongs to a body of Aboriginal oral traditions referred to as 'Captain Cook stories' well known to anthropologists working with Aboriginal people in northern Australia. Most of these tales are ahistorical by our canons of the verifiable, objective historical narrative. Yet all encapsulate significant historical truths on the nature of European settlement's impact on Aboriginal people, seen as Cook's gift (also cf. Beckett 1994; Maddock 1988; Reece 1996; Rose 1992: 186–202).

Certainly Cook did not bring *Endeavour* into the Clyde estuary when exploring the east coast of Australia in 1770. Nor did he have any direct contact with the people of the area. When he came ashore further north at Botany Bay (Figure 9.1), he did try to establish communication through offering local Aborigines gifts of various kinds. Some of these gifts were left in reciprocity for 'a quantity of Darts' taken away from huts visited (Cook 1893:243). Closer contact, however, was resisted by the local people on several occasions and stones were thrown at members of the ship's company.

Mr Hicks, who was the Officer ashore, did all in his power to intice [*sic*] them to him by offering them presents; but it was to no purpose, all they seem'd to want was for us to be gone.

(ibid.: 244)

The encounter in Percy Mumbulla's story of gifts offered and rejected denies the historical in a connected, narrative sense, and so may represent attempts to locate the event, or its meanings, in different 'domains of significance', to use Merlan's (1994:156) term for this convention in Aboriginal oral traditions about the past. Anthropologists regard these traditions and their treatment of the past as significant accounts, despite being counter to modern western historical conventions (Beckett 1994:111; McBryde 1996a:10–12; Merlan 1994:156; Myers 1986:68–9; Sutton 1988).

The poem and its events may thus carry several levels of meaning. The exchange encounter is one in which the items offered are not immediately reciprocated, but after some delay are rejected in a forceful display. Given the conventions governing exchange in Aboriginal society—that exchanges should be reciprocated and debt avoided—this is a powerful statement. Its interpretation, however, is ambiguous, as Maddock (1988:25) points out in his analysis.

Beckett accepts Maddock's conclusion that we have here a matter of significance. 'If the refusal was not tantamount to a declaration or *[sic]* war, it was certainly a refusal to make friends, and to resist what Bourdieu has called the gift's "symbolic violence" (Beckett 1994:108; cf. Thomas 1991: 8). This recalls Thomas' (1991:89–91) interpretation of the events of HMS *Havanna's* stay off the Marquesas when in urgent need of provisions which were usually acquired through barter with local people. Her commander, Erskine, attempted to foster local good will. Gifts that he considered both acceptable and generous were rejected. A firm return was made in the form of items not normally offered in local exchanges. Thomas (ibid.: 91) interprets this as a deliberate attempt by the Marquesans to avoid both exchange debt and the social relationships that

would inevitably follow the exchange of 'goods' carrying strong social meanings (cf. Kopytoff 1986:68–70; Appadurai 1986:11).

There may be elements of this form of rejection in the violent return of the gifts in our South Coast story, which must itself be rooted in knowledge of past established conventions of exchange. Further, its retelling could be seen as a form of resistance, an assertion of the older pre-colonial norms and meanings of exchange between individuals and groups in Aboriginal society.

Percy Mumbulla's account of first encounters mediated by gifts immediately raises major questions and issues concerning exchange and its mediating objects in Australian cross-cultural transactions. Some features of these transactions as recorded in the historical documents are significant. First of these is the immediacy with which exchanges took place between the two parties, despite the absence of a common language to assist in these transactions. Allied to this is the pervasiveness of exchange. To look even cursorily at the historical accounts demonstrates not only that exchange occurs, often as the first act of communication between Aboriginal people and new arrivals, but also that it remains integral to interaction thereafter.

The pervasiveness of cross-cultural exchange in early colonial Australia has not received the serious attention it warrants either from historians or from anthropologists (though cf. ethnohistorical discussions in McBryde 1989a; McBryde and Watchman 1993). Australian historians have ignored it, perhaps assuming that such exchanges are not characteristic of hunter-gatherer societies of this scale, in contrast to the more complex horticultural 'chiefly' societies of the Pacific. Yet in the anthropological literature the exchange systems of Aboriginal Australia are fully documented as complex and extensive in Berndt (1951), Stanner (1933–4) and Thomson (1949).

For example, Butlin (1993:3), sensitive to so many Aboriginal issues, still concluded that cross-cultural trade was unlikely as few European goods would have had significant appeal for Aboriginal people. The evidence presented in this chapter contests the point (also cf. McBryde 1989a). Butlin (1993) also assumes that, because the Aborigines did not produce goods comparable to those supporting the economically important North American fur trade, exchange or trade with them would not be significant to Europeans. Yet the Australian cross-cultural exchange, as we shall see, offers a significant perspective on the history of colonial encounters, parallel to that ably demonstrated for the Pacific by Thomas (1991) and for the Americas in a range of important ethnohistorical studies (Rich 1960; Ray 1974; Ruby and Brown 1976; Fisher 1977; Judd and Ray 1980; Trigger *et al.* 1987; Hagedorn 1988; Rogers 1990; Gibson 1992; Weber 1992).

Another assumption may have diverted historical interest from the complexity of these pervasive exchanges. Many consider that the Aboriginal people were naïvely satisfied with 'baubles' and 'trinkets'; that they had little sense of value in making exchanges, and that they neither initiated nor rejected exchange. Consequently, they are dismissed as passive recipients rather than active, effective agents in colonial encounters. Such stereotypic assumptions are challenged by the data presented below. Another assumption challenged here concerns lack of change over time, in terms both of the nature of exchange and of agency within exchange transactions. The impact of changing historical circumstances in the 40-year period under review is therefore examined in later sections.

Within this framework a major aim of this chapter is to explore the reasons *why* exchange was so important in the colonial encounter to both indigenous and European participants. Why was it a continuing pervasive entity? What were the dominant determinants for both parties? In addressing these questions I shall explore, from the indigenous side, questions of agency and initiative—seeking evidence on decisions being made about whether to participate in exchange or not, and on what influenced these decisions. Relevant also are questions of the perception of value: *why* were exotic items valued? What were the social and symbolic values and uses of goods and of exchange transactions themselves?

From the European perspective motivation must also be examined in terms of factors beyond the need for supplies or the requirements to meet Admiralty Instructions regarding good relations with local people and the useful commodities of the new land. Motives such as the passion for collecting 'curiosities' may also be involved, together with questions of power relations between indigenous and settler, and at the end of the period questions of land ownership. Hence a major strand of questioning in assessing the evidence must concern political relations between indigenous and settler, the use of exchange and exchange items in the creation of dominance, dependency and control. Was this especially important in the later periods when expanding settlement and a developing colonial economy made undisturbed secure tenure of the land significant? By the 1830s the nature of exchange in negotiating difference may have been a different entity from the diplomatic, gifting encounters of 1788 or 1790.

From Aboriginal perspectives we must consider the extent to which exchange with strangers was grounded in the conventions and expectations of pre-contact practice. This question was raised by the Captain Cook story which began our discussion. Were exchanges social or asocial in terms of their implications for abiding or binding relationships? What values did the Aboriginal participants see as involved in the transactions recorded? Have we any way of gaining knowledge of this, given that our historical sources, however perceptive or sympathetic, write from different cultural standpoints? How do we evaluate perceptions of what was given and what was received? How European items were perceived by their recipients may forever elude us: 'To say that black bottles were given does not tell us what was received' (Thomas 1991:108).

Many encounters are as baffling as Percy Mumbulla's Captain Cook story. They convey actions clearly held significant yet apparently inexplicable to the recorder. Such is Worgan's narrative of encounters towards the end of Phillip's brief reconnaissance at Broken Bay in March 1788 with officers and crew from *Sirius*. It involved several meetings with local groups, presentation of gifts and bartering for Aboriginal artefacts. Local Aborigines assisted the explorers, for example, by directing them to watering points. However, things became less friendly when Phillip reacted strongly to one of the most helpful making off with a spade for which he had 'taken a wonderful longing' (Worgan [1788] 1978:40).

Another curious Circumstance happened to them while they were on the Business of exploring this Bay; They had landed, where there was a great many of the Natives; and in one of their Huts, the Governor, saw a large Crawfish, which, he Bartered for, giving the owners of the Fish a Hatchet, and distributing Bawbles among many of Them whom, he thought might have a share of it. The Governor, now took the Fish, and was walking down towards the Boat with it, when, one of the Natives meeting Him, snatched it out of his Hand, and ran up with it to the Hut, where he had bought it, The Governor took no Notice then, but got into the Boat; soon after, they saw the same Fellow running down to the Boats hollowing and holding out the Fish, his Comrades, having told him, as they imagined that they had given something for it, however the Governor, and the Gentlemen went on shore again, would not accept of the Fish but went up to the Huts where he got it, and took back all the Presents he had given them, this Conduct, was a great matter of Surprise and Mortification to them.

(Worgan [1788] 1978:41)

Did these problems arise from differing perceptions of the balance of exchanges, of their proper conduct, or of the rejection of exchange? The incident strongly recalls in its ambiguities features of the encounter in Percy Mumbulla's story.

CONTEXTS FOR EXCHANGE

To understand how barter worked and to appreciate the situations recorded by First Fleet observers (for example, the incident that perplexed Worgan), we need to explore perceptions of exchange transactions among both Aboriginal people and the Europeans, whether engaged in First Fleet colonial administration (at whatever level) or as part of the later settler society in New South Wales.

Roles of exchange in Aboriginal societies

Some exchange encounters involve transactions that have functional or economic aspects and entail utilitarian items. Yet they also carry strong social meanings, establish social relationships, or make statements about existing relationships in terms of relative status or the balance of social power. The items exchanged are also imbued with social meanings or acquire them from the contexts or location of their production or their ensuing life histories, journeys and associations. In the course of that life history they may be re-contextualized and acquire new meanings or new roles. These may differ markedly from those held at their original creation or first exchange transaction (Stanner 1933–4; Thomson 1949; Thomas 1991:125, 208; Akerman with Stanton 1994; Turgeon 1997).

For example, in a recent paper on the Pintubi of Central Australia, Myers (1993) discusses the significant role of exchange and the relationships it establishes in creating social identity within that group. He also stresses the social importance of generosity and reciprocity as moral principles: they provide the framework for such exchanges at all levels. Allen (1996:140) also comments in general terms about exchange in Aboriginal society and its 'articulation and objectification of kin, residential and hierarchical relationships' (cf. Fajans 1993: 3). Similarly, Appadurai (1986:10–11) questions the view that barter in small-scale societies takes place *between* rather than *within* communities. He sees the circulation of goods through barter as socially situated, especially decisions on what is exchanged, when and by whom.

This social context for exchange and the guiding values of sharing, generosity and reciprocity, seem to be constants throughout Aboriginal Australia. They are therefore aspects relevant to the interpretation of the evidence for exchange encounters at Port Jackson in the first decades of settlement. Beyond the immediate local group social factors mediate networks of exchange and social or ceremonial alliance which may link groups half a continent apart and involve movements of goods over thousands of kilometres. Networks such as the desert trade routes of the Lake Eyre Basin are among the world's most extensive known from hunter-gatherer societies (McBryde 1987; 1997; Mulvaney 1976; Watson 1983).

The routes taken by these goods and the nodes they pass through (cf. McBryde 1997: Figure 1) would all be well known to groups linked by such transactions. Well known also would be the resources of the various countries traversed and the significant places from which these came, e.g. Parachilna red ochre, Mulligan pituri, north-west Queensland's green hatchet heads (McBryde 1997). Such places would also be known through stories of the ancestral beings or events responsible for their creation and hold powerful social significance:

the resilience of the network of linkages between ancestral beings and places is a reflection of the fact that the attachment of people to place through the mediating process of the ancestral past is part of the core structure of Aboriginal society.

(Morphy 1996:186)

We cannot, therefore, consider exchange transactions without contextualizing them in the cultural landscapes of Aboriginal societies, and appreciating the vital link between people, place and object. Transactions are also situated within the wider social practice of these societies. This becomes more relevant when we try to understand inter-cultural encounters at Port Jackson, in which one party lives within such a cultural landscape and social nexus, while the other, coming from a different cultural world with a directive to occupy the landscape, may be deliberately using exchange and the relationships it creates to facilitate that process.

Hiatt, discussing Aboriginal attitudes to land and resources, emphasizes that ownership of land is

typically seen as dependent upon ownership of symbols representing or emanating from ancestral powers. Because the creative acts of the heroes were particular rather than generalised, and because the mythological record of their movements over the landscape is detailed and definite, ritualised affirmations of this between man and land tend to be topographically specific rather than diffuse.

(Hiatt 1982:14)

In these terms, land, as group estate, becomes inalienable. Rights in relation to it, its resources or significant places, are strictly defined and protected. The resources of such lands may be shared with others, provided established conventions are observed. Thus the ethic of generosity may moderate the conventions regarding trespass and restricted access to significant resources (ibid.: 14-15).

Historical: colonial settlement and exchange

In considering the encounters and transactions during the early years of the British colony, we cannot avoid its context in a history of dispossession. That context changed dimension as the administrators and guardians of the transported convicts were later joined by free settlers seeking land for agricultural and pastoral pursuits. The numbers of those requiring land were swollen as many convicts on release elected to remain in New South Wales as artisans, farmers or business men. Thus a new stage was created on which social or political relations and exchange between indigenous and newcomers were established. It also conditioned the range of items involved and the meanings they acquired for both parties to the transactions.

The historical transition is fundamental: from penal establishment, tenuously located on the edge of a continent, to colonial settlement committed to long-term occupation of the continent and its economic development. Dominance and political advantage shifted significantly in such contexts. Despite these shifts we must be wary of denying agency to the Aboriginal people involved at any stage. I argue that throughout the period from 1788 to 1828 exchange continued as a vital part of the process of mediating survival for indigenous and settler participants. The traditional modes of exchange were still involved at the later stage, used by the minority indigenous groups in new social roles within the framework of a dominant, alien social system acquiring permanence. Exchange for Aboriginal people could thus be seen as maintaining its long-established role

of negotiating difference and facilitating social co-existence and a preserved cultural identity in a landscape no longer theirs to control. The Port Jackson indigenous inheritance of managed, productive resource landscapes passed to the newcomers while the tellers of stories and the custodians of this inheritance were no longer there to care for special places or pass on the stories of their meaning.

Colonial settlement at Port Jackson in the later stages of the period under review left indigenous societies dislocated both socially and in terms of their relationship to the land which was vital for spiritual and economic existence. Disease, particularly smallpox, took severe toll, numbered in thousands by a French observer of 1819 (Havard and Havard 1938). Our evidence for reconstructing Aboriginal lives during this period of contact and change comes primarily from the records of the officers of the First Fleet and later civilian writers, together with the traditions preserved by the descendants of survivors. Many of these writers were skilled observers and recorders, yet the details of the Aboriginal social and political organization and lifestyles are still difficult to recapture from the available records. The archaeology of sites belonging to the period will provide significant complementary evidence.

Linguists distinguish three major language groupings in the Sydney region, which we assume represent major socio-political divisions of long standing. These include the Dharawal language spoken at Botany Bay, and areas to the south; Dharug spoken north and west of Botany Bay, on the Cumberland Plain and along the Hawkesbury River (with localized dialects used by coastal and inland groups); Kuringgai speakers occupied the lands to the north of Port Jackson (Figure 9.2). These three languages were probably closely related and mutually intelligible while each also had local variants. The people living around the shores of Port Jackson are often referred to as the Eora, while the term Cammeraigal refers to a localized group living on the north shore (Kohen and Lampert 1987:351; Lampert 1988; Troy 1994; Walsh 1981).

The dispossession of these societies in the first fifty years of British settlement is also a question of Australia's economic history, especially the control and exploitation of resources. It is rarely so articulated. Yet the question is relevant to the contexts for exchange. Addressing modern Australians Butlin urged us 'to be aware of the conditions of our success' in settler Australia as the inheritors of enormous Aboriginal efforts. In his view, the capital of Aboriginal Australia with its managed landscapes and curated resources constituted a major contribution to the British colonies' rapid economic success in the nineteenth century (Butlin 1993:viii).

'BARTER...IMMEDIATELY COMMENCED'

When they saw that we had brought hatchets and other articles with us, they produced spears, fish gigs, and lines, for the purpose of



Figure 9.2 Major Aboriginal language groups of the Sydney district at the end of the eighteenth century. Based on Kohen and Lampert 1987 and Troy 1994. (Drawn by Winifred Mumford).

barter, which immediately commenced, to the satisfaction of both parties.

(Tench 1961:187)

On Sunday, 20 January 1788 when the *Lady Penhryn* of the First Fleet sailed into Botany Bay (Figure 9.1), her surgeon, Arthur Bowes Smyth, noted in his journal seeing 'Natives' 'running amongst the trees' on shore. The next day going ashore to net fish with other 'Gentlemen' aboard, he met a number of the 'Natives'

all provided wt. Lances of a great length pointed wt. the Bone of a Sting Ray at one end & a piece of oyster shell at the other... & one of them had a heavy Bludgeon wh. I persuaded him to exchange wt. me for a looking glass.

(Bowes Smyth [1787–98] 1979:56–7)

In the same entry Bowes Smyth records that he presented many of them with glass beads; others in his party distributed 'ribbands and glass Trincketts'. However, 'they seem'd most desirous of Hats from their attempting to seize the Hats of many persons on shore'. Later that day he explored the woods 'in search



Figure 9.3 Portraits of Aborigines of the Sydney district *c*. 1790 by the artist known as the Port Jackson painter. The men are depicted as natural history in the representational style of the late eighteenth century. The material culture depicted (club, barbed spear, spear thrower, multi-pronged fishing spear, boomerang, and shell fish hook with line of bark fibre cord) was keenly sought by European collectors in exchange encounters. (From the Rex Nan Kivell collection—NK144C—of the National Library of Australia, reproduced by kind permission.)

of insects & other Natural Curiosities' (ibid.: 58). The following day which he spent collecting 'Natural productions', he gave beads and trinkets to Aborigines met while walking along the beach. When fish were netted, some of these were distributed 'pretty freely to all of them' (ibid.: 60–1). These passages also reflect the experiences and activities of many First Fleet officers. They also illustrate the facility with which members of both cultures used gifting or barter as a means of communication, even without the ability to understand each other's language. Further they indicate which objects were regarded as desirable by both parties (Figure 9.3).

We have already seen that for Aboriginal people exchanges or gifts of material goods were significant components of social contacts (or contracts) of many kinds. These included the greeting or farewell of strangers (Malaspina in King 1990:149), and the negotiation of political dealings with those outside the local group (McBryde 1996b). The behaviour of Bowes Smyth and his companions in offering gifts would thus have seemed entirely appropriate to the Aborigines they met.

For the officers and crew of the First Fleet exchanges and gifting could also be a predictable component of their professional life. From Pacific or American experience they knew that provisioning and watering ships and establishing the necessary relations with local leaders were all matters of negotiated exchanges, (cf. Smith 1988; Thomas 1991; Dening 1995; Bowes Smyth [1787–88] 1979:99– 109 for Pacific cases). Some may also have been familiar with the North American fur trade, its complex arrangements with Native Americans, and its high profits on European market.

Those close to power and policy in London also were familiar with all this and indeed had hopes for commercially valuable trade in products from the new land. The First Fleet therefore sailed well stocked with 'articles for traffick' to provide for provisioning on the voyage as well as for barter to obtain native products and for diplomatic gifts to local leaders on arrival. These included tools, knives, beads, as well as muskets and cutlasses (unlikely to have been intended for use at Port Jackson (cf. Collins 1798:142)). Local barter was to proceed under strict controls, undertaken only by those in command, senior officers or 'gentlemen'. Phillip was wary of unsupervised open contact between convicts and native people, or between natives and soldiers or ships' crews (cf. Bladen 1892:53–4; HRA 1:13).

Phillip did, however, hope to establish close relations and peaceful coexistence with the local people mediated through exchange and through Aboriginal leaders who would act as 'conciliators' (McBryde 1989b). It was his intention to persuade some to

settle near us...who I mean to furnish with everything that can tend to civilize them, and to give them a high opinion of the new guests... By what I am informed hatchets and beads are the articles for barter—a few small grindstones for the chiefs; and as they use a light they hold it in their hands, small tin lamps on a very simple construction must be very acceptable.

(Bladen 1892:53-4; cf. Nepean to Shelton ibid.: 43)

All ships of the Fleet carried these 'articles of traffick' so none would risk arriving without gifts necessary for the expected encounters. Given the intense interest of the times in the natural history and cultural products of exotic places, unofficial exchanges inevitably accompanied such official barter. Most senior officers of the First Fleet were passionate collectors, anxious to acquire scientific specimens and 'artificial curiosities' (cf. McBryde 1989a; McBryde and Watchman 1993). Crew members also participated, driven one suspects by less scholarly motives since they would have known from their Pacific experience the market value of 'curiosities' in European home ports. We should not therefore be surprised that exchange was so readily established as the mode of communication with local people from the first days of the Fleet's arrival in the new land.

'WE LOVE THEIR THINGS SO MUCH'

In histories of European colonization of the Americas and the Pacific we often meet the assumption that indigenous peoples were unable to resist the 'lure' of the colonizers' exotic objects and further that this passion was the major motivation for exchange on their part. It is usually expressed as the appeal of the new, more efficient, 'superior' raw materials and new technologies. The quotation in my heading comes from a Native American leader in the sound-track of the film *Black Robe*. Fascination with goods as well as the regret at the consequences of accepting the 'lure' are expressed. The phrase well illustrates the type-casting of the indigenous as naïve or innocent, unable to resist such goods and easily persuaded to trade tracts of land for mere 'baubles'. Such assumptions require rigorous testing; in most cases they fail the scrutiny. Items such as metal tools, hatchets, axes, knives, spades or guns can be seen equally well as items *objectively* appreciated for what they can achieve in the economic or military sphere or for the social and political status their possession could bestow.

This appreciation of value need be neither naïve nor innocent. We have already seen Australian examples of the abandonment of the 'mere bauble' in the Captain Cook poem and in the historical record of Cook's attempts to provide gifts at Botany Bay in 1770. Rejection of the unsuitable gift could be followed by demands for a specific item (such as a hatchet). Australian examples parallel those from American and Pacific experience. As Jennings has commented: 'contrary to the popular impression that Indians traded mostly for gimcracks and baubles, traders soon discovered that the goods most in demand were those adapted to practical use in the Indian way of living' (Jennings 1976:86 quoted in Honeychurch 1997:299; also cf. Thomas 1992: 38).

In New South Wales metal hatchets and iron pieces (e.g. from cask hoops, ideal for re-use as the heads of wood working or cutting tools) moved rapidly at least a hundred kilometres ahead of the frontier, to the surprise of explorers such as Oxley and Cunningham. Metal tools were items requested from Europeans and most frequently removed from unattended houses, huts or tents in the Port Jackson settlement (Collins 1798 I: 82). 'Victuals, knives, or hatchets vanish with them in a twinkling' complained Watling, a concern echoed by Ralph Clark (Clark, [1787–92] 1981:100; Worgan [1788] 1978:40; Bradley [1786–92] 1969: 176–7).

To assess the equivalence of exchanges that may to us seem unbalanced, we must recognize the differences between giver and recipient in perceived value. Attraction has many facets. Kopytoff (1986) sees value as related to what is perceived as 'singular' by members of a society—hence perhaps the popularity of hats that amazed the officers of the First Fleet (Bowes Smyth 1788 [1979]:57–8; Clark [1787–92] 1981:109). The attraction of some items may relate to existing symbolic values held by recipients. For example, the red sheen of the copper kettles acquired by Native Americans in the seventeenth century gave these

objects special significance in ceremonial contexts (Turgeon 1997). Similarly, the shimmering quality of pearl and baler shell in Aboriginal Australia ensured their importance in far-flung Central Australian trading networks and their restriction there to ritual use (Akerman with Stanton 1994; McBryde 1997; Morphy 1989). Political or diplomatic dimensions may also be relevant. This is particularly so in exchanges between the powerful in either society: for example, those between Bennelong (a local Aboriginal man taken by force to act as a 'gobetween') and Governor Phillip (Figure 9.4). The tensions inherent in that long-standing close relationship, as each manoeuvred for advantage to ensure the survival of those he led, often erupted in events that seemed to the European 'inexplicable' (McBryde 1989b; 11–27; Tench 1961:200).

Watkin Tench's (1961:176–90) account of events late in 1790 provides clues to the tensions and the ambiguities of Aboriginal—European interaction. It also gives insights into the similarities and disjunctions in their perceptions of the values of exchange, of what constitute appropriate items to offer, as well as their varied meanings. These events followed Bennelong's departure (escape?) from the Governor's House, and consequent damage to his close relationship with Phillip, who was greatly concerned at the loss of his mediator in actions involving the local people.

In September 1790 a party led by Nepean of the New South Wales Corps and Surgeon White came to Manly Cove on their way to Broken Bay. They disturbed a large gathering of Aborigines, including Bennelong and Colebee, engaged in butchering a whale carcase. Bennelong was pleased to know that Phillip was in the area and wished to meet with him. When the boat departed he put in it pieces of whale flesh 'the largest of which [he] expressly requested might be offered, in his name, to the governor!' (Tench 1961:178). Given their special relationship, he was following Aboriginal forms of distributing meat food.

Bennelong had earlier asked 'Have you brought any hatchets with you?' (ibid.: 176). The request was repeated several times during the encounter, though the Europeans had given the men several shirts, handkerchiefs, knives 'and other trifles' (ibid.: 177). Phillip, learning of Bennelong's presence, arrived at Manly later in the day to see him. After initial reserve on Bennelong's part, he was finally greeted warmly. Hatchets were again demanded. Phillip presented him with a knife, bread and pork and promised to return with hatchets in two days' time (ibid.: 179). During the meeting Phillip asked for a fine and extremely large barbed spear. 'But Bennelong, instead of complying with the request, took it away and laid it at some distance, and brought back a throwing stick, which he presented to his excellency' (Tench 1961:178). Unfortunately, the meeting which promised reconciliation between the two leaders ended in disaster when Phillip was speared by one of the Aboriginal men present. Whether this was an act of alarm when Phillip approached him is uncertain (ibid.: 179-81). Although severely wounded, Phillip remained calm and left quietly for Sydney and medical aid without retaliation, though taking precautions to ensure the safety of his party.



Figure 9.4 Engraving of Bennelong after his return from England in 1795. Note that his European elegance is set against a background of the weapons of the 'native warrior'. In the words of Collins (1798 I: 439–90) he was then 'quite the man of consequence: fully conscious of his enhanced status as the result of his experiences'. Collins (ibid.) also notes that 'Ben-nil-long had not any desire to renounce the habits and comforts of the civilized life which he appeared so readily and successfully to adopt.' (Reproduced with kind permission from the Rex Nan Kivell Collection— NK4777—of the National Library of Australia.)

Later meetings were latent with tensions arising from this incident and concerns for its outcomes. On both sides there seems to have been a sincere desire to resolve the situation and restore diplomatic relations. These were clearly valued by Bennelong, but he was more evasive and resistant to invitations, requiring the Governor to come to him. Phillip seemed willing to allow Bennelong the diplomatic advantage, despite what would seem to us his right to appear the aggrieved party. Finally a meeting, a 'ceremony of introduction' was arranged by his officers, the preliminaries marked by gifts of hatchets and fish, and exchanges of hatchets for spears, fish gigs and lines (Tench 1961:187–8). At the formal meeting itself hatchets were presented to Bennelong.

From these incidents we may discern the importance to both leaders that the rift be mended with no loss of status. The Governor appreciated the need to avoid violence and the importance of the mediating role of the Aboriginal leader in controlling the situation. Although Bennelong saw advantage, both for his own status within his society, as well as the safety of his group, he was unwilling to compromise and bargain over his concerns, such as intrusions into Aboriginal land west of Sydney and the removal of Aboriginal equipment from camps near the harbour (ibid.: 185). The diplomatic negotiations at all stages were accompanied by the presentation of gifts and exchanges. The Aborigines made it clear what items would be regarded as acceptable to those involved, and seem to have been very much in control.

Hatchets marked other meetings regarded as politically significant by Phillip (Bowes Smyth [1788] 1979:69; Bradley [1786–1792] 1969:81; Hunter 1793: 519; Tench 1961:229). Encounters between Aboriginal people and British officers were also marked by gifts or exchanges, which may reflect these social dimensions at a personal rather than a collective level. Such exchanges, however, would have made statements concerning the social significance of the encounter.

Tench found it disturbing that despite 'constant communication', no increased understanding between the two societies emerged. It seemed blocked by what he called the 'inexplicable contradictions' that rendered bewildering his attempts to learn more about the local people (Tench 1961:200). The differing perceptions of value were not clear to most First Fleet recorders, unaware of the complexities and social dimensions of Aboriginal exchange. The majority remained locked in their assumption that Aboriginal people, as representatives of humankind's most 'primitive' stage, were incapable of such sophistication (cf. Malaspina 1793 in King 1990:106, 144, 149; Cavanilles 1793 in King 1990:158–9, 160–1). Even Hunter, an astute recorder, found the situation baffling.

Of all the cloaths and the multiplicity of other articles which had been given to Bennelong, very little now remained in his possession; his shield, and most of his cloaths, were, by his own account, sent a great distance off; but whether he had lost them, or given them away was uncertain.

(Hunter 1793:487)

These instances hardly suggest that the indigenous participants in exchange were incapable of independent judgement when offered exotic objects or new materials. Certainly there is an attraction, but there are also choices not only being made but also imposed on the Europeans in terms of the content of the exchange transactions and their context. These choices seem to be determined by the conventions of exchange within indigenous society. They thus give significant agency to indigenous participants. With anthropological hindsight we would read into Hunter's text a Bennelong seeking such European goods not for personal satisfaction but for the social and political status their possession, or acquisition as gifts from important Europeans, would create. He and others also sought metal goods, which in addition to their practical attributes had added value for further exchanges. The option of rejecting exchanges was also open to indigenous participants, as at Manly when Bennelong refused to exchange the spear Phillip wished, instead offering him a 'throwing stick'. Later he insisted that items of appropriate quality mark the meeting of reconciliation with Phillip. It is significant that by November 1790 Tench can comment that 'Bennelong had lately become a man of dignity and consequence...sensible that his importance with his countrymen arose in proportion to our patronage' (1961:200).

All cross-cultural encounters involve a social tension, inherent in the potential lack of understanding of the values and roles of items exchanged. Appadurai interprets such tensions as constituting a political dimension, which he regards as significant in mediating value.

What is political about it is the constant tension between the existing frameworks...and the tendency of commodities to break these frameworks...[the tension has its origin]...in the fact that not all parties share the same interests in any specific region of value, nor are the interests of any two parties in a given exchange identical.

(Appadurai 1986:57)

'ARTIFICIAL CURIOSITIES'

In seeing the desire for hats or other clothes as quaint and as a mark of the simplicity of the savage or in dismissing Aboriginal lack of response to certain items as stupidity (e.g. Malaspina in King 1990:105, 145, 149), the Europeans were victims of their own preconceptions about indigenous Australians. They failed to see the parallel with their own passion for what was 'singular' in the perception of their society. Their desire to collect 'artificial curiosities' is clearly demonstrated in Tench's account of the events of late 1790 discussed earlier (cf. also Cook's comment quoted by Thomas 1991:125). These items were also used to increase one's social or professional status. Thomas (ibid.: 151) comments that they may be used to make statements about the significance of their

experiences as in the portrait of Joseph Banks in which he is deliberately shown surrounded by exotic Pacific Island objects.

Aboriginal artefacts, or Aboriginal assistance in the collection of natural history specimens, were 'valued goods' for European participants in crosscultural exchanges. At the end of the eighteenth century such artefacts were greatly treasured as both scientific specimens and 'curiosities'. They were the products of distant places, of new worlds and their savage peoples. Collecting became a passion, whether the collections were of natural history or cultural materials and was a well-established tradition among Pacific voyagers (Smith 1988; Thomas 1991; 1992). We should not be surprised then that the journals and letters of Ralph Clark, Watkin Tench, Bowes Smyth, John White and Newton Fowell record with pride each successive addition to their personal collections. Even Governor Phillip made sure that he had a collection of Aboriginal artefacts before he left the colony, engaging in barter to establish it (Tench 1961:179). The European passion for exotic items was genuine. It probably seemed as irrational to the Aboriginal people as their own demand for a hat did to the Europeans. Hard bargains were driven by Aboriginal participants. They had a strong sense of equivalent value in their terms. When Tench was hoping to acquire a particularly fine spear, he found that a knife, a handkerchief plus even a hat did not constitute an adequate return. The 'equivalent' was a hatchet. This Tench produced, at the inconvenience of a trip back to the settlement. However, the Aboriginal man involved was then 'so delighted that he presented me with a throwing stick gratis' (ibid.: 187).

On Cook's *Resolution* voyage, Johann Reinhold Forster complained that crew members bargained with Pacific islanders for their artefacts. These were being acquired for profitable resale on return to Europe. Forster not only had concerns about the commercial motives involved, but also their impact on the exchange value of items, and the destruction of his opportunities to build up collections that would contribute to scientific knowledge (Thomas 1991: 140–1). Crew members on ships calling at Port Jackson were no less aware of similar opportunities for monetary gain, as were the convicts, who often sold them items. As early as October 1788 Phillip had to enact strong penalties to deter the raiding of Aboriginal camps for artefacts to meet the demands of this market (Bladen 1892: 208; Phillip 1789:139–40).

Robberies committed on them by the convicts who steal their spears and Fiz-gigs...which the people belonging to the Transports purchase, though every possible precaution has been taken to prevent it: this the Natives revenge by attacking any Stragglers they meet, and one convict has been killed...

(Phillip quoted in Henderson and Stanbury 1988:144–5)

Aboriginal concerns over the theft of artefacts from camps contributed to the previously discussed rift between Phillip and Bennelong. Bennelong had complained about the stealing of essential implements from his people: he demanded their return. Phillip's concern for continuing good relations with their 'mediator', and his strong control over the life of the penal establishment ensured that this demand was not only accepted, but met promptly (Tench 1961: 185–6). Tench added that 'It is a painful consideration that every previous addition to the cabinet of the virtuosi, from this country had wrung a tear from the plundered Indian' (ibid.: 187 note). Collecting of 'curiosities' and the illicit sale of items to visitors to the colony clearly continued throughout the early years of settlement, as some years later Collins, the Judge Advocate, commented:

the convicts were everywhere straggling about, collecting animals and gum to sell to the people of the transports, who at the same time were procuring spears, shields, swords, fishing-lines, and other articles from the natives, to carry to Europe.

(Collins 1798, I: 17; cf. Hunter 1793:474)

Many of these exchange transactions could be seen as 'asocial', the bartering of items as 'commodities'. The context of the action, or the values held by the objects themselves at the time, would be unlikely to create lasting social involvement, debt or to demand further reciprocity (cf. Kopytoff 1986; Gosden 1989). We could conclude that some gifts had been similarly construed from the abandonment of the 'trifles' or 'trinkets' accepted in courtesy from strangers (Hunter 1793:56). Such action was often interpreted by the donors as evidence of the child-like behaviour of the Aborigines, rather than either an astute assessment of the gift's value or the rejection of the relationship it might symbolize. However, gifts of part of the catch of fish netted by Europeans within their 'country' were usually accepted. Perhaps these were seen as appropriate within Aboriginal norms. Coming from the resources of the Aboriginal estate any generosity involved could be seen as theirs; so no debt was incurred.

...A COMMERCE OF THIS SORT'

Many Aboriginal men used their fishing catch to barter for European items. Such exchanges were welcome to the settlement, often near starvation in its early years. This practice soon became formalized into semi-commercial ventures. Phillip would certainly have encouraged the development; it met some of the expectations of his Instructions to establish relations with the indigenous inhabitants and initiate trade for 'useful' local products. By 1791 Parramatta was eminently suitable for such ventures. It was a sizeable settlement of convict workers and supervisors based on agricultural depots (Figures 9.1, 9.5). Some of the local Aborigines, including Baloderree (a young man who had already spent several months at Governor Phillip's house in Sydney (cf. Figure 9.5):



Figure 9.5 Places significant for cross-cultural encounters in the Sydney district 1788– 1838, including settlements created for Aboriginal groups by Governor Macquarie: Blacktown (west of Parramatta), Elizabeth Bay and Georges Head. (Drawn by Winifred Mumford.)

found it in their interest to sell or exchange fish among the people [there]: they being contented to receive a small quantity of either bread or salt meat in barter for mullet, bream or other fish. To the officers who resided there this proved a great convenience.

(Collins 1798, I: 165)

The return is bread or salted meat; this probably indicates that European foods had exotic appeal for Aborigines, although they may also have suffered food shortages. The impact of agricultural settlement on the Cumberland Plain on local Aboriginal food resources may have been severe. Food items could well have been welcome supplements as well as exotic treats.

This promising barter ended abruptly when some convicts destroyed Baloderree's canoe. They were punished by the authorities but Baloderree exacted his own retribution, spearing a convict who had ventured beyond the settlement's bounds. In consequence Phillip felt bound to react, so he reluctantly denied Baloderree access to the settlements. Thereafter the other Aborigines were 'alarmed' and withdrew from the settlement, so 'all commerce with them was destroyed' (Collins 1798, I: 165). Collins regretted the whole incident; he felt sorry for Baloderree whom he judged 'a fine young man' and the victim in the incident (Collins 1798, I: 165–6, 175; cf. Hunter 1793: 513, 532–4, 539–44, 565–6; Phillip 1789:353; Tench 1961:223, 238–9; McBryde 1989b:35).

Around Port Jackson, however, barter of fish continued as an important activity. It was probably also vital to the settlement's nutritional needs and most within the Sydney settlement took advantage of it. In later decades it was officially encouraged by Governor Macquarie who provided Aboriginal families with boats and equipment and sponsoring fishing and other semi-commercial enterprises that fostered or required a settled life style based on small blocks of land and cultivation of the soil. Yet even before this attempt at 'settling' occurred, many Aborigines were dependent on Sydney and its residents:

It was no uncommon circumstance to see them coming into town with bundles of firewood which they had been hired to procure, or bringing water from the tanks; for which services they thought themselves well rewarded with any worn-out jackets or trousers, or blankets, or a piece of bread. Of this latter article they were exceedingly fond, and their constant prayer was for bread, importuning with as much earnestness and perseverance as if begging for bread had been their profession from their infancy.

(Collins 1798, I: 297)

This passage raises the question of social dislocation as a result of loss of land and its resources, the beginnings of change and hints of dependence. But our sources also offer abundant references to the Aboriginal 'gift' of sharing their resources and their local knowledge. The newcomers were guided to sources of water, given advice on routes across country, introduced to local foods, and the alien presence on Aboriginal land tolerated. Provided the expected reciprocity was offered, easy relations seem to have existed, as for example when the catch was shared with the local group if nets were placed for fishing (Bowes Smyth [1787–89] 1979:62; Worgan [1788] 1978:30; Collins 1798, I: 13).

The earliest exchanges that so intrigue us took place without benefit of language understanding, or interpreters. However, within a short time of first contact Aboriginal leaders had acquired some English. But then most Aboriginal people would have already been fluent in more than one Aboriginal language. The linguistic skills of these Port Jackson people soon led to the creation of what is called New South Wales Jargon, followed by the Aboriginal development of the more sophisticated New South Wales Pidgin as a way of defining in their own terms the new situation (Troy 1990; 1994). The existence of such a language demonstrates clearly both the choice to communicate, and the abilities of the local Aboriginal leaders and exchange participants to put this choice into

effect. It also demonstrates initiative in the face of social disruption that demanded new responses and new negotiating skills. It is tempting to think of this New South Wales Pidgin as developing from a 'trading language', but the evidence is not as yet sufficient to sustain that interpretation. However, it is still significant as an Aboriginal linguistic product of the contact situation (see Troy 1990:105–8) and as the earliest of the Pidgins that developed from the cross-cultural encounters of the Pacific colonial world. Senior officers of Phillip's establishment, and Phillip himself, made efforts to acquire some knowledge of the local Aboriginal language as well as being receptive to the developing Jargon. They compiled vocabularies but do not seem to have become fluent speakers (but cf. Hunter 1793:405–7; Dawes 1790).

'A CONSTANT SYMBOL OF FRIENDSHIP'

Reports of the encounters between Phillip and Bennelong, as well as with others who frequented 'the Governor's House', hint at relationships of a serious and political nature. Phillip clearly saw Bennelong as playing the role of 'mediator', 'broker' or diplomat: the one 'who came among us'. We cannot speak directly to Bennelong's expectations of the relationship or the role thrust upon him initially through force of capture. Yet one could argue from the historical evidence that these became sophisticated, serious, and diplomatic and were directed to negotiating the uncertainties of relationships between the two groups, native and newcomer, to the best possible advantage. Bennelong was also aware of the significance of the role for his own status in local Aboriginal society. Phillip certainly treated him with great respect, friendship, and as a leader and a diplomatic equal. He stood by his Instructions on establishing good relations with local people and their leaders. Bennelong and his family were given open access to the Governor's House, and in 1790 a small house was built for their use at Bennelong's request on Tu-bow-gule (now Bennelong Point, Figure 9.5) (Collins 1798, 1:137; Hunter 1793:480-8; Tench 1961:200).

The exchange of names between Bennelong and Phillip is significant for its high symbolic value. Of Bennelong's various names he preferred that of Wolarawaree (Hunter 1793:405; Troy 1994:53) and Tench tells us that:

as a mark of affection and respect to the governor, he conferred on him the name of Wolarawaree, and sometimes called him Been-en-aa (father); adopting to himself the name of governor. This interchange we found is a constant symbol of friendship among them.

(Tench 1961:160-1)

Hunter comments that Phillip responded, calling Bennelong 'dooroow' (duru) or 'son' (1793:405).

Spanish visitor Malaspina remarked on the custom—'one of their greatest courtesies' (King 1990:149). Others within the settlement also had this

relationship with prominent Aboriginal men: for example, David Collins with Gnanga-gnanga (Collins 1798 I: 262–3; 1802:47; McBryde 1989b:33) and Lt. Ball of the *Supply* with Carradah (Midjer Bool) (Barrington 1801:26; Collins 1798 I: 328–9). Two other instances can be found in the captions to Watling's pencil portraits of Port Jackson Aborigines. Unfortunately we know too little of this social convention beyond its existence and accepted importance. The practice is recorded among other Aboriginal groups of south-eastern Australia in the nineteenth century (McBryde 1996b:47).

Most of the exchange encounters recorded for this early period are male dominated, in terms of both participants and the items involved. Among the male participants in social exchanges Bennelong and his relatives were major players. If the exotic, European goods enhanced their status or gave them new social standing through exchange transactions or command of goods denoting their association with the powerful among the newcomers, then this may reflect attempts to control the sources of advantage. In considering questions of accommodation and resistance in contact history, Reece sees a general pattern in Australia in which alliance is used by the Aboriginal 'local élite' to maintain their political position in times of social disruption and threat:

Instead of a system of 'divide and rule' in which the colonialists called the shots, there seems to have been one of 'ally and rule' in which the interests of certain indigenous groups were promoted at the expense of the colonising power.

(Reece 1996:33)

Our sources say little of the role of women in exchange. This may reflect the predominantly male authorship of our sources, and official nature of most documents, as well as the setting of a closely controlled penal settlement. This is certainly a theme demanding closer investigation. Gifts were offered frequently to the women by Europeans, but evoked little response. Women were constant visitors to Phillip's 'Governor's House', regarded as their refuge in times of trouble or violence. In later decades, and in areas beyond Port Jackson, Aboriginal men offered their women to European men; this was a welcoming courtesy extended to strangers in Aboriginal encounters. Bulmer, Cawthorne, Krefft and Snell all describe such situations, items of food or metal being accepted in return (McBryde 1996b). In Tasmania from early in the nineteenth century sealers similarly acquired women. Robinson records exchanges of women for dogs, mutton birds and flour in 1830 (Plomley 1966: 254). Aboriginal women were certainly present in the Sydney settlement and we may assume that this form of exchange occurred, though the British sources are largely silent on the matter, given their semi-official or public character. It is explicitly referred to in the account of the colony in 1793 given by the Spaniard Malaspina (King 1990:146, 148).

Jakelin Troy is one of the few researchers to consider the roles of Aboriginal women in the wider context of social relations between Aborigines and colonists, especially in the development of the contact languages (New South Wales Jargon and New South Wales Pidgin) (see Troy 1987). She concludes from her survey of the significant, if largely ignored, roles women played in social contexts that they made a strong contribution to the development of the New South Wales contact languages. She describes them as the 'most obvious, but least noticed, catalysts in the development of contact languages' (ibid.: 165). It is also relevant that William Dawes' linguistic tutors were the small girl Abaroo, and later the older Patye (ibid.: 162). Abaroo had acquired her English from the Chaplain Rev. Johnson and his wife while living in their home. She often acted as an interpreter for other senior officers (McBryde 1989a:11-13). Beyond their sexual exploitation by European males (Troy 1987:158; Hunter 1793:503), Aboriginal women were given significant roles as intermediaries and interpreters (both cultural and linguistic) between the two societies. Aboriginal men used them as such, while the Europeans saw them as sources of information about Aboriginal affairs (as was Abaroo) and (if given education and training) as a powerful force for social change (Troy 1987:159, 162-4).

'THEY EXCHANGED THEIR FISH FOR BRITISH ALCOHOL'

By the 1820s the Europeans at Port Jackson were no longer 'strangers' or 'visitors', but clearly a permanent presence. Further, it was clear that they intended to appropriate the plains below the mountains to the west, effectively dispossessing the Aboriginal groups there. The social problems of Aboriginal survivors living in camps about the Sydney settlement, whom many of the dispossessed would join, were thus exacerbated. Deprived of their lands and access to resources, Aborigines sought survival in strategies of accommodation or resistance, striving for advantage wherever it might lie. Bennelong, the negotiator and Pemulway, the resistance fighter, served as early exemplars of the two strategies. In either mode these and succeeding leaders, such as Bungaree (Figure 9.6), showed shrewd assessment of both the cultural norms and the material culture of the Europeans as they faced dispossession, often violent, and deliberate policies of social change and control (cf. Healey 1977a; 1997b; Liston 1988; McBryde 1989b; Willmot 1987).

Those with no alternative to life in the fringe camps of Sydney engaged in exchange. Their knowledge, labour, or local products provided them with hopes for economic survival as well as some maintenance of traditional activities and patterns of living. Thus some measure of the agency and choice open to the earlier generation might seem available in encounters with settler society. However, freedom of choice was severely constrained compared with those first decades, while from the European perspective the motivation and balance of power symbolized by exchange transactions had changed.



Figure 9.6 Portrait of Bungaree and his wife in the streets of Sydney by Augustus Earle in a style that reflects the European experience and attitudes of the late 1820s. It also reflects the low social conditions of Aboriginal leaders and something of Bungaree's sophisticated attempts to maintain his dignity and status despite these. The exchange items of clothing, tobacco, and alcohol are also shown. (Reproduced with kind permission from the Rex Nan Kivell Collection, National Library of Australia —NK 2652.)

For settler society and administration exchange could be seen in this period as a convenient mechanism for control and dominance. The game had changed from exchange transactions that promoted diplomatic relations that ensured the survival of the small and vulnerable penal establishment. The need for food and shelter, and the addictive taste for tobacco and alcohol could be used to create dependency on the new society among indigenous groups and finally to enforce conformity to new patterns of living. The process of change can be followed in both official policies and in the daily encounters between officials, settlers and Aboriginal people both in Sydney and in the surrounding rural districts (Liston 1988).

Perceptive comments on the situation come from members of foreign scientific expeditions visiting Port Jackson in the early decades of the nineteenth century. These men, both naval officers and scientists, themselves astute observers in the service of rival imperial powers, were quick to assess approaches to establishing control over dispossessed indigenous peoples. Their evidence is valuable for distinguishing these new roles for exchange. They also engaged in exchanges, of a kind familiar from the first years of settlement, for they sought local knowledge, scientific and ethnographic specimens. In return, however, they had to offer items that met the new expectations and needs of the Aboriginal fringe dwellers of Port Jackson.

In the early part of the nineteenth century some British administrators such as Governors King and Macquarie were very aware of the situation and sympathetic. They openly recognized the fact of dispossession of the once 'proprietors of the soil' in a way later administrators and settlers did not (McBryde 1989b:39). They tried to resolve the problems by encouraging Aboriginal families to settle on small plots of land, providing them with equipment and advice concerning cultivation and with boats to enable them to engage in commercial fishing ventures. The settlements included two on the harbour at Elizabeth Bay and Georges Head, and one inland at Blacktown (Figures 9.1, 9.5). These were deliberate attempts to alter the patterns of Aboriginal social and economic organization, to create the equivalent of a European peasant workforce. They supported these policies with educational initiatives. Native Schools were established at Parramatta for Aboriginal children, teaching them basic literacy and the skills of domestic and farm work (ibid.: 47, 49). Annual feasts at Parramatta, with presentation of gifts and blankets, celebrated this programme of settlement, and the hoped-for bonds between Aboriginal and settler communities despite the open conflict beyond the Sydney district (Reece 1967). Aboriginal leaders, even those who engaged in open resistance, regarded these meetings as important diplomatic events. For them they were public acknowledgements of their significant status, treated with respect by the leaders of the European community (Troy 1994). In many ways the annual assemblies resembled the traditional periodic inter-group meetings for settlement of social and political questions. At these, exchange was an important component (McBryde 1996b).
We would now judge such solutions to the problems of cross-cultural coexistence as inappropriate social engineering, doomed to failure. Predictably the governors' programmes met with little enthusiasm. 'They attach great value to independence in their own way of life', commented Schabelski of the Russian ship *Apollon* which visited Sydney in 1822. He also considered that the educational programmes of the Parramatta schools, though founded with the best of intentions, were unlikely to achieve their creators' aims (Hotimsky 1967:93).

Aboriginal responses to government support of fishing ventures were more positive, presumably because these drew on traditional skills and traditional forms of social exchange. 'The natives bring fish to the town and exchange it for wine which they love passionately' (Simonov in Barratt 1981:61). Pavel Mikhailov, official artist to the Russian Bellingshausen-Lazarev Antarctic expedition (Barratt n.d. Ms 4987:7), described this exchange as a daily occurrence with alcohol as the preferred return. Bellingshausen, the expedition leader, elaborated on the fact that Bungaree, a constant visitor to the Russian ships, had been provided with a boat for commercial fishing.

Other natives too are given boats by the inhabitants of Sydney, on condition that they shall give up a part of their daily catch of fish. ...they go out daily in these boats and, having given up the portion due, exchange the remainder for drink or tobacco.

(Bellingshausen in Barratt nd (Ms 1285 (b) 12): 188-9; cf. Ms 4987:19)

In December 1817 Mary Wild, a soldier's wife living in the Rocks area wrote to her mother in Ireland that: 'Fish is quite plentiful here. The poor blackfellas go about quite naked selling it. They will not take money but will give you as much for a loaf of bread as will serve the whole family' (Byrne 1992:13). Byrne's analysis of the 'cashless economy' of Mary Wild's Sydney brings out how widespread was barter in items such as clothing among the convicts and European working people. Everyone was trading, not just Aboriginal fishermen. Byrne (ibid.: 13–14) also stresses that since luxury items such as tea, sugar and tobacco were officially provided to convicts as a 'stimulus to labour' or as reward for good conduct, Aboriginal people were not alone in being subjected to mechanisms of control involving food and addictive drugs.

Exchange continued during this period as a vital part of Aboriginal life, and a major medium of interaction between the indigenous and the British communities (Figure 9.7). Its established, traditional conventions still seem to obtain although its social contexts had been transformed by the fact of European permanent settlement and the consequent loss of Aboriginal lands and access to resources as well as by the development of deliberate official policies directed to controlling the remaining Aboriginal groups, and incorporating them into the colonial enterprise. These changes brought hardships, as well as social disorientation. During this difficult time the provision of services to Europeans became more common, also more equivalent to casual unskilled employment



Figure 9.7 Augustus Earle's record of a mid 1820s' 'annual meeting of the native tribes' at Parramatta. The governor meets with the groups and their designated leaders, a feast is provided, and a range of items are exchanged, all in accord with Aboriginal expectations of formal inter-group meetings. (Reproduced with kind permission from the Rex Nan Kivell Collection of the National Library of Australia—NK 12/57.)

rather than provision of local expertise or Aboriginal generosity to strangers. Similarly, bread and flour offered became payment rather than an exotic gift or reciprocity from the Europeans (see Liston 1988: 55–7).

Aboriginal guides and interpreters guaranteed the safety and success of colonial explorers and scientific collectors. Bungaree (Figure 9.6) twice sailed on major explorations of Australia's coastline, first with Flinders and then with King. He was a valued member of both expeditions recognized as contributing essential practical and diplomatic skills (Collins 1802 II: 161–2; King 1827, I: xxxviii–xxxix; McBryde 1989b:33). Botanical researcher George Caley depended on Moowat'tin for specimen documentation as well as guidance in the bush (Caley 1966:140–1, 173–8; McBryde 1989b:29–30). Caley took Moowat'tin back with him to England in 1811, but Sir Joseph Banks insisted that Moowat'tin be returned to his homeland.

These are just two of the many Aboriginal people whose expertise served the settler society. Others, however, increasingly drifted into the town of Sydney to provide services of a menial kind such as cutting bark or supplying firewood in return for food and shelter (Barrett 1981:42–3). Another common task given Aboriginal men was the cleaning out of liquor casks; it would clearly encourage both a taste for alcohol, and enthusiasm for the task.



Figure 9.8 'Scene in Sydney streets' by Charles Rodius (*c*. 1830) depicting the fights, displays and drunkenness among Aboriginal residents that so disturbed writers like Arago and Schabelski. Like most artists of the colonial period, he displays little sympathy for the underlying causes of the evident violence. Note that two men wear the 'breast plates' that were signs of official recognition and all have acquired European clothing. (Reproduced by kind permission from the Rex Nan Kivell Collection of the National Library of Australia—NK 3558.)

The system of exchange led to a prevalence of drunkenness in the fringe camps (Figure 9.8) which was commented on by many European visitors (e.g. Schabelski in Hotimsky 1967:93). Arago, a member of Freycinet's expedition which called at Port Jackson in 1819, was deeply shocked by the drunkenness he saw among Aborigines in Sydney and the ensuing violence. He criticized the colonial administration for doing so little to resolve the problem. His concern was deepened by the ways this seemed to be encouraged or even enjoyed as spectacle by local European residents, including 'respectable merchants, elegant and accomplished young ladies' (Havard and Havard 1938:28).

Arago's account tempts speculation that here is another kind of 'service' provided by the Aboriginal fringe dwellers. In return for food and drink groups would dance or otherwise perform, providing after-dinner entertainment. Inevitably many of these events ended in conflict, injury, even death (Arago in Havard and Havard 1938:25). For a society whose general entertainments included bull or bear baiting, dog and cock fights and whose members could attend public executions, such spectacles would have been entirely acceptable. Perhaps they were the more acceptable given the widely acknowledged belief that the Aborigines were a wild and savage people, 'the most primitive in the human scale' (Malaspina and Cervanilles in King 1990:105, 144, 158–9; cf.

Schabelski in Hotimsky 1967:93) or 'their abject animal state...at the very zero of civilization' (Cunningham 1827, II: 39).

More amiable variants were the exhibitions by local Aborigines of traditional skills such as the tree climbing Arago witnessed when he visited John Oxley at Kirkham near Liverpool (Figure 9.1). The performers there, however, were rewarded not with spirits but 'an ample provision of food with which he [Oxley] filled their kangaroo skins' (Arago in Havard and Havard 1938: 39). Inter-group fights were also well attended by European spectators, to judge by the frequent and detailed reports of such events, as well as open dance and song performances. Similar events were well attended by local Europeans in rural areas throughout the nineteenth century.

Provision of services or of expert knowledge as a form of exchange had strong precedent in Aboriginal transactions (McBryde 1996b:47, 56, 59). As Appadurai (1986:6) has pointed out, however, services 'are obviously important objects of commoditization'. Hence, they can lead to transformation of the transaction's meaning. Exchange at Port Jackson in the 1820s was no longer a matter of negotiation between equals of wider social or diplomatic issues.

Similar roles and exchange situations prevailed beyond the major settlement on the pastoral frontier with local Aboriginal people contributing their bush skills and knowledge of the land, as well as the products of traditional crafts, such as baskets and skin rugs. Exchange based on the latter fed the demand by settlers for valued souvenirs as material witness to their time in the Antipodes and to the cultural status of its indigenous inhabitants. Women's skills contributed many of these objects, while they were exploited in other ways as well. Further, the Aboriginal inheritance of the well-managed landscape and its resources was also appropriated, contributing significantly to the economic success of early nineteenth-century Australian pastoral industries (Butlin 1993).

On the frontier as much as in Sydney, exchange and its desirable goods provided a mechanism for interaction and for creating dependency and therefore control. The bargain of food, shelter and some protection in times of conflict in return for cheap access to services requiring local knowledge and skills ensured the continuance of station camps and the creation of a domestic and farm labour force. For many settlers it was a matter of taming both the wilderness and its inhabitants, expressed in the literature of the time in exactly these brutal terms. Local Aborigines became 'our Aborigines', acquired with the land.

Aboriginal skills and labour were prized by the settlers if not praised. Settlers also often acquired a collection of artefacts to remind them of colonial adventures on return to England. Others continued the eighteenth-century tradition of collecting in pursuit of science: for example, members of European expeditions to the Pacific or Antarctica which called in to Sydney. The Russian ships carried supplies of 'trinkets' to barter for natural history and cultural specimens. The impressive array of sixty varieties included some metal items and edge tools (Barratt 1981:82). In return for the artefacts which now form part of the St Petersburg ethnographic collections (Barratt 1981; n.d.) the



Figure 9.9 Russian ships *Vostok* and *Mirinyi* anchored in Sydney harbour, by Pavel Mikhailov, 1820. Here they were engaged in constant exchanges with Bungaree and his family who camped nearby. (Reproduced by courtesy of the Australian Institute of Aboriginal and Torres Strait Islander Studies Pictorial Archive.)

Russians offered clothing, mirrors, beads, food and spirits (especially rum, which was the preferred equivalent).

Aboriginal residents of the harbour shores, such as Bungaree and his family, had established flourishing barter in artefacts with the officers and crews of passing vessels, acquiring new friends and spirits with relative ease. Members of the Russian expeditions enjoyed his 'friendship' and 'protection' as 'Bongree had received private gifts from us—and hoped to get more'. Novosil'sky wryly noted that the price of friendship was a bottle of rum (Barratt 1981:52).

In 1820 Bellingshausen's officers continued their scientific recording and collection while the ships the *Vostok* and *Mirinyi* were refitted and provisioned at their mooring near Kirribilli, close to Bungaree's camp (Figures 9.5, 9.9). He came aboard to announce himself and welcome them to 'his land' and was offered gifts, 'a glass of grog, sugar and butter' supplemented at his request by tobacco, clothing and ropes (Bellingshausen in Barratt n.d. Ms 1285 (b) 12:162–3). Bellingshausen indicated his interest in acquiring supplies of fish, and also live birds, kangaroos and other animals for the naturalists' collections. Towards the end of the stay he records 'Bongaree procured for me a set of native weapons, a shield, a spear and a fork for catching fish. All these were sketched' (Barratt n.d. Ms 1285 (b) 12:190).

These activities and their returns had the potential of creating dependency on what the Europeans offered: 'the magic charms of drink and tobacco, the greatest of all temptations to these natives...still attract them to the town of Sydney' (Bellingshausen in Barratt n.d. Ms 1285 (b) 12:188, 189). Bellingshausen does not stress, nor perhaps did he appreciate, the inevitability of Sydney's attractions, given the loss of traditional lands and resources. The establishment of government and free settler farms in surrounding districts contributed significantly to the displacement of Aborigines to the fringes of the major settlement, and to the creation of a new exchange-based economy with strong elements of dependency and control of various kinds.

The historical sources reviewed in this chapter provide us with insights into the changing significance of cross-cultural exchange at Port Jackson. In the first few years of the penal colony exchange enabled both British and Eora to negotiate some form of co-existence and even diplomatic advantage from encounters and thus to mediate their conflicting aspirations. In later decades exchange offered some tenuous modes of independent existence for the Aboriginal people who had suffered social disruption, loss of economic and spiritual resources, and the devastating impacts of epidemic diseases.

ARCHAEOLOGICAL DIMENSIONS

The combination of archaeological and documentary research can provide new dimensions to the study of exchange. Research on the North American fur trade and its institutions has long had strong archaeological components, now complemented by studies of less formalized settler/Native American interactions on the farming frontier (e.g. Rogers 1990) and recent work in South Africa promises important results (Schrire 1995). These studies often highlight dynamic responses by indigenous peoples to the pressures following the arrival of strangers bearing new gifts and requiring local products. For example, during the sixteenth century in Dominica in the Caribbean the indigenous people developed a tobacco-growing economy using the new metal tools acquired from passing ships and then exploited that same maritime traffic as markets (Honeychurch 1997). This was succeeded by exchange transactions with settlers that depended on barter of craft items and artefacts as curios, paralleling the history of Port Jackson. Marshall and Maas' archaeological study of the adoption of ceramics by the North American Northwest Coast groups engaged in potlatch exchanges also reaches similar conclusions to the Port Jackson ethnohistorical research. First, carefully made social choices determined the desirability and hence the adoption of particular items. Second, this finding applies to both parties in the crosscultural exchanges (Marshall and Maas 1997:275).

These and other similar studies demonstrate the value of articulating archaeological and historical analysis. Material culture studies focused on the life history of objects, and the varying meanings they acquired over time, can also add powerful new insights (cf. Appadurai 1986:13–15, 17; Kopytoff 1986). Turgeon's (1997) 'odyssey of the copper kettle' has important parallels with shell items and certain red ochres exchanged in Aboriginal Australia (cf.

Akerman with Stanton 1994; McBryde 1997). Similar studies of the Australian evidence could offer an important way to reinterpret the records of First Fleet observers.

Dense urban settlement and metropolitan development in the Sydney district have either destroyed or denied archaeologists access to much of the archaeology of the area that might otherwise complement the historical record and we await a substantial body of archaeological material from contact period sites in the Sydney Basin. Attenbrow's (1991; Attenbrow and Steele 1995) long-term archaeological survey and excavation programme focused on Port Jackson may provide some of the required data. Finds from the major investigations ahead of development undertaken since the 1980s in the Central Business District, which covers the hub of Phillip's Sydney, should also be useful. The excavation of First Government House (Phillip's headquarters from May 1788) has already shown the potential of archaeological research into this period (e.g. Proudfoot *et al.* 1991).

Aboriginal artefacts dating to this period that might offer challenges to our interpretive thinking await the analysis of material culture research. Most items acquired by Europeans through exchange grace the collections of British or European museums, often with minimal surviving documentation (but cf. McBryde 1970; Joppien and Smith 1985, I, 44–9, 220–6; Megaw 1993). Barratt's (1981; n.d.) studies of the artefacts acquired by members of Russian scientific expeditions that visited Port Jackson have been combined with written and pictorial records to provide invaluable material.

A ground edge stone hatchet head from the excavation of the HMS Sirius flagship of the First Fleet has provided some interesting evidence about Aboriginal-European exchange (Henderson and Stanbury 1988:143-5; McBryde and Watchman 1993). The geological source of the artefact (a spotted pelitic hornfels) has been identified by Watchman as matching the cordierite-rich spotted pelitic hornfels represented in the cobble beds of the Nepean near Richmond Hill, between Emu Plains and Richmond (Figure 9.1). This area near Richmond Hill was known to members of Phillip's staff as the place where Aborigines obtained stone for their hatchet heads. Lt Bradley of Sirius noted in his journal: 'a very shoal water with very large stones (of which the Natives make their hatchets etc.) and at the beginning of the falls, they found themselves at the foot of a hill which they ascended...the Governor named it Richmond Hill' (Bradley [1786–92] 1969:170). Later exploration was undertaken on the ground by a party which included Phillip as well as Aboriginal guides Colebee and Baloderree. Meeting an Aboriginal group, the guides were informed that it 'had come this journey in order to procure stone hatchets from that part of the river near Richmond Hill' (Hunter 1793: 519-20; cf. Tench 1961:228, 234).

The life history of this hatchet head, its transformation from useful tool to 'artificial curiosity', and finally its 'reappropriation' as the subject of scholarly enquiry parallels that of Turgeon's (1997:192) copper kettle. In turn, this hatchet, through the research it stimulated has created links back to the historical

record, thus illuminating its own history and that of its past owners. Objects of European origin found in Aboriginal archaeological sites may contextualize the hints in the historical documents of dynamic adoption of new items, the unexpected social values of exchange, the changed social conditions of the times and the roles of exchange in shaping these. To quote Kopytoff (1986:67): 'biographies of things can make salient what might otherwise remain obscure'.

CONCLUSION

The patterns of exchange transactions between European colonists and indigenous people such as the Aboriginal societies of Port Jackson and its hinterland provide significant insights into the nature of wider patterns of interaction. For both parties exchange was embedded in cultural milieux and practices and was mediated and transformed by the pulse of historical events. Some of these aspects are specific to the Australian situation, others reflect the wider social and historical processes of the worlds of colonizers and colonized in the late eighteenth and early nineteenth centuries.

These contexts aside, examination of the exchange transactions during the first forty years of Port Jackson contributes significantly to our historical understanding of colonial settlement and indigenous-settler relations. My ethnohistorical analyses have shown the inadequacy of many assumptions about the nature of European-Aboriginal exchange and the values and meanings (utilitarian or symbolic) of the items that changed hands. The exchanges were part of complex and dynamic cross-cultural interactions in which the indigenous participants were active agents and made deliberate choices in negotiating social and political relationships with the newcomers. The assumption that exchange of more than trivial import did not take place or was irrelevant to the shaping of indigenous and settler relations cannot be sustained. The historical records reveal exchange played a constant and pervasive role for both parties.

Assumptions about inequality or absence of choice for either party have been shown to be false. The record shows both parties had well-defined determinants and aims which were embedded in their own cultural norms and experience, yet both used exchange as a medium of communication and to transcend these norms. Furthermore, it has been shown that the perception of value from the giver's standpoint may not have been the same for the recipient, especially if symbolic and social values are considered. 'Baubles' for one side may have been symbols of importance or power for the other.

As we have seen, the Aborigines were not naïve innocents tricked into accepting mere 'baubles' in exchange for valuable local products or tracts of land. Nor did they have nothing to gain from such exchanges, given the symbolic value of the objects which they obtained from the Europeans. I have also provided challenging examples of goods being rejected and tough negotiation over what was acceptable. Similarly, Europeans as well as bargaining for access to water, provisions and local knowledge, indulged their own passion for exotic items—the artefacts of strange peoples. Both groups, however, had an objective understanding of the utilitarian values of new raw materials and technologies (hatchets, spades, knives). Less easily articulated cross-culturally were the symbolic values (the hats, clothing, European foods), but the significance of reciprocal courtesies and relationships was recognized by both groups. Exchange was fostered for very real diplomatic and social ends and marked by goods acceptable to the expectations of both parties. It was vital to negotiating the security of both Aborigines and Europeans as they sought to understand the implications of co-existence on the shores of Port Jackson.

As the social dislocation (both collective and personal) following the arrival of this alien presence became clear and conflicts over land a major issue, exchanges continued to negotiate difference. Contexts and modes changed, but the transactions were none the less matters of choice and agency. Aboriginal innovation continued as, for example, in the establishment of a new Pidgin to facilitate communication and incorporate the new into their linguistic and conceptual world view. Europeans countered with well-intentioned but inappropriate attempts to adapt Aboriginal society to European norms and needs. For indigenous groups the exchange of services, labour, local knowledge, and local products became a means of negotiating economic and social survival following the loss of land and access to resources. In return they received shelter, food, and the highly prized tobacco and alcohol. For Europeans, now the dominant group in society, exchange acquired new social ends: it became a medium of control and the creation of dependency among the indigenous minority.

Beyond the bounds of settlement earlier modes prevailed alongside armed warfare as Aboriginal groups asserted rights to traditional lands. Exchanges for cultural knowledge and objects continued to prevail among the scientists and explorers of colonial society. The earlier passions for collecting souvenirs of exotic objects remained alive among both urban and rural settler communities throughout the nineteenth century.

In all these developments exchange remained an indispensable mechanism vital to both groups. The ethno-historical record reveals active cross-cultural exchange between indigenous and settler as a significant and pervasive aspect of the complex history of colonial encounters in Australia. Important complementary perspectives also await us in the development of the archaeology of cross-cultural exchange.

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The colonial impact? Contact archaeology and indigenous sites in southern New South Wales SARAH M.COLLEY

INTRODUCTION

The history and archaeology of European colonial expansion are important because they illuminate the processes leading to the modern global economy. Scholars such as Wolf, Wallerstein and Braudel have traced the origins of key political, economic and cultural formations of the twentieth century to the expansion of western civilization across the globe from the fifteenth century onwards and in the gradual development of what have been labelled the 'modern world system' and the 'capitalist world economy'. Much has been written on this subject by historians who have particular interests in the interplay of politics, economics and sociology in the modern world. In recent years historical archaeologists have also become increasingly interested in the role of material evidence in writing the global history of colonialism and its aftermath. A number of archaeological research projects in former European colonies across the world have been undertaken with the explicit aim of using material evidence to gain insight into the nature of the colonial experience from the perspective of both the colonizers and the colonized. For example, Orser and Pagan (1995:221-35) summarize recent archaeological work on Spanish, Portuguese, Dutch and British colonial settlements in places as far apart as Haiti, Mexico, Peru, Ghana, South Africa and Australia which, while separated geographically by thousands of miles, share much in common in their aims and approaches to the study of colonialism.

Archaeological studies of encounters and contact between Australia's indigenous Aboriginal and Torres Strait Islander peoples and colonial settlers are relevant to and comparable with archaeological studies of colonialism elsewhere in the world. The colonial experience varied markedly in time and place. Such similarities and differences on a global scale are an intrinsic part of its study (Thomas 1994) and make it interesting. For example, as a former white-settler British colony with a minority indigenous population, many of whom consider themselves to be still colonized, Australia's colonial experience probably has more in common with North America, Canada and New Zealand than with the former

colonies of other European countries, or with now entirely self-governing excolonies in Africa or the Pacific (e.g. Mishra and Hodge 1993). Australia's 200 years or so of colonial history is also relatively short compared to the length of the British colonial experience in North America, Africa and elsewhere. These and similar factors are relevant to the contribution that Australia can make to our general understanding of the history and archaeology of colonialism world-wide.

Archaeological studies of settler-indigenous contact and encounters are a relatively recent phenomenon in Australian archaeology. Although some important work was conducted in the 1970s, including Judy Birmingham's (1992) pioneering study of the British-Aboriginal settlement at Wybalenna in Tasmania, it is only in the last few years that a sizeable, identifiable and specific interest in 'contact archaeology' has developed among Australian prehistorians and historical archaeologists (Colley and Bickford 1996).

This chapter will use results from recently completed excavations through midden deposits in the Greenglade Aboriginal rock shelter at Disaster Bay (New South Wales) to highlight a number of key issues in the developing field of indigenous-settler contact archaeology in Australia, but these are also relevant to archaeological studies of colonialism in other parts of the world. In particular the Greenglade evidence queries commonly held assumptions about the nature of archaeological data considered to be relevant to studies of colonial contact. Most studies of encounters between colonists and colonized have understandably focused on places established by the colonizers. In an Australian context such studies have especially involved missions and reserves built by the British to separate indigenous people from settler society (cf. Rose, Chapter 8; Hemming et al., Chapter 12; Birmingham, Chapter 13). Other colonial sites which formed the focus for early British-indigenous contact include places along the routes of railways and the early overland telegraph lines which crossed remote inland Australia; sites associated with pastoralism, forestry and the whaling industry in which indigenous people were directly involved; places associated with law and order such as prisons and police stations; and early colonial towns and other residential settlements. Following a growing interest in Australian and Aboriginal history in recent years there have now been a number of historical studies which emphasize the experiences of both settlers and indigenous peoples at such places. In contrast, Australian historical archaeology has primarily concerned itself with the material remains of British colonial settlers from AD 1788 onwards, and has usually had very little to say about Aborigines. Only very recently have Australian historical archaeologists started to focus on the indigenous elements of places associated with colonial settlement (Colley and Bickford 1996). At the same time, study of pre-colonial Australia has traditionally been the province of prehistorians who have focused on indigenous sites such as rock shelters, middens and lithic scatters. Unless such places contain very obvious and substantial material evidence from the colonial period they have usually been assumed to be exclusively prehistoric, with nothing to contribute to archaeological studies of colonialism.

The Greenglade rockshelter is significant in being a primarily indigenous site from which a tiny quantity of flaked nineteenth-century bottle glass was recovered. The site is superficially similar to hundreds of other Aboriginal sites in the region which contain little or no material evidence of British influence in the form of 'exotic' items. The small quantity of European material in Greenglade and similar sites in the region stands in stark contrast to the density of European items recovered from colonial-period indigenous sites elsewhere in Australia (cf. Colley and Bickford 1996). The Greenglade rockshelter was initially assumed to pre-date British colonization and formed the subject of a research project into regional prehistory. Subsequent analysis demonstrated that at least some of the upper midden layers date to well after the time of European settlement in the area and represent post-contact Aboriginal use of the shelter (Colley 1997; Murray-Wallace and Colley 1997). The site has been interpreted as demonstrating continuity of traditional indigenous life into at least the mid-nineteenth century, in an area relatively remote from the direct impact of colonial settlement. The tiny quantity of bottle glass recovered from the top of the midden in the shelter indicates either a lack of access to items of European material culture by the Aboriginal people who used the shelter in the late eighteenth and nineteenth century, or their rejection of or lack of interest in European items in such a context. Contrary to what might be expected, people's use of the Greenglade rockshelter did not change dramatically following early colonial settlement of the region. The faunal, artefactual and other evidence from the site indicates that indigenous people continued to use the rockshelter pretty much as they had always done, for as long as possible, despite the dramatic changes wrought elsewhere in the region by colonial settlement.

The Greenglade evidence placed in regional perspective raises widely applicable questions about the recognition and definition of 'colonial period' sites. Not all indigenous places which date to the period of early colonial encounter will necessarily be easily recognized as such on the basis of material evidence alone. Other chronological indicators, such as independent scientific dating methods, may be essential for understanding their significance. In countries like Australia where archaeological practice has traditionally been divided between 'prehistory' and 'historical archaeology', sites such as Greenglade run the risk of being classified as solely 'prehistoric' and being wrongly excluded from archaeological studies of colonialism. The Greenglade evidence also questions the widespread assumption that colonial encounters necessarily always result in radical change and emphasizes the value of regional approaches to contact archaeology. In many cases, studies which incorporate a range of sites within a landscape are likely to be more productive in furthering our understanding of the archaeology of colonial encounters than studies which focus too narrowly on individual sites of colonial settlement. Such sites, which are usually rich in material evidence of inter-cultural encounters and are well documented in the historical record, are obviously crucial to such work. However, a more sophisticated understanding of their significance will often result by considering them in the context of other sites in the region, even if such sites contain little 'exotic' material and have no associated historical documentation. In an Australian context, as elsewhere, such studies demand the application of the approaches and techniques of both historical archaeology and prehistory, and seem likely to contribute to the further breakdown of these disciplinary divisions.

This chapter summarizes the Greenglade evidence and discusses what it can demonstrate about indigenous life before and after British colonization. It places the Greenglade site in regional perspective by documenting and discussing other evidence for post-contact Aboriginal use of middens and rock shelters in southern coastal New South Wales and elsewhere in Australia. Such work is of more than just academic interest. If Aboriginal use of this and other similar places can be shown to date well after British colonization, such evidence may be relevant to indigenous groups who wish to claim Native Title for which they must demonstrate, among other things, continuity of occupation and subsistence practices prior to and following British settlement (Cane 1992; Colley 1992; Egloff 1997). Issues raised by the Greenglade excavation also illuminate changing research emphases within Australian prehistory and historical archaeology which are relevant to studies of colonial encounters in other countries.

RESEARCH BIASES IN AUSTRALIAN ARCHAEOLOGY

The Greenglade rockshelter at Disaster Bay lies in an area known as the New South Wales south coast which comprises a c. 500 kilometre stretch of coastline between Sydney south to the Victorian border (Figure 10.1). The area includes not only the immediate shoreline but the forested hinterland which in some places stretches several kilometres inland. The region, which is easily reached from universities and museums in the urban centres of Sydney and Canberra, has been the focus of forestry operations and building development. As a result, the NSW south coast has long been subject to intense study by researchers and consulting archaeologists. Most of this work has focused on Aboriginal prehistory, although some historical archaeology has also been done. Because of differing traditions of research, prehistorians and historical archaeologists have approached the archaeology of the region in very many ways. Most historical archaeology has been conducted in urban areas or has been narrowly focused on specific colonial sites. In contrast, rural sites like Greenglade have been investigated by prehistorians who have not generally been interested in evidence of indigenous-settler contact. Very little contact archaeology has been carried out in the area.

The NSW south coast is particularly rich in Aboriginal sites. Rockshelters, many with rock art, and shell middens comprise almost 70 per cent of known sites. The remainder consist of stone tool scatters (19 per cent) and small



Figure 10.1 The south coast of NSW showing the location of Greenglade rockshelter.

numbers of stone arrangements, axe-grinding grooves, burials, scarred trees, ritual sites, quarries, engravings and isolated finds (Cane 1997:87). Prehistorians have drawn heavily on ethnography and historical accounts of traditional indigenous life to develop regional models for pre-contact Aboriginal settlement patterns and seasonal use of resources (e.g. Lampert 1971; Poiner 1976). Most archaeological fieldwork and excavation has involved coastal shell middens and rockshelters and has emphasized pre-contact Aboriginal use of marine resources. Less work has been conducted on inland rock shelters, lithic scatters and other Aboriginal places which provide evidence of pre-contact use of forests in the coastal hinterland (Boot 1994). The area comprising Sydney and Wollongong, immediately to the north has also been subject to much archaeological research (e.g. Attenbrow and Steele 1995). As the first place in this region to be permanently settled by Europeans, the Sydney area is the focus

of a rich corpus of historical information about indigenous life during the early years of British colonization (cf. McBryde, Chapter 9). Archaeological and historical evidence from the Sydney region has often been compared with or used to explain aspects of south coast Aboriginal prehistory, and vice versa. The two areas also have closely linked research histories.

The historical archaeology of the New South Wales south coast is less well developed. Most historical archaeology in New South Wales has been associated with urban development in the Sydney area (Jack 1996). A survey of literature relating to studies of historic places on the Australian coast (e.g. Australian Heritage Commission 1993) suggests that the relatively few historical archaeological studies that have been conducted in southern coastal NSW have focused on places associated with highly specific types of European activity, for example, alluvial mining (McGowan 1992), the whaling industry (Bickford et al. 1988) and coke production (Higginbotham and Rogers 1984). Most studies have been conducted to assess the heritage significance of specific historic places for management purposes and involve documentary research and recording of standing structures and buildings, but only rarely excavation or study of artefacts. In marked contrast to the Aboriginal prehistory of the region, there are no published overviews of the historical archaeology of the NSW south coast and existing studies are highly diverse, with no clear or unitary theoretical focus. This piecemeal approach is typical of the development and practice of Australian historical archaeology in general (Birmingham and Jeans 1983; Murray and Allen 1986; Egloff 1994). Such archaeology that has been incorporated into Aboriginal histories of the region has been undertaken in the context of cultural heritage management and/or for Aboriginal land rights and native title claims (e.g. Byrne 1984; Egloff 1981, 1990; Cane 1992; Colley 1992; Egloff et al. 1995). The scope, aims and methodology of such projects often differ markedly from archaeological studies of indigenous-settler contact conducted elsewhere by academics for pure research purposes (Colley and Bickford 1996:13–17).

SOUTH COAST CONTACT HISTORY

Historical evidence provides a chronological framework in which to place the archaeology of indigenous-settler contact on the New South Wales south coast. It also suggests ways in which the impact of colonial settlement might be reflected in the archaeological record of the region.

The earliest historically recorded encounter between Europeans and indigenous Australians was in 1606. The crew of the Dutch vessel *Duyfken*, under explorer Willem Jansz, made brief contact with Aborigines who lived several thousand kilometres north of Greenglade, near Weipa in far north Queensland (Mulvaney 1989:8). While knowledge about Europeans may have spread to the NSW south coast following this and other fleeting early encounters elsewhere on the continent, the first Europeans to physically travel to this area were the crew of the *Endeavour* under the command of Captain James Cook,

who in 1770 sailed along the previously uncharted eastern seaboard of Australia and claimed the region for Britain.

Cook's ship would have sailed past the Greenglade rockshelter in 1770. His expedition did not land anywhere in the area (Pleaden 1990:4). However, local people may have known about the British, and could theoretically have had access to some items of Western material culture through trade and exchange, any time from 1770 onwards following Cook's contact and trade with indigenous groups further north at Botany Bay, south of Sydney. McAndrew (1990- cited in Organ 1990:9) claims that a story concerning a large White Swan developed among the people of the NSW south coast following sightings of Cook's ship Endeavour as it sailed up the coast (cf. McBryde, Chapter 9). The availability of imported goods and the likelihood of encounters between indigenous people and colonists would presumably have increased dramatically following the establishment of permanent British settlement at Sydney Cove in 1788. Trade and exchange of material items and information were a well-established part of indigenous life on the south coast, as elsewhere in Australia. This is attested by archaeological evidence for the transport of stone in south coast campsites over distances of 10-20 km (Boot 1994:337) and historically documented exchanges of information between different language groups and seasonal travel of people along the south coast and up into the mountains of the Southern Highlands to participate in major ceremonial activities and feasts associated with the collection of migratory moths (e.g. Flood 1980:73).

In March 1797 seventeen survivors from the wreck of the vessel Sydney Cove were washed ashore in a longboat at Cape Howe in Victoria and were forced to walk north along the NSW coast to Sydney. Some of them passed through the Disaster Bay area (Nash 1996). After a two-month journey only three survivors eventually reached Sydney. William Clarke's diary of the first part of the journey (cited in Organ 1990:12-13) describes variable types of encounters with small numbers of local indigenous people who seemed to be unfamiliar with Europeans. Near Cape Howe the sailors' bodies and clothes were subject to a physical examination by an astonished group of fourteen Aboriginal men. In some cases indigenous people watched the sailors from a distance or ran off into the bush. In some places the party was threatened by indigenous men wielding spears and in other cases they were given fish, shellfish, kangaroo meat and plant foods by local people in exchange for strips of calico cloth and other unspecified European items. The first Europeans officially recorded as visiting the Eden area were George Bass and Matthew Flinders in 1798 (Pleaden 1990:18-19). Flinders' diary records encounters with indigenous people at Twofold Bay involving the exchange of food items and other unspecified items (cited in Organ 1990:18).

Thomas Raine established the first whaling station at Twofold Bay, north of Disaster Bay, in 1828. From the 1830s the Imlay brothers acquired large tracts of land in the area and developed infrastructure for their activities in whaling, cattle and sheep droving, and the export of livestock and whale meat. British

settlement of the region increased from the 1830s when squatters moved south from the Braidwood area (McKenzie n.d.). Stock was moved down from the tablelands further inland on to the coast as far south as Victoria (Egloff 1997). The region is well known for the historic whaling industry based at Eden and around Twofold Bay, including the activities of colourful nineteenth-century entrepreneur Benjamin Boyd who established the failed settlement of Boyd Town in 1840 (Bickford *et al.* 1988; Davidson 1988). Many Aborigines were involved in pastoralism and in the whaling industry in the early to mid-nineteenth century (Egloff 1997). There are historically documented references to Aboriginal people living around European settlements during this time, as well as conflict between Aborigines and Europeans and massacres (e.g. Organ 1990:31, 52, 107–9). In 1839 George Imlay listed thirty-four Aboriginal men living in the Twofold Bay district and wrote to the Colonial Secretary as follows:

I am happy to say that the Blacks in the vicinity of the Bay are gradually advancing in civilization. We have now two boats in our whaling establishment manned entirely by Aborigines. One of the boats has got five whales this season and the other three.

The men live in huts with their families and cook their provisions the same as the white people. They seldom or ever [sic.] absent themselves without permission, and keep watch at night and perform their duty better than I expected. The females are also improving, several of them have become very good washer women and there are two or three who have made gowns for themselves.

(Imlay, cited in Organ 1990:246)

Egloff (1997) notes that Aboriginal men employed in the whaling industry returned to their traditional life in the bush as soon as the fishing season was over. Byrne (1984:20) argues that despite European incursions, large parts of the forests and coastline of the NSW far south coast remained relatively untouched by colonial expansion until at least the 1860s.

Organ (1990:275) characterizes the period from 1843 to 1869 as one of eviction and isolation of indigenous people on the NSW south coast during which they were further alienated from their culture and from white society by the taking up of large parcels of land by European settlers and the introduction of sheep and cattle, resulting in the destruction of native forests and indigenous plants and animals upon which indigenous people relied. The more recent Aboriginal history of the NSW south coast is documented elsewhere (e.g. Goodall 1995).

ARCHAEOLOGY OF SETTLER-INDIGENOUS CONTACT

What might the archaeology of south coast settler-indigenous contact look like? Given the history summarized above, what might one expect to find in archaeological sites such as Greenglade rockshelter? Documentary evidence suggests that indigenous-outsider encounters in the region might have started from 1770 onwards, perhaps accelerated in pace from 1788, and had major and lasting impact from the 1830s onwards. So one might expect to find at least some items of European origin in indigenous sites from about 1770. With the arrival of more and more Europeans in the area the quantity of European items in circulation would presumably have increased. However, this does not necessarily mean that a larger number of European items would have been deposited at indigenous sites through time. The expected pattern of distribution of European items of material culture through time and across the landscape depends on the answers to at least the following questions: Did indigenous people have access to European items and how? What value did these items hold for them? How did people's use of their traditional places change after colonial contact? What was the nature of the indigenous people's new association with colonial places?

Currently we are not in a position to satisfactorily answer these questions for the New South Wales south coast. Additional historical and archaeological research is required. On the basis of historically documented events elsewhere, some general comments can be made. Following European contact, the indigenous population is likely to have fallen dramatically due to the effects of smallpox and other introduced diseases. Many others would have died in violent conflict. Many people were also driven off their traditional lands and denied access to the plants and animals on which they relied for food. We know from historical records that many Aborigines on the NSW south coast moved to centres of European activity in order to survive. Some gained employment in pastoralism and in the whaling industry and combined employment with going back to the bush when they could. As the population size fell, we might expect at a minimum to find archaeological evidence for a reduction in the intensity of use and eventually the abandonment of many indigenous places combined with evidence for radical change in indigenous people's behaviour to accommodate the new situation in which they found themselves. The most obvious change would be evidence for indigenous people living around places of newly established European activity. We might also expect to find the incorporation of at least some items of European material culture into otherwise traditional indigenous sites. The earliest archaeological evidence for indigenous-settler contact is likely to be found in coastal areas near centres of early European activity. Sites in the hinterland and to the south were probably not directly affected by European incursions until a much later time, but this depends on the degree to which sites in these areas were linked to other places in the region. People may have moved backwards and forwards between more remote areas

and centres of European activity. Items may have been traded, and diseases may have been passed between communities outside the area of immediate European physical impact. In conclusion, I predict that archaeological evidence for indigenous-settler contact on the NSW south coast would be patchy and fairly unpredictable.

GREENGLADE ROCKSHELTER

The Greenglade rockshelter excavation (location in Figure 10.1) was conducted as part of a small-scale research project which focused on changes in pre-contact Aboriginal fishing and shell collecting practices in the Disaster Bay area. The excavation and dating evidence is presented elsewhere (Colley 1997; Murray-Wallace and Colley 1997) and what follows is a summary of the main findings. Three small trenches dug to a maximum depth of 2.7 metres uncovered a sequence of midden deposits interspersed with archaeologically sterile beach sand (Figures 10.2 and 10.3).

Subsistence data

The main component of the midden was marine shell. Thirty-three types of shells were identified from the main trench (Trench 2) with two rocky shore species (common edible mussel, Mytilus edulis planulatus, and triton, Cabestana spengleri) predominant. Other rocky shore species were well represented, and species which favour more sheltered estuarine conditions were found in small numbers. Only one shell type (the mud ark Anadara trapezia) demonstrated any major change between midden layers, although there were minor fluctuations in the relative representation of some other shell types in different layers. Variable representation of Anadara trapezia through the site is thought most likely to reflect local environmental change (Colley 1997). The midden also contained quantities of mammal, bird and fish bone, much of which was too fragmentary to be identified. All identified species were native fauna and included large macropods (kangaroo or wallaby), small marsupials, sea mammal, lizard, wombat, mutton bird (Puffinus sp.), little penguin (Eudyptula minor), and at least twelve types of fish. Crab or crayfish were represented by carapace fragments. There were no obvious changes in the types of animals represented throughout the depth of the midden.

Artefactual evidence

A small but consistent quantity of small stone flakes was found throughout the midden, 99 per cent of which was quartz. The only other artefacts recovered were two shell fish hooks, five worked bone points, a perforated shell fragment, along with glass fragments and shoe eyelets of European origin (see below). There were no obvious differences in the types or proportions of artefacts



Figure 10.2 A floor plan (upper) and a cross-section (lower) drawing of Greenglade rockshelter.

recovered from different layers of the site other than the appearance of the few items of European origin which occurred near the top. Whatever people may have been doing with stone at the site, there is no evidence that this changed through time. The number of fish hooks and bone points is too small to indicate either continuity or change through time.

Site chronology

During excavation there was no obvious indication that the site was anything other than 'prehistoric' and that it had ceased to be used by indigenous people before or very soon after British contact. Recent radiocarbon dates were the first indication that the midden might be younger than previously thought, and this impression was subsequently confirmed by amino acid racemisation dating and the presence of a few items of European origin in the upper layers (Figure 10.4). These included four pieces of olive green bottle glass of a type commonly dated to the nineteenth century. Three pieces were flaked, including one piece with multiple flake scars on both sides. The fourth piece was unflaked and heavily patinated. The other European finds were three metal shoe eyelets and a fragment of amber bottle glass, all of which are thought likely to be dated to the twentieth century. These items were recovered from the top 10–60 cm of the midden and all were recognized during laboratory sorting of shell midden samples.



Figure 10.3 Stratigraphy of northeast wall of Greenglade Trench 2/2A with dating evidence and selected spits.

The traditional indigenous artefacts recovered from the midden (lithics, shell fish hooks, bone points) and the remains of traditional hunting and fishing practices (shells, mammal, bird and fish bones) provide no indication that the site dates to the post-European contact period. In contrast, these finds are consistent with traditional indigenous life and are typical of other prehistoric sites elsewhere on the NSW south coast. The items of European origin recovered from the deposit indicate some human activity in the shelter in the nineteenth and twentieth centuries. The bottle glass and the shoe-eyelets are likely to be twentieth-century and indicate people visiting the shelter long after the site was abandoned by its original inhabitants. Those items may have belonged to Aboriginal people, or to anyone else.

If the flaked nineteenth-century bottle glass is accepted as an indigenous artefact, it indicates use of European materials by indigenous people living a traditional lifestyle for some time after the arrival of British settlers on the continent. Unmodified olive glass does not in itself indicate Aboriginal activity, simply that someone visited the site in the nineteenth century and left some glass there. However, the association of this material with flaked glass in a stratified Aboriginal midden which contains very little non-traditional material strongly suggests that the glass was transported there by Aboriginal people.

Intensity of site use

One interesting aspect of the Greenglade site is the large depth of deposit dated to a relatively short time span, unlike many other sites in this region. At Greenglade over 2.7 m of deposit were deposited during 600 years or so of Aboriginal occupation (Figure 10.3). This compares, for example, to approximately 500 years of Aboriginal occupation represented by 1 m of deposit at the Durras North rockshelter (Lampert 1966) and approximately 7,000 years represented by 1.2 m of midden at Currarong Shelters 1 and 2 (Hughes and Djohadze 1980). Despite problems in understanding the detailed internal stratigraphy and chronology of the site (Colley 1997; Murray-Wallace and Colley 1997), the lower midden layers (below 1.6 m) seem to represent mainly pre-contact indigenous use of the shelter. In addition, these lower layers appear to be less mixed than the upper layers, possibly suggesting that the shelter was used less frequently or by fewer people during the pre-contact period. This pattern contrasts to the upper part of the site which is more mixed (maybe suggesting more frequent use), and dates mainly to the post-contact period. The depth of deposit and the stratigraphy could be interpreted as more frequent use of the rockshelter after European contact, although this must be regarded as a hypothesis for further testing because other factors such as sampling and differential preservation need to be taken into account.

The interpretation for intensification in the use of particular rockshelters following European contact is strengthened by ethnographic data collected by Head and Fullagar (1997:425) in the Keep River region in the Northern Territory. During the first half of the twentieth century Aboriginal people in this region became involved in the pastoral industry on a seasonal basis. The area is located in the tropics and is characterized by a pronounced wet season when travel is



Figure 10.4 Artefacts from the Greenglade rockshelter. Bone points (a–e); *Veneridae* shell with pierced hole (f); ground shell fishhooks (g and h); flaked olive green bottle glass (i and j); amber bottle glass (k); metal shoe eyelets (l).

difficult. During the wet season Aborigines who otherwise resided on European pastoral stations were released from their work obligations. This allowed them to

return to the bush to renew links with people who were still living there, and to fulfil cultural and other obligations. Much of this activity took place at rockshelters which were favoured camping places to which people travelled along very specific walking routes (Mulvaney 1996, cited in Head and Fullagar 1997:421). According to Head and Fullagar, this pattern has resulted in archaeological evidence for more intensive use of rockshelter sites during the contact period in contrast to the presumed pre-contact pattern of activity being more dispersed in both time and space.

A similar pattern of behaviour could explain the intensification witnessed at Greenglade shelter. Since the whaling industry was seasonal, it seems likely that Aboriginal people might have returned to their country for short periods during the year. Since time was short, they may have concentrated their camping at particular, favoured places which resulted in the very large deposits of shell at Greenglade. It is interesting that similar types of behaviour may have occurred in different parts of the Australian continent as a part of a similar process.

CONTACT AND CONTINUITY

Greenglade rockshelter provides evidence of indigenous people continuing to pursue key elements of their traditional lifestyle long after British colonization. Greenglade, situated in an area remote from the whaling stations, logging and pastoralism of settler society, was a place where people continued to fish, collect shells, make stone tools and conduct other aspects of traditional life until well into the nineteenth century. Other than the use of a few sherds of bottle glass which were brought from further up the coast, or maybe even from a bottle washed up on the beach from a passing ship, there appears to have been very little contact with the European world. The only possible indication of change comes from the depth and nature of the deposits, which may suggest more intensive use of the rockshelter following European colonization, although this remains a hypothesis.

Greenglade provides an interesting comparison to pre- and post-contact changes in indigenous settlement patterns and site composition recorded by Schrire (1972) in the Oenpelli area, north-western Arnhem Land. Schrire argued that indigenous people were drawn towards centres of British and Macassan (Indonesian) settlement, which explained differences between pre-and postcontact site distribution in the area, and differences in mammal and fish bones between layers representing pre- and post-Macassan contact at the Borngolo shelter. At Greenglade we may be seeing the reverse of the Oenpelli case. Indigenous people may have increased their use of the shelter after British colonization precisely because it was located away from centres of British activity. As more and more land was taken by British settlers, indigenous people may have been forced back into relatively remote areas such as Disaster Bay to continue their traditional lifestyle, and use of some traditional places may have increased. Indigenous use of the Greenglade rockshelter in a 'traditional' manner stopped at some stage, as a direct or indirect result of European settlement.

If indigenous people continued to use the Greenglade rockshelter into the nineteenth century, why was so little material of European origin found in the midden? How typical is Greenglade in this respect? Many Aboriginal shell middens in the Sydney and south coast region have been excavated by prehistorians over the past twenty years or so. In many cases the upper layers of

Site	Excavator	European items	Context	Dating evidence	Excavator's conclusion
Durras North	Lampert (1966)	1 sherd white glazed ware	25 cm below the surface. 'Undisturbe d.'	Ceramics are nineteenth- century	Occupation of site into historic times
Pambula Lake	Sullivan (1984)	Chipped glass	In top 5 cm of deposit	ANU-2253 90±80 BP C14 date (shell) at 8. 5 cm	Site continued in use 'until European contact'
Captain Cook's Landing Place	Megaw (1968)	Bone button, historic iron nail, weathered glass fragment	Well stratified	Artefacts dated between late eighteenth and early nineteenth century	Documente d area of contact between Cook and Aborigines
Ball's Head	Bowdler (1971)	Heavily patinated glass pieces, some possibly flaked. Lumps of lead and spherical lead 'shot'	Glass in top 4 cm of undisturbed midden. Lead from disturbed deposits.	Artefacts 'of European origin'	Glass may indicate that site was inhabited into colonial times

Table 10.1 Artefactual evidence for post-contact use of Aboriginal middens in the Sydney and NSW south coast regions

Aboriginal shell middens were removed in historic times for lime production or have been destroyed. Most middens were excavated by prehistorians with research interests in pre-contact Aboriginal economic life. Projects which aimed to establish the antiquity of the deposit focused on radiocarbon dating the lower layers with little attention paid to the top layers of the site. A comprehensive survey of published excavation reports revealed only four middens (other than Greenglade) with European materials recorded in their upper layers (Table 10.1). The finds are limited to flaked and unflaked bottle glass, ceramics, lead shot and buttons and all occur in tiny quantities. The items are all found in the upper layers of the sites and some are from layers described as 'disturbed'. If this pattern of extreme scarcity and low density of items of European material culture in 'traditional' Aboriginal sites reflects people's behaviour (and is not simply an artefact of survival of evidence or lack of research interest), it is an interesting one. Why are there so few items of European origin in Aboriginal shell middens on the NSW south coast? As discussed above, we only have a limited understanding of the way indigenous people regarded and treated items of European origin during the early colonial period. Indigenous people living away from British centres in this area may have had less access to or simply less interest in items of European material culture. They may have curated what they had and not abandoned items in sites.

The relative representation of indigenous and non-indigenous items of material culture in post-contact Australian sites varies according to the nature of the site and provides a measure of indigenous-outsider contact, trade and exchange which is only now starting to be studied by archaeologists in any systematic way (e.g. Birmingham and Wilson 1993; Mitchell 1994). Researchers have recorded often dense concentrations of European material culture in indigenous sites associated with nineteenth- and early twentieth-century British settlements (e.g. Allen 1978; Birmingham and Wilson 1993; Brockwell *et al.* 1989), while post-contact indigenous places located further away from British and Macassan centres contain far fewer 'exotic' items (e.g. Mitchell 1994; Schrire 1972).

In the absence of other dating methods, the presence of exotic items of European and Indonesian origin is used to recognize indigenous places that continued in use after contact. Many indigenous sites which do not obviously contain such materials may have continued in use after European or Indonesian contact but are not conventionally recognized as such. In parts of Australia where traditional Aboriginal culture was quickly decimated by settler contact, primarily in the south east, Aboriginal people who survived were encouraged to shed their Aboriginality. In such circumstances indigenous people living in or near to white society may be largely indistinguishable from poor white people in terms of their material culture.

Such problems, which are linked to broader issues of recognizing identity in the archaeological record, deserve further attention from Australian archaeologists. This question is of more than just academic interest. Some Aboriginal commentators claim that all indigenous places and knowledge and information about them belong by rights to indigenous people, and all government departments currently have policies that require archaeologists to gain permission from relevant Aboriginal communities before they can obtain excavation permits. The Australian Archaeological Association has developed a Code of Ethics which acknowledges Aboriginal ownership of indigenous cultural heritage. In cases where sites are clearly indigenous or non-indigenous this may not be a problem, but there is an obvious question of who has most rights over places which represent a shared heritage.

WIDER IMPLICATIONS

The Greenglade excavations were initially conceived to investigate academic research questions about human use of marine resources in the region before eighteenth-century British colonization. The project was grounded in a wellestablished tradition of regional Aboriginal prehistory (e.g. Attenbrow 1999; Boot 1994:320-5; Sullivan 1987) which defined the aims and research design of the work. Scientific dating and other evidence, including a small quantity of stratified flaked nineteenth-century bottle glass, subsequently demonstrated that the site was too recent to answer the original research questions. The fact that part of the site represented post-contact Aboriginal use of the area changed the whole focus of the project. Greenglade rockshelter and other sites with material evidence for contact between indigenous Australians and outsiders cross the boundary between prehistory and historical archaeology, into which Australian archaeology has been traditionally divided. The nature and practice of Australian academic archaeology have changed dramatically in the last few years in response to a number of factors, especially the increased power of government agencies and indigenous communities over archaeological research under the aegis of cultural heritage management. Also relevant is Australia's status as a former British settler colony with a minority indigenous population which has experienced changing public attitudes towards Australian and indigenous history in response to shifts in the existing colonial order. Recent growth in interest in archaeological studies of indigenous-settler encounters and contact reflect and are linked to these broader trends in Australian society (e.g. Egloff 1994; Ireland 1996; Murray 1996; Colley and Bickford 1996).

The Greenglade project throws into sharp contrast the differences in approach between Australian prehistory and historical archaeology. The prehistory of indigenous settlement on the NSW south coast has mainly involved the development of generalized models of hunter-gatherer behaviour based on ethnohistory which are then used to explain the contents and spatial distribution of indigenous sites. Ethnography is mined for what it can tell about pre-contact indigenous Australia. Non-traditional elements of indigenous culture are ignored as irrelevant or as 'contamination' which must be accounted for in order to reconstruct a picture of pristine pre-contact life.

Contact archaeology requires that explanation be at least partially re-framed in terms of history and historical archaeology. The incorporation of non-indigenous elements of Aboriginal culture become viewed as worthy of study in their own right. The incorporation of indigenous elements into settler culture is also of interest. Emphasis is on interaction and change rather than timelessness and essentialism (cf. Murray 1992). Time after contact is measured in decades or even individual years. Explanation may be offered in the form of historical narratives which identify known people and places, some of whom have direct historical links to people still alive. Such studies emphasize continuity between past and present. They are probably of more direct interest and relevance to indigenous people than studies of prehistory alone. Indeed, the term 'Prehistory' has been criticized by some Aboriginal people who feel it implies that their culture is dead and not linked to the present. In turn, this denies them their rights (Langford 1983; Mulvaney 1990; Pardoe 1990).

Archaeological studies of 'contact' in Australia involve using methods and approaches of both prehistory and historical archaeology and incorporate elements of ethnography, history, oral history, genealogy, landscape studies and other disciplines. For example, an academic research project which aimed to build archaeology into the contact history of southern coastal NSW might involve surveying and excavating a range of sites to try to document changes in settlement patterns, subsistence and use of material items associated with the arrival of settler culture in the area. This would involve studying not only traditional sites such as middens, rockshelters and lithic scatters (which have traditionally been the province of prehistorians) but also European places with which Aboriginal people were associated (which have traditionally been studied by historical archaeologists). The archaeological research would also need to be accompanied by historical research and involve the active participation of local communities, both Aboriginal and non-Aboriginal, in tracing family histories and associations with place. The aim of such research might be to construct largescale regional narratives of continuity and change in indigenous economies, settlement patterns and use of material culture before and after British colonization, coupled with a study of the impact on settler society of encounters, conflict and negotiation with indigenous peoples during the early years of British colonization.

In conclusion, the Greenglade excavations demonstrate that in Australia, as elsewhere, the archaeology of encounters and contact between indigenous peoples and outsiders in a colonial context involves combining elements of both prehistory and historical archaeology. In many places indigenous people and other sectors of society such as slaves, women, convicts and the poor were illiterate and did not keep the journals and diaries and other written records which constitute much of the documentary evidence for the colonial experience. Archaeological study of such groups is by definition 'prehistoric' in the sense that we are studying people without written records. At the same time the archaeological study of European colonialism is firmly grounded in the historic world. We need to combine elements of both prehistory and historical archaeology in order to make sense of this world. The Greenglade study also reminds us that contact and encounters may occur and be manifest in different ways and in different locations across the landscape. In particular, indigenous people do not just experience 'contact' in the places where the colonizers are. We may need to look out into the bush, to the countryside, to the hinterland and the region as a whole, to places where indigenous people have always lived, to really understand the widest implications of contact.

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11

Keeping the land alive: changing social contexts of landscape and rock art production URSULA FREDERICK

The land is my backbone, I only stand straight, happy, proud and not ashamed about my colour because I still have land. The land is the art. I can paint, dance, create and sing as my ancestors did before me. My people recorded these things about our land this way, so that I and all others like me may do the same...I think of land as the history of my nation. It tells us how we came into being and in what system we must live.

(G.Yunupingu, quoted in Rose 1996:40)

INTRODUCTION

As an interactive component of the ideological, spiritual, and material culture practices of indigenous Australians, rock art production is a particularly potent expression of socio-cultural identity. In light of its communicative function and its dual role as a reflectional and intervening force directing the course of social action, rock art offers an informative and expressive indigenous view of the process of change and continuity brought about by culture contact (McDonald 1994; Smith 1994). The principal aim of this chapter is to examine the graphic implications and shifting social contexts of rock art production arising from culture contact between an indigenous society and European (or Anglo-Australian) colonists. The source of my investigation is the rock art of Watarrka National Park, central Australia. My intention is to provide a broad geographical, archaeological, anthropological and historical model of this area to provide a setting within which the social contexts of rock art production may be adequately understood. The approach I have taken in constructing this framework is informed by studies of social landscapes (Baker 1989; Bender 1993; Gosden and Head 1994; Ingold 1993; Tilley 1994). Landscape is an appropriate concept for the examination of socio-cultural change during contact because it was the stage upon which cross-cultural engagements were set and the vehicle through which these experiences were mediated. Indeed, the land itself lies at the heart of the long and difficult history of Aboriginal-European relations and it holds the power to future reconciliation.

Archaeological investigations of Australian rock art have focused almost exclusively on the prehistoric rock art with very little research addressing how indigenous graphic systems adapted and changed during the process of European contact and colonialism. The most comprehensive studies of recent rock art that have appeared to date (Chaloupka 1993; Layton 1992; Lewis 1988; Smith 1994; Turner 1973) recognize the prevalence and diversity of contact rock art, yet lack the thorough recording and analysis that are characteristic of archaeological investigations into prehistoric rock art. References to rock art produced in the context of Macassan, European, and Chinese cross-cultural exchange are customarily just descriptive accounts (e.g. Chaloupka 1984, 1988, 1993; Crawford 1968; David and Chant 1995; Edwards 1979; Gunn 1989, 1996; Kimber 1991; Lewis and Rose 1988; McCarthy 1960, 1979; McDonald 1994; Mulvaney 1992; Graham and Mulvaney 1995; Reynolds 1987; Rosenfeld 1990; Smith 1994; Taçon 1987, 1988, 1992; Turner 1973; Walsh 1988). The emphasis in most of these accounts is on the incorporation and use of motifs and materials of a foreign appearance or derivation, such as guns, white men, introduced fauna and Reckitt's Blue (a laundry compound). A typical example being: 'subjects represented were not part of the Aborigines' normal life...paintings include sailing ships, praus, introduced buffalo and other game, revolvers and guns' (Edwards 1979:192).

Thus, the concept of contact, as it has been framed in the field of Australian rock art research, has emphasized the material manifestations or 'objects' of culture contact rather than the cross-cultural encounters and relationships which contextualized and shaped their production. An unfortunate effect of this preoccupation with overt representations of contact is that it has directed our attention to externally motivated innovation at the expense of internally generated indigenous response. This effectively negates the social agency motivating the invention and production of indigenous graphic systems and obscures indigenous perspectives on the social and historical processes of contact. A further implication of this approach is that it undermines recognition of any graphic conventions that may have continued throughout contact.

Clearly, it is not always possible, or desirable, to distinguish the aesthetic outcome of contact processes beyond the obvious markers of continuity and change. There are, however, different ways of conceptualizing innovation and response and our investigations can delve deeper by exploring the social relationships motivating and underlying these innovations:

inventions, and in particular their adoption, are integrated parts of *and* partners in social actions. Thus they participate in social discourse and they are not something that happens *to* a society. Consequently, our study of these processes should not separate them from the cultural and social context in which they took place.

To consider contact as a process of socially mediated exchange, rock art studies should give as much priority to continuity as to change. They should also study internally generated innovation and indigenous responses to new external stimuli.

THE LANDSCAPE

My purpose in adopting a social landscape approach is to emphasize the diverse nature of interactions between Aboriginal and European peoples and to demonstrate the way the landscape was negotiated in the context of these engagements (Gosden and Head 1994). The relevance of this approach lies in its attempts to link social processes to the physical transformation of the landscape and, more specifically, to patterns in rock art production. Rather than chronicle singular events, social landscapes reflect the ongoing process of social negotiation (cf. Gosden and Head 1994). Concomitantly, it is important to recognize the complexity of relations, activities and processes that took place within the landscape in the context of cross-cultural engagements. More clearly, these interactions define a process by which the social and cultural geography of central Australia has been perceived, inhabited, utilized and thus created.

In order to present a picture of changing land use and social relations over time, a variety of perspectives is entwined within this model of landscape. The initial focus acts to situate the study area within a geographic context. A second component provides a background for considering the land use, settlement and cultural practices of indigenous people immediately prior to their contact with European settlers. It provides a baseline for considering change and continuity in the social contexts and cultural geography of the study area over the period of European contact. The third aspect of the model provides insight into how the material and social landscape was constructed under the colonial mentalities and practices that directed the course of European settlement. It emphasizes the perceptions and desires that drove the expansion of European settlement and its effects on the evolution of Aboriginal and European relations.

The attitudes and preconceptions with which both Aboriginal and European peoples approached central Australia firmly influenced the outcome of their interactions with one another. Their motives and methods of marking the land are an indicator of the way they perceived their environment and their relationships to it and one another. Prior to the arrival of Europeans in central Australia, two fundamentally different manifestations of landscape co-existed: (1) an indigenous geography embedded in the traditions of the *tjukurrpa* (the indigenous name for the 'Dreaming' or 'Law'); and (2) a European vision of a new frontier. As these two landscapes converged, each became influential on the articulation of the other. The changes in the physical, economic and social spheres encompassed within the emergent colonial landscape, which was a



Figure 11.1 Map of Australia showing the location of Watarrka National Park and Alice Springs in the arid centre. (Reproduced with kind permission of Winifred Mumford.) shared albeit contested geography, were marked by the rock art produced during this time.

The study area: Watarrka National Park

In order to study the contact process with relation to rock art, I undertook a case study of a particular landscape: a portion of land currently recognized as Watarrka (Kings Canyon) National Park. The park is located in central Australia (Figure 11.1) approximately 320 km southwest of Alice Springs in the SW corner of the Northern Territory of Australia (Figure 11.2). It lies along the eastern borderlands of the Western Desert and comprises an area of approximately 725 square km, subsuming the western section of the George Gill Range and adjacent sand plains to the south and southwest. The range itself lies in the outliers of the Central Ranges and marks the westernmost limits of the better watered country of central Australia.

My survey focused on the western end of the George Gill Range of Watarrka National Park. For the purposes of examining inter-site spatial variability in rock art production, I divided the western George Gill Range into smaller land units (Figure 11.3). My intention was to correlate potential patterns in site distribution



Figure 11.2 Map of central Australia showing Watarrka National Park and other places mentioned in the text. (Reproduced with kind permission of Winifred Mumford.) with changes in land use or differences in site function. The divisions were made primarily on the basis of topography and geomorphology (see Bagas 1988) to determine whether these factors played a contributing role in the distributional patterning of rock art sites. The range was divided into three main landscape units, the Northern Plateau (NP) and two components of the Southern Escarpment (SE). The two units of the Southern Escarpment are the Southern Ridge (SR), consisting of the elevated strike-ridges of the southern escarpment and the Southern Base (SB), comprised of the base of the southern escarpment adjoining the sandy lowlands and alluvial floodplains.

Within the three land units, a sample of sixty-two rock art sites have been analysed. These sites represent 62 per cent of the known database of rock art sites in the Park, and incorporate fifty-five sites recorded by myself (Frederick 1997), one by Rosenfeld (1990) and six sites recorded by Smith and Rosenfeld (1992). Smith and Rosenfeld did not record all of the Northern Plateau sites in detail and the sample of sites I have chosen to include from their database was selected on the basis of their high degree of recording detail. The level of recording for these sites was considered to be compatible with my own. A table of site frequencies, as categorized within the three landscape units is provided in Table 11.1.



Figure 11.3 Map of the western end of the George Gill Range, Watarrka National Park, showing the distribution of rock art site complexes within the Northern Plateau, Southern Ridge and Southern Base land units. (Reproduced with kind permission of Winifred Mumford.)

Table 11.1 Spatial and chronological distribution of Watarrka National Park rock art sites incorporated in the analysis

Land unit	Site complex	No. of sites	es Precontact		Contact	
			No.	%	No.	%
Northern Plateau	North West Ridge (NW)	2	1	50	1	50

Land unit	Site complex	Site complex No. of sites		Precontact		Contact	
			No.	%	No.	%	
Upper Reedy Creek (UR)	3	3	100	3	100		
North East Ridge (NE)	1	1	100	1	100		
NP Sub-total	6	5	83	5	83		
Southern Ridge	Penny Springs [Urarita] (PS)	8	7	88	2	25	
Lila West (LIW)	1	1	100	0	0		
Groom's Cave (GC)	3	3	100	2	67		
Upper Wanga Creek (WWand WE)	5	5	100	1	20		
Upper Kathleen Creek (UK)	5	5	100	2	40		
SR Sub-total	22	21	95	7	32		
Southern Base	Watarrka [Kings Canyon] (WT)	3	2	67	1	33	
Lila [Reedy Creek] (LR, L and LE)	7	6	86	5	71		
Cypress Creek (CY)	2	2	100	2	100		
Lower Wanga Creek (WC)	3	3	100	2	100		
Ipitilkiti [Kathleen Springs] (I)	2	2	100	1	50		
Tjungku [Stokes Creek] (T)	7	6	86	4	57		
Tjungku West (TW)	5	5	100	0	0		
Ironwood Creek (IC)	2	2	100	1	50		
Wanmara [Bagot Springs] (WN)	3	3	100	1	33		
SB Sub-total	34	31	91	17	50		
TOTAL		62	57	92	29	47	

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The physical geography

The western part of the George Gill Range consists of a broad flat-topped plateau bounded by steep escarpments towering up to 150 metres above the surrounding sand plain (Bagas 1988; Smith and Rosenfeld 1992). Much of the plateau is made up of sand sheets or dunes which support sand plain vegetation, but it is also distinguished by a maze of dome-shaped landforms (Bagas 1988). The northern escarpment of the plateau is steeply inclined, forming an almost continuous series of cliffs that drop dramatically into a broad valley (Smith and Rosenfeld 1992). There are several water sources, including the important Kings

Creek and Reedy Creek, which generally drain southwards along narrow gorges. The southern escarpment of the plateau is also steep, with rock shelters occurring within the ridge, on top of scree slopes, and between gullies. Both the southern and northern ridges of the plateau command expansive views of the southern sand plains and Dry Valley, respectively.

The southern side of the George Gill Range is distinguished by a series of springs and ephemeral creeks which dissect the soft stone cliffs of the southern ridge of the plateau gouging deep gullies, gorges and rock holes in pockets along the edge of the escarpment. Though the creeks are ephemeral, many incorporate sandstone rock hole formations that entrap and retain rain and flood waters producing permanent or semi-permanent reservoirs of water (Smith 1988). The majority of these watering places lie along the lower reaches of the gorges in the SB land unit where the southern edge of the escarpment meets the sandy lowlands. Abundant assemblages of diverse floral and faunal species are concentrated around these waters (Latz *et al.* 1981) and so they were prominent areas of traditional land use and significant nodes in the spiritual geography of Aboriginal people (Hamilton and Vachon 1985; Maurice 1989).

An Aboriginal geography

The traditional owners of this area are generally recognized as Luritja, specifically Matutajara, people while Yankutjajara, Pitjantjatjara, Kukatja and Southern Aranda also have affiliations to country encompassed in Watarrka National Park (Hamilton and Vachon 1985; Kimber 1979; Maurice 1989; Smith and Rosenfeld 1992; Strehlow 1969). For the Luritja people *tjukurrpa* is the name for the 'Dreaming' or 'Law'. 'Law' is an English gloss that has come to generalize the central concepts of the socio-spiritual systems governing Aboriginal culture.

It was through the *tjukurrpa* that the Aboriginal landscape of all things seen and unseen was created and it is through the activities of ancestral forces that the fabric of the land is formed. The ancestral forces that shaped the landscape and lives of Aboriginal people took the form of plants, animals and humans and through their activities of creation and destruction they left their imprint in the land itself. The very land is alive with the energy of these ancestors and the marks of their activities remain embedded in the land, recognizable today in the flora, fauna, sand hills, rock holes and other physiographic features that make up the natural environment. And while the land continues to be the conduit for Luritja connections to their ancestry, the presence of the ancestors is also felt in the rites, dance, song, stories and designs extant in Luritja culture (Layton 1986). The essence of the ancestors remains strongly linked to the land and for this reason the *tjukurrpa* is frequently associated with specific places and the stories, perceptions, connections and energies these places generate.

The landscape of Watarrka National Park encompasses a complex terrain of *tjukurrpa* tracks that have linked the land and its people and places to others

hundreds of kilometres away for thousands of years (Turner 1980). Yet within an ethnographic and contemporary context this landscape also acted, to some extent, as a border zone between Western Desert people and adjacent Aranda and other Central Desert groups (Hamilton and Vachon 1985; Laughton pers. comm. dated 1994; Strehlow 1969; Stirling 1896).

The traditional social organization of Western Desert people operated as a large open network of overlapping and interlocking social affiliations (Berndt 1966; 1972; Sackett 1987; Tonkinson 1991). Through this complex social structure special rights and responsibilities for an area were shared by several individuals and dialectic groups (Hamilton 1982; Myers 1986; 1987; Layton and Rowell 1979). A variety of social ties gave an individual the opportunity to share in the knowledge, identity, rights and obligations of a place, including the responsibilities of perpetuating that place and its flora and fauna through the performance of song cycles, dance, ritual and the production of graphic designs. With this responsibility came the right to forage and access the resources of that area (Hamilton 1982; Hamilton and Vachon 1985; Keen 1997; Layton 1986; Maurice 1989; Myers 1986).

The knowledge associated with these resources, their social affiliations, geographical location, and the rights of access were encoded in the teachings of the *tjukurrpa*. The interdependent relationships between the environment, belief systems, social structure and graphic system served to integrate and reinforce knowledge of the landscape into a holistic body of meanings (Chewings 1909; Gillen 1901–2; Layton 1986; Smith 1989). Similarly, the graphic system entwines the social, physiographic and spiritual knowledge of the society. All members of society, although at varying levels of practice and cognizance of encoded meaning, have some involvement in the production and maintenance of the graphic system (Morphy 1987; 1991; Munn 1973).

The maintenance and dissemination of this system of meanings through graphic production took place within a variety of social forums, ranging from an informal level through the practice of everyday activities, such as sand drawing (Munn 1973) through to more ritualized contexts, such as revelatory ceremonies (Gunn 1989). In this way the graphic systems of the Western Desert were an important tool for promoting and controlling the exchange of information. Through the communication and, alternatively, the restriction of *tjukurrpa* traditions and socio-religious ties, the graphic art system functioned to identify and integrate (Smith 1989), as well as demarcate social groups (Taylor 1979).

Likewise, the application of this graphic system in the production of rock art served a number of functions and operated within a variety of social contexts. It was a way of marking place and concomitantly an individual's affiliation to it (Aitkens pers. comm. dated 1996; Clyne pers. comm. dated 1995; Thorley and Gunn 1996; Gunn 1989). Rock art was also significant within a storytelling or instructive context (Munn 1973), for use in initiation ceremonies (Laughton pers. comm. dated 1994; Clyne pers. comm. dated 1995; Kimber 1991; Taylor 1979), and as the physical form of an ancestral being or event (Munn 1973). Marking

country was also a way of maintaining the long association with the traditions of the *tjukurrpa*. Consequently, the Luritja landscape of rock art production observable in Watarrka National Park today records a range of techniques and activities and demonstrates a long history of marking practices.

A European geography

Central Australia held a position of unrivalled promise in the heart of the Australian colonial/settler imagination. It was perceived as a land of undiscovered riches and a central gateway between opposing ends of the continent. Early interests and excursions into the interior were driven by these popular perceptions. European explorers engaged in discovering 'the Centre' covered long distances in their efforts to claim this land. With their eyes set to gauge the economic potential of 'undiscovered' lands, they gave little consideration to the intricacies of their social surroundings, instead concentrating their efforts on surveying routes and defining new country (Hamilton 1984; Mulvaney 1989). The process of naming, mapping and marking the land was an integral component of exploratory endeavours and served an essential function in the advancement of colonial settlement. Marking behaviour acted as an imaginative tool in physically taming and claiming the land, effectively transforming an unknown natural environment into a specific tangible cultural landscape (Carter 1987; Morphy 1993).

Culturally appropriating the landscape with familiar signs was the first tactic Europeans took towards civilizing and colonizing an 'untamed' land and immortalizing their presence within the landscape itself. Glen Thirsty, Mt. Unapproachable, Mt. Solitary and Mt. Disappointment are a few of the central Australian landmarks that bear the historical burden of early colonial experiences. The colonial imprint is also found in the physical fabric of the land. Names carved into rock, blazed trees and stone cairns are all indicators of the impending permanence of European presence and the colonial reconstruction of the land.

For the physical marks the newcomers made were primarily symbolic: the first axe blows, a gun shot fortuitously taking a cockatoo out of its path of flight, even the fording of a creek, these spatial gestures marked their intent to construct a new country, to write over what was there before, to revise it until it appeared like an Eden.

(Carter 1987:166)

More implicitly, these physical and conceptual markings functioned to subvert indigenous ownership of land. By reinventing the landscape in European terms, the explorers and settlers were denying the pre-existence and validity of indigenous names and associations to land. In renaming and redrawing the country, the explorers were claiming it as their own and establishing a cultural reference by linking their new environment with the security of familiar lands.

Initially, the explorers approached the landscape with an almost hostile vigour, as if it were an enemy to conquer as much as a mystery to unravel. Anything that stood in their path was seen as treacherous, yet the main obstacles they were to find were the physiographic features of the landscape itself. The realities imposed by the natural environment soon shattered European illusions and shifted their concerns from discovery to basic survival.

In an arid frontier, survival meant knowledge of water sources, and it is a consistent theme of explorers' journals. It is within the context of seeking to tame the land that Europeans first sought engagement with local Aborigines. Not having the knowledge of the environment themselves, they exploited Aboriginal people for this purpose:

No doubt these Autochthones were dreadfully annoyed to find their little reservoirs discovered by such water-swallowing wretches as they doubtless thought white men and horses to be...in such a region as this we must be prepared to lay down our lives...in our attempts to procure water...as life and water are synonymous terms. I dare say they know where to get more, but I don't.

(Giles 1889 v.1:212–13)

Water resources became the path through which European settlers came to navigate and locate the landscape, following the paths Aboriginal people had trodden for thousands of years. It is for this reason that the southern end of the George Gill Range became a well-known route for European travellers (Chewings 1894; Giles 1872, 1889; Gosse 1874; Groom 1949; Tietkens 1879; Wiltshire 1891).

Despite the hardships they encountered, explorers recalled their journeys in glorified accounts. Needless to say, the images they presented to the settled areas of Australia and abroad gave the impression that the central interior was indeed a land worthy of European settlement. Through the publication of journals, maps and adventure stories they essentially laid the groundwork for colonial occupation.

Soon after construction of the telegraph line commenced in 1870, the material manifestation of the European landscape expanded through the construction of buildings and boring of wells and the introduction of domesticated animals (Garment 1991; Hartwig 1965; Pearce 1985b; Strehlow 1969). Telegraph operators, police, pastoralists, miners and missionaries were all implicated in the construction of the colonial interior. All had their own reasons for coming to 'the Centre' and all marked their presence in a different way. Moreover, all had preconceived ideas about the landscape and its indigenous inhabitants. Many settlers carried a generic impression of the appearances, behaviours, material culture and customs of Aboriginal people formed from the accumulated accounts

of other Aboriginal-European encounters and portraits inscribed in colonial texts (Beckett 1988; Donaldson and Donaldson 1985).

Aboriginal people were perceived as a part of the wider central Australian landscape, as the human bearers of a harsh and brutal environment. This perception is illustrated in colonial writings that embody Aboriginal people with a savage or animalized identity. Giles, for example, described Aboriginal men in long-winded accounts of the native flora, as if they themselves were fauna that 'scampered off...flew away...[and went]...scudding away' (Giles 1872:22–3). It is a perception which guided European approaches to interaction, where the blame for failed ventures and misspent journeys was cast on indigenous inhabitants of the central interior as much as on the land.

Pastoralism represented the most popular motive for European migration into the Australian interior (Hartwig 1965). As such, certain areas especially unsuitable for pastoral enterprise were avoided by settlers. Settlers rarely ventured into the sand hill and salt-lake regions, viewing them as barriers to colonial expansion and pastoral practice. Thus Europeans only truly came to occupy and embrace half of the central interior. The spatial parameters of European settlement clearly separated drier areas from the comparatively rich resource zones of the central ranges.

In the context of colonial expansion, the George Gill Range remained on the fringe of European settlement and in itself demarcated the edge of the colonial frontier. As the last secure watering post before stepping off into the relatively waterless west, the George Gill Range became a kind of transition zone between 'civilized' European settlement and the limitless 'wilds' beyond.

Many Europeans viewed Aborigines as an impediment to the progress of settlement (Hartwig 1965). I propose that once early pastoralists became disenchanted by their efforts to harness the landscape, they came to project the disappointment and resentment they harboured towards the landscape upon what they saw as its human counterparts. Clearly, the land not only played a central role in the negotiation of shared space but also in the perceptions and interactions emerging in cross-cultural encounters at this time.

ROCK ART ANALYSIS

The methodology I devised for analysing the rock art assemblage of Watarrka National Park was aimed at examining the techniques and materials of rock art production, the formal range of graphic designs and, more specifically, the structuring principles utilized in graphic constructions. At a broad level the analysis assessed formal variation, the diversity in media and techniques by which the rock art was produced and more specifically the relationship between technique and form. At the broadest level formal variation in the graphic assemblage was identified as a distinction between figurative and geometric forms. A more detailed breakdown of the graphic assemblage into graphic types or classes allowed me to consider the variation between graphic classes and the

production of specific graphics with relation to technique, media and spatial distribution. At a finer level, the analysis sought to examine the basic graphic elements used in the construction of graphic classes and the frequency and manner with which these elements were engaged to create structured graphic designs (see Table 11.2). Furthermore, the way in which graphic designs were structured was examined and an index of graphic complexity developed on the basis of principles such as repetition and combination. The complexity or elaboration of a graphic was defined according to the manner

Element and description	Examples of graphics made using element repetition	Examples of graphics made using element combinations	Examples of graphics made using element repetitions and combinations
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Table	11.2	Principles	of	graphic	construction
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Table 11.3 Changes and continuities in the rock art of Watarrka National Park associated with the period of Aboriginal-European contact.

Changes	Continuities
The production of rock art intensified. The use of ochre diminished and charcoal media became predominant.	Wet pigment stencilling continued, although to a lesser extent, and outlining in

Changes	Continuities
A shift occurred in the method of pigment	dry pigment appeared as a modification/
application from painting with a wet	extension of the stencilling technique.
pigment suspension to drawing with	The basic elements of the graphic code
pigment in a dry unprepared state.	remained consistent.
Bi- and poly-chromatic designs decreased	The hand motif remained dominant.
in frequency.	Some sites, particularly in the Northern
Re-marking of graphics increased in	Plateau and Southern Base units, were
frequency.	used both prior to and during contact.
Graphic vocabulary and structural	
diversity increased with some pre-contact	
graphics dropping out.	
Graphic construction became more	
elaborate.	
Figurative forms dramatically increased in	
frequency.	
The number of sites diminished and their	
distribution changed in part.	
Intra-site distribution of graphics	
expanded from exhibiting one or two	
elaborate graphics to containing a number	
of highly elaborate graphic designs.	

and extent to which these structuring principles were employed. An illustrated example of how I examined graphic complexity through these structuring principles is presented in Table 11.2. On this basis I was able to examine whether there was a change or a consistency in the way graphic designs were structured, and whether or not the degree of graphic elaboration changed or remained consistent over time. A final focus of the analysis examined the way these trends in technique, media, and form related to the use of the physical environment. The results of my analysis demonstrate both gross and specific patterns of continuity and change in the formal variation, frequency, media, technique and site distribution of rock art across time and space. After considering these continuities and discontinuities with regard to superpositioning and relative weathering patterns, a relative sequence was established whereby two distinguishable phases in a continuum of rock art production were identified. The changes which are related to the process of Aboriginal-European contact are summarized in Table 11.3 and a brief description of each phase is outlined below (cf. Frederick 1997 for a fuller analysis).

The pre-contact assemblage

During the pre-contact phase of rock art production a range of pigments including red and yellow ochres, black charcoal, and white clay was used in stencilling and painting activities. Rock art includes bi- and poly-chrome paintings and there is little evidence for the practice of re-marking. The graphic vocabulary was consistently governed by a standard lexicon of hand stencils and various geometric and 'track' graphic forms. Graphic variability was minimal and the production of elaborate graphic designs was infrequent. The few elaborate designs that were produced commonly appear in isolation or as single individuals among large groupings of simple graphic forms and their occurrence is dispersed broadly across the landscape. This may suggest that elaborate designs were site specific and definitively associated with a particular place or tract of land. This trend conforms to a pattern identified by Gunn elsewhere in central Australia.

To date each of the large, [painted] bichrome, geometric *churinga ilkinia* motifs recorded has been distinctly different in design from the others. Most occur as a singular, or at least the most dominant, motif within their respective shelters. They also tend to occur within only one site within each clan estate...while these motifs form a very small numerical group, they are from an ethnographic and functional perspective an extremely important component of the region's rock art.

(Gunn 1996:125)

Some 92 per cent of the sites analysed exhibit rock art produced prior to contact and they are fairly evenly spread throughout the landscape (Table 11.1). Of these sites, many are large shelters which appear to have been occupied and marked intermittently over time (Smith and Rosenfeld 1992). There are also small rock shelters which contain very little rock art and have a scant range of graphic classes. These may well represent short-term occupation and/or isolated events of rock art production.

The contact assemblage

Rock art produced during the period of contact with Europeans is characterized by a predominance of dry charcoal drawings that consist of intricately structured non-figurative designs as well as what appear to be figurative representations of horses, cattle and clothed anthropomorphs. The content of these latter drawings clearly derived from the appearance of Europeans and provides a firm indicator of the temporal framework within which the drawings were produced. While drawing was the most commonly practised technique during

Land unit	Basic graphics	Percentag e basic graphics	Number complex graphics	Percentag e complex graphics	Number figurative forms	Percentag e figurative forms
Northern Plateau	541	25.1	17	21.8	40	80

Table 11.4 Spatial distribution of basic, complex and figurative graphics

Land unit	Basic graphics	Percentag e basic graphics	Number complex graphics	Percentag e complex graphics	Number figurative forms	Percentag e figurative forms
Southern Ridge	610	28.3	16	20.5	6	12
Southern Base	1006	46.6	45	57.7	4	8
Total	2157	100	78	100	50	100

contact, stencilling and abrading were also employed, albeit to a lesser extent. The emergence of outlining and scratching techniques and the re-marking of existing stencils and graphics in dry pigment is also indicative of this phase. Very few other pigments were employed. The contact assemblage is further characterized by a diversity of graphic designs, most of which are without precedent in the graphic vocabulary of the pre-contact tradition. The greater proportion of these exist as unique and elaborate graphics or similar variations of a complex graphic.

Contact rock art occurs in all of the three designated land units of the George Gill Range, with 47 per cent of the total assemblage of sites exhibiting contact art. Unlike the pre-contact assemblage, a greater proportion of sites in the Northern Plateau and Southern Base units exhibit contact art, 83 per cent and 50 per cent, respectively, while contact art appears in only 32 per cent of the Southern Ridge sites (Table 11.1). The distribution of graphic classes across these land units was examined in order to determine whether there was spatial variation in the production of specific graphic classes. For example, one may expect to find a greater proportion of figurative graphics along the southern escarpment, the area of landscape most frequented by Europeans. In contrast, a distribution analysis has indicated that the figurative drawings are isolated in the elevated and interior sites of the Northern Plateau while the elaborate geometric drawings are especially prevalent in the basal sites of the southern escarpment (Table 11.4).

Many of the Northern Plateau sites are large shelters. They contain both rock art on the walls and archaeological materials on the surface, evidence that is suggestive of family camping activities (Smith and Rosenfeld 1992). In contrast, the majority of Southern Base sites containing contact art are smaller rock shelters not obviously conducive to family camping or long-term occupation, thus suggesting that the sites of the Southern Base may have been single event art sites or utilized by individuals.

Comparing the pre-contact and contact components

The contact period represents a transition in the materials and techniques used for rock art production. The major change is a shift in emphasis from the application of wet ochre pigment to dry charcoal drawing. The rock art of the contact period represents a greater emphasis on innovation and the produc

Phase	Number basic graphics	Percentag e basic graphics	Number complex graphics	Percentag e complex graphics	Number figurative forms	Percentag e figurative forms
Pre- contact	1473	68.3	21	26.9	6	12
Contact	684	31.7	57	73.1	44	88

Table 11.5 Temporal distribution of basic, complex and figurative graphics

tion of elaborate graphics (Table 11.5). This is demonstrated by the increased variation in graphic classes and the discontinuation of several prominent precontact graphics, specifically 'macropod' and 'dot' track graphics. Compared with the pre-contact assemblage, the graphic designs of contact are more detailed and structurally complex. The same graphic elements and structural principles governing the arrangement of graphic design were used prior to and during contact. However, during the contact phase the application of these conventions changed markedly towards the construction of unique and more elaborate designs. In short, a greater number and variety of graphic elements were employed in a multiplicity of arrangements within each individual graphic construction. This indicates that the graphic system was extremely adaptive and flexible in its ability to interchange existing graphic elements in the creation of an expanded graphic vocabulary.

In addition to the variation in the graphic system, the distribution patterns of complex graphics is reversed over time. Although they have a smaller spatial and frequency distribution than the pre-contact tradition, most contact sites exhibit rock art in relatively high frequencies (Frederick 1997). The difference in the site frequency and distribution patterns of these assemblages indicates a shift in the social context of rock art production during contact. A smaller number of widely dispersed, complex graphics in the pre-contact period shifts to a greater number of complex graphics with a limited distribution after contact. In other words, there was a discontinuation in the production of site-specific graphic designs. This trend indicates that rock art activity was closely clustered around particular sites and there was an intensification in art activity at these sites. Furthermore, the perpetuation of closely similar complex graphic constructions but their placement at different locales within the landscape may imply the existence of a relationship between the use of these different places in both periods.

The continuity of certain conventions at the expense of others shows that the graphic system exhibited in Watarrka National Park demonstrates a capacity for change within a framework of continuity. It further indicates that over the course of Aboriginal-European contact there were significant changes in resource use, residence patterns, networks of exchange, social structures and graphic systems.

Various interpretations of the kinds of behavioural patterns responsible for the changes and continuities observed in rock art production during contact may be offered. As the production of rock art was contingent on the perception, utilization and maintenance of the landscape, these trends will be discussed by returning to the concept of landscape and changing social relations.

DISCUSSION

Prior to European contact, the George Gill Range was occupied on a seasonal basis by small family groups of socially affiliated Luritja people. The semipermanent and permanent waterholes and rich subsistence base of this area made it an important refuge during dry seasons and protracted droughts (Kimber 1979; Smith 1988). The seasonal abundance of resources was capable of supporting large aggregates of people (Kimber 1984; Latz *et al.* 1981) and as such the range was an important venue for trade, ceremonial activities, and the dissemination of socio-cultural knowledge.

Large-scale social gatherings were an integral feature of Western Desert societies and facilitated the exchange of commodities and maintenance of links to the social and spiritual geography (Hamilton and Vachon 1985; Mulvaney 1976; Sackett 1987; Tonkinson 1991). Singing, dancing, body decoration and the marking of the land through rock art production were important activities for reaffirming the rights and responsibilities to the land and the *tjukurrpa*.

Giles' passage through this landscape, along the southern reaches of the range in 1872, marks the beginning of a long entangled history of Luritja-European relations in the area. The sporadic and transient nature of this and other explorations (Chewings 1894; Gosse 1874; Spencer 1896) is echoed in the relatively minor impact they left on the land and its indigenous inhabitants. By 1885, however, cattle from Tempe Downs and adjacent pastoral properties were grazing beside the waters along the southern base of the George Gill Range (Pearce 1985a; 1985b). Stations were always located in the best portions of country, areas that had been traditionally used by Aboriginal people as their major resource area (Kimber 1979). The cattle had a devastating effect on the local subsistence particularly because they occupied the area during the drier months of the year at a time which coincided with the flowering of abundant grasses and the seasonal migration of Western Desert people from the sand hills. Aboriginal families had to compete with cattle for the most reliable water and food resources in their country. These resources were vital to the economy of large-scale social aggregations and their impoverishment effectively interrupted the seasonal pattern of ceremonial and exchange gatherings practised by indigenous people. As the flow of exchange became hindered, access to resources through group dispersal diminished.

Unlike long-term indigenous strategies of exploitation, pastoral practices had relatively short-term goals and effectively exhausted the economy of the Southern Base by consistently over-utilizing resources. Touching Gill Range. I was out there a good deal last month... and was thoroughly disgusted with the appearance of the whole place... Reedy Hole and the Kathleen which used to be fairly pretty little spots are as bare as a board, all the fern and reeds eaten or trampled to pieces by the Cattle, I don't think you would even *recognise* Reedy Hole.

(emphasis original, Cowle 1896:9, 10)

Cattle occupying the reliable waters of the range effectively destroyed the traditional subsistence economy by uprooting important native flora, trampling young plants and compacting the ground, eating the seeds needed for plants to reproduce, and fouling precious waters. It may be conjecture to suggest that cattle became a potent symbol of the prolonged intrusion of European settlers on Luritja lands, but it remains certain that they were an easily targeted source of food. Bands of Aboriginal men began to attack cattle and would then retreat into the range where the rugged and convoluted terrain offered adequate cover (Bowman 1989; Hartwig 1965; Stirling 1896; Willshire 1891). Having spent most of their time along the southern reaches of the ranges, European police and stockmen were less willing to pursue the Luritja on foot onto unfamiliar ground (Cowle 1896).

Yet despite taking refuge in the elevated and interior regions of the range, many Luritja, particularly young men, were murdered by Europeans in the punitive expeditions that regularly followed cattle raids (Cowle 1899; Kimber 1991; Leske 1977; Mulvaney 1989). High mortality coupled with the destruction of endemic vegetable foods upset the delicate balance of local subsistence production and so a traditional economy became difficult to sustain. In conjunction with the deaths from introduced disease and the anguish over loss of life, these conditions made the George Gill Range virtually uninhabitable.

Many Luritja responded by migrating to European station settlements where government rations supplied in exchange for labour and artefacts gave some immediate relief to their situation (Hartwig 1965; Long 1989; Scherer 1994). As indigenous emigration from the Western Desert increased, both in terms of shortterm visitation and long-term residence, semi-permanent camps were formed in the vicinity of most stations (Hartwig 1965; Long 1989). It may be argued that this sedentism was a decision by Aboriginal people 'consistent with a tradition of opportunist exploitation of resources when and where they appeared' (Long 1989:34). Yet, once they had made the move to the stations, it was difficult for Aboriginal families to leave (Kimber 1979; Long 1989; Hamilton and Vachon 1985). In addition to providing rations as an enticement to stay, pastoralists took an active role in discouraging indigenous people from leaving because they had an obvious interest in their whereabouts and activities.

the cattle men...quite specifically directed the activities of Aboriginals on their properties...I have talked with one old pioneer fellow up here who said that anyone who went off a station, at least in some areas, was forcibly taken back, or else forcibly hunted down.

(Kimber 1979:784)

By 1900, most of the Luritja once occupying the range had become estranged from their own land and dependent on the cattle stations and ration depots of European settlement. The plateau of the range had been abandoned and semipermanent occupation of the range ceased (Hamilton and Vachon 1985). Meanwhile, by living on or near stations the Luritja gained access to a wider range of European influences and developed different kinds of relationships with the settlers, some of them working as stockmen or station hands.

Despite a growing involvement with life on European settlements, the Luritja returned intermittently and for short intervals to their distant country whenever possible: e.g. during the 'off season' of the pastoral industry or on 'dogging' (Aboriginal people hunted dingoes [dogs] in order to supplement their rations with a bounty paid on dingo scalps) (Bowman 1989; Smith and Rosenfeld 1992). Nevertheless, the greater expanse of traditional homelands remained at a distance to most. Luritja women and children had limited opportunities to leave the stations, particularly as the women were sought by European men for cleaning and cooking services and for sexual companionship.

Luritja men were somewhat less constrained by the conditions of colonial settlement and those who had relocated to pastoral stations such as Tempe Downs were able to return to the George Gill Range under the legitimacy of routine stock work (Bowman 1989; Hamilton and Vachon 1985; Kimber 1979; Maurice 1989). These visits provided key opportunities for Luritja stockmen to activate their rights and responsibilities to sites and renew traditional cultural practices of marking land and identity. The relatively well-watered southern end of the George Gill Range remained a strong focus for pastoral activities well into the twentieth century (Bowman 1989; Pearce 1985a) with stock activities converging around rock holes and on the mulga flats abutting the southern base of the range. There was little need for venturing into the interior or ascending the range, except to search for stray cattle or to grasp the panoramic views.

The sedentism of station life continued to limit access to the wider Luritja landscape. An ongoing effect of this contraction in the traditional landscape was the loss of access to key resources and possibly key social relationships. It is ironic that, on the one hand, the conditions on European settlements strained existing social ties and at the same time encouraged interaction between different social groups. The close proximity of different individuals and social groups exaggerated the competition over local resources and fuelled existing enmities (Bowman 1989; Scherer 1994; Strehlow 1969). The increased pressure on local resources, and the exploitation of Aboriginal women by white stockmen led to renewed tensions between Aboriginal and European people and within indigenous social groups. A long period of payback killings ensued (Bowman 1989; Kimber pers. comm. dated 1995) which may ultimately have been the

reason Matutara people 'left the [Tempe Downs] area and moved to somewhere near Charlotte Waters' (Bowman 1989:27–31).

Rock art as indigenous agency and response

It is my proposition that the rock art record of Watarrka National Park marks the changes in the physical, economic and social spheres encompassed within the emergent colonial landscape outlined above. The distribution pattern of precontact rock art sites mirrors the open landscape that Luritja people inhabited and traversed prior to European settlement. The range of pigments and techniques used during this time similarly reflects a wide network of social alliances and resources. The perpetuation of a basic range of graphic forms may also reflect this period of relative stability.

One of the most distinguishing features of rock art produced prior to long-term contact with Europeans is the predominant use of red ochre for painting and stencilling. Contemporary and historic accounts indicate that there are several sources of ochre in the vicinity of Watarrka National Park. Harney (1963:109) refers to two major sources of ochre: (1) 'Butler's Dome, which is known to the Loritdja elders as "Mundaru-rungga" because of the red sand and ochre deposits around' and (2) 'Eyowa, a red ochre quarry, seven miles from Wolonga, northeast of Angus Downs'. The latter may be the same place referred to by Spencer (1896:78): 'somewhere to the south of the Levi Range is a patch of red ochre, which amongst the natives is a valuable asset and is traded over considerable distances'. Spencer and Gillen (1899: 446–63) also refer to a place called 'Wankima (west of the River Jay), and about a hundred miles further to the east are well-known deposits of red ochre...[and] Near to Stuart's Hole, on the Finke River, there is a red ochre pit which has evidently been used for a long time.'

A key source of prime red ochre for the people of the eastern part of the Western Desert located near the George Gill Range has been identified as an important women's site (Hamilton and Vachon 1985; Laughton pers. comm. dated 1994). Ochre was regularly retrieved for use in rock painting and ceremony and as an important commodity for trade by the women who had access to this locality. It is possible that the provisioning of ochre may have been limited if the appropriate women were unable to visit this area. In addition, the decline of large-scale social gatherings after the introduction of pastoralism also meant that valuable commodities such as quality ochre would have become scarce. In contrast, charcoal was easily acquired from the campfire or from the remains of a burnt tree and required no preparation for drawing. It is my suggestion that as ochre became harder to obtain, the Luritja adopted the more convenient and expedient material of charcoal.

Although charcoal was available prior to and during contact, its function clearly changed over time. Previously charcoal had been prepared similarly to other pigments, as a wet pigment suspension for painting and stencilling. However, after contact charcoal was used solely as a dry pigment. The technique of drawing with dry charcoal may have been more responsive to the social demands generated by the conditions of contact in that it required less time and energy, both in terms of resource extraction and preparation, than the technique of painting with wet charcoal. Furthermore, the expediency and availability of the material made it well suited to the schematic renderings of new impressions of European forms.

There are other explanations for why changes in media and technique developed during contact. The first is that indigenous efforts to record the presence of Europeans were a conscious departure from tradition. Their decision to substitute charcoal drawing for ochre painting may have been a way for indigenous people to render foreign forms and external entities without wholly incorporating them within their art system. This interpretation is strengthened by the economic and spiritual values attributed to ochre. The potency of red ochre is well documented (Hamilton and Vachon 1985; Spencer and Gillen 1899) and as such it may have been culturally inappropriate or unwise to paint the forms of foreign subjects with such powerful material.

As Luritja families retreated to the rugged interior and elevated regions of the Northern Plateau of the range, it is likely that white men, horses and cattle were amongst their foremost concerns. The depictions of figurative forms may have been produced within a 'storytelling' or instructive context, as a way of communicating the novelty of European forms and activities to one another. By adding the foreign shapes of colonialism and the knowledge associated with them to their graphic repertoire, Luritja artists may have been effectively disarming the 'shock of the new'. Stylistically, the figurative drawings of the Northern Plateau do not conform to the remaining rock art in the Park. The depiction of European subject matter stands out against the traditional geometric and 'track' graphics (Figure 11.4). In this way the basic structural and aesthetic differences between the 'traditional' Luritja graphic system and the figurative art component may symbolize the difference between change arising from internal forces against change as directed by external stimuli.

A complementary reading is that figurative forms were employed as a tool for demarcating the external forces of colonization from the internal dynamics of the traditional indigenous experience (see Haskovec and Sullivan 1989). It is plausible that figurative forms were developed as an inventive medium for the expression of new and unfamiliar entities, possibly as an innovative way of comprehending and expressing new information while simultaneously being a deliberate marker of difference intended to denote externality and exclusion. Rather than encoding and thus accepting European values and entities within the internal structure of the graphic system, they were kept at a symbolic distance, as a means of distinguishing the 'us' from the 'them'.

As they gravitated towards stations, Luritja grew more accustomed to the cattle, horses and other features of a colonial settler lifestyle that they had once distinguished in their art. The increasingly common presence of Europeans, cattle and horses may explain why Luritja people no longer needed or desired to



Figure 11.4 Graphic representation of rock art in Watarrka National Park.

Note: Due to the potential sensitivity of some graphic designs these representations are only meant as an illustration of the kinds of graphic designs present at Watarrka National Park and should not be taken as an accurate reproduction of specific designs.

distinguish this feature of their lives through their art. By this time many of the Luritja men visiting the range were involved in droving and other stock activities. The focus for stock work lay along the southern base of the range and in this area there is a distinct absence of figurative charcoal drawings. What does appear to be specifically associated with Southern Base sites is a greater diversity of graphic designs and an increase in the number of elaborately structured designs. The availability and expediency of dry charcoal drawing meant that it continued to be a mode of production more adequately suited to fulfilling the demands of the changing social environment, where access to resources had become increasingly difficult and strategies were employed to maximize resource yield.

A variety of evidence from throughout Australia attests to the prevalence of charcoal drawing and other time- and resource-efficient media and techniques of art production, such as light scratchings, in the context of Aboriginal-European contact. Examples have been noted in the rock art of the Kimberley District (O'Connor, pers. comm. dated 1995; Mulvaney 1996; Wallahs pers. comm. dated 1996), in the Sydney-Hawkesbury region (Macdonald 1994; Franklin 1984) and in Arnhem Land (McCarthy 1960; 1979; Taçon pers. comm. dated 1996; Turner 1973; pers. obs. 1995). O'Connor (pers. comm. dated 1995) in particular has observed thinly scratched graphic designs and charcoal drawings over paintings in rock shelters in the Kimberley region of northwestern Australia. The Aboriginal people with whom she was working stated that the drawings and scratchings were the same as the paintings in these sites but that they had been done while working with cattle at a time when the people were no longer going to places to get ochre. In this instance it would seem that the scratchings and drawings were developed as a substitute for ochre art.

The shift at Watarrka in the distribution of art sites from large shelters suitable for family camping towards small clusters of single event sites situated around rock holes strengthens the interpretation for an itinerant pattern of land use. This suggests that the Luritja were responding to the different kinds of conditions and social relationships that station life presented and a different stage in the process of contact.

As access to traditional homelands diminished, so too did the social, subsistence and spiritual knowledge base associated with this landscape. It is suggested that in the face of this displacement, Luritja stockmen took active measures to maintain their country and social identity and to promote group cohesion. In place of an interest in figurative forms, the increasingly elaborate designs they drew in charcoal demonstrate a renewed emphasis on the visual language of the *tjukurrpa* and a concern for maintaining connections to country. The impetus for maintaining these links was not only their physical displacement from the land but the added social pressures wrought by their migration to European settlement. While the new range of social influences encountered on stations may offer some explanation for the greater diversity in graphic designs (following Conkey 1980), it also provides a context for understanding a climate of changing priorities geared more towards managing the stress of local conditions and relationships than the operation of an open network of social alliances.

As social relationships shifted for Luritja people, the priority of rock art production was to reinforce social and spiritual links to country. Hence we see an emphasis on the assertion of social identity and the rights to resources that came with that identity. This is expressed graphically with an increase in re-marking and a continuity in hand stencilling and hand outlining. These are all indicators of renewed interest in reinforcing a symbolic and tactile connection to the land. The re-marking of hand stencils is a particularly evocative symbol of a person's connection to country.

Another component of this interpretation is that in response to the gradual displacement from their country, the Luritja compressed a larger landscape of rock art sites, and their associated graphics, into a smaller portion of the accessible landscape. Furthermore, the elaboration in graphic structure that occurred at this time may have been an attempt to encode more 'country' and more knowledge of country within a single graphic construction.

CONCLUSION

Prior to sustained Aboriginal-European contact a greater number of widely dispersed sites were used for the production of rock art than during contact where fewer sites were used more intensively. I have argued that this indicates a shift from a wide-ranging use of an expansive landscape to a more intensive use of a contracted landscape. The intensification in rock art activity during contact is not only observable in the distribution of sites across the landscape. Graphic designs within themselves show an increase in elaboration of form and detail. In addition the shift to using unprepared charcoal also reflects a process of focusing artistic intent into matters of foremost concern, maintaining links to land and *tjukurrpa*.

To summarize, I suggest that the landscape of rock art production is both a mirror and a response to the contraction in economic resources and social networks experienced by Luritja people during contact. The distribution of rock art sites shows shifting settlement patterns which reflect different responses to and different stages of a process of cross-cultural contact. Initially, the traditional Luritja geography contracted to the elevated regions of the range, away from colonial encounters. In these areas there was an emphasis on the representation of new forms and the application of charcoal media in new ways.

Under different social and economic circumstances, the Luritja landscape was re-aligned in favour of locations associated with colonial settlement because this became the new focus for all aspects of life. Similar parallels are drawn by Arndt (1962), Morphy (1993) and Clarke (1994) for Northern Australia. This process is rendered stylistically in the rock art of contact whereby changes in the social landscape led to a restructuring of the graphic system, just as the graphic system articulated the reconfigured landscape. Following their physical displacement from their country, more overt allusions to distant places became important. It became a priority to re-establish the links to the *tjukurrpa*, the central life-giving

and governing force of these places. The graphic designs symbolizing or associated with less accessible regions of the landscape could be constructed, from a distance, at and into sites that remained accessible along the Southern Base of the range. In this way drawing became a means of recovering the distance between the artists and the totality of their landscape. By drawing the graphic designs of their country, they were drawing the stories, places, beliefs and people associated with that country. In the process of conjuring distant places, graphics became more elaborate, resonant with the echoes of associated places, people and other levels of knowledge.

The severity of social changes brought about by the expansion of European settlement to central Australia was recorded by the Luritja and their kin within a series of dramatic alterations to their traditional graphic system. In observing these alterations within the graphic system, it becomes clear that the rock art produced during the process of European contact embodies a period of adaptation, innovation, disruption and loss. As part of the same process, the enduring consistency of certain conventions is affirmed. It is important to emphasize that contact rock art production in Watarrka National Park reflects a change in degree rather than a change in kind.

In reviewing this process of constructing and socializing the Watarrka National Park landscape, certain themes have emerged. The first highlights a history of Aboriginal-European relations that have evolved to create a brokered landscape in which the exploitation of and competition over resources and the access to and control over specific landscapes or geographic features reflect both conflict and co-operation which has led to both continuity and change. The second lies in the active layering of the landscape that derived from different processes of marking the country. Changes in the rock art of Watarrka National Park provide an important record of the process of negotiation between Aboriginal people and outsiders. The rock art is a potent expression of continuity and innovation.

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Researching the past: oral history and archaeology at Swan Reach STEVEN HEMMING, VIVIENNE WOOD AND RICHARD HUNTER

Far from being dead, passive or conservative, the past is dynamic, active and potentially revolutionary. It has been, and continues to be, a powerful reality in which we can root our autonomy, our sense of ownership of ourselves, and our resistance against assimilation. To paraphrase the philosopher Marcuse, there is a liberating power in remembrance. And, in fact, what we are rediscovering is that our past, far from being a source of constriction, can be a source of freedom.

(Dodson 1994:2)

INTRODUCTION

The sense of connection to particular places in the landscape continues to be central to many Aboriginal people from the Murray River in South Australia. Place is a defining aspect of identity. Association with places such as the former mission site at Swan Reach provides a crucial aspect of the cultural identity of an individual (Figure 12.1). Place transcends time and provides a connection between the Aboriginal people who live in the region today (for example, one of the authors of this chapter, Richard Hunter, who grew up at Swan Reach) and all the people who lived there in previous times.

Using archaeological evidence obtained during excavations in 1993, it can be argued that indigenous Australians have lived on the site of the former mission at Swan Reach on the Murray River for at least 1,700 years (Figure 12.2). At a nearby burial ground archaeologists obtained dates of 18,000 years ago for Aboriginal occupation of the region (Pretty 1977:317). Aboriginal people, however, argue that they have lived in this area for time immemorial. Old dates can be useful to Aboriginal people when claiming their rights to the land, but we argue that there is a need for more archaeological research into the period since the European invasion of Australia to enable a better understanding of the connection that contemporary Aboriginal people have with their 'pasts' and their 'countries'. We also argue that the use of the term 'prehistory' in Australian



Figure 12.1 View of Swan Reach Mission looking towards the old Mission house, *c*. 1938. (Courtesy of South Australian Department of State Aboriginal Affairs.) archaeology has helped create a false dichotomy between contemporary Aboriginal people and their pre-European pasts (Langford 1983; Pardoe 1990; Hemming 1995; Colley and Bickford 1997).

The Swan Reach project has taken a multi-disciplinary approach using archaeology, oral history, archival research and anthropology to develop an understanding of Aboriginal relationships to the Swan Reach site and the associated area. Local Aboriginal people involved in the project have critically influenced this direction and their interests have demanded a broad approach to research. We are interested in the ways that Aboriginal people organized their lives at this particular place. We want to know what archaeological research can tell us about the responses to changing social and environmental circumstances brought about by European invasion. Above all we want to recognize that this place, and the material remains associated with it, have a long-term significance for Aboriginal people and that their relationships with it and the histories it evokes are crucial to understanding the meaning of this place and the significance of what is described in European terms as the archaeological record.

KNOWING/CONSTRUCTING THE PAST

The historian Bain Attwood, in a critique of what he describes as Aboriginalist discourses, writes that 'the discourse of archaeology is seen to subordinate Aborigines to prehistory' (1992:ix). As Tim Murray has pointed out, archaeology



Figure 12.2 Location of Swan Reach Mission on the River Murray in South Australia. (Drawing by Andrew Noble.)

in Australia has lagged behind other disciplines such as history and anthropology in 'historicising Aboriginality' (1992:18). The implication in archaeology's previous preoccupation with the prehistoric is that the only 'real' Aborigines existed before European invasion. Ethnoarchaeology has contributed to this impression by judging the value of the study of contemporary Aboriginal cultures or ethnographies and historic sources on the basis of how much they can tell about the 'real' Aborigines of the prehistoric past. Only recently have Australian archaeological projects begun to use these sources to shed light on the more recent Aboriginal, post-invasion past (e.g. Rhodes and Stocks 1985; Brockwell *et al.* 1989; Birmingham 1992; Clarke 1993; Murray 1993; Hemming and Cook 1994; Hemming 1995; Harris 1996; Anderson 1997; Colley and Bickford 1997). The use of the term 'prehistory' in Australian archaeology has been criticized by indigenous Australians as a Eurocentric view of Australia's past (Langford 1983; Narogin 1990; Pardoe 1990; Dodson 1994). This term creates an artificial division between contemporary Aboriginal people and their past. Static models of culture, popular in early anthropology together with images of Aboriginal people as examples of what were considered by Europeans in the early twentieth century as 'Stone Age primitives', continue to colour the use of the term prehistory in Australian archaeology (Langton 1981; Cowlishaw 1987; 1992).

More recently, Tim Murray has written about the creation of what he describes as a 'post-Mabo archaeology'.

First, such an archaeology will allow us to comprehend the archaeology of the continent (both pre-European and contact) in a way which acknowledges that despite the fact that there were very real differences between the Aboriginal world of the eighteenth and nineteenth century and that of previous millennia, this is all properly the heritage of contemporary Aboriginal people.

(Murray 1996:77)

Murray then proceeds to call for a 'polyvocal' post-Mabo archaeology which accepts that 'other groups have rights and interests in that archaeology, especially in its interpretation and explanation' and that the 'Australian public will be able to make an informed choice between competing accounts of the past; one that will not be founded on the censorship of unpopular views' (ibid.: 77). Murray appears content for Aboriginal people to 'manage' their Aboriginal heritage and to have 'custodial rights', but at the same time he stresses the rights of 'others' to interpret and explain this heritage. He should have placed the emphasis on Aboriginal rights to interpret their own history rather than stressing a 'static' role as custodians. This post-Mabo archaeology resembles archaeological interpretations of Aboriginal history that continue to function as colonizing discourses. It must also be said that Murray's view of contemporary Australia is politically naïve. It takes little account of the position that Aboriginal people occupy in Australian society and in particular, their extremely limited influence over powerful 'educational' tools such as newspapers and television.

Most importantly for this chapter, in his discussion of post-Mabo archaeology Murray fails to emphasize the significance of what we argue is the central reason why Australian archaeology has largely ignored post-European Aboriginal sites, this being that archaeologists have constructed post-contact Aboriginal culture as unauthentic. Murray then fails to recognize this Aboriginalist construction as a critical act of colonization by the discourse of archaeology.

There is an epistemological problem inherent in the differences between archaeological and Aboriginal ways of knowing the past (Pardoe 1990:208). Many Aboriginal people view the 'past' very differently to the separate, 'dead past' constructed by archaeology (Dodson 1994). In her 1983 article, criticizing
what she calls the 'science of archaeology', Ros Langford, a Tasmanian Aborigine, presents an Aboriginal perspective of the politics of the so-called prehistoric Australian past:

From our point of view we say you have come as invaders, you have tried to destroy our culture, you have built your fortunes upon the lands and bodies of our people and now, having said sorry, want to share in picking out the bones of what you regard as a dead past. We say that it is our past, our culture and heritage, and forms part of our present life. As such it is ours to control and it is ours to share on our terms.

(Langford 1983:2)

Indigenous people worldwide have encountered the same struggles over control and definition of their pasts (Trigger 1985; Layton 1989; Condori 1989; Lightfoot 1995). The relationship between constructions of the past and identity is a central theme in these struggles (Dodson 1994). This issue has been discussed in detail in more general studies of the relationship between the past and the present in the construction of Aboriginality (Cowlishaw 1987; Beckett 1988; Keen 1988; Attwood 1989; Keefe 1992; Bourke 1994).

In his useful survey of European theories of human action and time, Christopher Gosden stresses the importance of critically re-evaluating the way that archaeology as a discipline has theorized time.

Fabian (1983:16) has noted that it is curious that archaeology and anthropology should have built their temporal theories of human society around the notion of a single form of measured time just at the period when this idea was about to be discarded by physics. It is even more curious that the idea of a single form of time measurement should have persisted ever since.

(Gosden 1994:5)

Gosden argues that time is 'the crucial element in all human activities' and that it is not only socially created but also 'an aspect of bodily involvement in the world' (ibid.: 7). His investigation of the connection between human action, the material world and time provides useful insights into the nature of Aboriginal relationships with Swan Reach. A long-term, common experience of life at Swan Reach is the regular flooding of the Murray River. The subsequent impact of this event on the lives of Aboriginal people can be traced in the archaeological record, archival sources and oral histories and witnessed by high water marks carved on river red gums and the lines of trees that follow old flood peaks.

The inclusion of 'historical' archaeology (although we prefer the general term archaeology without adding constructions such as 'prehistory' and 'historical') in the study of Australia's indigenous people is critical to Aboriginal people. Many Aboriginal people living in the southern part of the country constantly battle with misconceptions in the general community that they are not 'real' Aborigines, because they are perhaps fair-skinned, they live in towns and they often speak English rather than a separate Aboriginal language (Langton 1981; Beckett 1988; Bourke 1994; Hemming 1995). Richard Hunter provided a personal example of these misconceptions to the World Archaeology conference in New Delhi.

In broadening my knowledge of heritage as far as recording, protecting and oral history, and further to the preservation of these sites I believe that historical archaeology is very important because it supports what the local Aboriginal community know about their own local area. It is also a very significant way of breaking down the stereotyping of Aboriginal people. The stereotyping that Europeans expect of the Aboriginal person is to have an Aboriginal person standing with his left foot resting on his right knee with a spear and woomera and waddies in his hand or similar to that shown in the slides [refers to slides being shown during the presentation]. This is an important issue with Aboriginal people of southern parts of Australia. Because to be regarded as a traditional Aboriginal person one had to be of 'full-blood' as seen by early invaders. Even today Aboriginal people are still carrying out traditional methods of hunting and gathering food, methods of our ancestors, but are not recognised as real Aboriginal. Our skin colour has changed from black to pale, we don't speak our language, particularly in the southern parts of Australia, only speak English. We have settled in large towns along the river, also in cities, we still use a lot of traditional methods. We still also pass on all our information to our children.

(Wood et al. 1994)

There has been limited archaeological research carried out on post-contact Australian Aboriginal sites (see chapters in this volume). Some of this has tended to build models of 'cultural loss', assuming that as Aboriginal people adopt material elements of European culture they lose their 'traditional' Aboriginality. This model severely limits an understanding of the changes that have occurred in Aboriginal cultures since contact with Europeans, and it does not allow for a recognition of the adaptability and survival of Aboriginal cultures. As Trigger and Robins have pointed out, the use of the label 'traditional' for Aboriginal people living in remote settlements, in contrast to people from rural and urban social contexts has long been heavily criticized. They ask, 'Is a new belief or practice any less "traditional" than an old one?' (Trigger and Robins 1987:41).

Judy Birmingham's work on Wybalenna, the 1830s Aboriginal 'settlement' on Flinders Island, is the most detailed published account of archaeological research on a post-contact Aboriginal site. She is critical of the accultural studies (e.g. Linton 1940) that assume an 'acceptance of coloniser dominance' (Birmingham 1992:176). Instead Birmingham uses Leone *et al.'s* (1987) work on dominant

ideology as a basis for her theoretical interpretation of the Wybalenna site. She argues that the archaeological record can be used to question the dominant ideological constructions of the written record.

The archaeology at Swan Reach has been conducted with an understanding of these theoretical developments in 'colonial' archaeology. It is, however, the disciplines of anthropology and history, the writings of indigenous Australians, and the critical ideas of Aboriginal people working on the project which have been most influential in framing the approaches taken in this chapter (see, for example, Langton 1981; Kartinyeri 1983; Beckett 1988; Keen 1988; Morris 1989; Attwood and Arnold 1992; Huggins 1993; Dodson 1994).

SWAN REACH

Swan Reach is a small South Australian town on Australia's longest river— the Murray. Across the river from the town is the site of the former Swan Reach Aboriginal Mission (Figures 12.1 and 12.2). In the vicinity of Swan Reach the river winds its way through limestone country carving spectacular cliffs. Large swamps have also been created by the Murray River's regular flooding and they attract a wealth of bird and animal life. The former Swan Reach Mission site is located on a sand levee and flood plain immediately adjacent to the Murray. Through archival research and oral histories it is clear that the site was used as an Aboriginal camping area from at least as early as the late 1800s.

In recent years the impact of tourism on the site has been severe. Richard Hunter, Chairman of the Mannum Aboriginal Development Committee, has been keen to have the site preserved and incorporated into plans for a cultural tourism complex, centred on the location of one of Australia's most significant archaeological sites at Devon Downs, not far south of Swan Reach on the River Murray (Hale and Tindale 1930). Hunter, working with elders in the community, has been encouraging research into the Aboriginal heritage of the region, focusing on rock art, site recording, historical research, and archaeological excavations. He sees the archaeological excavations at Swan Reach as providing useful additional knowledge and stronger arguments for the protection of the site.

In the early 1990s Hunter obtained significant research funding through the Murray Darling Basin Commission. Some of this funding was used to conduct an investigation of historic and contemporary places of significance to the Aboriginal people in the Mid-Murray region. Hunter invited Steve Hemming to work on this project (Hemming and Cook 1994). As a continuation of this research focus further funding was obtained to enable an archaeological study of the Aboriginal significance of the Mid-Murray region. Richard Hunter, Colin Cook (an Aboriginal elder) and Steve Hemming had been coordinating the research to this point and it was decided to concentrate the archaeological research on the former Swan Reach Mission as one of the principal Aboriginal sites in the area. This sequence of events brought together the authors of this

chapter: Steve Hemming, a museum-based historian; Vivienne Wood, a contract archaeologist; and Richard Hunter, the chairperson of the Mannum Aboriginal Progress Association (now Aboriginal Development Committee).

In September 1993 four weeks were spent excavating at the Swan Reach site and during this period oral histories were recorded with local Aboriginal and non-Aboriginal people as part of the research process (Wood and Hemming 1994). In particular, Aboriginal people from South Australia's Riverland travelled to Swan Reach to participate in the research. Considerable historical research and site recording had already been carried out by Hemming and Hunter prior to the excavation as part of the broader Mid-Murray project.

History since invasion

The explorer Captain Charles Sturt and his 1830 exploration party were probably the first Europeans to make contact with the Aboriginal people of the Swan Reach area (Sturt 1833). They were followed in the late 1830s and early 1840s by 'the overlanders' bringing sheep and cattle along the River Murray to the newly established South Australian colony. Intense conflict occurred between the overlanders and the Aboriginal people of the Upper Murray in South Australia. This conflict culminated in a massacre of Aboriginal people at the Rufus River (Hemming 1982). Following this period of conflict, a ration depot was established at Murrundi (Moorunde), just north of Swan Reach. Aboriginal people along the Murray in South Australia began to experience the new system of control developed by the Government—the ration system (Foster 1989).

The explorer and first Sub-protector of Aborigines at Murrundi, Edward John Eyre, wrote an account of his explorations which contains a description of the lifestyle of the Aboriginal people of the Mid-Murray at the time of European contact. It remains the most detailed account of the early Aboriginal culture of the region (Eyre 1845, vol. 2:147–512). However, the history of the changing lives of the Mid-Murray Aboriginal people has not been documented and only appears in a fragmented fashion in brief articles and books dealing with more general subjects (cf. Bellchambers 1931; Tindale 1939; Cato 1976; Mattingley and Hampton 1988; Pring 1990; Berndt *et al.* 1993).

After Murrundi was abandoned in 1856, it appears that Mid-Murray Aboriginal people who lived in the region continued to live in camps focused on the River. They also established fringe camps around the new towns in the area. In 1901 the Matthews family opened a mission at Manunka north of Mannum. This mission continued until 1911 and in 1925 a second mission opened in the region at Swan Reach. The Swan Reach Mission was run by the United Aborigines Mission (UAM) (Mattingley and Hampton 1988: 221–6). The Mission was formally declared an Aboriginal reserve in 1938 giving the Aboriginal people living on the site at least short-term security. The mission became more formalized and new hessian and iron houses were constructed (Hemming and Cook 1994). The houses were located either side of a track which

ran roughly parallel with the river (see Figure 12.1). Although hessian and iron houses were built during the mission period, people continued to use 'wurleys' or temporary shelters and spent much of their time living outside the formal structure of the mission.

In 1945–6 the UAM shifted their activities to their new mission, Gerard, located in South Australia's Upper Murray (ibid.). Many of the Mid-Murray people moved to what is called locally 'the Riverland' and started a new life on Gerard Mission. Some families continued living on the old Swan Reach Mission site until the early 1970s. By the 1960s and 1970s many Aboriginal people with a Mid-Murray background were living in towns along the River such as Mannum, Swan Reach, Barmera and Berri, and on Gerard Mission.

Richard Hunter and a number of other Aboriginal people have provided accounts of their lives on the Swan Reach Mission and the period prior to its establishment in 1925 (Hemming and Cook 1994; Harris 1996; Anderson 1997). The knowledge of some of the elders has been invaluable in understanding the lives of Aboriginal people during the twentieth century, but also the latter half of the nineteenth century. Much of the history of this latter period does not exist in the archival records or is only accessible through the eyes of European observers. Images of adaptation and resistance can also be found in the archaeology where they may be masked in the European writings describing the same situation (Rubertone 1989; Birmingham 1992).

The archaeological investigations

Surface features of the Swan Reach Mission were mapped and a number of areas (SR1-SR9) including the three occupation sites discussed below (Figure 12.3) were chosen for excavation. The decisions on where to excavate were made on the basis of advice from Aboriginal people together with archival and oral history research conducted by Hemming and Hunter (Wood and Hemming 1994). Along with the memories of Aboriginal people we used old photographs to determine the best locations for excavation. These photographs evoked Swan Reach memories and histories from Aboriginal people (see Edwards 1994 and Hemming 1995 for examples of 're-engaging and re-activating' museum collections by using photographs as a fieldwork tool). A number of the photographs were poorly documented examples of the South Australian Museum's collection. From the photographs younger people acquired visual markers for the stories their old people told them. For the researchers, the photographs identified the locations of particular sites such as wurleys or temporary shelters, and drew detailed explanations from the older Aboriginal people. For example, Colin Cook, the senior male Aboriginal adviser, suggested that the wurley (Figure 12.4) shown in a museum photograph was an unmarried men's camp and that men often built wurleys at this location.

The three main locations selected were the first missionaries' house (SR1), which later became the home of Aboriginal residents Malcolm and Gertrude



Figure 12.3 Survey of Swan Reach site showing excavation areas SR1–SR9. (Drawn by Ria Djuwita.)

Cook (Figure 12.5), a wurley (SR5) shown in a 1930 South Australian Museum



Figure 12.4 Single men's wurley (SR5), 1930. Richard Hunter's father, Harry Hunter is seated third from left. (Photograph by H.Sheard, Courtesy of the South Australian Museum.)

photograph (Figure 12.4), and a shell midden (SR2) adjacent to the Murray River. The missionaries' house was the oldest on the mission, built in 1925, and little was known of the techniques used in its construction. It was also targeted for investigation because Richard Hunter was interested in exposing its foundations as a focus for cultural tourism. By selecting these three areas for excavation the aim was to acquire a set of data to compare and contrast the different modes of occupation at the site.

The old mission house (SR1)

Oral histories and old photographs showed that the old Swan Reach Mission house had four rooms, with a front and back porch which was enclosed with flyscreen wire. The house was constructed using hessian for walls and a tin roof, some of which was made from hammered-out kerosene tins. No glass was used for the windows; rather, hessian was hung over the casements. This type of construction was commonly used by Europeans living along the River Murray in this period in the first half of the twentieth century (Harris 1996: 11).

Next to the old mission house was William and Dorothy Cook's house. According to Colin Cook and Janet Karpany (one of the senior female advisers to the project) this was a single-roomed, hessian bag hut with a door facing the road. This was Colin Cook's family house when he was a boy.

The excavation revealed that the mission house measured 9 m by 8 m (Figure 12.5). Not enough of the smaller Cook family house was excavated to show its dimensions. Foundations of the walls and interior in both houses appear



Figure 12.5 The old mission house (SR1). (Courtesy of South Australian Department of State Aboriginal Affairs.)

to have been comprised of a locally produced, large limestone calcarenite rubble overlain by a layer of limestone gravel. The remains of an external chimney were identified at the old mission house.

Concrete slurry covered half of the exposed rubble foundation in the mission house. Oral history has indicated that this flooring was used in the kitchen/eating area of the house as it was easier to keep clean. Other evidence of flooring such as linoleum pieces were found throughout the house. Research at another Aboriginal house site has shown that linoleum floor coverings were only used in the kitchen area in the Aboriginal houses (Hemming and Cook 1994; Harris 1996:34; Anderson 1997). A compacted dirt floor was present in the remaining half of the mission house. The remains of six wooden posts were located, set in the coarse rubble foundation, and these appear to delineate the framework of the house. It appears that although the old mission house was constructed in a similar way to the Aboriginal houses, it was larger, more expensive and fitted with 'luxuries' such as linoleum throughout.

Refuse pits or hearths were located at the rear of both houses. These contained a range of discarded materials including burnt bone, nails, buttons, egg shell and the remains of fishing tackle. Aboriginal advisers told us that rubbish was often buried and burnt at the rear of houses. Outdoor cooking was also common. From the location of these features, and the types of material they contained, it appeared that they related to the Aboriginal occupation of the houses.



Figure 12.6 Disher's camp, 1932. Drawn by N.B.Tindale. (Courtesy of the South Australian Museum.)

On the banks of the river (SR2)

Once again, using old photographs to assist reflections by older Aboriginal people, a pattern of use of the riverbank was identified. Outdoor cooking was common during the mission period and families often joined together by the river to fish and cook their meals. A midden site was selected for excavation because of its proximity to the River Murray and the evidence of shell material of cultural origin visible on the surface. It was hoped that this site would provide evidence of long-term occupation. While a maximum depth of 120 cm was reached during the excavation of this site, the majority of the artefacts were retrieved from the top 34 cm of sandy deposit. These included recent beer bottle glass and bottle tops, fragmented crockery and a piece of worked glass. A charcoal sample taken from a depth of 25 cm was submitted for radiocarbon dating and a date of 102 ± 3 years BP was returned (Wood and Hemming 1994). This date approximates the establishment of the township of Swan Reach. Oral histories, both Aboriginal and non-Aboriginal, and archival sources, support the existence of an Aboriginal 'fringe' camp in this vicinity from Swan Reach's early years.

Four quartz flakes were recovered from a depth of 40 cm and these were roughly contemporaneous with a hearth feature which consisted of baked silty clay balls and charcoal. Six more stone artefacts were retrieved from depths ranging from 45 cm to 110 cm. A date of $1,700\pm390$ years BP was obtained from a charcoal sample retrieved from a depth of 60 cm. Some, if not all of these artefacts clearly correspond to a period of occupation prior to European contact. This date provides important evidence for the long-term Aboriginal occupation of this site and a continuity of practice from pre-European times to at least the mission period.

Wurley location (SR5)

As late as the 1960s at Swan Reach, wurleys were used as temporary accommodation for visitors, for single men who regularly shifted in search of work and for families who were also regularly moving for work. When travelling away from the mission Aboriginal people often lived in wurleys made from branches, hessian and other materials. Writing in 1843 Edward John Eyre provides an indication of the size of some of the 'pre-European' wurleys or huts in the Mid-Murray region.

Sometimes each married man will have a hut for himself, his wives, and family, including perhaps occasionally his mother, or some other near relative. At other times, large long huts are constructed, in which, from five to ten families reside, each having their own separate fire. Young unmarried men frequently unite in parties of six or eight, and make a hut for themselves. The materials of which the huts are composed, are generally small branches or boughs of trees, covered in wet weather with grass, or other similar material. At other times, and especially if large, or made in wet weather, they are formed of thick solid logs of wood, piled and arranged much in the same way as the lighter material, but presenting an appearance of durability that the others do not possess. In this case they are generally well covered over with grass, creeping plants, or whatever else may appear likely to render them waterproof.

(Eyre 1845, vol. 2:302–3)

In 1932 anthropologist Norman Tindale recorded in his journal a description of activities at what he called 'the Disher camp', an example of a temporary camp, located about three miles north of Swan Reach (Figure 12.6).

Parties of men and women were fishing and setting lines until dusk. Two small fires were placed near the centres of the hut group [wurleys] as shown in the following ground plan... The fires were extinguished or died down about 10 pm. At about 9 pm we heard a woman wailing for perhaps ten minutes. It sounded like the 'crying for the dead' of former times. I was up just before sunrise and saw two men winding their way to their boats in order to examine their lines. By sunrise 6 boats had set out. They were out for about an hour. On their homeward journey several rowed side by side talking as they rowed. Later in the day we met some of the men at the main Swan Reach camp and they said that they had had splendid fishing.

(Tindale 1930–52:19–20)

The description that Tindale provides holds many similarities to the observations of Eyre in the early 1800s. It is interesting to note that Tindale described the

Swan Reach Mission as a camp in 1932, before the formal layout of the Mission with white-washed, hessian-walled houses.

From oral histories recorded during the Swan Reach excavations it was suggested that people living in the houses organized their lives in a similar way to people living in the wurleys. In a museum photograph of a wurley at Swan Reach in 1930, Richard Hunter's father is a young man (Figure 12.4). Memories of fishing, playing football and drinking stories were evoked by this photograph. Several of the men appear to be wearing football boots. Colin Cook told us that the men at Swan Reach often wore their football boots all year round to assist with walking on the sandy areas throughout the mission.

The excavation of the wurley location exposed a number of features (Wood and Hemming 1994). A single chert flake was recovered from clean white sand at a depth of 24 cm and it is thought to be *in situ*. No further cultural material was located beneath this flake. The top of an intrusive and discrete refuse pit was encountered at a similar depth to the artefact in another area of the excavation. It contained two shoes (one leather, one canvas), crockery fragments, rusted metal, linoleum, canvas fragments, bone fragments of sheep, bird, fish and rabbit, and formed wood. Based on these contents it was interpreted as relating to the time the Mission was occupied rather than it being a more recent intrusion. A large metal hammer was also located in association with this feature. It was later identified as a boat building implement used by the main Aboriginal boat builder at Swan Reach in the 1940s and 1950s (Anderson 1997:114). No further cultural material was found below this pit.

An area of compacted or baked earth was located at a depth of approximately 8 cm, interpreted as being the remains of a cooking fire. A small amount of cultural material was retrieved from this feature including rusty tacks, copper wire fragments, fragmented freshwater mussel, bone, egg shell and a small amount of opalized glass. It is known from oral histories that during the 1930s and 1940s men predominantly lived in wurleys on this part of the Mission and what appear to be the earlier remains found on this site probably relate to men's activities.

DISCUSSION

A variety of artefact types were retrieved from the house and wurley sites including flaked stone artefacts, masonry and mortar fragments, some of which had been painted, formed timber, nails, screws, washers, hessian and linoleum fragments, glass, crockery fragments, buttons, beads, bullet casings, marbles, record fragments, coins, bone fragments (mostly sheep, goat, chicken, bird and rabbit), fragments of toys, bicycle valves and so on. The house site has often been used as a temporary camping site since the last Aboriginal families moved away in the late 1960s and early 1970s. Both Aboriginal and non-Aboriginal campers have used the area. Many of the materials retrieved from this site clearly represent recent, heavy 'tourist' use.



Figure 12.7 A wooden float recovered from excavations at the rear of the old mission house (SR1 on Figure 12.3). (Photograph by Scott Bradley.)

Remains of Aboriginal hearths appear to contain less charcoal and are smaller in scale than more recent 'tourist' camp fires. This can probably be attributed to Aboriginal cultural practices associated with domestic fires. People did not waste wood; they kept their fires small and controlled and maintained them until all the wood and charcoal was reduced to ashes and very small pieces of charcoal. Colin Cook, Richard Hunter and other Aboriginal people pointed out this cultural practice during site recording and excavations. Contemporary Aboriginal people in this region often still follow this practice.

Another interesting and unusual surface feature of the site was explained by Colin Cook as a result of the activities of Aboriginal children during and after World War II. The children used torch batteries as toy grenades and these were found scattered in large numbers across the site. According to Harris (1996:25), Agnes Rigney, a Mission resident, also provided this explanation for the presence of batteries to herself and Sue Anderson during their research. This example is important as a signal of the impact of the activities of children across the site. Children used everyday refuse as toys. Agnes Rigney and Colin Cook gave accounts of using cans and boxes as toy houses (Rigney 1992; Hemming and Cook 1994).

Fishing equipment in the form of nylon line, metal tackle, wooden floats (Figure 12.7), string and net fragments (Figure 12.8) were retrieved and the oral histories provide abundant evidence of fishing continuing to play a major part in



Figure 12.8 Fragments of netting and string from the excavations at Swan Reach Mission. (Photograph by Scott Bradley.)

the lifestyle of the people living in the area. Instead of the pre-European nets made of chewed plant fibres and sinews of animals (Tindale and Mountford 1936), an adaptation was made to the use of European string and nylon fishing tackle. Aboriginal men in the Lower Murray region often made their own nets from European materials although the knot used was slightly different to the conventional European knot (Hemming *et al.* 1989). Richard Hunter highlights Aboriginal adaptations.

When a ration depot was set up in this area, and because the amount of ration issued was small amounts, the practice was to supplement these rations by going out fishing, collecting wild fowl's egg, hunting ducks and animals, the local varieties of bush foods that were available at the time. My father and mother also continued these methods of providing food for the home and passing this information on down to their children.

The adaptation process is demonstrated by how the 'traditional' methods of hunting and gathering food change from having fishing nets and fish traps made out of chewed plant fibres and sinews of animals to string or nylon nets and traps, hunting methods from wooden instruments—waddies to guns.

(Wood *et al.* 1994)



Figure 12.9 Elders Sarah Taylor, Janet Karpany and Colin Cook at Swan Reach recording oral history, 1991. (Photograph by Steve Hemming).

In the early 1940s the Cook family held the licences for the fishing reaches worked by the Swan Reach people to the north of the mission (Figure 12.9). Commercial fishing was a major source of income for many of the Swan Reach families. Colin Cook's description is useful.

Then the other place we was looking at and that's down at Possum-Ville, only a few, few mile down from Dierssen. That's a quite, quite a significant spot, for the Cook family cause there was two families stayed there for quite some time and they built permanent sort of abodes there. Two bedroomed, kitchen affair abodes, that, it was perched up on the cliff, top of the cliff, and it was overlooking the river area. You're looking at our fishing reach and it was the beginning of my Dad's fishing reach extending from that position down river towards Swan Reach, and the tail end of Grandfather Torp's fishing reach. Dad was another, another licensed fisherman. And cause fishing an all these other things were the main, occupations of a, woodcutting, and when the fish were slack there was woodcutting and, shearing, that Dad and them used to do for some of the cockies [farmers] around the area.

(Hemming and Cook 1994:55)

The continuation of fishing throughout the region enabled Aboriginal people to maintain their connections with their country. They passed on their knowledge and cultural practices associated with the River and surrounds. Colin Cook pointed out the frequent camping trips along the River that his older male relatives organized for the boys of his age.

Grandfather Torp he used to come down the river bringing his fish, sell the fish and then when, stay there most probably on Wednesday and then we'd travel back on Thursday and we'd have a weekend with him and spend you know, spend time with him up there at Dierrsen's. And if it was during the holidays well we'd stop up there you know during the holidays whilst he, well stop there and then travel from there all the way up to Blanchetown and then travel back. But he'd take all of us lads on camping trips, during those holidays and; but that's the way he used to work it he used to come and pick us up and take us back with whoever wanted to go with him.

(ibid.)

Men, women and children caught fish to feed their families and often good catches were shared around the mission. 'We used to look forward to them days too, because that was the day everybody from the mission was down there and everybody had their share of the fish guts, better than the fish... the women used glass to scrape out the fish guts and scale the fish' (Rigney as told to Harris 1996: 22 and Anderson 1997:100, 102). Men also used pieces of glass for butchering game and making wooden artefacts (Hemming and Cook 1994). Aboriginal woodcarvers from the region still use glass to finish their artefacts. A number of what appeared to be glass tools with obvious retouching were obtained from the mission house site. Several stone artefacts were also retrieved during the excavation although most of these appear to be pre-European.

At the time of contact men carved a range of weapons for use in hunting and fighting (Hemming *et al.* 1989; Hemming 1990b). From the ethnographic record it appears that they often used bone and shell in the carving process. Due to the relatively sedentary lifestyle of the River people, the men had a specialized selection of weapons. Carved designs on the clubs, spearthrowers and shields were often intricate and complex. The carved designs represented the life-histories and totemic affiliations of the makers.

After European contact new materials such as glass and metal were used for carving. New weapons also became popular and spears and other weapons were used less in hunting and fighting. The men began to make weapons for sale to tourists and like the women supplemented their incomes through this industry. Woodcarving is still popular in this area today and important woodcarvers include John Lindsay, Bill Abdulla and Bluey and Ted Roberts.

Two small pieces of flattened basket sedge fragments were retrieved from the wurley site. The Aboriginal people at the time of contact with Europeans were making a range of objects from sedges *Cyperus gymnocaulos* that grew on the

sandy rises along the banks of the river and around the swamps (Hemming *et al.* 1989). Both men and women made basketry objects. These objects included mats, baskets, fish traps, coffins and cloaks. Some of these objects were sold to the South Australian Museum by Aboriginal people in the 1920s and 1930s. The basketry style can be described as single element, coiled bundle with a simple loop stitch (Hemming 1990a).

When the Europeans established missions such as Manunka and Swan Reach, the people continued to make baskets and mats for sale to tourists and for use in their own homes. Manunka was set up in 1900 by missionaries Janet and Daniel Matthews. It was situated downstream from Swan Reach and closed in 1911. Many of the people who lived at Manunka also spent time camping at Swan Reach. After the closure of Manunka many shifted their main base to the camp at Swan Reach which later became Swan Reach Mission. The missionaries considered the basketry to be an appropriate way for the women to spend their time and they also encouraged the sale of baskets and mats to tourists to help support the running of the missions. Aboriginal people still produce basketry in the River Murray region of South Australia using the same materials and the same style. Famous fibre artists include Ellen Trevorrow and Yvonne Koolmatrie.

Finding evidence of basketry in the archaeological excavations at Swan Reach can be interpreted as the continuation of an Aboriginal tradition. It can also be understood as an example of the impact of missionary control on Aboriginal culture and as a sign of the interaction between museums and Aboriginal people. Most certainly Aboriginal people reinforced local traditions through continuing basketry and passing on the skills to younger people. However, they now made a living from selling baskets and mats to Europeans who often saw these artefacts as representing exotic examples of 'real' Aboriginality as opposed to what they believed the lives of the mission people represented (Tindale 1930–52:55–7).

The houses and wurley locations that were excavated during 1994 related to a period at Swan Reach when government and mission authorities increasingly intervened in the lives of the Aboriginal people. The layout of the mission was made more formal in European terms. The houses were laid out on either side of a central road and the missionary's house was separate and positioned at the main entrance to the mission. This 'formality' would not be seen in equivalent itinerant European camps along the River in the same era. For the archaeologist this formality is a marker of an Aboriginal mission or reserve. The themes of control and surveillance can be clearly observed in the organization of space on the mission. Bain Attwood has examined the use of space by missionaries in their attempts to control and change the culture of Aboriginal people at a nineteenth-century mission in Victoria (Attwood 1989).

The people at Swan Reach, however, maintained a significant degree of control over their own physical and social environments. From the archival and oral history records it is clear that the mission represented only one 'place' in their network of Aboriginal places. Men, women and children continued to interact with their local environment in a way that was passed on to them by their old people. From the archaeological record there is evidence of wurleys located on the mission after the period that formalized housing was introduced. The mission was closed in the mid-1940s, but Aboriginal people continued to live on the site until the late 1960s and early 1970s. The area is still a regular camping area for Aboriginal people and many older people come back to Swan Reach to visit the former Swan Reach mission burial ground—now located on private land.

The diverse range of archaeological evidence listed at the beginning of this section points to the intense long-term use of this site by Aboriginal people and then short-term use by non-Aboriginal campers, many of whom would have been tourists. Aboriginal people, mostly with an association to the region, have also continued to camp on the site. The archaeological evidence located so far shows that Aboriginal people lived at this site for extended periods, particularly after contact with Europeans. They continued to use the local environment to make at least part of their living. They used European material culture, but lived in a small-scale settlement that always differed from the European towns, farms and camps along the River Murray. They were culturally different from the Europeans and this difference was accentuated by their political powerlessness and segregation from the dominant European society.

Swan Reach has remained an Aboriginal place. The lifestyle that Aboriginal people have experienced at this place shows considerable continuity over a long period of time. The findings of the Swan Reach project challenge Australian 'myths' of nationhood that depend for their authenticity on the extinction of Aboriginal people—particularly in the so-called 'settled areas'. In the growing Social Darwinist climate of the late nineteenth century, J.D. Woods writing about the Aborigines of the 'settled' districts of South Australia declared the following:

In many parts of that portion of the continent to which these pages specially refer [South Australia] they have entirely disappeared. Not a vestige of the Port Adelaide tribe remains. The Adelaide tribe is extinct, and so are those which dwelt near Gawler, Kapunda, the Burra, the Rufus [on the River Murray], &c. In none of these places can a single trace of them be found.

(Woods 1879:ix)

CONCLUSION

This project has combined a range of research approaches to understanding the history and significance of the Swan Reach site. The research started from a local Aboriginal initiative. Aboriginal direction of the project has continued to encourage multi-disciplinary research. Archaeological excavation was used at the site to add further evidence to the available oral histories and documentary records enabling as full an understanding of the site's history and cultural

significance as possible. Archaeology conducted on Aboriginal sites without significant Aboriginal participation will restrict the ability of the archaeological research to reach meaningful conclusions. It is certainly possible to make judgements and reach conclusions using archaeological research alone, but these will always be based on a non-Aboriginal interpretation of the evidence. This inevitably leads to the development of an archaeologically created divide between contemporary Aboriginal people and their pasts. It is important to remember that so-called archaeological sites are part of an Aboriginal cultural landscape and an understanding and recognition of this should be an integral part of an archaeological project.

The excavations at Swan Reach have shown that post-contact archaeology, in association with oral histories and documentary evidence, at Aboriginal sites can do much to remove the artificial division inherent in the terms prehistoric and historic archaeology (Lightfoot 1995)—terms that establish a division between contemporary Aboriginal people and their past. Occupation at the Swan Reach site has been shown to be long term and extending to the present day. Aboriginal relationships with the land developed since European invasion—a product of adaptation and continuity of culture—must be recognized as being culturally valid.

Through carrying out multi-disciplinary research on their important sites, Aboriginal people are performing a cultural activity that reinforces their connection with these places. They are continuing to add to the archaeological record with their renewed activity on the site and are using research projects to develop ways of 'getting back to the places' they see as important. Access to many of these places is now restricted by European land owners. Jenny Grace grew up on Nildottie Island, just south off Swan Reach, and cannot revisit the places of her childhood without fear of trespass.

I sometimes go back up to Nildottie and like to have a look around where we lived, but there's signs up all over the place. I did go there at the beginning of this year to have a look but I was expecting somebody to come with a shotgun because with the signs there, I was trespassing. I wouldn't mind being able to go there for a good look around without sort of feeling under threat that someone was going to come there with a gun or something and tell us to get off.

(Grace 1990)

Cultural tourism and the research projects that support its development are one way for Aboriginal people to use their knowledge of the region and its Aboriginal history to provide an economic basis for remaining on their own country, having the freedom to go back to places that they relate to, having a say in local development and moving towards self-determination based on the control of major business ventures. As Richard Hunter pointed out in an interview at Swan Reach in 1993, research will enable his community's younger people to develop an understanding of their history and through participation in research projects develop new histories to enable them to change their future in Australian society.

Well, my dream, which is one that I have been involved with for quite a long time now and hope to be for a long time into the future, is that eventually with all the projects that I am involved with: the Devon Downs site, Swan Reach Mission site, and all the site recording through Mannum and Morgan and all the appropriate archaeological finds and surveys that we do, that we will eventually build up a big dossier that will make the Aboriginal people especially the children aware of where their roots are who they are so they can walk straight ahead instead of looking down to the ground. So they can look people in the eye and not be ashamed of what they are, who they are. The other good plus out of this is it is also educating the white society making them understand or giving them the opportunity to understand us the Aboriginal people. And so that down the track, might be five or six generations time, that our kids carry on the work so that we both walk together and that no-one would notice the difference. (Hunter 1993)

Archaeology can assist with bridging the gap between Australia's 'prehistory' and contemporary Aboriginal culture to support rather than obstruct Aboriginal control over what is being labelled as cultural heritage, particularly in the 'settled' parts of Australia. Archaeological research that contributes to an understanding of the last 200 years of Australia's history can assist with the dismantling of this colonial construction. This research will also result in an increased understanding of how Aboriginal people have survived, changed and adapted in the face of a traumatic invasion of their lands. It is in this 'shared' past that Aboriginal people and archaeologists may find considerable common ground.

While archaeological evidence obtained during excavations of the former Swan Reach Mission has shown that indigenous Australians have lived on the site for at least 1,700 years, Aboriginal people argue that they have lived in this area for time immemorial. They lived at this place long before European invasion and continued to live there during the severe impact of early contact, or the 'killing times', and the subsequent period of control or in Foucaldian terms 'surveillance' imposed by colonization (Foucault 1977). They adapted to these changes and maintained their connection to their 'country'. The location became a town fringe-camp, an official United Aborigines Mission and returned to a fringe-camp before the last Aboriginal people shifted into the nearby township in the late 1960s and early 1970s (Hemming and Cook 1994). The Swan Reach 'site' (there are no actual structures remaining above ground) is still culturally very important to Aboriginal people from the region and is used regularly for camping, fishing and cultural tourism (Hemming 1994).



Figure 12.10 Colin Cook (right) and Richard Hunter reminiscing a few kilometres north of Swan Reach, 1993. (Photograph by Steve Hemming.)

The archaeological record can be a source of information about the impact that invasion had on Aboriginal people and the ways that they adapted to this situation. It should therefore be considered as an untapped and unique resource in the development of an understanding of the post-invasion history of the Swan Reach area. The actual exercise of excavation provided a unique opportunity for Aboriginal people to develop oral histories on the site and reflect on the results of the excavation. Memories were triggered by the sense of 'place' and the physical remains of the mission exposed by the archaeologists (Hemming and Cook 1994; Wood and Hemming 1994; Hemming 1995; Harris 1996; Anderson 1997) (Figure 12.10).

Through a combination of archaeological excavation, site recording, oral history recording, archival research and anthropology, Aboriginal people have developed new histories from their experience at the site and their encounters with the archaeological record (Hemming 1995; Harris 1996:18). In addition, their input has been used by the researchers to add new meaning to the archaeological record (Wood and Hemming 1994; Harris 1996; Anderson 1997). Aboriginal people have extended what Gosden (1994:15) has described as the 'network of actions' linking human actions and artefacts across time and space, to include a new relationship with Swan Reach and the material culture exposed through excavation.

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Resistance, creolization or optimal foraging at Killalpaninna Mission, South Australia JUDY BIRMINGHAM

COMPETING THEORIES OF CONTACT

Dominance-resistance theory has often been applied within studies of contact in order to highlight various aspects of the mostly unequal struggle between invaders empowered with superior technology, ideology and language, and the invaded who, armed only with an appropriate lifestyle and familiarity with local conditions, reacted by resistance (e.g. Beaudry *et al.* 1991; Deetz 1967; Deagan 1983; 1985; 1990; Miller 1989; Miller *et al.* 1989; Paynter and McGuire 1991; McEwan 1991; Farnsworth 1992). This chapter uses recent archaeological research at the Killalpaninna mission, South Australia (Figure 13.1), as a case study for assessing the relevance of dominance-resistance theory for a remote, arid-region, Australian mission site where in the latter part of the nineteenth century black-suited Lutheran Christians confronted their would-be congregation of highly specialized Aboriginal foragers (cf. Stevens 1994).

The data are mainly historical and archaeological, since contact archaeology here on the edge of the Simpson Desert in the lower Cooper Creek region is at the more distant end of the contact archaeology spectrum, close to the limits of first-hand Aboriginal oral memory. The mission closed in 1915, while the last Aborigines left the Simpson Desert soon after 1900. Neither the original inhabitants, the Dieri, nor their former neighbours have lived permanently on their traditional lands for many years (Hercus 1985) and those who knew the mission at first hand are no longer able to act as informants (Hercus and Sutton 1986; Austin et al. 1988; Stevens 1994:286–92, bibliography and interviews). Thus while the project maintained close communication with the Arabanna community in Marree, it can scarcely be classed as a community archaeology project in the sense of Anne Clarke's research further north where there is rich and developing oral memory to the present day (cf. chapter 6). Some anthropological studies have proved relevant (e.g. Meggitt 1962: esp. 75f.; Beckett 1964; Long 1964; Tonkinson 1974; 1977; Sansom 1980; Swain and Rose 1988; Anderson 1983; 1988; McGrath 1984; Mulvaney 1989; Brady 1986; Hamilton 1987; Kolig 1988; Berndt 1989). The Killalpaninna study is primarily



Figure 13.1 Map showing the position of the Killalpaninna (Bethesda) Mission on the edge of the Simpson Desert in the Lake Eyre-lower Cooper Creek marginal habitat zone, which was close to what was to become the major crossing over Cooper Creek on the Birdsville stock route (based on Digital chart of the World, US National Imagery and Mapping Agency 1997, and the Central Australia Archaeology Project GPS Survey 1997).

an investigation in the archaeology of recent times. It also places more emphasis on anthropological models than previous archaeological studies of missions in Australia (cf. Anderson and Robins 1988; Penney and Rhodes 1990; Gara *et al.* 1988; Davison 1985; Birmingham 1992; Kabaila 1995).

In a recent study van Dommelen (1997) has demonstrated how the archaeological interpretations of classical archaeologists about the colonialism of classical antiquity were significantly structured by contemporary nineteenth-and early twentieth-century imperial attitudes in all their ethnocentric superiority. No less at this time in the furthest corners of empire pioneering Christian missionizers shared similar views on 'savages' which varied from paternalism to contempt, as well as an unquestioning conviction in their own Christian values as justification for dominance. Indigenous populations were noted as responding either by embracing mission teaching, values and lifestyle, often known as 'missionization', or more commonly by resisting, overtly or clandestinely, by stubbornly retaining unacceptable features of traditional culture.

In contrast, archaeological exploration of colonial dominance can get further into the sensitivity of colonizer-colonized power play than is revealed in elegant colonial landscapes, smug institutional architecture and biased textual accounts of pastoral expansion. Archaeological research has explored the survival of symbolic or traditional items of material culture which demonstrate indigenous resistance (South 1990; Deagan 1990) and has also revisited challenging colonial outposts where colonizer dominance was at best precarious (e.g. Schrire 1991). Schrire (1984:2), in particular, has explored 'how archaeology and prehistoric inferences may articulate with historical records to provide a better understanding of current situations'. From a post-colonial perspective, then, many contact studies have perhaps over-emphasized resistance, defined more by the actions of the dominant than the positive and innovative reactions of the indigenous. This previous work has also set classically British rules for unBritish encounters across the planet. The rules do not easily allow for those who preferred to play a different game or chose not to play at all. In summary, 'resistance' may not be the most rewarding way of exploring either nonengagement or selective engagement between Europeans and non-Europeans in a colonizing episode.

The negative and disempowering connotation of resistance as a response to invasion is more problematic because in this view even cultural survival has a negative value. Activities of the invaders are characterized as positive, actioninitiating, and value-laden; the invaded emerge as victims whatever their response. Resistance theory as it stands is ill-equipped to explore new values, initiatives and innovative behaviours born out of the domination process itself and the dominance-resistance dichotomy constricts the systematic exploration of alternate behaviours. A final difficulty with dominance theory is that it lacks a dynamic dimension. In its simple form it reflects a state rather than a process, and does not formally address either mechanisms of change or its likely outcomes.

Creolization theory (e.g. Ferguson 1992:xli–xlv; Brathwaite 1971; Joyner 1984; Deagan 1983) offers an alternative approach to understanding the cultural interactions during colonialization and it is not a new concept in Australian Aboriginal studies (Harris 1988). In creolized cultures, first defined and studied in the Caribbean and then the American South, indigenous and adopted cultural elements blend into a new mixed culture, often of extreme vigour, which differs from both its predecessors. Creolization theory allows for change, provides for resolution of the power confrontation, and also maintains the theme of resistance without its negative connotations. Most usefully, it models circumstances in which cultural resistance takes innovative and creative forms by adopting much of what is relevant and useful from the incoming, retaining many elements of what is traditional, and then creating a new vigorous blend or hybrid culture involving speech, technology, music, art and religion, craft, and institutions. Brathwaite's (1971) classic study of Jamaica has since been joined by post-colonial archaeological exponents who find this theory both relevant and

enriching. In particular, it avoids van Dommelen's specific critique that studies of colonialism are themselves colonialist.

A third approach is to view the processes taking place at missions as the continuation of traditional forager practices which are constantly adjusted to changing conditions and resources. For example, optimal foraging theory together with technology as a means of energy conservation or social behaviour as risk minimization (O'Connell 1987; Gould 1980; Binford 1975; Cashdan 1983; Torrence 1989) are approaches which have been applied in Australia. The recent complex ecological modelling in this field (Cashdan 1990; Kelly 1995: esp. 73–110) is beyond the data and scope of this chapter, but establishing how and what way the assumptions behind these studies can be applied more generally in a historic situation is a useful exercise.

I therefore propose that optimal foraging can be extended to include the period of European contact and consider how the rations and European items were recycled to minimize the expenditure of energy and reduce risk. In this view, mission and other contact sites would have been perceived by regional foragers as new quarry sites, offering a new and more varied set of resources to be exploited both for direct subsistence and for raw materials. So, for example, one would expect that Christianity was relevant only as it constrained access to desired resources. Optimization theory when applied to contact situations implies the systematic quarrying and utilization of resources rather than the casual pilfering of a few items, regardless of the ideological, military, mining or pastoral ambitions of its white inmates, and it should be able to explain change. Optimization theory also re-empowers the indigenous population, acknowledges that it can show initiative and re-affirms continuity from past to present cultural behaviour, but offers no prizes for the creativity of resource use, for innovative adaptations and for brave experiments that fail. While it may have more to offer the broad perspectives of prehistory than the multiple, fine-grained viewpoints of contact archaeology, it remains the only approach so far which emphasizes continuity from the recent into the more distant past.

A progressive model of contact developed by A.P.Elkin (1951), which was written in the vigorous style of that time, lacks post-colonial sensitivity but has important insights enriched by extensive first-hand experience with Australian Aboriginal communities. He used the term 'intelligent parasitism' for the most critical stage of the contact process. This behaviour had the potential to lead either into his forms of 'intelligent appreciation' of, and 'assimilation' into, the larger Australian community or, should disillusionment and apathy set in, into his stage of 'pauperism'. This less structured forerunner of optimization strategy, 'intelligent parasitism', also described the selective adoption and adaptation of European culture and accepted that this process could be creative. His staged model was further developed by Hartwig (1965) who also emphasized selective exploitation among Aboriginal people.

The aim of this chapter is to assess which, if any, of the three theories dominance-resistance, creolization, or optimal foraging—best explains what happened at Killalpaninna Mission and therefore which provides promising lines for future research. The archaeological data available for study were surface material, European and Aboriginal, found in concentrations of camp sites on and beyond Killalpaninna Mission. Procedures comprised surface survey, mapping, quantifying and classifying the material culture in order to measure aspects of human behaviour. Primary results were thus derived from the location, frequencies and nature of the objects found. As on many contact sites there was also an extensive historical record at Killalpaninna which made a useful contribution to the theoretical issues raised here.

HISTORICAL BACKGROUND

The mission ruins, overlooking Lake Killalpaninna and its feeder channel, are on the lower Cooper Creek near the Birdsville Track crossing (Figure 13.1). In 1866 this area on the edge of the Simpson desert was on the extreme frontier of Australian pastoral expansion but by the 1890s the advancing line of government artesian bores had made the Birdsville a key stock droving route from the great stations of Queensland to Port Augusta. The site chosen for the mission was a prehistoric campsite and burial ground. It had good access to the traditional food and timber resources of the Cooper Creek flood plain, the barren sand-dune ridges which extend unbroken from the flood plain, and the interdunal clay-pans (Lange and Fatchen 1990; Veth et al. 1990). As shown by the density of prehistoric sites, a more critical factor was the channel which intermittently fed the lake from Cooper Creek flood waters since this might fill more often than the lake and retained flood waters and their fish component longest. The lake only occasionally fills from the lower Cooper Creek system and has unpredictable, mostly marginal rainfall (Allan 1990: 81-4; Dulhunty 1990:101-6; Kotwicki 1986). When the floods brought their abundance of natural resources, the area was a noisy meeting place for the local owners, the Dieri (Hercus 1990), and many other regional groups. Here trade goods such as ochre, grindstones, and pitjuri were exchanged as part of a complex Aboriginal trading network which was continent-wide (Mulvaney 1976:72-94; Jones 1984; McBryde 1987:252-73). Doubtless for this reason (mistakenly in the event), Killalpaninna was selected by the Lutherans for the mission as a place likely to provide high numbers of Aborigines for conversion and baptism. The site selected by the Lutherans was on a wooded sand-dune overlooking two precious soakages on the lake's feeder channel.

The mission was an initiative of German Lutherans in Hermansburg, inspired by the accounts of numerous heathen Aborigines in the interior of Australia following the explorations of John McDouall Stuart in 1858–62. Its founding in 1866 coincided with a Moravian expedition coincidentally to the same place that survived only a year. At this time the north east of South Australia was on the frontier of settlement, with one police camp at Lake Hope, and scattered primitive homesteads along what was to become the Birdsville track. At its peak



Figure 13.2 Killalpaninna (Bethesda) Mission Station, Cooper Creek, South Australia showing all visible remains of mission structures, European rubbish dumps and campsite localities. Surveyed and mapped by the Central Australia Archaeology Project (1995–7) under the direction of Andrew Wilson.

(c. 1903–4) some six or more missionaries' houses, community cooking and eating rooms, Aboriginal dormitories, married quarters, school, mission offices, workshops, yards and gardens were laid out in a systematic order around a substantial church with a dominating 40-foot bell-tower and a graveyard. Most structures were built in German peasant style of thick mud-brick on a timber foundation, and roofed with thatch over corrugated iron (Figure 13.2).

The dynamics of the mission are well documented by Stevens (1994) whose phases reflect its growth, zenith and decline. The pioneer phase involved great hardship, while the last three were each dominated by the personality and activities of the mission's director of the time. During the pioneer phase (1866–79), the mission was forced to abandon the lake site almost immediately for five

years because of drought. Not until 1879 did it return to Killalpaninna: this second phase (1879–85) was marked by the active building programme of its director Flierl. The third phase (1889–1906) marked the peak of the mission's achievements, under the direction of the humane, scholarly and energetic Georg Reuther (1970; 1981), who left suddenly in disgrace in 1906. Phase 4 (1908–14) began with the arrival of Wolfgang Reidel, scholar and linguist, but an autocratic man of less sympathetic character.

While the mission formally came to an end in 1915 for financial reasons, not helped by the anti-German public feeling of the time, basic mission activities were continued until 1920 by Johannes Bogner, in charge of what had now become a pastoral station (i.e. a large sheep and/or cattle ranch), together with Hermann Vogelsang, the school teacher, and Theodore, his brother, station manager and storekeeper in charge of rations. In that late phase the school continued at least until Hermann's departure, and the rations dissemination continued until 1928. The Bogner management of the place as a pastoral station with some employed Aborigines continued until 1920, and the Powell management of the station continued until 1929. The Lutherans mostly moved south to the Murray River, remaining in touch with their baptized Aborigines by means of letters, gifts and occasional visits by members of the Vogelsang family. The Aborigines, understandably traumatized by the departure of the Germans, roamed as a mob for a while. Eventually (c. 1923) they moved on to a new nondenominational mission at Finniss Springs on the Oodnadatta track (Stevens 1994:231-66). The site continued as a pastoral property until 1929, when it was abandoned to intermittent squatting occupation by rabbiters and dingo bounty hunters throughout the 1930s and 1940s. The mud-brick buildings fell into decay and today are not readily visible to the casual visitor.

While the mission was supported institutionally and financially from Germany, and more immediately from the German community at Tanunda, South Australia, there was pressure that it also be financially self-supporting as a pastoral enterprise. Two outstations were developed from the 1890s: the well-watered Ethadinna sheep station, 17 kilometres from the mission, which was supervised by one of the original German lay brothers (Ernst Jakob) and Kopperamanna station, which was developed as a cattle station once the government artesian bores began to bring an assured water supply to this part of the Birdsville Track and run by the other lay brother Hermann Vogelsang. These enterprises, primarily dependent on years of good rainfall and lake inundations as well as good management, had mixed success, especially after the deaths of the experienced and hard-working Jakob in 1907 and Vogelsang in 1913. In addition, the mission derived income from cattle droving on the adjacent Birdsville track. Wet years in the 1880s and 1890s brought profits and expansion; the national drought of 1901-2 began a financial decline, not helped by the sudden departure of Reuther. Tensions sometimes developed between mission staff with more spiritual goals and those concerned with the practical needs of the outstations. The stock activities had the additional advantage of offering training and employment to mission Aborigines.

The mission staff, especially the two lay brothers who were the backbone of the enterprise and their wives, remained dedicated and energetic in testing conditions throughout the life of Killalpaninna. The Lutheran women were strong and practical: almost all their numerous children survived. One of the more academically trained missionaries suffered health and psychological problems. Some staff and visitors, including Georg Reuther, Henry Hillier, Otto Siebert and Carl Strehlow, pursued anthropological studies and collections among their Dieri congregation.

CENTRAL AUSTRALIAN ARCHAEOLOGICAL PROJECT

An archaeological team of 3–6 from the Central Australian Archaeological Project (CAAP) worked for a total of eight weeks in the Lake Killalpaninna area in 1994, 1995 and 1997. Killalpaninna was the first site surveyed in the project and methods mailed here were subsequently refined for wider application. The aim was to identify, map, and record surface material on, and at increasing distances from, the mission. The field component had three parts: (1) a mapping programme to plot archaeological surface features in their topographic context; (2) a quantitative programme to collect frequency data from each of the surface scatters; and (3) a recording programme which used codes to list and describe the contents of each scatter by form and function.

The project's survey began with the ruins still visible on the Lutheran mission, and extended out from it to plot sites and features up to 10 km away (Figure 13.3). In fact, despite extensive survey in all directions, the only visible campsites proved to be on the low white border dune which lined both sides of the channel and encircled the lake. A small scatter of campsites without European artefacts occurred around the creekbeds feeding the north end of the lake. Significantly, additional campsites dating from both contact and precontact times occurred intermittently down the south channel for some three kilometres to the point at which it widened into the extensive flood plain of Cooper Creek. The most extensive sites proved to be those at the north end of this channel near its junction with the lake approximately half a kilometre from the mission church.

As defined by the CAAP, the Killalpaninna (KLP 15) *site* includes the totality of the mission ruins and its rubbish dumps as well as surface scatters around and beyond it as far as they extended. Each of these components was called a *feature*, whether a structure or ruin, primary or secondary European rubbish dump, a burial or an Aboriginal campsite scatter. Features were given a fixed point used by the GIS system to map and organize the quantitative and descriptive data. Concentrations of features were given an arbitrary *locality* number. Sixteen of these comprised clusters of Aboriginal campsites



Figure 13.3 Map showing the Aboriginal campsite zones and localities identified within 5 kilometres of the mission. Surveyed by the Central Australia Archaeology Project (1995–7) under the direction of Andrew Wilson.

with surface scatters and fireplaces (Figures 13.2, 13.3; cf. Tables 13.1–13.5). Ephemeral shelters, now no longer visible, doubtless existed on most of them.

Other localities were individual relics or graves. Campsite localities 28–9 are close to the mission to the north east and south east respectively. Localities 30–33 are also close to the mission on its west and south west, while localities 35–45 and 47–9 are the smaller campsite clusters scattered at a greater distance down the south channel. Campsites 25 and 46 differ in having prehistoric material only; 46 is especially large. In Tables 13.1–13.5 the campsite localities are listed in order of their increasing distance from the mission.

The quantitative programme involved counting artefacts within each feature by category, including the frequency of bottle glass by colour and the frequency of flaked glass. In the recording programme artefacts are defined according to their primary function. A general distinction is made between the broad term *artefact* for all modified materials and the more specific term *object* which is used when the artefact, whether of European or Aboriginal origin, retains enough of its original form to allow identification and to imply possible continuity in function. This quantified and recorded data was then used to provide two indices, as shown in Tables 13.1–13.3. In Table 13.1 the intensity of cross-cultural interaction in different localities is measured in terms of the relative percentage of European and Aboriginal artefacts. The range of European objects (Table 13.2) and raw materials (Table 13.3) which occur at each locality allows another comparison of the nature of the interaction involved.

The frequency of bottle glass bits on Aboriginal campsites, summarized in Table 13.4, was the most common indicator of cross-cultural contact. Bottle

	Total artefacts	European artefacts	%	Aboriginal artefacts	%
Mission localities					
28	221	206	93	15	7
29	641	591	92	50	8
33	547	439	80	108	20
30	588	181	31	407	69
31	181	60	33	121	67
Channel localities					
37	140	1	1	139	99
38	114	4	4	110	97
39	132	10	8	122	92
40	50	37	74	13	26
41	55	10	18	45	82
35	57	40	70	17	30
42	72	10	13	62	86
43	32	17	53	15	47
44	41	27	66	14	34

Table 13.1 Relative quantities of European and Aboriginal artefacts by locality

	Total artefacts	European artefacts	%	Aboriginal artefacts	%
45	264	4	2	260	99
46	1700	0	0	1700	100
49	16	4	25	12	75

Table 13.2 Range and frequency of European artefacts used as objects

		Localities															
Obje ct categ ories	Obje cts	28	29	33	30	31	37	38	39	40	41	35	42	43	44	45	49
Coo king	billy			55			1			5			4		2	2	1
	cam p oven			16	7	17											
Pres erve d food	can- food		6	2	2												
al- can			2		8												
foil											1						
Hou seho ld item s	table - cera mic	4	27	12								6		1	1		
plate -			13														
cera mic																	
pin fuel- can			2										1				
fuel- lid		3															
torc h		1															
gro mm et	2	25	1														
		Localities															
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Obje ct categ ories	Obje cts	28	29	33	30	31	37	38	39	40	41	35	42	43	44	45	49
bed- spik e			1	2													
Clot hing	butt on	7	29	7	5	1				6	1	8	1	1	1		
bead		1															
shoe	1	2															
buck le- belt	1	2															
Stati on	harn ess	2	2		1										1		
stud		1	2	2			2										
spri ng		1															
cartr idge		5	3	7							2						
shot		1															
pipe			1											2			
toba cco tab		11			1												
matc h		1															
fishi ng	2	1	2										1				
Othe r miss ion activ ities	slate	6	2	1													
slate - penc il coin	1	2												1		1	
har mon ica	1																

		Loc	alities														
Obje ct categ ories	Obje cts	28	29	33	30	31	37	38	39	40	41	35	42	43	44	45	49
Tota l obje cts		27	123	120	26	27	1	2		11	1	17	5	4	8	2	2

		Loca	lities													
Cate gorie s		28	29	33	30	31	38	39	40	41	35	42	43	44	45	49
Gla ss	bott le win	173	397	205	129	28	2	10	1	6	9 4		3	3		
	dow															
Iron scra p	flat			4	11	3							2	1		
hoo k			3							1						
rod			7	1				5		6		2	1			
bar			14	1	2			5		1		2				
Buil ding mat erial s	nail	3	29	30	4				5		1				1	
scre w		2	3													
was her	1															
wire	2	1	55	1								1				
shee t	2	33								1						
flec ks				8				10			5	3	8		2	
Tot al glas s		173	397	205	129	28	2	10	1	6	9	0	3	3	0	0

Table 13.3 Range and frequency of European artefacts used as raw materials

		Loca	lities													
Cate gorie s		28	29	33	30	31	38	39	40	41	35	42	43	44	45	49
Tot al othe r	8	65	116	26	5	0	0	25	0	14	5	10	10	1	2	
Tot al raw mat erial s	181	462	321	155	33	2	10	26	6	23	5	13	13	1	2	

Table 13.4 Relative frequency of glass and non-glass artefacts

	Total artefacts	Total glass	%	Total non- glass	%	Total non- glass Europea n	%	Total non- glass Aborigin al	%
Mission localities									
28	221	173	78	48	22	33	69	15	31
29	641	397	62	244	38	194	80	50	20
33	547	201	37	346	63	238	69	108	31
30	588	129	22	459	78	52	11	407	89
31	181	28	15	153	85	32	21	121	79
Channel localities									
37	140	0	0	140	100	1	1	139	99
38	114	2	2	112	98	2	2	110	98
39	132	10	8	122	92	0	0	122	100
40	50	1	2	49	98	36	74	13	26
41	55	6	11	49	89	4	8	45	92
35	57	9	16	48	84	31	65	17	35
42	72	0	0	72	100	10	14	62	86
43	32	3	9	29	91	14	48	15	52
44	31	3	10	28	90	14	50	14	50
45	264	0	0	264	100	4	2	260	98
46	1700	0	0	1700	100	0	0	1700	100
49	16	0	0	16	100	4	25	12	75

	D. oli ve	%	Oli ve	%	Tin t	%	Am eth yst	%	Cl ear	%	Em era ld	%	Bl ue	%	Tot al	Us ed/ wo rk	%
Mis	sion l	locali	ties														
28	1	1	55	32	10 0	58	16	9	0	0	0	0	0	0	17 2	1	1
29	21	5. 3	88	22	17 7	45	64	16	31	8	0	0	1	0. 25	38 2	45	12
33	4	2	10 2	51	45	22	10	5	5	3	9	4. 5	0	0	17 5	46	26
30	0	0	88	68	37	29	0	0	1	1	0	0	0	0	12 6	23	18
31	3	11	15	54	10	35	0	0	0	0	0	0	0	0	28	12	43
Channel localities																	
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	0
39	10	10 0	0	0	0	0	0	0	0	0	0	0	0	0	10	3	33
40	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	1	17	5	83	0	0	0	0	0	0	0	0	6	1	17
35	0	0	9	10 0	0	0	0	0	0	0	0	0	0	0	9	5	56
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3	1	33
44	1	33	0	0	0	0	2	0	0	0	0	0	0	0	3	2	67
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 13.5 Comparative frequency of bottle-glass by glass colour

glass colour, together with base and lip form, were the primary chronological indicators on these open scatters. The occurrence of different types of bottle glass is presented in Table 13.5. During the period from 1860 to 1950 rapid changes in colour and forms of closures and bases allow chronological assignment to within a decade. Dominance of dark olive bottle glass yielded to a mix of dark, medium and lighter olives in the 1870s, with light olive emerging as most frequent in the late 1880s. Amber glass, other than medicinal, did not appear before 1900 and was sparse before 1920. Early amber was as thick as olive glass and equally suitable for flaking. Clear glass, almost always with residual blue, green and blue-green tints ranging from almost clear to deep 'aqua', was present on these sites from the late 1860s (especially containing Scotch and Irish whiskies). It increased sharply from about 1880 when the

extended railway brought commercial sauces, pickles and patent medicines in quantity. The dominance of single and double-collar hand-tooled closures of midnineteenth-century bottles changed to more varied tooled and machine forms from the 1880s on, especially on sauce and other condiment bottles. The most diagnostic form from the 1890s to about 1910 was the light olive ring seal, with its equally recognizable high push-up base, a form and colour which thereafter gave way to amber crown seals. On and around the mission colours and forms were typical of the main mission period (1880–1914), i.e. light olive ring seals and push-ups, a little amber, and a lot of both tint and amethyst (the solarized form of manganese-cleared glass prior to 1914).

Conversely, the difficulties of using data from surface sites has to be recognized. Due to sand and wind storms, features appear due to deflation and disappear with instant vegetation after desert rain. The presence of Aboriginal items deflating on the surface of even the most European features is not unusual. Acid conditions mean that iron (other than cast-iron) survives, if at all, with minimal form. Normal recording of surface scatters was carried out from a standing position, with items needing closer inspection picked up and replaced; features recorded as 'reduced recording time' for whatever reason were known to present a reduced count of poorly defined iron objects such as tobacco tabs and rusty iron buttons, and especially flaked glass, since these items could only be identified by closer examination. 'Untoward circumstances', usually vehicle bogging in isolated situations, are always a factor in remote archaeology, and conspired to ensure that some parts of Killalpaninna were incompletely recorded even after three visits. But contact archaeology itself is hard because of the fragility of its recent record and its special methodological needs are only beginning to be recognized. From our experience the archaeological imprint of contact is rarely firmly impressed, far more often lighter than a butterfly's wing, and the archaeological record must be read from as many angles as possible.

DOMINATION ACCORDING TO MISSION RECORDS

Nineteenth-century ideology, as well as data of chronicle and description, is richly present in the historical record constructed by the dedicated, authoritarian Lutheran missionaries working in this distant colony. Christine Stevens (1994) has done extensive research into this material, and her scholarly publication together with the sources she has listed and the research archive she made available provide the historical basis for the following discussion.

The Lutheran mission to christianize the indigenous heathen was based on dominating and 'missionizing' the Aborigines. Their work included militant forays into the bush camps of the resistant. In fact, the data available in the historical accounts can be used in much the same way as archaeological field data, provided it is collected with awareness of ideological biases and a methodology to handle them. Conversely, the biases themselves can be analysed to reveal more of the ideological convictions and blind spots they reveal. Bias in selection—what incidents and policy decisions are considered suitable for the written record—can be detected at Killalpaninna. For example, there is little comment on non-missionized Aborigines and the bush beyond the mission. Bias in presentation is more apparent. The existence of dominance is unquestioned. Accounts of incidents or statements of policy are structured with the same ideological filter which illustrates a value structure in which Aborigines, although often considered lovable, were essentially inferior. The possibility of intentional distortion for political or personal benefit, for example inflation of christianizing results to encourage continuing funds, must also be considered in the analysis.

Some of the Lutheran records provide interesting data on mission strategies for ideological domination, although they are more implicit than explicit. These are most visible in the analysis of statements made by individual mission administrators of their intended or completed achievements in terms of mission building programmes, such as Flierl's 1879–84 building programme with its ground plan set out in Figure 13.4 and a list of completed buildings. Descriptions of mission activities designed for Aboriginal instruction further clarify Lutheran goals, and interestingly provide the possibility of archaeological investigation of such hopes. Most revealing are records of mission building programmes and site layout plans, whether proposed or completed which offer especially revealing insights into attitudes about and strategies of dominance (Figures 13.4, 13.5).

Whether viewed through the filter lens of historic plans or simply by a visitor with an eye to landscape and archaeological data, the ideology and symbolism of dominance implicit in the Lutheran choice of site are unmistakable. Intrusively built on a traditional burial ground, a rare timbered dune which overlooked the lake, traditional soaks and the critical feeder channel to the lake from Cooper Creek, the mission offered in return reassuring German peasant architecture, orderly thatched cottages, gardens and livestock, school and central village church contained within defined godly terrain. The early mission buildings were thick-walled and cool, built of timber and mud brick with thatched roofs. The school and the church formed the centre of the mission's activities. Both texts and historic maps indicate the typically white European Christian arrangements for accommodating the Aborigines once enticed into the mission: well-spaced separate dormitories for boys and for girls; separate quarters for single men and women; and one-room units for married couples, which were individual huts or barracks of up to six rooms, although some Aboriginal couples lived in tents. There were the usual communal but segregated mess arrangements for the Aborigines. All these structures were built by the Aborigines under supervision on site, within an orderly centralized mission layout.

The mission strategies implied in the building plans are supplemented from documents describing mission activities. Religious instruction began in the mission school, leading to early confirmation and baptism. Marriage of the baptized to each other with allocation of married quarters followed rapidly in view of Dieri customs. Christian values of purity and monogamy in marriage



Figure 13.4 Plan of the Killalpaninna (Bethesda) settlement Pastoral Plan 2842, dated 1899 which reflects the mission about 1890 as a result of Pastor Flierl's substantial building programme (after Stevens 1994:127).

were thus consolidated. The Aboriginal communal mess room with adjacent bakehouse staffed by Aboriginal women as cooks supervised by mission wives was another reinforcing strategy. Attendance at Sunday church was obligatory before sharing in Sunday dining room meals—an arrangement integral to the Lutheran two-fold conversion strategy of using food rations to attract mobile marginal foragers and segregate them from the bush camps.

Some changes in accommodation for the Aborigines were initiated by Reuther in the 1890s when good rains meant station profits for rebuilding. He had additional mud-brick accommodation built especially for married couples with an apparent decrease in both single women's and single men's accommodation, because of more conversions, or a Lutheran acknowledgement that the Dieri were sexually active from an early age. There was also a change in children's dormitory arrangements (apparently to make them safer). At this time he also upgraded several European buildings, including his own residence, due to an increasing number of mission staff and anthropological visiting scholars and constructed a museum.

While the Aboriginal cottages remained small, appropriately reflecting the roles of the conspicuously sub-dominant, the missionary houses with their yards and outbuildings were in their later stages large and impressive, especially the main missionary house on the high north end of the dune, enlarged by Reuther in



Figure 13.5 Reconstructed plan of the Bethesda Mission Station (after Litchfield 1983: 105). The plan dates after the arrival of Pastor Reidel in 1907. Note the area close to the church marked 'native humpies', an indication of increasing Lutheran tolerance towards Aboriginal traditional practices.

1895. Changes which took place in the mission landscape after Reuther's departure in 1906 could be interpreted as modified egalitarianism —among the Europeans, of course. Larger houses were built for the Vogelsang sons in 1907

and a third large house was remodelled for the teamster Jack Ruediger (all timber-framed with galvanized roofing). In 1908 the new pastor Reidel also ordered the old-style mud-brick church with its 40-foot bell tower to be demolished, and replaced by a new galvanized iron structure. Significant management changes documented in the Lutheran records gave new emphasis to pastoral activities and the need for financial viability, fruitlessly as it turned out.

Accounts of mission activities indicate other aspects of dominance and paternalism among the Europeans, as well as revealing something of what missionization meant. The Lutherans made a sharp distinction in the Aborigines around them between 'mission blacks' and 'bush blacks'. Christianized mission Aborigines, having totally rejected the world and values of their former kin, made a commitment to clean-living and industry and were welcomed into the Christian fellowship of the mission's orderly community life which was firmly based in church and school and reinforced by occasionally heavy discipline. In this perception the gulf between mission Aborigines and an outer fringe of heathen savages sharing their airless, mud-smeared shelters with their dogs was huge. Visitation to these camps by missionaries was clearly restricted. In 1868 missionary Homann sang hymns near the camp to the consternation of the Aborigines (Homann 1869 in Stevens 1994:63), Pastor Reidel left evangelizing in the camps to trustworthy Aborigines such as Old Joseph (Ben Murray interview 1990 in Stevens 1994:174) while Reuther's 1890-96 crusades across the channel to break up traditional ceremonies were directed to the spectacular ceremonial ground at Lake Allalinna rather than the unhygienic camps (Reuther in Stevens 1994:123-5).

In fact, the records are explicit that some degree of passive resistance to doctrinal pressure was alive and well. The figures of 1891 are illustrative of these results. Of 65 mission Aborigines, 24 were shepherds and 28 were baptized. Of these, 26 were married couples, demonstrating Lutheran early marriage policy for their converts. In the first 25 years of the mission 60 persons were baptized, but of these 16 died and another 16 or more reverted to traditional living (Reuther in Stevens 1994:126). By 1916 about 100 to 130 were still based on mission land, of whom 72 were baptized. Most of them resided at the mission station. The remainder, in groups of around 30, lived close enough to the mission to receive rations, blankets and medical care.

Indeed, it is difficult to resist terms like passive resistance, exploitation and even optimal foraging when looking at the contrast between the minimal Lutheran triumphs in terms of baptisms, and the comparatively constant if intermittent numbers for Aboriginal meals and school attendance. Resistance at Killalpaninna had rare militaristic manifestations. Consistent numbers over time for meals, school, residence and even baptism are not easily calculated, but the interesting feature of what is clear is its consistency over at least twenty years. There seem to have been about 200 Aborigines generally based on the Killalpaninna property as a whole, with about 135 living at the mission in 1909. Whether this means on the mission or near it is not clear, but would certainly have been temporary. The number of Aborigines taking meals at the mission was often about 70, but could range up to 135, doubtless in times of drought. The difficulty is that while the mission often recorded meals when numbers were high, it did not usually reflect the drop in numbers in times of rains or lake inundation.

The apparent certainties of domination in doctrinal areas seem to become vaguer in matters of daily mission life. Lutheran records, while listing school enrolments, meals served and wages paid to Aborigines around the mission, give no clear definition of those actually called 'mission Aborigines' or indeed who actually received these benefits. Certainly they included the baptized, always considered an elite. Converts were quickly married into monogamous unions and housed in neat married quarters close to the mission staff. Mission Aborigines must also have included others who, after attending school and maybe some baptismal instruction, did not proceed to baptism but stayed on in the secure mission environment to work for the mission as stockmen and domestic help, sometimes for wages. Parents of children at school were presumably part of the mission group. Aboriginal initial interest in school, baptism and confirmation classes was lively: school numbers varied up to seventy in times of drought. Overlong sermons produced the comment 'too much Jesus Christ yabber' and the firm Lutheran discipline, described by one recipient as 'too much stick' was not popular (Love in Stevens 1994:175; Proeve 1945:260), but in general they loved hymn-singing, Christmas, gift exchange, and biblical stories, appeared willing to compromise cheerfully, and attended prayers in order to get their rations when times were hard.

Symbolic of the Lutheran struggle with recidivism among its converts, and especially the mission Aborigines, are accounts of how Reuther patrolled at night with a lantern to ensure proper standards of Christian behaviour among them (*Lutheran Herald* in Stevens 1994:125). All the mission Aborigines had work tasks, the monotony of which they hated. One couple left the station in 1886 saying the work made them sick, while in 1880 Flierl noted the boredom of young Aboriginal women being trained as domestic servants in the mission houses and their pining instead to be off playing among the sanddunes, where limited hunting was allowed only on Saturday afternoons. The constant slipping away of these young women to Aboriginal ceremonies nearby, often to return to their own cultural social obligations, was another unobtrusive form of resistance (Flierl KMZ 1879 in Stevens 1994:92).

Missionization included the significant area of training in basic European skills and techniques. The historical record gives some information about instruction in sheep and cattle husbandry and general yard work for the more able men—doubtless including building and fencing techniques, perhaps blacksmithing, and sewing, cooking and general domestic work for the women. Despite Lutheran rules, converts did return to bush camps temporarily or permanently. Presumably they carried rudiments of the more relevant of these activities back to the bush camps with them. The significant question is of course

to what extent non-mission Aborigines could, and did, avail themselves of these opportunities.

Dominance is particularly represented in language and content of the Lutheran accounts of the non-missionized Aborigines, the so-called 'bush' or 'camp blacks', whose behaviour represented classic forms of resistance. 'Bush Aborigines', as the mission staff perceived them, were primarily the Dieri people who inhabited the wider landscape to the north and east and were sometimes joined by their neighbours to the north east, the Wangkangurru and Kuyani. Colonialist anthropological studies-linguistic, religious, ceremonial, sexual and lifestyle-were pursued vigorously from first contact, especially by the more scholarly Lutheran pastors and their visitors (e.g. Gason 1879; Howitt 1891, 1904; Howitt and Siebert 1904; Horne and Aiston 1924; Elkin 1951; Hillier 1904; unpublished material listed in Stevens 1994:286-9). In general, the Europeans at the mission distinguished the bush Aborigines by their idiosyncratic use (or non-use) of clothing, unattractive diet, strong distasteful body smell, and 'savage' habits which included wide-ranging sex, eating human flesh, pagan ceremonies, and wild behaviour. 'Bush Aborigines' lived in native shelters beyond the mission limits across the channel and remained outside the regulatory sphere of the mission unless they specifically chose to enter its territory. The mission staff did not habitually approach the camps.

Investigation of incidental information in the historical record shows that communication between mission and bush camps was maintained by direct visitation in both directions by both mission and camp blacks. At the very least both parties had opportunity for impressions and curiosity and at most exchanged both verbal impressions and goods. The visits by missionaries were very occasional since the Germans found the bush camps smelly and difficult. More common were visits to the camps by converted Aborigines, who would read the Bible to polite but unenthusiastic elders. The most frequent visitors were temporary or permanent refugees from the mission who were expressly forbidden to visit their relatives in the camps, but whose tendency to disobey this order was the despair of the Lutherans. Conversely, members of the bush camps occasionally visited the mission, mostly in times of drought and food shortage, for rations and once a year for clothing. Bush relatives might attend weddings and special services and, provided they had washed and attended prayers, they could also get Sunday breakfast and dinner, perhaps stimulating imitation of things they saw. As to transfers of material culture between the two domains, other than government issue rations, a few meals and some clothing, the historic record is largely silent probably because the missionaries regarded the bush Aborigines as the heathen enemy and devoid of interest while in that state.

Lutheran records were vague about distance or direction of the bush camps, although they were clearly not far away, and a Lutheran comment of 1867 gives a clue in its reference to the 'miserable shelters of the Aborigines' by the lake edge (Homann 1965:24 in Stevens 1994:59 n.53). In 1883 Flierl reports that some 50 Aborigines lived at the mission, with about 50 'camp' Aborigines living

nearby in traditional shelters (Flierl 1885 in Stevens 1994: 105 n.28). Mission Aborigines could steal back to the camps at night or join in ceremonies at a traditional site 3 km away. The closeness of the mission Aborigines is often contrasted to the distant bush camps, but the 'bush blacks' could hear the mission bell in order to attend Sunday prayers and obtain their meal (Homann letter, November 1869 in Stevens 1994:64 n.72). Rations were issued to 'bush blacks' weekly. In Reuther's time (1891) forty-two Aborigines are reported as living at the mission, with sixty-five coming regularly to the station for meals (Select Committee report in Stevens 1994:125). In the 1890s there was increased visitation from the camps to share in celebrating family weddings and baptisms, while children attending school must have included those from bush families. All the references, unspecific as they are, support the comparative proximity of the 'bush' camps.

The feeling of superiority felt by the Lutherans was expressed in their extremely negative assessments of everything Aboriginal and their apparent deliberate vagueness and often ignorance about virtually all aspects of traditional Aboriginal life. They found the lifestyle disgusting and the idiosyncratic adoptions of European clothing and implements risible. Although shirts and trousers worn upside down might be quaint, the disinclination to work and their mobility were disruptive and conflicted with the fundamentals of Lutheran Christianity. Only on the occasion of some dramatic Aboriginal act of dedication, such as saving the lives of lost missionaries in the desert, did they recognize bush Aboriginal skills as grudgingly admirable.

The Lutherans noted the comings and goings of Aborigines, especially in relation to meals served at the mission, but write nothing about the full complexity of Dieri food gathering strategies and the extensive interlinked network of their social structures, despite their relevance to what was for the mission the most frustrating aspect of Dieri culture: namely, patterns of mobility. As to the wider landscape, the Lutherans were even less specific. There were frequent references to the role of mobility in frustrating Lutheran goals both in schooling and in conversion, but very few on where they went. The missionaries made no secret of their sense of alienation when in Aboriginal camps and this increased when out in the desert landscape where they were totally reliant on Aboriginal guides. On the other hand, it seems incomprehensible that the mission children, white and black and, perhaps to a lesser extent, the mission wives did not interact: certainly aspects of bush tucker knowledge were exchanged among the women.

In contrast, the Lutheran accounts show that they were fascinated by their religion and language. Reuther and his colleagues collected a great deal of information on these aspects of culture which was added to by others (Proeve 1945; Basedow 1925; Cane and Gunston 1986, Austin *et al.* 1988; Dodd and Gibson 1990; Stevens taped interviews). Recent collaborative research between Aboriginal and non-Aboriginal academics in oral history and language study with more multi-voiced base has produced invaluable insights into Dieri

language, songs and mythology (Hercus 1985; 1986; 1990) together with later work by the South Australian Museum (Jones 1984; Hercus and Clarke 1986; Hercus and Sutton 1986) and more broadly-based work on Australian desert-environment Aborigines (Peterson 1976; Peterson and Long 1986; Veth *et al.* 1990).

However, more direct historical and oral sources at this stage do not appear substantial. The bush Dieri and their neighbours did not leave their own written record of the Killalpaninna mission episode. While there are just a few oral references in interviews with former Killalpaninna inmates taped by Stevens in 1990, and rare contemporary comments and views in the Lutheran accounts, all these, not surprisingly, are made by the committed mission Aborigines who enjoyed a close relationship with the mission at the time and also benefited from the Lutherans' continuing relationship with their flock well into the 1940s. Various memories of the mission were published later (Proeve 1945), but in essence these and various important later recollections by mission inmates (Dodd and Gibson 1990; Cane and Gunston 1986) are part not of the Killalpaninna story but of the next contact episode in this region, centred upon the new mission at Finniss Creek established *c*. 1923, to which many of the Killalpaninna mob and their children went.

Despite the manifestly active role of the mission as a successful focus for Aboriginal life on the lower Cooper Creek, the mission's own assessment of its success rate was in terms of spiritual domination: the number of conversions and baptisms. By the end of the mission less than 200 Aborigines in total had been baptized. Also the younger converts often reverted to traditional ceremonies. These defections and difficulties are constantly referred to by the Lutherans themselves, and it is the low baptismal rate as recorded in the written record that basically attests to the deep misgivings the Lutherans had about their own record of dominance.

ARCHAEOLOGICAL EXPECTATIONS AND METHODOLOGY

Turning to archaeological evidence, we need to begin by establishing a series of expectations from each of the three models of intercultural interaction introduced at the beginning of the chapter: dominance-resistance; creolization; and optimal foraging. To begin with, if the Aboriginal camp sites around Killalpaninna mission primarily denote successful missionization, supporting the dominance model put forth by the Lutherans themselves, the artefacts present on the localities recorded will demonstrate the presence of mission-sanctioned activities, skills, lifestyle and regulations, with a diminution if not absence of those demonstrating traditional activities, especially ceremonial. Based on textual sources the following artefacts can be predicted to occur: items of European clothing; European household objects; artefacts relating to school and church activities; and objects relating to men's work on and around the mission gardens

and stations or domestic work by women. There will also be evidence of skills and techniques acquired in association with these items, and socialized behaviour in their use. Also, there will be evidence of Lutheran lifestyle regulation, e.g. the encouragement of married family life; segregated quarters for the unmarried; cleanliness; non-traditional lifestyles. In particular, any mission Aboriginal dwellings will be spatially in the heart of the mission, drawing strength from its Christian fellowship while also negating risk of contact with the heathen in the bush. Predictable absences are evidence of alcoholic liquor, artefacts reflecting traditional ceremonies, such as ochre, magic stones, and traditional spears. The status of tobacco is unclear: it was a trade item and so could have been used for wages or barter for services, legitimate or otherwise.

Expectations in support of creolization theory imply a different configuration in the archaeological data. A varied selection of European artefacts will be found in fair quantity, obviously also from the mission as source. The selection, however, will not necessarily have been made with intent to imitate mission usage and will appear less systematic in functional terms. Diagnostic of creolization is presence of innovative and often idiosyncratic uses and adaptations of European objects not previously associated with either Aboriginal or Lutheran lifestyles. Distance from the mission will not be a significant factor. Again the identification of a creolizing community archaeologically is problematic. Innovative cross-cultural hybridization in language, song, dance, apparel, cuisine and religious practice are its classic manifestations, most readily identified in living cultural communities. The challenge is to identify innovative crosscultural hybridization in surface material culture, spatial patterns, and a critical use of historical photographs.

Alternatively, if the primary cultural process at work at Killalpaninna was the continuity of a traditional forager optimization strategy, then the archaeological record will demonstrate clear evidence of mission-based resources selected for their adaptability to traditional purposes as well as need, and exploited according to traditional patterns of seasonally and social custom. The archaeological imprint of resource exploitation is thus predicted to include the systematic taking of rations, blankets and clothing, raw materials such as bottle glass, fencing wire and iron sheeting, and basic skills to adapt these items. Second, the mission resources exploited will be those primarily useful for the traditional food quest and subsistence activities. Third, the exploitation will be systematic rather than casual pilfering. Fourth, the campsites will be located close to the mission to maximize access. Fifth, imported items will appear on campsites in dismembered form or already adapted to traditional use rather than with the integrity of their European use maintained. European whole objects may occur, but not associated with recognizable European technical, social or cultural skills in their context or use. Sixth, campsites will demonstrate strong continuities in forager lifestyle alongside utilization of cross-cultural artefacts.

To investigate these models working assumptions were needed to clarify the nature of the linkage between the artefacts and their users. Artefacts were formally ascribed to either European or Aboriginal primary ownership or usage; the choice was mostly obvious, based on material as well as form. The presence of recycling, modification and/or adaptation was recorded as a secondary variable. Lost and discarded European artefacts were assumed to have resulted from the behaviour of Europeans. Similarly, Aboriginal artefacts, isolated or in scatters, were assumed to have resulted from Aboriginal behaviour. More significantly, scatters containing both European and Aboriginal items were assumed to have resulted from of interaction between the two groups, the nature of that interaction determined by the selection and structuring visible in the contents of the features, and their spatial locations.

Three analytical tools were devised to measure cultural interaction. The relative proportion of European and Aboriginal artefacts (Table 13.1) was used as an index of the intensity of European impact. A second tool, the range of European objects present (Tables 13.2, 13.3), measured the extent to which European material culture had been adopted or altered. The third tool measures the decay in European objects with distance from the mission. It is proposed that the transfer of goods from a central source-here European cultural material from the mission—will show a regular fall-off in frequency and range of types as distance from the mission centre increases. At Killalpaninna gifting and other exchanges of European objects for services, as well as quarrying and pilfering, set in train the movement of European items out from the mission as a central point into the landscape via both traditional and new social networks, steadily becoming less visible with distance. This trend can be monitored by the intensity index. In the abundant rubbish around the buildings of the core zone a proportion of nearly 100 per cent European artefacts was predicted. An intermediate zone of interactive European-Aboriginal behaviour was predicted to surround the mission core. This would consist of a high frequency and range of imported European items, a strong presence of traditional Aboriginal items, and a significant presence of cross-cultural items representing Aboriginal adaptations and adoptions of European objects. Beyond the intermediate interaction zone a third zone of traditional Aboriginal living spaces, with more diluted impacts of European goods and skills was predicted. The most common signature was expected to be bottle glass worked or adapted to traditional needs, found together with strong retention of traditional Aboriginal culture. The presence of European goods here other than glass was expected to be inconsequential.

One other dimension of this body of archaeological material should be noted. The mission lasted over fifty years, and became as familiar to second and third generation Aborigines as it had been a threatening invader at first. Inevitably the relationship between it and the Aboriginal community must have undergone change also. What such change might prove to be, and more specifically how archaeologically visible was not predicted, but change over time was always to be looked for.

SPATIAL PATTERNS

Using the three measures, significant spatial patterning in the cross-cultural interaction can be detected at Killalpaninna. The aim of this section is to establish how such patterning relates to the models raised at the beginning of this chapter. Three archaeological reconstructions can be established. The simplest is mission domination visible on campsites close to the mission, although a degree of passively resistant traditional behaviour is also visible. The second is a less visible rejection of mission values through the maintenance of existing forager practice along with exploitation of European items used as new raw materials for traditional uses. The third is a form of more opportunistic and aggressive exploitation which, while maintaining traditional lifestyle and food collecting, further extends foraging strategy to take advantage of mission skills as well as food rations and extensive cross-cultural material resources.

The localities which were sampled are shown in Figures 13.2 and 13.3. Data from those that were best studied are presented in Tables 13.1–13.5. Localities 28 and 29 are on the high yellow dune on which the mission was situated. In contrast, localities 30–33 which are placed in the mission category in the tables are on the low white border dune adjacent to lake and channels or its adjacent flood plain to the west. Importantly 30 and 31 are across the channel from the mission. Although 33 is on the same side as the mission, it is located out of sight from it. The third group (34–49), described in the tables as the channel localities, is scattered on both sides of the south channel south to the point where it dissipates into the flood plain (Figure 13.3).

The localities are given in the tables according to increasing distance from the mission. The data presented demonstrate a dramatic decrease in the frequency of artefacts overall with distance from the mission. Artefact totals of 500–600 within a kilometre of the mission dwindle mostly to double figures over two to three kilometres. The one exception is the large pre-contact Aboriginal open site (46) for which the siting of the later mission is irrelevant. Second, this drop-off in overall frequency of campsite finds is echoed by a decrease with distance in the percentage frequency of European artefacts (Table 13.1). The most distant localities—those at the north end of the lake —show no presence of European artefacts. The channel localities also generally demonstrate the decreasing presence of European artefacts with increasing distance from the mission. A significant exceptional group (40, 35, 44) which has a higher than expected frequency of European artefacts is discussed below.

Another trend clear in the data is a stepped rather than uniform drop-off in the frequency of cross-cultural material with distance from the mission core (cf. Table 13.1). A steep drop in quantities occurs at about one kilometre from the mission church. What specific factors cause this sudden drop-off in interaction are speculative, since distances of one, two or three kilometres cannot have been significant to people used to walking long distances. However, such distances might have been relevant for the sickly and elderly, and also access to mission

meals, since these required prior attendance at church. Being within sound of the chapel bell, therefore, may well have been significant for optimal foragers.

The second analysis was directed towards identifying how much interaction took place in different localities. Tables 13.1 and 13.4 present the relative frequency of European versus Aboriginal artefacts at each locality (cf. Figure 13.6). For most localities the total count is presented since the numbers of visible artefacts were not large, but where the quantities were particularly great (especially prehistoric Aboriginal sites), sampling was undertaken using counts of representative one-metre grid squares. The intensity index proved to be a useful baseline cross-cultural indicator. On Table 13.1 there are marked trends — from intensity indices of 90 and 80 close to the mission, down to 2, 1 and zero down the south channel.

In general, the distance decay model clearly applies around Killalpaninna for both frequency and intensity of European material. Anomalies in this pattern on the south channel are explained by reference to Figure 13.6. The low intensity of interaction (i.e. low percentage of European artefacts) on the west bank campsite localities 37, 38, and 39 is largely explained by topography, since the west bank in the northern part of the channel is steep and comparatively inaccessible. The middle channel campsites (35, 40, 43, 44) are close to the track from the main Birdsville track to the mission station and therefore have distinctive crosscultural characteristics, as discussed below. At the south end of the channel are large lithic sites like 45 and 46, together with small fishermen's camps of recent date such as 47, 48, and 49 sometimes superimposed on older Aboriginal localities.

While Table 13.1 is concerned with an overview of all cross-cultural artefacts, Table 13.4 looks specifically at the percentage frequency of glass on each locality as distinct from other European material (Figure 13.7). As with total European artefacts, generally the glass also decreases with distance from the mission, showing that glass, normally the most numerous single category of European artefact, can on its own give some indication of the relative intensity of interaction. More significantly, bottle glass (Table 13.5) appears in virtually all instances to be the pioneer cross-cultural resource to be utilized by indigenous people in contact situations, including contact-at-a-distance.

The interest of Table 13.5, which also analyses glass, is primarily to demonstrate the consistent mix of glass colour over the various sets of localities and to confirm its contemporaneity with the mission. Olive, tint and amethyst bottle glass colours are characteristic of Central Australian sites c. 1890–1914, dark olive having largely disappeared by this date. The most interesting point here is that amber glass, used for beers after 1900 and not normally frequent until c. 1912 or later, characterizes only the two localities closest to the mission: 29 and 33. This suggests that occupation of these campsites may have continued later in time and that use of the more distant campsites gradually contracted through time. Table 13.5 also presents the number of glass bits showing flaking and/or use. Identification of worked glass is dependent on field conditions for



Figure 13.6 Distribution map of campsite localities around Killalpaninna Mission which have European artefacts used in a European context. *Source:* Surveyed and mapped by the Central Australia Archaeology Project (1994–7) under the direction of Andrew Wilson. Contour interval 2 metres, Australian Height Datum.



Figure 13.7 Distribution map of campsite localities around Killalpaninna Mission showing the proportion of glass artefacts. Surveyed and mapped by the Central Australia Archaeology Project (1994–7) under the direction of Andrew Wilson. Contour interval 2 metres, Australian Height Datum.

data collection, but where glass is numerous and conditions normal (as on localities 29–33 on Table 13.5) a figure of between 10 and 20 per cent for the worked glass component of total glass is common on campsite localities, and also consistent with evidence from other sites recorded by the Central Australia Archaeological Project. Other aspects of the glass analysis (not fully analysed yet) show the increase in coloured glass to be related to household products from the mission which included patent medicines and disinfectants as well as food sauces and pickles.

To summarize, based on total counts of both European and Aboriginal artefacts occurring on up to thirty campsite localities within 10 km of the mission, the localities close to the mission have large concentrations of both European and Aboriginal artefacts, with the percentage frequency of European items in the range of 80–90 per cent. Bottle glass, some of it worked, forms the major, but not the only, component of the European artefacts. Both total number of artefacts and the frequency of the European component decrease dramatically to double and single figures on localities more than a kilometre from the mission. Table 13.1 also demonstrates that the drop-off in intensity of interaction with distance from the mission is not uniform, but has a significant shoulder at about a kilometre from the mission.

The third type of analysis aims to identify the processes of cross-cultural interaction by looking at the range, character and structure of European material on the sites. The *range index*, defined as the number and frequency of different artefact categories found on the various campsites is used as the basis for a discussion of the nature of artefact use and the behavioural implications of these.

Tables 13.2 and 13.3 present the categories of European material culture found on the campsites in the survey area. Table 13.2 lists the occurrence of objects whose form is recognizeable and so the function can be inferred (cf. Figure 13.6). The following categories were found to be present in the assemblages: cooking; preserved food; household items; clothing; and mission/ station. Camp ovens and billies (pans used for boiling water), axes and net sinkers are among the recognizable items. Others include buttons, shoe and belt buckles and eyelets which are inferred as belonging to clothing; a range of household items such as ceramic tableware, fuel cans probably for kerosene lamps, bed spikes from small iron bed frames; and objects indicating various activities associated with the mission/station such as slates and slate pencils from the mission school, harmonica and Jew's harp for church music, and harness studs and buckles associated with stock work and transport.

The uses for a range of other items cannot be ascertained. It appears that most of these European artefacts were not used in the same way as their original function, but were raw materials for manufacture by Aboriginal people into items with different uses. These are listed in Table 13.3. The first category includes the numerous broken bits of bottle glass. The second, iron scrap, consist of pieces of iron rod, spikes, cast iron plate. The third are building materials of which thick fencing wire is the most common. All appear to have been imported

as raw material for adaptation to new forms. In most cases they do not have an immediately recognizable form or context of use, although repetitive association and inter-site patterning sheds some light on their possible function. Clues to some intended products can be sought in the curated objects of museum collections, e.g. bottle glass tools and instruments fashioned from broken glass bottles (Morphy and Edwards 1988: fig. 101; Balfour 1903; Freeman 1993); ceremonial knife blades made from half a wool shear (Australian Museum cat. no. E66785; Manchester Museum cat. no. 60850); axes made from an iron hinge (Macleay Museum, Sydney cat. no. 1785-6), or iron adzes, hooks, points and digging sticks which have been depicted in recent ethnographic accounts by Meehan et al. (1979) and Khan (1993) but such useful and recognizable tools are rarely found abandoned on surface scatters at Killalpaninna. With experience a number of the items in the building materials category can be recognized as the collapsed components of composite constructions, most often humpies (traditional Aboriginal shelters) which have incorporated salvaged, pilfered or donated European building materials. Other composite forms include fish traps, chicken runs, scoops, and containers, in which again the adapted and re-used items have not survived in their recycled forms, but have lapsed back into the undistinguished components from which they were fashioned. So, for example, bits of iron sheet, twists of fencing and chicken wire, and miscellaneous building items such as bolts, nails and spikes were observed on a number of campsites (Table 13.3).

Tables 13.2 and 13.3 also show both a decrease in the range and frequency of artefacts within all categories with increasing distance from the core mission site, i.e. sites closest to the mission have the greatest range of imported European artefacts, and especially objects whose function has not changed. Table 13.2 confirms the higher variety of identifiable objects on the closer localities. The total range of artefacts (number of types of objects recorded in both Tables 13.2 and 13.3) varies from a maximum of 24, 23 and 15 categories respectively on localities 29, 33 and 28, to 14 and 7 on the cross-channel sites at 30 and 31. There is a clear fall-off down the channel, where the mid- to lower channel localities 35–49 decrease in total number of categories.

While these counts thus reveal significant spatial patterns in the data, they can only begin to indicate the cross-cultural processes at work around the mission. Archaeological identification of behavioural structure in contact material culture is needed if a behavioural level of insight is to be recovered. Behavioural structuring of cross-cultural material culture on these surface scatters mostly leaves the lightest of archaeological imprints. It can be illustrated by example. On a campsite rich in lithics two odd buttons, one pipe stem, and one bit of broken glass reflect a cross-cultural behavioural structure which has minimal European cultural logic. The evidence is too sparse to support the European use of clothing, participation in tobacco trading, or the systematic exploitation of European raw materials. Conversely, a single campsite also rich in lithics but with three matching trouser buttons, a belt or harness buckle plus saddle stud, tobacco tab, and a wire billy handle presents an episode of structured activity convincing to the European mind as an employed Aboriginal stockman's temporary camp. Such structuring can also be recognized where the same combination of European objects characterizes a number of campsites: for example, when adult clothing items, domestic tablewares, school slates, and children's shoe buckles imply a recognizable set of mission family goals and values.

The most striking range of structured cross-cultural material culture is to be seen on the campsites at locality 29. Here clothing-related items were widespread providing positive evidence for the operation of one of the mission's strictest rules. While the range was limited-predominantly buttons, and buckles from both shoes and belts-the objects were informative. Small women's buttons in white glass were from blouses and dresses, probably the women's best clothing. The more numerous men's metal buttons were from the more uniform four-hole sewthrough kind common on work clothing. Belts were also part of the stockman's clothing which was originally supplied by Reuther to improve the status of his best Aboriginal workers. Men's stock work activities were also represented by the presence of saddle studs, harness buckles and pack saddle chains. However, no pins, needles or washing bowls were found to attest women's activities on the mission itself because laundry was probably done near the soakages and sewing took place under mission staff supervision. Children were represented by small sandal buckles and a total of eleven fragments of green writing slates and some slate pencils from various localities, good support for the work of the mission school and teaching staff and for the strength of the teaching ethic at Killalpaninna. Pieces of a Jew's harp and a harmonica may well have been used in the church band, which appears to have been enthusiastically supported by the Aborigines.

All these categories had their place in a context of instruction in skills and usage, whether in the mission school, in the men's stock work and building programmes, or the women's training in laundering of clothes (both their own and those of the missionary households), and cooking skills in the communal mess and bakery. Skills in the new cooking techniques of boiling and baking were another area of mission instruction, certainly for Aboriginal women who were trained to work in the communal mess. Predictably, however, cooking pot fragments were not found on locality 29, since meals for these Aborigines are assumed to have been supplied in the communal mess next to the church, although some of these campsites do have evidence of burnt sheep bones in their fireplaces. Such food remains may simply represent supplementary or clandestine meals. Alternatively, they may imply a more systematic change in mission organization in its later years, or indeed that changed eating habits followed the end of the mission administration. The occasional pieces of broken ceramic tableware found on campsites at locality 29, which was occasionally flaked as raw material but more often was apparently for more European-style use, seem to be part of this later stage.

The practical skills and techniques of use and maintenance implied by these object categories were essentially those taught by the mission to give their Aboriginal congregation employment opportunities, both on the mission and increasingly on neighbouring stations. For men, in addition to the stock work with horses, sheep and cattle (already visible in the archaeological record), there was also training in construction methods using mud brick, timber and galvanized iron sheet. Blacksmithing for reforging and sharpening tools, maintenance of carts and shoeing horses were constant activities on any station and some Aborigines may have learned these skills: all would have seen them in use.

Two or three other objects found on locality 29 add a probable archaeological fingerprint for employment. Tobacco-related items, particularly the small metal tabs from cakes of chewing tobacco were not government or mission free issue, and strongly suggest that money was available from the payment of wages. Localities 28 and 29 had a high frequency of tobacco tabs. Another item that may have indicated spending money is ammunition (both .22 and shotgun). Fish hooks and net sinkers were also sold in the mission shop, as were additional shirts and trousers made by the mission women (Reuther in PPSA 1899:13): small amounts of money were available for their purchase by Aborigines. On sites around Killalpaninna dating prior to 1914 no artefacts relating to alcohol use were observed.

Campsites at locality 29 are not the only ones with European artefacts structured by mission activity. Several smaller campsite localities down the south channel at a greater distance from the mission were also characterized by selections of these items: 35, 40, 43 and 44. As can be seen in Table 13.1, these localities all had a higher intensity index than would be expected from their distance from the mission. All four also had flaked lithic artefacts, grindstones and hammer-stones, confirming their identification as Aboriginal campsites, as well as bottle glass and iron scrap for adaptation and re-use. At the same time items of stockmen's work clothes plus horse gear, together with building and hardware materials from shelters and their contents (cf. Tables 13.2, 13.3) strongly support their identification as Aboriginal stockmen's temporary camps.

In summary, the structured selection and quantity of European objects at locality 29 give strong support for the dominance of mission culture. Mission dominance is also visible on locality 28, although the data collection from this clay-pan area was more attenuated. At the same time additional evidence from these same localities, as well as from localities 30, 31 and 33, suggests that any impression of total dominance needs to be questioned. The first archaeological argument against total mission control is that on all the campsite localities, even on locality 29, traditional Aboriginal artefacts are present, together with the significant presence of flaked bottle glass especially on campsite localities close to the mission. Whatever the intensity of European artefacts or the absolute frequency of finds in the locality, the archaeological imprint of traditional Aboriginal living is always present. Primarily it is present in the campsite structure

of these localities, despite any efforts that may have been made to re-house mission Aborigines more appropriately. Campsites also display the material culture of Aboriginal camp life usual in this mostly arid zone: grindstones, hammerstones, and a body of the stone items reflecting the manufacture, use and repair of the tools and weapons essential for foraging (e.g. wooden spears, adzes, digging sticks and containers for collecting and carrying seeds, water, babies and anything else). Glass scrapers, like stone adzes and scrapers, were used to work and smooth wooden components in the tool kit. Ochre, an indispensable part of traditional ceremonial life, is found on some localities (35, 37 and 40 down the channel, and 30, 31 and 33 near the mission) and its presence is particularly suggestive of surviving traditional practice. Thus the Aboriginal component on all localities even with high frequencies of cross-cultural material is a strong indicator of only minimally changing underlying lifestyles.

Second, the behavioural structures on the campsites away from the mission are different from the mission-structured activities and behaviours of locality 29 and imply more or less uninterrupted continuities in forager, not European mission, priorities. These localities have a few apparently non-functional European items on campsites primarily characterized by Aboriginal material. Localities such as 37, 38, and 39, with abundant lithic material and very small quantities of iron or glass are not otherwise pristine prehistoric sites 'spoiled' by the accidental deposition of later European rubbish. Rather, such isolated European items can be assumed to have been specifically selected for their usefulness in traditional contexts and imported for adaptation primarily because of their increased efficiency or availability over traditional materials. The function of iron bars, spikes and bits of hinge or tyre are not easy to reconstruct without contemporary photographs or parallels in museum collections, but bottle glass is immediately accessible as an indicator of how European items have been transformed since both flaking and use wear leave visible traces. In short, campsites demonstrating this form of behavioural structuring are here interpreted as continuing the classic forager strategies of pre-European times, but with the incorporation of available European raw materials where they proved relevant or superior for existing needs.

Localities with such minimal European material of this kind are thus interpreted as demonstrating their own form of resistance to any mission initiatives by indicating obvious continuities in camp and ritual life together with the extension of traditional foraging to exploiting European resources for traditional needs, most demonstrably bottle glass. It should perhaps be noted here that in the experience of the Central Australian Archaeological Project, when interest in the contents rather than the glass container becomes significant, whole bottles rather than broken glass are found on campsite scatters. It is interesting that there is no evidence for alcohol abuse at Killalpaninna.

The strongest support for the validity of resistance and optimal foraging is to be found in the cross-cultural evidence from the three large campsite localities not yet considered in detail, namely 30, 31 and 33 (Figure 13.2). Although at first sight it is plausible to group these three localities with 28 and 29, on the basis of their proximity to the mission and their high frequencies of crosscultural artefacts, closer study identifies differences which, although small, emerge as significant in behavioural terms.

First, there are important variations in both distance and location. While all five localities are within 1 kilometre of the church, their locations are not identical. Localities 30 and 31, close as the crow flies, lie across the south channel which was sometimes full and often soggy. In times of flood the banks opposite the mission were referred to as 'across the lake' so there is documentary reason to assume these campsites were occupied early in the life of the mission specifically by Aborigines who were not prepared to live on the mission. Archaeological evidence generally supports this proposition. Tables 13.4 and 13.5 show that only olive and tint glass are present with the exception of the three intrusive 1960s amber fragments on 30, lacking the additional colours of the other three localities. Both 30 and 31 have a much higher frequency of Aboriginal artefacts than the other three classified as mission localities. Both localities also have the lowest ranges of the five, with only 7 artefact types at 31 being especially low.

It is also noticeable that the range of artefacts for localities 30 and 31 includes cooking pot fragments. European objects found on various localities include those for cooking and food preparation, e.g. billies and camp oven fragments which are sometimes together with animal bones from meals. This supports the interpretation that these were campsites of Aborigines who received rations and cooked their own food rather than eating in the mission Aboriginal mess. The proposition put forward here is that localities 30 and 31 represent the earliest campsites of 'bush Aborigines' attracted to the mission by rations but separated from it by the channel.

The most interesting of these five localities is 33, which shares characteristics with both the cross-channel 'camp' localities and the 'mission' localities closest to the church. In fact it can be said to add a further dimension of innovative exploitation to forager resistance. Locality 33 is on the same side of the channel as the mission, and comparatively close to it, yet unlike all the others would have been out of mission sight and probably unable to see even the church tower. It is large, with numerous campsites (of which only ten were fully documented), and with various indications of a long life-span. The most straightforward of these is the presence of glass from early amber beer bottles on some campsites, implying continuity to a date at the end of the mission's life. Some campsites are found with later material, including iron sheet and wire probably salvaged from the mission later, and several of these cluster at the north end of the locality at the point closest to the mission but still out of sight. Table 13.1 shows the third highest intensity index of 80 per cent, significantly below the indices of the on-mission localities and above those of the cross-channel campsites. This indicates a comparatively high presence of Aboriginal items such as grindstones, hammerstone and adze blades and including some ochre, the critical indicator of continuing ceremonial participation. This strong traditional component is confirmed by much evidence of the flaking and use of bottle glass (Table 13.4).

Yet inspection of Table 13.3 reveals an equally vigorous presence of European artefacts at 33. While these items are not as tightly structured as those on locality 29, a fair range of them is present including several categories connected with food preparation and serving (billies, camp ovens, and ceramic tableware) and only a selection of mission-related items such as cartridges and net sinkers, both of which are obvious food quest items. These suggest that as on localities 30 and 31, the locality 33 Aborigines were augmenting their own traditional food quest with rations from the mission. At the same time slate and slate pencil fragments were found indicating that children from here attended the mission school. There is noticeably less presence of stock station items such as horse harness and stockmen's belt buckles and an apparent absence of tobacco tabs. If as seems likely the tabs represent their users' access to money, their absence on 33 reinforces the view that employment as stock or yard men was not significant here. There was also much less range in clothing-related items on locality 33, with none of the fancy buttons found on 29 and nothing to suggest female clothing. One inference from this would be that the women of 33 were not employed at the mission, for which German peasant dress, including blouses with buttons, was required.

There is a last point to note in terms of the range of artefacts found at locality 33. The overall range of artefacts is high (Tables 13.2 and 13.3), in fact the second highest after 29. Unlike locality 29, however, there are more items used as raw materials. Locality 29 has four more categories of objects than 33 (Table 13.2), while 33 has three more categories of raw material (Table 13.3). The distinction between the use of European artefacts for quasi-European functions versus their adaptation for quite different traditional purposes appears to be a promising lead into future research on the processes at work.

In summary, locality 33 shares characteristics with both the supposed 'mission' Aborigines at localities 28 and 29 and the localities 30 and 31 which are assumed to represent places used by the so-called 'bush' Aborigines. Along with a high degree of retention of wholly traditional Aboriginal cultural features (including ochre), this locality, which was well placed for both exploitation and avoidance of mission influences, demonstrates an eclectic and enthusiastic adoption of cross-cultural material culture, with a strong trend towards the selection and adaptation of European materials for traditional purposes, as well as selective exploitation of both goods and services from the mission for European-style usage wherever this conferred perceived benefit.

RESISTANCE OR INNOVATIVE FORAGER EXPLOITATION

The historical record was used as a first track into this study, with questions framed to test how far the missionaries' perceptions of the mission's impact on the

Aboriginal camps around it coincided with the archaeological record. European missions from the sixteenth century onward made no secret of their determination to dominate and convert the heathen, if necessary against their will. At Killalpaninna the Lutheran intent to dominate, convert and maintain by dominance was from the start evidenced by its siting on a traditional living and burial site of the Dieri people-a high sand-dune with a rare copse of ancestral trees which dominated lake and landscape-and then by the implied management strategies and ecclesiastical hierarchy of its ground plan and replicated German architecture. One Aboriginal response, modest as it was in terms of numbers and much subject to back-sliding, was missionization. This is documented in the historical record as the list of conversions and baptisms. Another response also present in the documents was resistance. Some Aborigines lived elsewhere in the vicinity and continued their ceremonial life with little interruption from the mission. The frustration of mission staff over persistent Aboriginal mobility is graphically described, especially when traditional food resources were plentiful and their flock disappeared to hunt. Times of drought were almost welcomed by the missionaries since the Aborigines returned to their base camps near the mission to draw the rations they needed to survive. The responses of dominance and resistance were summed up by the Lutherans in their perception of two kinds of Aborigines: 'mission' and 'bush'.

The archaeology confirms that the placing of the mission was a declaration of intrusive power into traditional Aboriginal territory, which is represented by extensive scatters of prehistoric material by the lake and channel. However, there are also archaeological indicators that this dominance was not as absolute as the early Lutheran records would indicate. The 'humpies' of locality 29 are clearly shown close to the church on the map of c. 1907 (Figure 13.5) suggesting that their presence had been accepted by those who had drafted the plan, despite the dislike of earlier missionaries for such 'miserable shelters'. Moreover, massed campsites with mission-related objects and indications of associated cultural and technical instruction are also found at some distance from the mission, significantly out of sight both of its residents and of the church. Most notably there was evidence for the vigorous survival of traditional items and European items used as raw materials on all these localities. These features are suggestive either that in the later stages of the mission Lutheran authoritarian attitudes changed, with greater tolerance of Aboriginal identity and lifestyle, or that under the less involved leadership after Reuther's departure, the Aborigines had more freedom to make their own accommodation between two regimes.

To summarize the evidence, then, processes of missionization, however defined, are clearly demonstrated on the campsite localities 28 and especially 29, which are closest to the mission and in which European items for European-style use are most abundant and most structured in the assemblages. On these localities imported items such as specialized clothing, eating utensils, and ceramic tableware appear to have been adopted along with their European use context and perhaps their European status as well. Locality 29 alone is fully within the core of the mission, a circumstance which *prima facie* supports the presumption of occupation by the converted 'mission' Aborigines. Its considerable importation of mission-based European objects also appears associated with the kind of technical and cultural knowledge of their use gained from mission training. Here are clear archaeological imprints of families with women employed in the mission, children attending school, and males working as stockmen. The archaeological signature of employed Aborigines at this locality, e.g. saddle studs, saddle chains and leather traces, buckles from work belts, fourhole sew-through buttons from moleskin trousers, and tobacco tabs, includes gear that would have to have been supplied by the mission.

In contrast, despite their apparent proximity to the mission, the archaeological evidence supports the interpretation of non-participation, if not *resistance* in localities 30, 31 and 33, and thus their identification as the campsites of 'bush' Aborigines. Like locality 28, localities 30 and 31 across the channel have a selection of European material, but it is less numerous, less intense, and especially less structured. As discussed previously, locality 33 demonstrates both greater range and higher frequency of European items than either 30 or 31. Significantly, it is off the mission dune and out of sight of it and, second, it appears to lack the more structured evidence of mission behaviour and activities characteristic of 29. These data support the conclusion that 30, 31 and especially 33 represent the campsite localities of camp Aborigines increasingly attracted to the mission periphery for what it could offer in the way of rations, meals, material culture and skills but who resisted the commitment of full mission living and conversion along with the rejection of ceremonial life such a commitment required.

This conclusion is supported by strong continuities on 30, 31 and 33 in both traditional and adapted Aboriginal artefacts. The adaptation of European items as raw materials for the continuation of traditional lifestyle practices included the use of cross-cultural weapons and utensils for hunting and food preparation and the manufacture of tools from newly-available raw materials of bottle glass and iron scrap for use or maintenance of traditional needs. The building materials associated with these items confirm that adaptations of traditional shelters incorporated some recycled European materials. At the same time all these localities are rich in traditional lithic items, including some ochre for ceremonial use, indicating the strength of traditional continuities. What is especially interesting is that even the campsites of locality 29, right in the mission, have significant evidence for flaked bottle glass, the most identifiable of these adaptations, although they have fewer lithic items such as grindstones, and no ochre, the hallmark of anti-Christian ceremonial. Moreover, as established earlier in this chapter, the Lutherans had increasingly come to accept the presence of traditional Aboriginal shelters adjacent to their church.

The conclusion here is inescapable that the mission had increasingly come to accept significant continuities in traditional lifeways even among their converted missionized flock, while conversely the more distant 'bush' Aborigines increasingly moved closer to the mission and availed themselves of whatever it offered in both goods and services. Such negotiated tolerance on both sides involved compromises all round: for the Lutherans in their normal rigorous and totalitarian approach to missionization and for the Aborigines in accepting some conditions—cleanliness, church-going—to get their subsistence and other needs. These processes, for which clues are documented at least from the 1890s, imply persistent negotiation over at least twenty years, probably largely tacitly, for a co-existence that benefited both.

To return to the theoretical questions about dominance, missionization and resistance raised previously, the archaeological data at Killalpaninna demonstrate that while the dominance implied by the European objects is clear, the strength of the resistant Aboriginal cultural complex within which they were embedded is surprising. The inference must be either that the nineteenth-century Lutherans became steadily more tolerant of mixed lifestyle practices they once abhorred, or that the cross-cultural adaptations at Killalpaninna represent a late stage when rigorous church supervision and control of their wider congregation had effectively ceased.

The prediction of Aboriginal resistance to the intrusive mission, even residually among the most missionized, is therefore confirmed. Identification of what is implied by the Killalpaninna data as resistance is nevertheless seen as a minimalist interpretation. It fails to recognize the positive actions taken by Aboriginal people: namely, the selection, collection and adaptation of European items such as bottle glass and iron objects. In contrast, creolization theory was designed to highlight the positive features of hybrid culture resulting from cultural contact. If present, creolization was predicted to involve innovative and creative uses of foreign material which were not traditional either to Aborigines or to Europeans. How far Dieri music and song were incorporated into the European church tradition has not to our knowledge been established, nor has the extent of creolization in language. The analysis of adaptive uses of items of clothing can be undertaken with contemporary photographs. In contrast to the stiff photographs of the baptized in full and orthodox European dress, the 'bush' Aborigines are recorded as inventive in their use of selective items. Ceremonial body adornment might have included items of European clothing, but these have been rigorously excluded from the purist anthropological record. Photographs suggest that other recycled European items like camp ovens, mugs, and cooking pots were used in orthodox fashion, but they were often posed to make the point of successful Europeanization. In the absence so far of photographic and written evidence the use of ceramic tableware remains a question mark.

In archaeological terms the concept of creolization best fits the sense of vigour and creativity of the recycled bottle glass and the salvaged building and other European components for up-dated humpies. Humpy materials are often frustrating when they appear in the archaeological record because of the difficulty of recognizing the features. They are more accessible to analysis when the incomplete archaeological data are used in conjunction with contemporary photographs of how traditional and European forms and materials were combined in post-contact shelters. There is much work to be done on the study of innovative aspects of post-contact shelters. Most accessible archaeologically is the emergent bottle glass tool technology, which developed new techniques for reducing and flaking bottles rather than solid stone cores. Glass tools include flakes of all sizes often struck off elegantly-prepared base cores and lips, scrapers of every description, adze flakes and slugs, and a wide range of opportunistic tools on broken bits. Study to date indicates its richness, with some new forms related to bottle shape, but probably the most recognizable material in fact following traditional adze shapes and working flakes for wood smoothing. On current evidence it must be concluded that the intended products for glass manufacture appear to follow traditional forms despite the innovative technical adaptations required to make the bottle form produce them.

The third predicted Aboriginal response was optimization of resources, in which the process of contact is perceived as a continuation of traditional forager practice in identifying, exploiting and maximizing resources. Surprisingly, evidence to support optimization is most dramatically found in the historic records, where the Lutherans themselves record the systematic Aboriginal exploitation of government rations as dispensed by the mission. The records comment that 'bush' Aborigines consistently appeared at the mission in times of drought and natural food shortage and were prepared to comply with minimal mission standards to get meals, but they disappeared as soon as rains or flood brought a renewal of native food sources. A second resource thoroughly exploited by Aboriginal people was bottle glass, discarded by the Europeans at the mission and valued by the Aborigines both for tool production and for casual use in shaping and smoothing spears and other wooden items. Glass was found further from the mission than any other category of European item (cf. Figure 13.2 with Table 13.4). Other raw materials, recycled building materials and iron items, were used in different ways, sometimes for human shelters, sometimes for hunting and collecting devices, traps, perhaps cages and utensils. The imported European objects were mainly concerned with subsistence and doubtless status activities (clothing, household). The campsite localities were close to the mission but significantly neither on it nor in sight of it, and as noted there is strong evidence for continuity in traditional lifestyle in the presence of grindstones, stone adze flakes, hammer-stones, and ochre on most sites, with the notable exception of 28 and 29.

In summary, while the strong undercurrent of resistance at the mission cannot be denied, its subtlety and understated presence in the historical record are strikingly highlighted by the archaeology in the form of selective and innovative resource exploitation. At Killalpaninna Mission there is incontrovertible evidence for optimal exploitation of selective resources by the indigenous population within the new economic and cultural contexts created by contact with European outsiders. Subsistence and material resources perceived by Aboriginal people to have been valuable for part of the changing spectrum of lifestyle needs were selectively identified and utilized. The significant resources comprise a broad spectrum involving food quest, food preparation, clothing, wages and tool manufacture.

The model proposed here for selective resource exploitation allows the option of limited engagement and of selected choices about perceived benefit when interacting with the new resources of contact. Localities with the lightest imprint of imported raw materials, in fact those at the extreme edges of distance from the mission, demonstrate such communities. Campsites in such localities usually have one or two bits of bottle glass along with large quantities of lithic material. These bits are not necessarily flaked and may have been acquired for curiosity or experimental purposes. Such places contrast strongly with localities like 30 which has a high proportion of glass and even more with 33 where there is a wide range of cross-cultural resources selected for exploitation. A.P.Elkin's (1951) value-laden term 'intelligent parasitism' is consistent with the concept of selective resource exploitation. His viewpoint elevates the role of the predator or exploiter and reduces that of the host settlement. Also implicit is the terminal nature of the relationship, which is what has actually happened at the Killalpaninna mission. A critical point is whether his characterization fully captures the vigorous and creative character of these campsites which I have documented. It may nevertheless be a model worth revisiting for understanding cross-cultural contact.

To conclude, what of the role and nature of negotiation at Killalpaninna, the theme of this volume? If dominance and conversion were the goals of the mission and selective exploitation for perceived benefit the basis of continuing forager strategy around it, negotiation and parley, tacit as they must largely have been, were, from the archaeological evidence, absolutely fundamental to every aspect of the interactions that took place at Killalpaninna.

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