

**Romancing the Reef:
history, heritage and the hyper-real**

Thesis submitted by

Celmara Anne POCOCK BA (Hons) UWA

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James Cook University

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Abstract

The Great Barrier Reef is regarded as one of the natural wonders of the world and is recognised as having World Heritage significance. The wealth and complexity of its natural attributes form the basis of a rich and complementary human history. However, management of the region is focused on the conservation of natural attributes, sometimes at the cost of human interests and cultural values. This is symptomatic of the way in which many heritage properties are managed and is a source of problems in the identification and interpretation of heritage. There is a need to better understand the human dimensions of such ‘natural wonders’ to ensure effective management. In order to address some of these issues, this thesis explores visitor experiences and knowledge of the Great Barrier Reef with a particular focus on the non-local experiences and knowledge that underpin the region’s global recognition.

One of the major issues for management is the mutable nature of heritage values. This research therefore seeks to develop an understanding of how such heritage values are formed, transformed and sustained over time. It takes an historical approach to understand the ways in which visitor knowledge of the Reef has been constructed and transmitted both temporally and spatially. Methods novel to heritage assessments are developed and implemented to identify and contrast visitor experiences in the past and those of the present.

The study focuses on visitor sensory experiences of the Reef as a means to understand knowledge of place. A concept of sensuousness is defined and used to understand how knowledge of place is constructed through the human senses, and communicated within and between generations.

The research identifies a number of significant changes in the way in which visitors have constructed and understood the Great Barrier Reef. These include the creation of idealised Pacific islands at the expense of an Australian location and character; the transformation of the dangerous underwater world into a controlled and benign coral garden; and the synecdoche of the coral garden as representative of the Reef as a whole. Central to these constructions is the way in which simulacra are used to create experiences that are increasingly both dislocated and disembodied. As a consequence visitor knowledge of the Reef has shifted from sensuous perception of the Reef as a place or series of places, to the construction of imaginative and photographic simulacra that manifest as experiences of space and non-place.

Through the exploration of this case study, the thesis makes a contribution to both theoretical and methodological issues in heritage studies.

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Acronyms and Abbreviations

ACF	Australian Conservation Foundation
ACIUCN	Australian Committee for the International Union for the Conservation of Nature
AHC	Australian Heritage Commission
Aus. Mus.	Australian Museum
ANHC	Australian Natural Heritage Charter
ANTA	Australian National Travel Association
CRC Reef	Cooperative Research Centre for the Great Barrier Reef World Heritage Area
GBR	Great Barrier Reef
GBRC	Great Barrier Reef Committee
GBRMPA	Great Barrier Reef Marine Park Authority
GBRWHA	Great Barrier Reef World Heritage Area
ICOMOS	International Council on Monuments and Sites
JCU	James Cook University
NAA	National Archives of Australia
NLA	National Library of Australia
Reef	Great Barrier Reef
RNE	Register of the National Estate
SAAS	School of Anthropology, Archaeology and Sociology
ScreenSound Australia	National Screen and Sound Archive
VSL	State Library of Victoria
WHA	World Heritage Area
WWF	World Wildlife Fund

Statement of Sources

DECLARATION

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

Celina Pooal

Signature

3 December 2003

Date

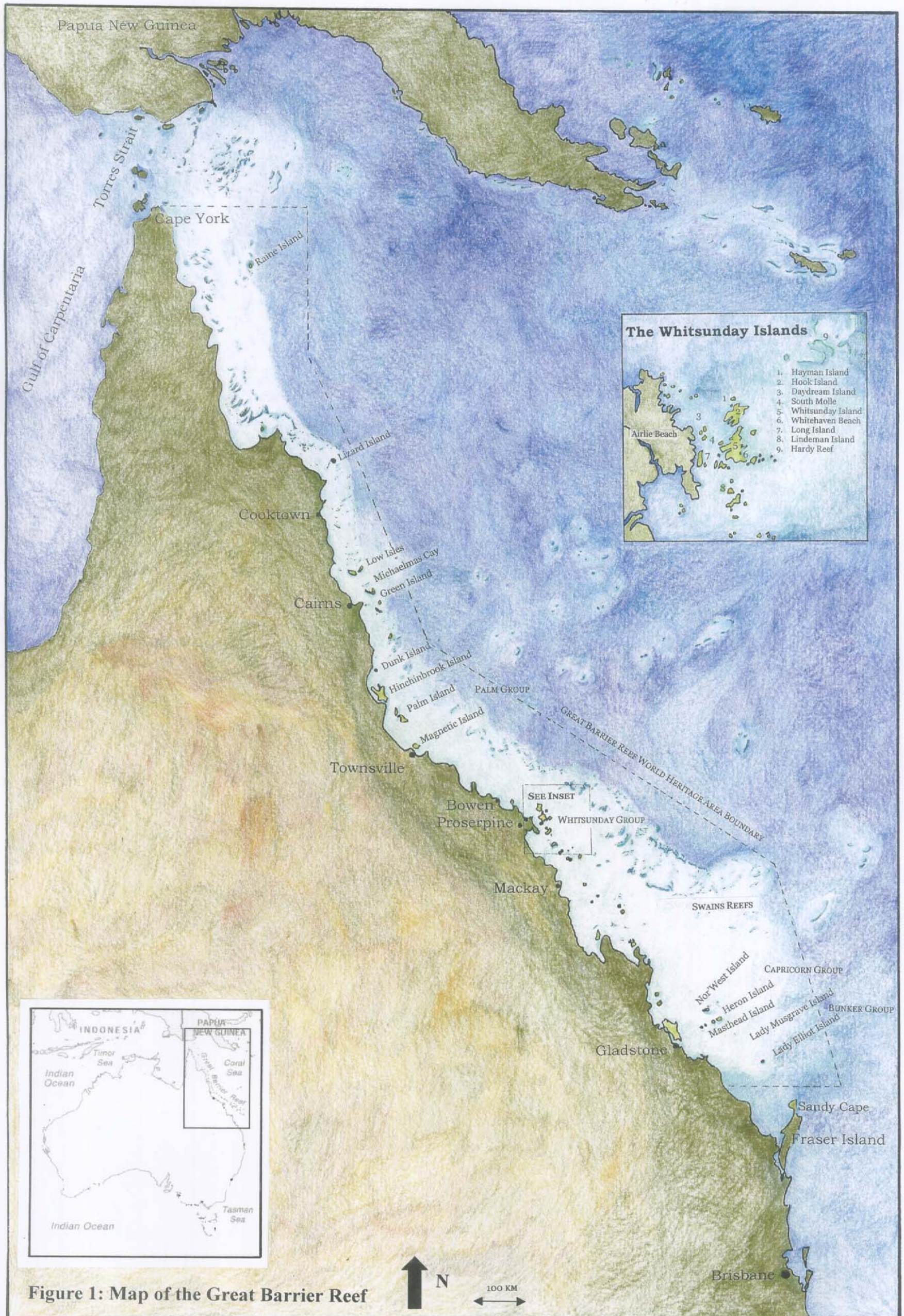


Figure 1: Map of the Great Barrier Reef

Genesis

The Great Barrier Reef is a composite of coral reefs, islands and cays that stretches for more than 2,000 kilometres along the northeast coast of Australia (Figure 1). It is renowned world-wide for its unprecedented scale, spectacular scenery and diverse marine life and is regarded as one of the ‘natural wonders’ of the world. A significant portion of the region is listed as World Heritage in recognition of its exceptional natural features, biological diversity, and visual aesthetic qualities. The Great Barrier Reef World Heritage Area (GBRWHA) constitutes the largest of any World Heritage place in the world. It comprises 348,700 km² and extends from north of Fraser Island to the tip of Cape York Peninsula, and from the low water mark of the Australian mainland to the edge of the continental shelf (Lucas, *et al.* 1997). Although not a singular reef, the Great Barrier Reef is conceptualised and valued as a single entity and its immense scale is largely responsible for its recognition as a unique phenomenon in the world. For this reason and in the interests of brevity throughout this thesis I use a capitalised ‘Reef’ to signify the Great Barrier Reef and to distinguish this phenomenon from any other singular reef whether or not it is part of the larger Reef.

The celebrated natural attributes of the Reef and the wealth of its resources have drawn a diversity of people to the region. It is the basis of many people’s livelihoods and is also a place of spiritual and sensual significance. It has a varied and rich human history that complements and extends the recognised natural values of the region. However, it is the natural qualities that dominate both popular conceptions of the area and its management.

The recognised heritage values of the Reef are primarily drawn from scientific interpretations of the natural attributes of the region, and consequently management of the World Heritage Area emphasises the conservation of natural qualities. There have

been few attempts to document or understand the cultural heritage of the region and hence these values are not accounted for within management. As a consequence of this neglect within current management, cultural values are at risk of disruption or loss. Cultural significance is important to conserve in its own right, but the recognition of these values also has the capacity to inform the effective management of natural attributes. Cultural heritage is often seen as a separate and unrelated component of resource management. However, in the absence of people, natural systems continue to function and change. It is human use and impacts that are the impetus for change and damage, as well as the source of all values. Management should therefore focus on the interrelationship between a perceived or purely 'natural' system and the people that value it. An understanding of cultural constructions of the region can identify mechanisms through which people value the natural attributes of a given region. It can also identify areas of potential conflict between nature conservation and other human use.

For these reasons a project was developed jointly by the Great Barrier Reef Marine Park Authority (GBRMPA) and the School of Anthropology, Archaeology and Sociology at James Cook University, to investigate the research and management needs of cultural heritage in the Great Barrier Reef Marine Park and World Heritage Area. The report produced as a result of this study highlights the fact that there has been little research in relation to cultural heritage of the Reef, and identifies a number of cultural heritage research needs, including collection and synthesis of existing data (Greer, *et al.* 2000). More significantly, the report criticises the framework used by governments and practitioners to assess and manage cultural heritage, and the authors recommend that the GBRMPA develop a new framework specifically for cultural heritage management. It further recommends that this framework incorporate the concepts of cultural landscapes and social values.

Although the Reef has a diverse range of cultural values worthy of recognition and conservation, it is the particular social relationships that people have with the region that are frequently at the heart of disputes about its management and use. The ideas, opinions and associations that a community or social group hold in relation to a heritage place are often referred to as social values within Australian heritage management. These values may be expressed through different criteria under different regimes in

other parts of the world (Byrne, *et al.* 2001: 8). However coined or defined, these values are increasingly regarded as an important aspect of heritage significance and their recognition is considered central to successful management. Social significance is identified as a criterion to assess heritage places under a number of regimes in Australia, but the concept is poorly defined and used. However, there is increasing recognition that such values are integral to the significance of many heritage places, including those primarily thought of as natural heritage. Social significance therefore underpins the nexus between natural and cultural heritage values.

Following the recommendations of the Greer *et al.* (2000) report, the Cooperative Research Centre for the Great Barrier Reef World Heritage Area (CRC Reef) agreed to fund a large-scale project to assess cultural heritage of the World Heritage Area and Marine Park. This project comprises several sub-components including to synthesise existing data for known cultural heritage, to locate and record archaeological sites, and to consult with and interview community groups. These data will be used to generate a landscapes model for management of cultural heritage values in the Great Barrier Reef World Heritage Area, and it is anticipated that the outcomes will be applicable to other management contexts (Greer, *et al.* 2000). Following the Greer *et al.* (2000: 91) recommendation that “[p]articular attention should be given to the identification of ‘social values’ as a criterion in identifying and assessing cultural heritage”, the CRC Reef project identified, as a priority, the need for a discrete research proposal to investigate social values of the Reef. It is from this recommendation that research for my thesis has emerged.

The Problem

If cultural heritage values are poorly understood for the Reef, then social values are completely unrecognised. Social values are often mistakenly conflated with socio-economic interests in the management of the World Heritage Area (Greer, *et al.* 2000: 91). However, social values as defined and used within heritage conservation remain undocumented and are absent from the management scheme. This oversight is not unique to this particular management agency. Social value as a criterion to assess heritage places is less systematically defined and used than other criteria (Byrne, *et al.*

2001; Pocock 2002b: 276). The range of values represented by the social value criterion is quite diverse. Definitions vary across a number of different State and Commonwealth regimes in Australia, and some have no capacity to include these values. While the need to address social value is recognised as good practice in the assessment and management of heritage places, there is little theoretical understanding and consequently methods are problematic and ineffective. This makes social values difficult to defend in contentious situations where values and uses are in conflict.

In spite of the many problems surrounding the definition and use of this criterion, social values are a component of all heritage and can therefore unify heritage in its many forms. However, social value is a criterion primarily used to represent groups and values outside the dominant ones. It is therefore a means by which minority groups or others marginalised by heritage processes can have their views and aspirations recognised. In this way social significance is most often interpreted around a dualism in which the heritage practitioner is the centre or 'self' and individuals and communities who are not part of this paradigm are defined as 'other'. Heritage management then, protects what is important to itself, and the additional values and perspectives of other groups are only defined as the residual not encompassed by the dominant paradigm. While this is problematic and reflective of significant weaknesses, it also means that the social value criterion plays an important role within existing regimes because it facilitates consideration of a range of values that might otherwise be ignored. This includes the neglect of cultural values in natural areas.

As the single category carrying many hopes and aspirations for diverse communities, it is important that social significance is defined appropriately and that methods for deciding social value are rigorous and independent. Without such development social significance will remain a lesser category of significance. In the longer term more rigorous methods and conceptual strength may lead to a revision of the whole assessment framework to allow redress of the colonial bias that characterises most heritage regimes (cf. Cleere 1984b; Byrne 1991; Sullivan 1993).

The criteria for World Heritage listing include no specific provision for the assessment of social significance. However, aesthetics are considered as part of World Heritage assessments and the Reef is recognised in both the World Heritage List and the Register

of the National Estate for these qualities. As I discuss in Chapter 3, aesthetics are socially constructed and are a form of social value. In relation to the World Heritage values of the Reef, Lucas *et al.* (1997: 52-3) consider the term ‘aesthetics’ an important avenue through which to consider human association with the region. Although this raises some issues in relation to the structure of the existing criteria which divide natural from cultural values, it facilitates an examination of social values through the consideration of aesthetic experiences of the Reef. It is these experiences and the way in which they contribute to the construction of a place, in this instance the Great Barrier Reef, that forms the focus of this study.

Aims and Objectives

This study aims to advance the conceptual understanding of social value as a criterion through which to assess and recognise heritage significance. It contributes to the theoretical understanding of social significance in relation to heritage places. It also aims to apply this understanding to the management of the Great Barrier Reef World Heritage Area. At the broadest level this research seeks to:

- Examine the link between social value and identity, with particular reference to notions of universal or global ownership that are implied through World Heritage listing.
- Explore the mutable nature of social significance, and the implications this has for heritage listing and management.
- Develop rigorous methods of assessment to ensure that values identified under social significance can be justified, and hence respected, as much as those identified under other assessment criteria.

The consideration of these issues is timely and makes a contribution to heritage studies and management. However, it is necessary to have clear parameters in which to discuss them. I therefore explore these objectives through a consideration of aesthetics as a subset of social value. Like other aspects of social value, aesthetics criteria require both theoretical and methodological development. The aim of my research is to explore the concept and use of aesthetics as a form of social value and to investigate these values as

they manifest in relation to the Reef. The breadth of the objectives, together with the lack of previous research and the immense scale of the region under consideration, has the potential to overwhelm the project. It is therefore necessary to focus the objectives more clearly.

Project Scope

A conventional way to restrict a large-scale project is to limit the geographical scope of the study to one or more discrete locations. However, I did not wish to confine my research in this way because much of the heritage significance of the Great Barrier Reef rests on the concept of the Reef as a single entity. In particular, it is the scale of the Reef that makes it unique and hence worthy of World Heritage listing. Consideration of the whole region also converges with the landscapes approach advocated by the Greer *et al.* (2000) report in that it facilitates consideration of the region at a number of scales and as a composite of many different places and overlapping landscapes. I therefore chose, instead, to focus on a particular social phenomenon or activity that would allow me to address the issues outlined above.

Tourism

Fishing, scientific research and tourism are all significant industries that operate in the Great Barrier Reef Marine Park. For those who live and work on or near the Reef the region is experienced through daily contact and a level of familiarity that characterises local knowledge. As such, I have assumed that locals experience the Reef as a series of more particular places and this would not allow me the scope to consider the conceptual whole which underlies its inclusion in the World Heritage list. Furthermore, local associations are particular and do not fit easily within the concept of global or universal significance that is implied by World Heritage listing. While some of the same arguments might be made for tourism operators on the Reef, the many participants in Reef tours comprise a diverse group of people from all over the world. As outsiders these visitors engage with the area through predefined constructs and are drawn to the Reef partly by its World Heritage status. Their expectation and experience of the Reef is therefore conditioned by values and characteristics for which the Reef is inscribed,

including the scale of the phenomenon envisaged as a singular whole. Tourism is also a key industry that is influential in the management of the Great Barrier Reef.

Management gives weight to the needs of the tourism industry because of its economic importance. Tourists are one of the greatest consumers of the heritage product that is the Reef, and it is therefore relevant to examine what the social significance of the region might be to them.

Time and Change

The longevity of visitor history at the Reef is relevant to my aims concerning change and continuity through time. One of the major challenges for managers is the mutable nature of all significance. This is particularly the case for social significance, especially its mutable quality and the implications this has for management. Byrne *et al.* (2001: 61-3) have suggested that any assessment of social significance must treat the issues of inter-generational change and transmission seriously. They assert that an assessment of social significance will be irrelevant within twenty years of its formation because culture is not simply inherited but actively constructed and modified. If these values are only ever contemporary and constructed in the present, rapidly changing from one generation to the next, they do not require conservation at all. In fact, conservation would mean halting choice and social process. If, however, social significance comprises a body of practices, experiences and knowledge that exhibits continuity and transformation as well as more transient forms of meaning, it is a useful category for the identification of important heritage places. All heritage values are based in the present, but there has been little consideration of change and continuity of social values as there has for other categories of significance. Through an historical approach it is possible to develop an understanding of how social values originate, transform and continue through time. An understanding of how social values form, transform and dissolve has important implications for predicting and addressing management issues and in order to make a new contribution to the study of social significance I have investigated and tested the accepted position that social significance is synonymous with present day values (Walker 1998: 13). A history of visitor experience at the Reef can assist in comprehending social significance not only in the present but also in the past, and in how the past shapes present day constructions of the Reef.

The project uses an open-ended definition of visitor that includes amateur scientists, natural enthusiasts and navigators in the early historic period, as well as holidaymakers and tourists in later eras. This provides a longer period of human interaction than might strictly be recognised by the term 'tourism'. It also allows for the inclusion of some of the fishers, scientists and other enthusiasts who have visited the Reef. There are dangers in using longevity of historical practice as an essential element in assessing tradition and related heritage values and continual transformation is an important characteristic of social and heritage values more broadly (Knowles 1997: 14). However, an historic perspective allows the consideration of the ways in which some community values might be reproduced socially (cf. Knowles 1997). The fluidity of values poses one of the greatest challenges to management and resource use. An understanding of how social values develop, form and change will enable heritage professionals to make better informed judgements about their assessment, conservation and management.

Methods

The historical approach I have proposed provides an alternative to accepted methods. Most social values are assessed through the active participation of community members, but research into past associations and experiences is dependent on other forms of information. The Reef has a long history and is well documented through personal and popular accounts. These comprise a range of source types that are culturally constructed and which play a role in the transmission of knowledge. They can therefore be used as indicators of social meaning and contribute to an understanding of the continuity of social values from the past to the present (Pocock 2002b). Historic data are compared through time, and also compared with that gathered from contemporary Reef tourism, to show how experiences of the Reef have changed over time.

Thesis Structure

The thesis is divided into three parts; introductory and background information; presentation of data about experiences of the Reef; and a discussion of how these experiences are interpreted to construct the place known as the Great Barrier Reef.

There are eleven chapters in total; an introduction, three chapters for each main part, and a conclusion.

Part 1 of the thesis provides background information for the study. This includes an introduction to the history of the region and its conservation; an overview of relevant debates in heritage management and aesthetics, and a discussion of methods used for the study. As I use a different approach to social significance, the methods form an important part of the thesis and are discussed at length in Chapter 4.

The chapters in Part 2 identify, present and collate relevant data sources about visitor activities and experiences at the Reef. These data are examined for how these experiences contribute to a sense of place, particularly the role of orientation and location in understanding the Reef, the sensuous experiences visitors have encountered at the Reef, and the ways in which these have been captured and transmitted as knowledge.

Part 3 is an extended discussion of the data, with a particular focus on the constructions of the Reef that characterise visitor experiences. Chapter 8 traces the creation of an idealised paradise on the Reef islands and Chapter 9 outlines human interactions with and perceptions of the underwater world. In Chapter 10 I consider how these elements are fused to form a tourist commodity. This is a single entity, known as the Great Barrier Reef, and as suggested at the outset, is an integral part of the significance of the region.

In conclusion I discuss how these experiences and constructions of the Reef influence visitors' understanding of space and place and consider these in relation to Urry's (1990) concept of the tourist gaze and the idea of hyper-reality in tourism (Baudrillard 1983; Eco 1986). I discuss how these are relevant to understanding the ways in which heritage is defined and appreciated in contemporary society. My conclusions focus on the implications of using social value as identified from my research, particularly the use of definitions and terminology, methods for identifying change and continuities, as well as future research needs.

In addition, the thesis contains three data sets which represent the types of sources I have used in my research. They also illustrate many of the ideas and discussion in the text. These include a written account of a Reef holiday from the 1930s, a photographic essay of vegetation and accommodation changes on the Reef islands, and a compilation of film footage that illustrates changes in Reef activities and access.

Part 1

Background

This part of the thesis provides a brief history of the Great Barrier Reef; a literature review and a discussion of methods.

Chapter 2

Histories

To generations of seafarers who followed in the wake of Captain Cook's "Endeavour" in 1770, the Great Barrier Reef has spelt anxiety and sometimes disaster as they thread their way warily between islands, shoals and reefs of the world's largest and most beautiful of all coral reefs. For many years, the Reef has been recognized as a marine wonderland, and today it is an irresistible magnet for tourists from all over the world, and source of continual research by marine scientists, biologists and conservationists.

(Trower 1980)

The Great Barrier Reef has been variously described as the graveyard of ships, the living laboratory of marine scientists, the playground of tourists and the battlefield of conservation groups (cf. Wigmore 1932; Gamon 1935; Wright 1977; Johnson 1991). These descriptions reflect the way in which a single space can be constructed as different spaces and places through the uses and experiences of particular groups. These ways of knowing the Reef are not mutually exclusive and, as I will show in this chapter, they often share overlapping histories. Visitor knowledge and experience builds on these historically constituted forms of knowledge and it is therefore useful to consider at the outset the interlinking histories of tourism, European navigation, scientific research and conservation. Many of the data sources outlined in Chapter 4 were identified through explicitly recognising the links between tourism and other facets of Reef knowledge. This chapter therefore aims to provide chronological frameworks for these sources particularly in relation to the identification of change and continuity in Reef experiences. These thematic histories also provide the backdrop for my interpretations of the Reef as detailed in Part 3 of the thesis. This chapter therefore functions as a context for the interpretations I make, rather than providing an exhaustive review of Reef history.

Indigenous history is not included in the thematic history. Aboriginal and Torres Strait Islander peoples' use and knowledge of the region pre-dates European awareness of the Reef by several millennia, and many parts continue to hold particular significance for Australia's first peoples. They are not visitors, and their knowledge is arguably the

antithesis of visitor experience. Certainly there are many aspects of Indigenous interaction that have enabled participation and shaped visitor perceptions of the region, but as suggested in Chapter 11, this is an entirely separate project that should be investigated by, or in close cooperation with, Indigenous communities of interest. For the purposes of my research, I have deliberately set Indigenous histories aside, including their interactions with traders from southeast Asia prior to the establishment of a British colony. Instead I start with the European navigators and move through the early scientific investigation of the Reef; the tourism industry that developed in association with such research; and the conservation movement that resulted in the World Heritage listing of the region. The aim is to introduce the reader to key events and individuals so that the sources cited in later chapters can be readily contextualised. This material is also presented in summary form in Figure 2.

As mentioned in the introduction there has been little research into the cultural heritage values of the Reef. The exceptions to this come from a number of published sources including a published Honours thesis on early tourism in the Whitsundays (Barr 1990) histories relating to conservation and environmental issues (Wright 1977; Love 2000), and a recent and more broad-based history of science and conservation (Bowen and Bowen 2002). These have been very helpful in constructing basic chronologies, while other aspects of this chapter are drawn from local histories, unpublished sources and other materials that are discussed in more detail in Chapter 4.

European Navigation

The Great Barrier Reef first came into European consciousness through the exploration of the Pacific. Exploration and eventual colonisation was driven by the need for new resources and lands. Between the fifteenth and eighteenth centuries key European powers made considerable effort to expand their territories through the acquisition of parts of the world previously unknown to them. In addition to the American and Australian continents, the discovery of the Pacific islands was especially significant. The exploration of these islands in the latter part of the eighteenth century, and the accounts of Tahiti in particular, gave credence to the idea of a paradise on earth. These exotic islands promised not only fertile lands but also political refuge and social

freedom (Smith 1992; Grove 1995; Sheller 2001). During this period of colonisation, Europe was also undergoing major philosophical changes through the emergence of a natural science based in observation. This way of conceiving and recording the world was applied directly to the New World and consequently shaped the way in which it was classified and understood (Sheller 2001). These factors had both direct and indirect consequences for how the Reef was constructed and is discussed further in Chapter 8.

The first European encounters with the Reef also had a direct impact on the way in which the region is understood. A succession of navigators made their way to the antipodes in search of an imagined southern continent. It was almost certainly the Portuguese and Spanish who first sighted and made charts of the east coast of Australia in the 1520s (Stevens 1930; Bowen and Bowen 2002: 13-20). However, in the highly competitive circumstances of colonisation these discoveries were kept secret. This enabled English explorers to claim primacy in the discovery of the southern continent some two-hundred and fifty years later. It is therefore Captain James Cook who is most widely acknowledged as ‘discovering’ Australia. This is not least because in claiming the east coast of the continent in the name of King George III, he opened the way for the establishment of a British colony at Botany Bay in 1788.

The significance of Captain Cook is not merely as a great navigator, but more particularly the way in which his reputation is enmeshed with the establishment of Australia as both place and nation. It was his accounts from his voyage aboard the *H.M.S. Endeavour* that first brought the Australian continent into common European knowledge. Simultaneously, the European public became aware of the presence of a coast characterised by innumerable coral cays and shoals. Much of Captain Cook’s time on the Australian coast was spent negotiating the shoals and reefs he named ‘the Labyrinth’. Consequently conceptions of early Australia conflate European discovery of the continent and navigation of the Reef. This has implications for continuity and change in knowledge and experience of the Reef, but is also important to a consideration of the relationship between the Reef and Australian identities.

The legacy of the *Endeavour*’s voyage along the Queensland coast survives today in a litany of place names redolent of influential English gentlemen and navigational observations and events. However, it is Captain Cook’s descriptions of ‘the Labyrinth’ as

unique and dangerous that caught the European public imagination and came to characterise the region. Accounts of the journey are typified by a sense of frustration and fear associated with the extreme danger the reefs and shoals posed to the vessel and lives on board. The *Endeavour* encountered many navigational problems during the voyage. This made travel particularly slow and on one occasion the vessel was seriously damaged when it collided with a reef just north of present day Cairns. The party managed to reach the mainland where they were forced to camp at the mouth of the present day Endeavour River while repairs were made. The dangers encountered by this foremost navigator therefore came to characterise perceptions of the Reef.

The dangers posed by the Reef made the creation of charts a priority so that vessels could avoid potentially fatal encounters with corals and shoals in these waters. Following Cook's initial cadastral work several notable navigators entered these waters to gather information to create and refine charts. This was an incredibly laborious and time consuming task that took many decades. Several of these expeditions are noted on the timeline in Appendix 1. Matthew Flinders contribution is worthy of particular mention. In 1801 and 1802 he was charged with the express task of making corrections to charts created during the voyage of the *Endeavour* (Flinders 1801: 15 November 1802). In his experiences and recollections of this voyage on the *Investigator*, Flinders also characterises the Outer Reef as extremely dangerous. It was his perception that the dangers of the outer wall impeded navigators from reaching the mainland coast that led him to coin the term 'barrier reef' (Flinders 1801: 21 August 1802). Although he did not survey the entire length of the Reef, he gained the impression that it extended much further north than the 400 miles he charted. Flinders thus gave the region its enduring name. His observations and experiences also cemented the idea of the Reef as a singular, unending and unparalleled entity of considerable danger.

The navigational dangers of the Reef were also a reality for many vessels, including the *Cato* and *Porpoise*, which were wrecked under the command of Flinders in 1803. Ships travelling the eastern seaboard to and from the British colony of New South Wales therefore tended to use the Outer Route. This had some of its own dangers but by and large offered a safer passage. However, it was a much longer and therefore more costly journey. Consequently the governors of the infant colony were keen to secure a safer passage through the Inner Route. This was also strategically important at a time when

Britain sought to consolidate its position as a world power. Charting the Reef thus remained a priority during the nineteenth century. In spite of increasingly refined charts and knowledge of the region, the number of wrecks escalated during the ensuing decades as the use of the Inner Route became more and more popular (Bowen and Bowen 2002: 11-123). By 1861 the Reef had caused some 159 wrecks and claimed a high toll in human lives (Loney 1982; Bowen and Bowen 2002: 85). So in spite of increased knowledge, the Reef remains a navigational hazard and continues to threaten ships today.

Scientific Research

Naturalists accompanied many of the early navigational voyages of the Reef waters. European interest in natural sciences emerged at a similar time to colonial expansion and voyages to new lands offered a rich source of inquiry. So while information was being gathered to construct maps and charts of the Reef, naturalists were constructing some of the earliest knowledge of the reefs themselves. Scientific study was an important component of the earliest of voyages. Sir Joseph Banks and his assistants accompanied the *Endeavour* in 1770. As a botanist Banks's priority was to make botanical collections from the novel flora of the Australian continent. He made extensive collections of plant samples, particularly during the weeks the ship was under repair at the mouth of the present day Endeavour River.

Sir Joseph Banks was a wealthy and influential individual and his interest in botany also shaped subsequent scientific studies associated with Reef navigation. In particular his support for Matthew Flinders' ensured that botany remained the focus of naturalist studies during the voyage of the *Investigator*. Nevertheless, the appointed botanist Robert Brown also made some marine collections and reported to Banks that "I have not been able to attend to ichthyology, which would probably have afforded the greatest variety, and both insects and shells are few in number, and by no means beautiful or singular" (cited in Bowen and Bowen 2002: 69). His observation stands in stark contrast to the present-day recognition given to the Reef through both heritage listing and in personal accounts that are outlined in later parts of this thesis.

Geological explanations dominated early theories about the origin of coral reefs, including Charles Darwin's, and geologists were among the first investigators to systematically study the Reef. Between 1842 and 1846 a geologist, Joseph Beete Jukes, accompanied Captain Blackwood on the *H.M.S. Fly* (Jukes 1847). His work with botanist John MacGillivray led to an interest in marine life and the pair are credited with making the "first major contribution to the zoology of the Reef" (Bowen and Bowen 2002: 92). These were the first of many collections of Reef corals, shells and other specimens that were accumulated across the world over the following century. Many of these collections were returned to Britain for display and research. It is through such collections that people some considerable distance from Australia first came to know the Reef.

One person who gained his first knowledge of the Reef through collected samples and specimens was nineteenth century British Museum curator, William Saville-Kent. It is suggested that he first dreamed of visiting the living Reef while cataloguing Reef specimens (Harrison 1997: 84; Love 2000: 100). After taking the position of Tasmanian Inspector of Fisheries in 1884, he was offered a similar post in Queensland in 1889, primarily to investigate the decline in pearl-shell. It was during his three years as Queensland Commissioner of Fisheries that his early interest in corals and sponges was rekindled and he had the opportunity to work on the Reef. It is perhaps for this work that he is most renowned. His biographer (Harrison 1997: 118) has suggested that the acclaim he received for the publication, *The Great Barrier Reef of Australia: Its Products and Potentialities* (Saville-Kent 1893) was a result of its "single dramatic core and unique illustrations". This work was influential in a number of ways. The black and white photographs and hand coloured plates produced by Saville-Kent are striking (Plates 1 and 2) and were revolutionary in "introducing the general public to the incredible beauty and variety of Reef life" (Bowen and Bowen 2002: 159). Like coral collections, photographs are an important means to communicate the Reef and photography has played a central role in shaping visitor experiences of the Reef (Pocock In press). However, Saville-Kent's work went beyond popular imagery to encompass both scientific interests and what might now be regarded as sustainable use of Reef resources. His work can therefore be seen as a precursor to both conservation and scientific research. The influence of *The Great Barrier Reef of Australia* was significant

and provided a baseline for many subsequent research projects on the Reef, including a major British Expedition in the 1920s.



Plate 1: William Saville-Kent (1893) "Plate XV: Low Woody Reef, Outer Barrier Series, No. 7"

This scientific expedition to Low Isles in 1928 and 1929 was undertaken with the support of the Great Barrier Reef Committee (GBRC). The Committee was established in 1922 to coordinate and promote scientific research on the Reef, and marked the emergence of Reef science as an exclusive domain for professional scientists. It was active in supporting and promoting the Low Isles expedition, and continued to play an active role in facilitating and promoting the need for scientific investigations and field research stations on Reef islands. The GBRC supported and oversaw a number of Australian studies and enjoyed particularly close ties with the University of Queensland. It was also successful in establishing what would be the first of several biological research stations on the Reef. The Heron Island research station was initially established in 1952, but it took several years to develop all the necessary facilities. In 1967 the Committee made the Heron Island base available to an expedition by the Belgian University of Liege (Prime Minister's Department 1966-1969).

When conservation emerged as a major issue in the mid 1960s, the GBRC was still the only organisation with a central coordinating function specific to the Reef (Wright 1977: 3). While ecological interpretations of the Reef as a single interrelated system were only beginning to emerge at this time, scientific research had diversified prior to

this period (see Bowen and Bowen 2002). This provided the basis for greater expansion in the years that followed. Conservationists also highlighted a lack of knowledge of the Reef in many of their campaigns and this supported the persistent calls for research by the Great Barrier Reef Committee. The call for conservation ultimately led to the establishment of the Marine Park and the Great Barrier Reef Marine Park Authority. This fostered increases in both the number of scientific studies and the range of specialisation in Reef science through the later decades of the twentieth century.



Plate 2: William Saville-Kent coloured drawing (1893) "Chromo V. Great Barrier Reef Corals"

Biological research stations belonging to the Australian Museum, James Cook University, the University of Sydney, and other organisations operate on Reef islands. These tend to be exclusive domains for *bona fide* researchers and scientific methods, including highly sophisticated use of equipment. This is associated with an elitism that contrasts with the participation of many amateurs and holidaymakers in the early period of scientific research.

The distinction between professional and amateur scientists and holidaymakers was blurred for much of the first half of the twentieth century (contra Bowen and Bowen 2002: 285). Scientific endeavours were widely reported in various media and this gave the general public direct access to scientific research. The Low Isles expedition was reported extensively in newspapers, partly due to the participation of journalist Charles Barrett of the Melbourne *Herald* (Bowen and Bowen 2002: 249-82). Barrett also wrote for *National Geographic* and *Walkabout* magazines (1930; 1935) and these articles provided popularised accounts of Reef research. In addition the leader of the British Expedition, Maurice Yonge, produced a popular book about the expedition titled *A Year on the Great Barrier Reef* (1930). Many other scientists, journalists and enthusiasts produced popularised accounts of Reef science in the first part of the twentieth century. These include books by Elliot Napier (1928), Mont Embury (1933), Theodore Roughley (1936) and William J. Dakin (1950). They are all well illustrated and scientific information is presented in accessible language. The Embury book was explicitly produced to provide visitors with information about the Reef. These publications therefore offered the general public a means to gain a scientific understanding of the Reef. While increased specialisation tends to exclude the public from contemporary scientific practice, the plethora of popular magazine articles, documentary films and television programs continue to provide broad access to scientific interpretations of the Reef. Consequently marine science dominates public perception as well as management and use of the Reef today.

Tourism

The intersection between Reef research and holidays is demonstrated by the nature of the earliest holidaymakers who went along as visitors on scientific excursions. Some were scientists on leave from their employment and for them there was little distinction between research and vacation. Others were simply taking a holiday.

At the beginning of the twentieth century the Reef islands were largely a holiday destination for locals from the adjacent mainland. At this time pastoralism was the main industry on the islands of the Whitsundays and pastoralists hosted guests as an additional source of income (Barr 1990: 7). Visitors usually provided all their own

supplies, though on some islands they used existing sheds and structures as shelter. Larger organised parties of visitors from further afield blossomed in the late 1920s and reached a peak in the 1930s. Some of the earliest expeditions were those organised by E.F. Pollock, Honorary Secretary of the Royal Zoological Society of New South Wales. He led a party of fourteen people to North West Isle for three weeks in December 1925. The group included several scientists. Eleanor Chase of the Zoology Department of the University of Sydney and Clifford Coles, a taxidermist and furrier, had an interest in turtles. Gilbert Whitley and Anthony Musgrave, both of the Australian Museum, investigated fishes and entomology. Ornithology was an important focus of the expedition and was overseen by Dr William MacGillivray of Broken Hill and Mr P.A. Gilbert of Sydney. The group was accompanied by a photographer, Otto Webb, and a journalist, Hilda Geissmann, who was also a photographer, ornithologist and botanist. They travelled from Sydney and Brisbane by train to Gladstone where they boarded the launch *Lyola*. From their base at North West Isle they visited other islands, made collections of shells and corals and recorded turtles and birds (*The Sydney Morning Herald* 1925b, 1925a; Whitley 1925a; Pollock 1926a, 1926b).

Other expeditions followed and in 1927 Pollock organised an expedition to North West, Heron, Hoskyn and Fairfax islands. A journalist, Elliot Napier, accompanied this trip and wrote a series of newspaper articles. These were published collectively under the title *On the Barrier Reef* (Napier 1928). Among the participants of Pollock's 1927 excursion were Albert Hayter from Kyogle and Edwin Montague (Mont) Embury, a school teacher from the Rural School in Manilla, New South Wales. They were so inspired by this excursion that they decided to organise their own trips to the Reef. The first of these was run from December 1928 to January 1929 with a base camp on Lindeman Island. There were about a hundred participants, most of whom were teachers from New South Wales and Queensland, who travelled by train to Proserpine and then by bus to Cannonvale where launches ferried them to Lindeman (The Australia Handbook 1933; Embury 1981; Barr 1990: 9; Anonymous n.d.: 1-2). The excursion made use of facilities at Lindeman which was at that time leased to the Nicolson family. Accommodation was supplemented by tents and participants took their own bedding and eating equipment.

Following the initial expedition, Embury organised a further two each year until 1934. A central part of the excursions was the presence of several marine scientists from the Australian Museum, including some who had been on the Pollock expeditions. They provided lectures on marine life and led scientific activities for holidaymakers. In addition to these activities, boat trips were organised to other islands and exploration of reefs and fishing were important visitor amusements. And at night there were dances, concerts and fancy dress balls. The production of photographs and the involvement of Australian Museum scientists typify all the Embury expeditions. Mont's brother, Arch Embury, and Otto Webb were both professional photographers and their participation has ensured that these expeditions are well documented in photographs. The images show a range of people and activities and include some of the first underwater photographs of the Reef. The trips were always advertised as scientific and holiday expeditions to the Reef and combined holidays, research and education. Embury was an enthusiast about the nature of the Reef and he sought out the involvement of Frank McNeill, Gilbert Whitley, Harold Fletcher, Mel Ward, W. Boardman and A. Livingstone from the Australian Museum. Many of these individuals were also involved in the Pollock expeditions and the scientific expedition to Low Isles.

Embury organised several excursions to North West Isle up until May 1932 (McNeill 1932; Wilkinson 1932). By December of the same year he moved his operation to Hayman Island where he had secured a lease after his applications for Musgrave and Masthead Islands were rejected. It has been suggested that the scientific component of the Embury expeditions only sought to satisfy government requirements and the scrutiny of the Great Barrier Reef Committee that were conditions of his lease of Hayman Island (Bowen and Bowen 2002: 285). However, other accounts suggest that Embury intended to fund the scientific component through the organisation of fee paying visitors (Barr 1990: 9). By contemporary standards of highly specialised scientific research the efforts of the Embury team may have been small. However, the significance of science to the participants of these expeditions cannot be ignored. The scientific nature of the expeditions was an important aspect of their appeal. This was particularly pertinent for the many school teachers who found these trips educational and a way of developing their own firsthand knowledge which they then relayed to their classrooms. Embury ensured scientific involvement in all the expeditions including the earliest trips to the Capricorns and Bunker Groups which were conducted before he had

any interest in obtaining a lease. On one such trip there were forty-six people, several of them were scientists (Australian Museum 1929).

Whatever his scientific credentials Embury was undoubtedly influential in establishing the Reef islands as a holiday destination. At Hayman Island he is credited with the establishment of one of the first resorts on the Reef (Barr 1990: 9; Bowen and Bowen 2002: 285). The facilities included a shark-proof swimming enclosure, a tennis court, golf links and communal hall for dining and entertainment. There were also purpose built verandahs which served as sleeping accommodation (*The Australian and New Zealand Traveller's Gazette* 1932; *The N.S.W. Freemason* 1932; *The Sun* 1932c; *The World* 1932b). However many participants chose to sleep in tents as had been the practice on earlier expeditions. The experiences of some of the holidaymakers survive in personal accounts of their trips, a notable example is the publication of *A Christmas Holiday on the Great Barrier Reef* by Hilda Violette Marks (1933).

Pollock continued to organise expeditions to the Reef including one that overlapped with an Embury Expedition in 1933 (Carr 1933; *The Sydney Morning Herald* 1933; *The Telegraph* 1933b). Embury ran fourteen expeditions in total with the last run at the end of 1934. The Depression forced Embury to sell his lease over Hayman Island and return to teaching. The lease was sold to brothers, Bert and Bob Hallam in 1935 and while Embury no longer had a financial interest in the expeditions, he continued to organise parties for the Hallams and others until 1937 (Anonymous n.d.). The enthusiasm for the Reef of the Australian Museum scientists is seen in their continued involvement in early tourism, not just the Embury expeditions. In 1935 Marshall, Livingstone and McNeill organised a launch to take several people around the Reef islands. This was written about by several of the participants.

The 1930s can be characterised as a time of expanding tourism interest in the Reef. Almost all holidaymakers were Australian; either being from the local area or outsiders from New South Wales, Queensland and Victoria. There were exceptions to this pattern, but these are not as well documented. The Reef was already recognised as a plentiful and rewarding fishing ground and predicted to become a Mecca for Australian and overseas anglers (Purcell 1933). A particularly famous advocate of Reef fishing holidays was American western writer and big game fisher, Zane Grey, who spent three

and a half months among the islands of the Great Barrier Reef in 1936 (Grey 1937: 107-11). Although he intended to write a book about these adventures and it is sometimes referred to, it has proved impossible to find any trace of such a publication.

Nevertheless, while based on Hayman Island he made the film *White Death* (1936) which highlights the dangers of predatory sharks at the Reef. Although the Second World War brought a halt to almost all tourism in the 1940s, it also brought new overseas visitors to the Reef. Based in Queensland, many American service personnel visited the Reef during shore leave. These individuals were considered to be new unofficial ambassadors for tourism to the region, and after the War some effort was made to encourage them to return (Roughley 1940).

An Australian Tourism Industry

For the most part Reef visitors in the first half of the twentieth century were Australian. This is important in considering the ways in which the islands have been constructed as a Pacific destination (Chapter 8). Coordination of these early Reef holidays was undertaken by individual operators with no reference to any external bodies. However, governments and businesses interest in developing an Australian tourism industry emerged in parallel with these early Reef excursions and this also had implications for the ways in which islands were developed. Tourism was perceived as offering a means to raise revenue and increase both trade and immigration to Australia. The earliest large scale international promotion of Australia with government support was the Centennial Exhibition of Melbourne in 1888 (Richardson 1999: 76). It was attended by thousands of interstate and international visitors and, like other international exhibitions, provided an opportunity for colonies (and later states) to promote their products and industries (Trumble 1998). Queensland exhibited at several international exhibitions between 1851 and 1901 and Reef shells and corals, as well as *bêche-de-mer*, dugong and turtle were a feature of several of these promotions of the colony's products (McKay 1998). At the Centennial exhibition in Melbourne a twenty foot tall marine trophy comprised of six tons of pearl-shell and a base of clams and corals won a silver medal (McKay 1998: 226-227). The Reef and its rich resources have always been part of promoting Queensland, and by implication, Australia to an overseas market.

An important aspect of the Centennial Exhibition in Melbourne was the involvement of Thomas Cook & Son, the iconic travel agency which was founded in Britain in the 1840s. The company established itself in Australia in 1879, and by the following year offered a range of tours to New South Wales, Victoria and Tasmania. By 1893 there was also an office in Brisbane (Brendon 1991: 213-14, 238). While the intention of the office was to promote Australia as a tourist destination, it became much more profitable for Thomas Cook & Son to take Australians overseas (Pesman 1996: 60-61; Davidson and Spearritt 2000: 59-60).

The problem of Australians travelling outside Australia in preference to touring in their own country was highlighted by many early campaigners for a national tourism office. By the early 1900s tourist bureaux existed in most states and territories; many having been established through commercial interests. The railways were particularly influential in marketing and promotion (Richardson 1999: 76-7; Davidson and Spearritt 2000: 73-6). The state bureaux were not only competitive within Australia, but also marketed themselves individually overseas. Momentum gathered during the 1920s for Commonwealth Government involvement in Australian tourism. In 1927 the Commonwealth Government commissioned a confidential report by Charles Holmes and T.E. Moorhouse “regarding the necessity of taking steps to ensure to the Commonwealth a definite place in the sphere of world tourist traffic” (Prime Minister’s Department 1928). The report highlighted the need for a federal body “to draw loose ends together, coordinate efforts and speak for Australia”. It suggests that while Australian tourism was growing, other countries were taking the lead in marketing and promotion. The report further identified the need for Australians to travel more within their own country. The final recommendation was therefore for the establishment of an Australian travel bureau to encourage overseas travel to Australia as well as encouraging Australians to travel within the country.

The Australian National Travel Association (ANTA) was eventually established in 1929 “the object being to attract a greater number of tourists to our shores, and, by cultivating good will and a better understanding of Australia’s potentialities and dissipating ignorance of things Australian, to inspire confidence of investors, and thus enlarge the field for investment and industrial expansion” (Prime Minister's Department 1937). Many of the people involved in lobbying for a national body subsequently joined the

Board which included representatives of key interests, such as the shipping lines, railways, hotels and the Commonwealth Government. The group's lobbying skills were now turned to promoting Australia overseas.

Although ANTA's role was to promote Australian destinations to travellers within Australia as well as overseas, the organisation focused its efforts on the promotion of Australian destinations internationally. In 1929 the Association focused on standards of accommodation, transport and other associated infrastructure which were thought to be inadequate for the overseas market (Prime Minister's Department 1929). However, it is the publicity campaigns that the Association is renowned for. During the 1930s ANTA worked consistently to improve publicity for Australia. By this time the Association had designated representatives in Britain and the United States, and was using Australian Trade Commissioners and representatives in Canada, New Zealand, Netherlands, India, China, Japan and France as *de facto* representatives. ANTA consolidated efforts in producing photographs, news articles and press releases, broadcasting and lectures, and advertised in overseas journals including *London Illustrated News* and *National Geographic*. It also maintained strong links with business interests such as the shipping lines and railways, and played an important role in disseminating information to travel agents to keep them up to date about specific tourist locations and facilities in Australia.

It was during this time that ANTA commissioned Australian and international graphic artists, including Eileen Mayo, James Northfield, Gert Sellheim and Percy Trompf, to design a dramatic and colourful series of travel posters (Spearritt 1991; Hetherington 1999; State Library of Victoria 2001: 28). The posters were never intended to attract a broad public, but were targeted at a limited number who could afford overseas travel. The designs and concepts represented by the posters reflect this niche market (Hetherington 1999: 4-5). By 1930, 100,000 posters had been distributed, but only a few survive today. These images reveal how Australia wanted to be seen by the world and might offer an interesting insight into concepts of Australian self-identity and an opportunity to consider the extent to which official portrayals become part of popular ideas about the Reef. Like other parts of the tourism industry, ANTA was forced to close during the war years and afterwards it was necessary to campaign again for the establishment of a national body. It was 1948 before ANTA reopened and resumed poster production (Hetherington 1999: 6), and it took another eight years before the

Commonwealth made a commitment to fund overseas promotion (Australian National Travel Association and Holmes 1956). The organisation advertised in select journals, and used literature and display material including the production of its own popular travel magazine *Walkabout*.

The Great Barrier Reef as a Key Australian Attraction

During the vacillations of establishing ANTA and in its negotiations with state travel bureaux, the Great Barrier Reef emerged as one of the more significant Australian destinations. Information from travel posters and the magazine *Walkabout*, both sponsored by ANTA, suggest that the Reef was a significant destination in promoting Australia domestically and internationally. Significantly, of the few travel posters that survive a number depict the Reef, including those by Northfield (c. 1930a), Trompf (1933), and Sellheim (c. 1939) from the pre-War years; and Mayo (1953), Trompf (c. 1950) (Plate 3) and Lambert (c. 1950) from the later period. Its significance as a unique attraction was highlighted by Theodore Roughley, Superintendent and Deputy Controller of Fisheries in New South Wales. In his paper “The Attraction of Tourists to Australia” he advocated the role of Government in promoting Australian tourism. Roughley suggested that “[t]he interest of tourists will neither be aroused nor maintained ... unless the attractions of the country are continually placed before them by means of alluring propaganda” (1940: 1). He went on to say that every country has attractions and that it was simply a matter of making people aware of them. Roughley clearly advocated the Reef as the destination that would ensure Australia a competitive market share, and highlighted its unique quality as a particular strength:

What, then, does Australia possess that tourists cannot obtain elsewhere, that will fire their imagination, or that will provide them with greater enjoyment than similar attractions found in other parts of the world? Australia has at least two features ... if these great attractions are known abroad there is no doubt that they will bring tourists to our shores in great numbers and foreign money will flow freely into this country. I refer to the Great Barrier Reef and big-game angling.

Roughley 1940:1-2

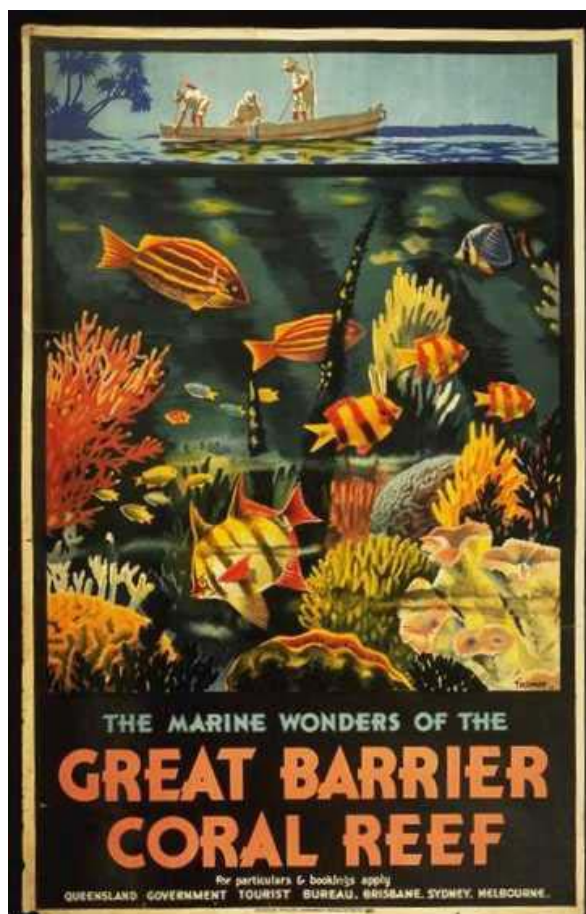


Plate 3: Percy Trompf Poster Produced for the Queensland Government Tourist Bureau, 1933. "The Marine Wonders of the Great Barrier Coral Reef".

©National Library of Australia (PIC Z86 LOC Drawer R28)

In spite of the Reef's natural assets, infrastructure for visitors continued to be an issue for the young tourism industry. As government and industry involvement increased so did criticism of Reef facilities. Eighteen years after the issue was first raised in a report by ANTA, a report by the Queensland Tourist Development Board (1947) made similar recommendations for development. While it describes the Reef as "Australia's tourist drawcard No.1", it found "a need for better infrastructure, particularly transport and accommodation". Contrary to the predominant message about the need for promotion, this report suggested that publicity without improvements would be premature and damaging to the industry (Queensland Tourist Development Board 1947: 11). This was certainly the case for people who were lured to the region by posters and other advertising only to find there was no means to actually reach the Reef (Lock 1955: 36). Tourism development in the Whitsunday region during the 1950s therefore concentrated on improvements to the standard of accommodation and an increased range of resort facilities. The Royal Hayman Hotel constructed by a subsidiary of Ansett Transport

Industries was the first resort in the Whitsundays to offer a full range of luxury facilities. The Hotel opened in 1950 and offered a range of accommodation and amenities including suites with private toilets and verandahs. There was also a range of common facilities including dining rooms and bars, a barber and beauty salon, and a paper shop and other retail outlets. The hotel also had its own swimming pool which was “a real novelty on an island surrounded by tropical beaches” (Davidson and Spearritt 2000: 297-300). Hayman continued to dominate the luxury resort market in the Whitsundays until the late 1960s (Barr 1990: 55).

Although the 1950s saw a new level of sophistication in resort infrastructure and the first corporate investors, other operations in the Whitsundays continued to be run by local entrepreneurs and families through the 1960s (Barr 1990: 54-5). Inter-island transport expanded and by the 1960s the Whitsunday Islands became much more accessible. Reaching the region from interstate was also easier due to the establishment of air travel between southern cities and Proserpine and Mackay. These improvements to regional transport and the reluctance of some local residents to develop resorts left an opening for outside investors (Barr 1990: 71-2). Another important aspect of the transport infrastructure was the construction of the Bruce Highway which allowed visitors from further south to drive themselves. This produced a significant shift in the type of tourists visiting the region. Rather than being primarily cruise or island guests, visitors now included a large majority of self-drive tourists who made day trips to the islands (Barr 1990: 51-4). This also resulted in the expansion of tourist facilities on the Australian mainland and from this time onward centres like Airlie Beach and Cairns developed to become tourist centres in their own right (Barr 1990: 53-4). A number of new cruising operations were developed from the late 1950s to the early 1970s, but the development of Whitsunday Islands as tourist islands remained stable with only one additional island being developed for tourism. This was Daydream Island where a resort opened in 1968. Family run businesses like those on Lindeman and South Molle Islands strived to match the luxury of Hayman, but others underwent minimal changes. By the end of the 1960s tourist islands in the region were unevenly developed with luxurious developments catering to large numbers of guests and an assortment of relatively small operations that continued to host smaller groups (Barr 1990: 55).

Significantly, up until the beginning of the 1970s the vast majority of visitors continued to originate from the Australian domestic market. The following decades saw a succession of non-local entrepreneurs investing in resorts of not only the Whitsunday Islands, but other key tourist destinations on the Reef. Barr (1990) has outlined many of the changes up until the 1970s for the Whitsundays, but there has been little other research into post-war tourism histories of the Great Barrier Reef. However, the constant refurbishment and improvement in facilities resulted in significant changes to the way the Reef was presented to tourists and this forms a significant theme in this thesis. Today the region is highly publicised through a range of media and with the support of both private enterprise and government. The Reef has become synonymous with international tourism and the supporting infrastructure, including transport, accommodation and amenities, is extensive and relatively uniform. With the exception of a more recent trend towards high end exclusivity on the one hand and ecotourism on the other, a general observation of tourism development from the 1970s onwards is of greater conformity in standards partly through the expansion of government involvement and a much higher level of corporate investment.

The latter part of the twentieth century is also characterised by increasing sophistication in facilities providing access to the Reef. At the same time a more conscious rise and politicisation of conservation concerns gathered strength to change the ways in which the Reef was not only conceived but also the ways in which it is used and experienced by visitors.

Conservation

Conservation concerns at the Reef date back to the late nineteenth century when declining pearl-shell numbers were a source of concern to the pearl-shell industry. There was a rapid depletion of pearl-shells through their exploitation, primarily for button making (Ganter 1994: 151-94), and it was this that helped drive the appointment of Saville-Kent. Other conservation concerns became apparent early in the last century when the impact of amateur collectors and enthusiasts, as well as particular primary industries had dramatic negative impacts on populations of shells and other marine life. Some of the quickest and harshest lessons came from the exploitation of turtles for the

soup factories on Heron and North West islands in the 1920s. Conservation concerns in the case of both pearl-shell and turtle numbers were directly related to the economic interests of these industries as it was realised that the practices were unsustainable. Similarly conservation from a scientific point of view in the early part of the century was based on a need to ensure sufficient specimens for scientific collecting. Researchers were increasingly in competition with amateurs and holidaymakers and shell and coral numbers were significantly depleted in some areas. As early as 1932 Frank McNeill was quoted in a newspaper article as expressing concerns about this trend:

Beautiful and rare corals and shells are disappearing from the more accessible parts of the Great Barrier Reef owing to looting by visitors. In the interests of science this must be checked, declares Mr. F.A. McNeill, zoologist at the Australian Museum, just returned from the reef with the Embury expedition.

(The Sun 1932b)

A broader conservation ethic is regarded as having its origins even earlier through the writing of Edmund Banfield (Bowen and Bowen 2002: 214-230). A journalist with *The Townsville Bulletin* newspaper, he became seriously ill and withdrew from society to live on Dunk Island with his wife, Bertha. They spent twenty-six years there, from 1897 until Banfield died in 1923. During this time Banfield became a strong advocate for the Reef and its islands. His books and other writings were particularly influential and he introduced many readers to the Reef. Although he was a long term visitor and knew Dunk Island as characteristically Australian, he nevertheless encouraged romantic visions of island life as a place of refuge. His retreat to the Reef as a place of healing is strongly represented in even the briefest accounts of his life. Through him conceptions of the Reef were therefore expanded to encompass not only its dangers but its capacity to offer healing and solace. This characterisation of the Reef created it as both a liminal space and conservation icon. Through his lengthy association with the Reef, Banfield has acquired some of the power and legendary status of the Reef itself and has himself become a symbol of conservation (cf. Knowles 1997: 67-8).

One of Banfield's visions was the establishment of the Reef as "a great insular national park" (Banfield 1908: 63, cited in Bowen and Bowen 2002: 230). This was to be realised long after his death with the establishment of the Great Barrier Reef Marine Park in 1975. This came as a result of a fierce and protracted fight to save the Reef from

a number of converging threats in the 1960s (Wright 1977; Bowen and Bowen 2002: 323-24). In 1960 Crown of Thorns starfish were first sighted from the Green Island Observatory, a facility constructed to allow tourists to view the Reef underwater. The outbreak of these voracious coral eating animals left large tracts of dead corals that were slow to regenerate. Tourism operators became concerned about the loss of visual beauty and the impact on their businesses. Various experiments to control the species were conducted and a plan developed for further research. While the Crown of Thorns issue remained of concern, a more immediate threat surfaced in 1967. The Queensland Government received an application to mine coral from Ellison Reef to provide lime fertiliser for the sugar cane industry on the adjacent mainland. Under the requirements of relevant mining legislation individuals had the opportunity to comment. Members of a newly formed Wildlife Preservation Society of Queensland were alarmed by the application. A small group of highly active lobbyists within the society, including Judith Wright, an Australian poet from Brisbane, and John Büss, Melbourne-born artist and resident of Bedarra Island, became the primary champions of the Reef during this period. They were concerned not only for Ellison Reef, but also the precedent that an approval would set. The Wildlife Preservation Society of Queensland, the Australian Conservation Foundation and the Australian Littoral Society all subsequently mounted objections opposing the application. Eventually the application was rejected. This was no small feat and the group lobbied hard to gain a range of financial and logistical support to make proper representations.

At the same time as these local events were shaping environmental concerns about the Reef, an international issue also came to the fore. Oil pollution had become a world-wide problem following the introduction of supertankers. A number of disastrous wrecks resulted in extensive contamination and damage to marine life and the Reef was seen as vulnerable to similar accidents because of the numerous vessels that used the Inner Route each year. The conservation groups were also alarmed to learn that unlike the application to mine Ellison Reef, the Queensland government was not required to seek input on exploration licenses and had already approved several oil exploration permits for parts of the Reef. Both mining and oil contamination were therefore regarded as very real and serious threats. Many of these issues – the spread of Crown of Thorns, mining and exploration leases, and threats from oil – gained prominence through a 1969 Australian Conservation Foundation symposium on Reef protection

(Australian Conservation Foundation 1969). However, the ACF was criticised for taking a conciliatory stance on the issues and not providing sufficient time for open discussion during the symposium. Wright and Büsst therefore continued to lobby politicians of both the government and opposition, as well as using the unions to assist in their cause. During these crucial activities the Great Barrier Reef Committee was conspicuous in its failure to make any strong statement about the preservation of the Reef or the threats that had been identified by the conservation groups. It is possibly from this time that science and conservation, although mutually dependent, became distinct interest groups in relation to the Reef.

The Great Barrier Reef Marine Park Authority

The disputes over mining and use of the Great Barrier Reef highlighted the fact that there were no clear jurisdictional responsibilities for the region. The process not only revealed a lack of central coordination for Reef related issues, but that the respective roles of the Queensland and Commonwealth Governments were unclear (Bowen and Bowen 2002: 324-6). This confusion was a contributing factor in the decade of protest, lobbying, Royal Commissions and inter-government negotiation, and was instrumental in the success of the campaign to protect the Reef. In 1975 the Commonwealth Government passed the *Great Barrier Reef Marine Park Act* which established the Great Barrier Reef Marine Park Authority (GBRMPA). The first members of the Authority were appointed in 1976 to oversee the implementation of the legislation. The Authority and the legislation have enshrined the place of the Reef as a conservation icon, and through much of the conservation agenda also ensured that it is preserved for the particular use of marine research. The conservation and research agendas are no longer so closely aligned, but scientific research is still used as the basis for conservation arguments.

As Wright (1977: 187) notes, many of the people who fought for the Reef and its protection had never in fact been there and many were not scientists. Even Wright's own passion stemmed from a single visit and the lasting memory of staring into a coral pool. These ways of knowing the Reef through small parts and of gaining knowledge

through secondary experiences are the subject of Chapters 7 and 10, and are important in the way in which the World Heritage status of the region is recognised.

World Heritage Listing

In 1972 UNESCO established a convention for the protection of World Heritage Properties. Australia became a signatory to this convention in 1974, and in 1981 the Great Barrier Reef, Willandra Lakes Region and Kakadu National Park became the first Australian properties to be inscribed on the World Heritage List. This recognised the Reef as being of ‘outstanding universal value’ and therefore a place significant to ‘all the nations of the world’ and belonging to all people (UNESCO 1972; Lucas, *et al.* 1997).

The first set of criteria adopted by UNESCO to assist in determining places of World Heritage significance were adopted in 1977, and in what has become a continual process, were modified several times before the Reef was nominated in 1981. The Reef was nominated under all four of the 1980 criteria (Lucas, *et al.* 1997: 22), and these and a summary of the values for which the property was originally nominated can be found in Appendix 2. Although the nomination includes both cultural and natural attributes, the real focus of the nomination was on the natural heritage of the region and it is because of these attributes that the Reef was ultimately recognised.

In comparison with later nominations, documentation for Great Barrier Reef nomination was scant and consequently proved inadequate for the management of the World Heritage Area. The Great Barrier Reef Marine Park Authority therefore commissioned a study to ascertain the full range of values for which the Reef might be recognised, taking into consideration further refinements to the UNESCO criteria. It was through this reappraisal by Lucas *et al.* (1997) that the aesthetic values of the Reef were identified as an area in need of further research.

The Great Barrier Reef is included in the World Heritage list under all four natural criteria of the UNESCO (1972) Convention. One of these criteria relates to aesthetic values which are a significant contributor to its status as a place of “outstanding universal value”. The aesthetics are also important in how the region is recognised by other heritage regimes, and are an integral part of its promotion and consumption by tourists. Section 44a (iii) of the Operational Guidelines of the World Heritage Convention stipulates the basis on which a natural heritage property may be recognised for its aesthetic qualities. This requires that a property “contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance” (UNESCO 1999). The specific values for which the Reef is listed under this criterion are summarised as follows:

The Great Barrier Reef provides some of the most spectacular scenery on earth and is of exceptional natural beauty. The World Heritage values include:

- *the vast extent of the reef and island systems which produces an unparalleled aerial vista;*
- *islands ranging from towering forested continental islands complete with freshwater streams, to small coral cays with rainforest and unvegetated sand cays;*
- *coastal and adjacent islands with mangrove systems of exceptional beauty;*
- *the rich variety of landscapes and seascapes including rugged mountains with dense and diverse vegetation and adjacent fringing reefs;*
- *the abundance and diversity of shape, size and colour of marine fauna and flora in the coral reefs;*
- *spectacular breeding colonies of seabirds and great aggregations of over-wintering butterflies; and*
- *migrating whales, dolphins, dugong, whale sharks, sea turtles, seabirds and concentrations of large fish.*

(Environment Australia 2002)

In this list of natural attributes aesthetics are reduced to scenic qualities and “natural beauty”. Significantly, this includes its “unparalleled aerial vista”. There is also an intimation of the sublime through the scale of the Reef that is “unparalleled” and hence awesome. Its unprecedented size also underlies the categorisation of the region as

unique and is fundamental to its global recognition. Also significant in the identified aesthetics is the diversity of shape, size and colour of marine fauna. The focus on these attributes and the system that facilitates it raises questions about the way in which aesthetics are defined and interpreted within heritage practice; the relationship between place and values; and the social construction and mutability of value. An exploration of literature relevant to these questions forms the basis of this chapter.

Focus of Inquiry

Each Australian State and Territory has its own legislative and administrative frameworks for deciding what heritage will be conserved and the Australian Commonwealth Government makes additional and separate provisions. As noted the Australian Government is also a signatory to the UNESCO Convention for the Protection of World Heritage under which the Great Barrier Reef is listed and protected. Under these heritage regimes place is determined and defined according to the assessment of values against established criteria. Although these criteria vary between different heritage frameworks, they all specify historic, scientific and aesthetic values as constituting heritage.

These three standard criteria contribute significantly to the Western hegemony that characterises heritage conservation throughout the world. Consequently the framework they provide for the identification of heritage tends to exclude or ignore heritage significant to people outside dominant social groups (Cleere 1984b; Byrne 1991; Sullivan 1993; Ashworth 1994; Brett 1996). They are also limited in their capacity to recognise the nexus between cultural and natural values. The application of standard criteria therefore contributes to unequal representation and protection of heritage.

Some Australian legislative and management regimes make an additional provision for heritage to be assessed and listed for its social values. This criterion is very broadly understood to represent the values attributed to areas or structures by communities. Significantly, social value has come to represent the broad and varied range of values of areas or structures that fall outside the scope of the other criteria. It therefore has an important role to play in identifying heritage important to those outside the dominant

sectors of society. It also allows consideration of social or cultural associations with regions that are otherwise categorised as ‘natural heritage’.

Social value as a criterion operates to incorporate all the residual heritage values that are not included under the other three formal criteria. In spite of the capacity of this criterion to recognise values that might otherwise be neglected, it is not regarded as equal to the other criteria in the establishment of significance. Instead social values are assessed as a secondary category of value (Byrne, *et al.* 2001: 7-8). In a recent discussion paper Byrne builds on a literature about local knowledge and local identity to suggest that all values are social and therefore suggests that social value should be considered equal to scientific, historic and aesthetic values. I prefer to follow his schematic representation which suggests that all heritage values are embedded within a social matrix (Byrne, *et al.* 2001: 8). As can be seen in Figure 2, social value includes the three standard categories of heritage values. So rather than social value being equal to these criteria, it is a broader level of significance comprised of scientific, historic and aesthetic values. It also comprises other kinds of value that may as yet be undetermined within heritage regimes (cf. Johnston 1992: 15). All heritage values can therefore be regarded as social values. In other words, social value is another way of indicating heritage value rather than being the kind of disciplinary or analytical category that typifies historic, scientific or aesthetic significance.

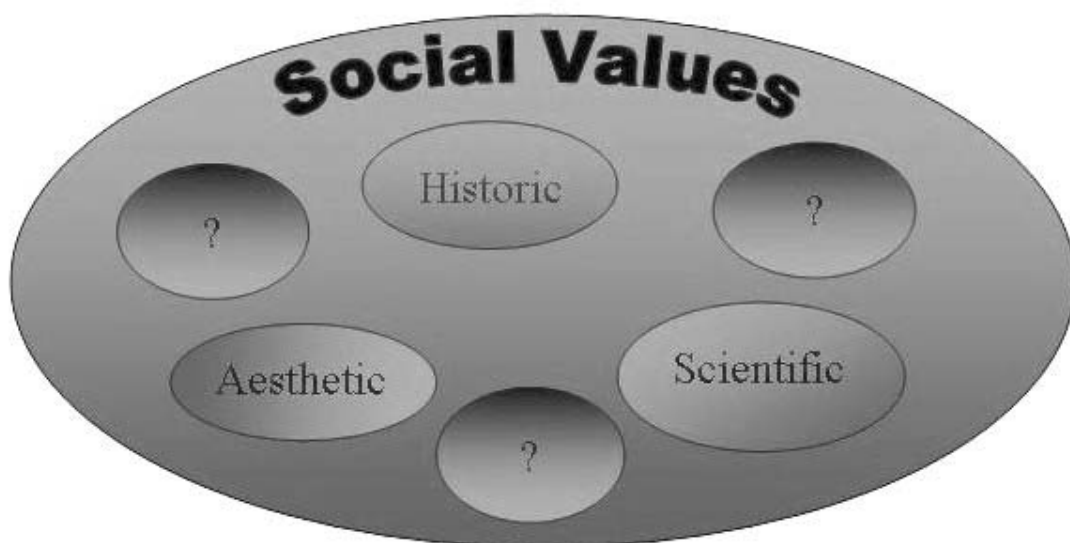


Figure 2: Heritage Values as Social Value (After Byrne 2000: 8)

A further issue raised by Byrne's contribution to the discussion paper on social significance, is that while values are transmitted socially, they are also mutable. He suggests that information gathered to identify and assess values is quickly outdated and that a statement of significance will become an historic document within twenty years of being formulated (Byrne, *et al.* 2001: 61-2). If this assertion is true and local knowledge changes rapidly, then the recognition and management of these values will be a major challenge for heritage managers. In order to ensure continuity or protection of values, managers would need to understand and manipulate the process of social transmission. A failure to do so would result in benign neglect that is contrary to the aims of management. However, to achieve effective intervention managers would require an understanding of the process of change and continuity. This understanding of how values are socially reproduced can be best understood by considering values within an historic context. I have therefore adopted an historic approach in order to examine the question of mutability of values.

Current heritage practice is based on the idea that heritage values are part of people's understanding of places. In other words, heritage places are primarily defined and identified by values. Heritage practitioners have tended to assume that the criteria they use to identify values reflect the process of connection and generally have not explored the social mechanisms that make heritage places valuable to people. The recent work by Byrne *et al.* (2002) on social value suggests place is constituted through the memories, stories and journeys of a knowing ego. While anthropologists recognise that a sense of place is constituted through the knowing self (see, for example, Hirsch 1995; Layton 1995; Morphy 1995; Basso 1996; Casey 1996; Feld 1996), recent discussions suggest that space can also be constructed as non-place and imaginary place (Augé 1995). Interestingly, some examples of non-places are areas that practitioners might feel have heritage value because of their history. This raises a question about whether heritage is always emplaced or whether it can in fact be displaced. This question is also examined the present study.

Criteria and Values of the Reef

Many heritage management regimes in Australia and elsewhere recognise the importance of aesthetic appreciation as a component of heritage significance and, by implication, its contribution to the establishment of place. While not all regimes include criteria specifically for social value, some definitions of aesthetics recognise that these values are a product of society and culture, and thus may be regarded as a form of social value. However, there is a large degree of variance in the way that these criteria are defined, interpreted and used both within and between different management systems. I have published a short critique of the use of aesthetic value as a criterion to assess heritage places for both Australian and World Heritage listing, and shown that the way in which aesthetic value is used and interpreted is both inconsistent between regimes, and between formal definition and practice (Pocock 2002c). In particular I have shown that the World Heritage criteria are clearly aligned with a particular definition of aesthetics that relates to high art in a cultural context, and a much broader definition in relation to natural heritage. I present some of that argument here.

The World Heritage Convention (Appendix 3) specifies separate criteria for cultural and natural heritage. The division between natural and cultural values within the World Heritage Convention is based on a fundamental dualism which classifies nature as 'other' and distinct from culture or 'self'. This division has a number of consequences for the assessment and management of large-scale regions recognised solely for their natural values. Most often cultural values are neglected and the rights and interests of local communities are marginalized. Consequently there is a growing recognition that such separation is untenable, philosophically and practically, and discussions are underway within UNESCO to unify the criteria for natural and cultural heritage (Rose 1972: 58; Bourassa 1991: 12; Cleere 1995; UNESCO 1998; Lowenthal 2000). Although the Reef is not recognised as having cultural values of World Heritage status, it does have strong historical associations as outlined in the previous chapter. The significance of the region within the cultural contexts of history, science and conservation are largely responsible for its recognition, but the division between cultural and natural heritage does not facilitate a ready acknowledgement of their interconnection.

Both cultural and natural criteria for World Heritage have the capacity to assess aesthetics (Appendices 4 and 5). However, the way in which aesthetics are incorporated into each definition is quite distinct. In the case of cultural heritage, defined under Article 1, aesthetics are mentioned in relation to sites, but in relation to buildings and monuments it is art that defines aesthetic judgement. Sites, which appear to be defined quite broadly, and differentiated from monuments in part by reference to natural elements, are judged to be of outstanding universal value “from the historical, aesthetic, ethnological or anthropological point of view”, but monuments and buildings must have outstanding universal value “from the point of view of history, *art* or science” (my emphasis). In contrast Article 2 defines natural heritage to include a broader range of scientific and aesthetic values. This is expressed as the “outstanding universal value from the aesthetic or scientific point of view” and “from the point of view of science, conservation or natural beauty”. Underlying this division between cultural and natural aesthetic criteria are some strongly held associations between high art and beauty in a cultural context, and the presupposed aesthetic qualities of the natural world.

The Operational Guidelines of the World Heritage Convention go further in showing these two distinct approaches to assessing aesthetic value. The cultural criteria (Appendix 4) are clearly focused on the arts, citing monumental arts and architecture. The word ‘aesthetic’ is absent altogether. On the other hand, the natural criteria (Appendix 5) retain their inclusiveness and require that sites “contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance” (UNESCO 1999). The first indicates that aesthetics used in the assessment of cultural values relate to established concepts of ‘high’ or ‘pure’ art. The second, that natural aesthetics are presumed to be independent of cultural influence. Both clearly indicate that UNESCO regards aesthetic values to exist without a cultural context and that they are objectively assessable.

Lucas *et al.* consider the inclusion of the phrase “aesthetic importance” in the World Heritage criteria since 1996 as an important avenue through which to consider “the range of values which the community places on the Great Barrier Reef World Heritage Area” (Lucas, *et al.* 1997: 52-3). This interpretation suggests a nexus between cultural and natural heritage values because it recognises that it is people who attribute these values. However, in the World Heritage Operational Guidelines this phrase is only

included in the context of natural heritage values. The division of cultural and natural values within the current World Heritage framework subsequently leads directly to the problems that Lucas *et al.* identify. In particular that aesthetic qualities are reduced “solely to visual amenity”, and that there is a lack of consistency in methods used to document and assess aesthetic value (Lucas, *et al.* 1997: 39). It is apparent that the problems of assessment and documentation of aesthetics highlighted by Lucas *et al.* result from a failure to regard aesthetics in a social context.

While the division between cultural and natural values is a direct result of the structure of the World Heritage Convention, it also reflects a more systemic division within the heritage profession. The Australian Heritage Commission (AHC) is a Commonwealth Government statutory authority responsible for natural and cultural heritage places of significance. It was established to identify, assess and list heritage places in the Register of the National Estate (RNE). As a national body, it has been a leader in developing guidelines, policies and practices for the assessment and management of heritage places. The Commission uses the same principal criteria to assess both natural and cultural heritage, and defines separate criteria for social and aesthetic values (Appendix 6). However, the Commission criterion used to assess aesthetics has some social context, and is less general than the World Heritage one. Criterion E under the *Australian Heritage Commission Act 1975* provides for a place to be included in the Register of the National Estate for “its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group”. This goes some way to recognise that aesthetic appreciation is determined by cultural groups themselves, and thus partly addresses research that demonstrates the interconnectedness of class, culture, education levels and aesthetic judgement (Bourdieu 1984; Eagleton 1990; Hunter 1996; Patin 1999; Duncan and Duncan 2001). While a diversity of aesthetic appreciation may be recognised through factors like class, gender and ethnicity, the phases of human lifecycles can have an equally important impact on aesthetic appreciation and values. The Australian Heritage Commission criterion for aesthetic value has the capacity to consider and include the aesthetic values of cultural groups within society brought about not only by historical change but also by the transformation of individuals throughout their lives.

As an explanation of the formal criterion, aesthetic value is defined broadly by the Australian Heritage Commission to include:

[A]spects of sensory perception (sight, touch, sound, taste, smell) for which criteria can be stated. These criteria may include consideration of form, scale, colour, texture and material of the fabric or landscape, the smells and sounds associated with the place and its use.

(Australian Heritage Commission 2001)

Contra UNESCO, the Commission clearly recognises that aesthetics are culturally constructed and that there are a range of experiences that might contribute to any such values. The Commission therefore has the capacity to include a range of values that would remain unconsidered within World Heritage listing.

Although the Commission definitions have the potential to include cultural difference and recognise a range of sensory experiences, this does not translate into practice in the assessment of heritage, as illustrated by the Register of the National Estate listing of the Great Barrier Reef. In spite of the differences between the two sets of criteria, the statements of significance and listed values for both World Heritage and the National Estate are very similar. The emphasis in both is on natural systems and biodiversity. The Commission listing mentions cultural values, but these relate more specifically to historic built heritage than any broader notion of cultural values associated with ‘natural landscapes’. Similarly the aesthetics of the Reef are defined in both statements as related to the natural beauty and scenic qualities of the region. These preoccupations point to some underlying issues about the significance of aesthetics as either natural and pre-established or cultural and the domain of monuments and buildings.

Heritage Assessments of Aesthetics

Aesthetics are themselves the subject of extensive research, academic debate and a comprehensive literature. It is not my intention to fully review this body of work because much of it is focused towards fine arts and visual quality, and the debates are largely exhausted (Grace 1996: 2). However, a brief mention of some key issues provides a context for the way in which aesthetics are assessed in heritage contexts.

The dominance of visual characteristics in aesthetics is noted by many authors and has been the subject of continued debate (Litton 1982; Eagleton 1990; Grace 1996: 2-6; Riley 1997: 201; Upton 1997). It is arguable that this visual preoccupation is legitimate when discussed within fine arts. It also has some internal consistency because the interpretations of aesthetics and art originate within the same, and very particular, cultural and social discourse. What is more problematic is when these systems of assessment are related to situations and contexts that fall outside that framework. This is pertinent for heritage places that may be constructed from non-visual aspects of the environment. Furthermore, the ways in which different cultural groups perceive and articulate a sense of what might broadly be regarded as 'aesthetics' can be strikingly different, and may in fact be a completely inappropriate term or concept. These issues are intensified in relation to the aesthetics of 'natural' landscapes because the very notion of landscape derives from a specific cultural discourse about vision, view, vantage point and painting (see for example Litton 1982; Bourassa 1991: 1-4; Berleant 1992: 2-7, 11-13; Rodaway 1994: 126-33; Ryan 1996: 9-10, 62; Berleant 1997: 12-15; Riley 1997: 200-209; Upton 1997; Patin 1999: 41-59; Carlson 2001: 9-10).

The problem for the assessment of heritage based on judgements about aesthetics is that the term itself is value laden and incorporates many biases of its origin and operation within a fine arts framework. While there is a more recent body of literature that deals specifically with environmental aesthetics, this is similarly laden with the cultural bias of aesthetics.

Within a cultural heritage context aesthetic assessment has remained the primary domain of non-Indigenous, historic built heritage. For example it can be argued that aesthetic qualities may manifest as very different concepts within Aboriginal society (Morphy 1992; Taylor 1994), but Aboriginal paintings and engravings are often judged by non-Aboriginal experts to be of aesthetic importance. As such they are judged to be important by outsiders and these values do not necessarily reflect the values attributed by the creators and custodians. In this way heritage may be oversimplified or even misrepresented. The focus on built heritage may be attributed to the primary use and interpretation of this criterion by conservation architects (Byrne, *et al.* 2001: 7), and the strong association of aesthetics with high art and particular social strata. It is particularly from 'high' or 'pure' art that much of the judgement of aesthetics is taken.

This is problematic even from an architectural perspective because it does not recognise that buildings also have a functional role and are directly connected to people and cultures that use them (Carlson 2001: 10-11). In both instances it is possible to see that while aesthetic judgements are valuable within their own particular contexts, they do not necessarily assist in understanding a broad range of ways in which particular localities can be valued by groups of people. It has consequently remained problematic for the assessment of heritage.

The Australian Heritage Commission convened a workshop in 1993 to discuss the issue of how to identify and assess aesthetic value. A collection of papers from this meeting (Ramsay and Paraskevopoulos 1994) provides some insight into the status of aesthetic assessments in Australia. Firstly, most of the authors of these papers are architects, landscape architects or environmental planners. A clear division between the 'natural' and built environment characterises both the formal papers and the discussion, and mirrors the division that is so apparent in the World Heritage Convention. With the exception of a paper by Luke Taylor (1994), a non-Aboriginal researcher with expertise in Aboriginal painting, there is no representation of other cultural perspectives. Some of the contributions suggest that aesthetic assessments should consider sensuous experiences other than sight (e.g. Paraskevopoulos 1994; Schapper 1994). However, most papers and examples focus exclusively on visual quality. An analysis of how the aesthetic criterion is used by heritage agencies in Australia also identified an additional list of qualifiers (Schapper 1994: 8, Table 1). Seven of the additional descriptors for aesthetics relate to art, design and architecture while three relate to 'natural' qualities and one is specifically named 'visual quality'. Heritage agencies are therefore clearly constrained by assumptions about aesthetics that limit them to particular constructions of visual quality. Although these issues were raised, they were unable to be resolved and there was disagreement in the group. For instance, a paper by Lamb (1994) implies that 'beauty' is something readily understood and agreed, and that these preconceived aesthetics are the only way in which value can be measured. While the group discussion about the appropriateness of the term 'beauty' suggested that it was too narrow, the participants were unable to suggest alternatives. Rather they found it easier to define what aesthetics are not, and specifically excluded utility, function or life support values from the definition, clearly stating that aesthetics should be regarded as an end in itself (Paraskevopoulos 1994: 80-1). This assumes that a response to aesthetics will be the

same for all people, and does not recognise how much these are culturally constructed. Nor does it recognise that activities engaged in through some utilitarian needs may produce aesthetic responses (cf. Carlson 2001). In spite of the recognised problems with the term 'aesthetics', it was decided to maintain the term because neither 'artistic' nor 'sensory' were appropriate alternatives. Although this group regarded 'sensory' as failing to recognise thought, imagination and emotion, Grace (1996: 3) has used the term *aesthesia* to suggest sensuous thought. The underlying issue for aesthetics is the imprecise nature of definitions and their interpretation within heritage management contexts. Furthermore, heritage practice has failed to recognise that the concept of aesthetics is constructed and used in very particular circumstances and does not transport readily to other situations. Even in its own context arguments about aesthetics are complex and continuous. However, the concept has been transported into heritage contexts where it is used and interpreted as though there has been no debate or disagreement about its meanings.

The Heritage Commission workshop posed the question of threshold – that is, how to decide the degree of significance – for aesthetic values. This raised the issue of how to balance community (subjective) and systematic (objective) approaches to identification. One suggestion was for community views to be confirmed through other sources (Paraskevopoulos 1994: 83). However, there was no detail about what these were and how they might be assessed. Other significant issues were raised during the workshop, including the changing nature of aesthetics and the need for a richer lexicon to elicit community responses (Ramsay and Paraskevopoulos 1994: 82). In spite of these suggestions, the workshop participants failed to suggest a fresh approach or to resolve any of the existing conflicts. The few suggestions that were made did not gain consensual support. For example, some participants strongly advocated the role of the professional and formal means of assessing aesthetics while others were of the opinion that communities were the source of all information. It is possible to move towards a balance, but the workshop did not articulate why this might be useful or how it might be achieved. Overall the issues are poorly addressed and the underlying ambiguity is a strong reason why aesthetics are poorly understood in relation to heritage, including the Reef.

While Byrne *et al.* (2001) point to an emphasis on fabric at the expense of other values, the problem is more specific than this and relates to a focus on the visual amenity of fabric as well as particular interpretations of that fabric. It is the nature of this focus on the fabric of heritage that poses problems for heritage management in Australia, rather than the consideration of fabric *per se*. The assessment and management of aesthetic value is similarly restricted by this focus. Because aesthetic values are assessed separately from social values, heritage practitioners tend to regard aesthetics as a set of attributes that can be observed impartially by an ‘expert’, at a distance and in isolation from other communities who may attribute values to the place. This is also linked strongly with a scientific model in which observations must be objective in order to be validated. Although seeing can be a tactile experience (Taussig 1993: 25-6), the physical and emotional distance required by this objectivity restricts assessment of aesthetics to visual characteristics which are less “grossly sensuous” (Eagleton 1990: 13) than other experiences.

The assessment of aesthetic values, as with other characteristics of heritage places, is therefore reduced to fabric and material evidence that is significant to a particular group of professionals. This objectifying process displaces the consideration of sensory experiences that underpin other peoples’ knowledge of place (see, for example, Porteous 1985; Porteous and Mastin 1985; Rodaway 1994; Feld and Basso 1996). The result is that aesthetic judgement remains the realm of aesthetes for whom visual pleasure is pre-established and does not meet the broader objective of aesthetic criteria as defined by the heritage profession.

Aesthetic value is also used as a generic criterion, to support arguments about ‘natural’ landscape values or as support to arguments about scientific significance. In this context, aesthetic value is sometimes (sub)consciously used by scientists as a way to express connection that is not possible through standard natural heritage criteria. This is clearly indicated by the Lucas *et al.* (Lucas, *et al.* 1997: 52-3) remark about aesthetics and community values. In other words, aesthetics are not always explicitly recognised as a subset of social values, but may nevertheless be used as though they are.

So in spite of the inclusive definitions of aesthetic value, which go some way to recognise that aesthetics are culturally constructed and that smell, taste, touch, and

sound can all be strongly evocative, the predominant interpretation of aesthetics is a visual one, constituted by a particular social construction. The implications of this bias are that a broad range of experiential values goes unrecognised and unassessed. According to established processes of Article 6 of the Burra Charter (Appendix 7), management of a heritage place “must be based on an understanding of its cultural significance” (Australia ICOMOS 1988). In other words the values must be assessed before the associated areas and structures can be managed. This principle is generally regarded as standard, if not best, practice in Australian heritage conservation and elsewhere (see for example Cleere 1984a: 126-7; Pearson and Sullivan 1995). In the case of aesthetics it is apparent that only a very narrow range of values is considered. Many additional aesthetic values, both from different cultural and social perspectives, and those resulting from different sensory experiences, are ignored. The aesthetic experiences of people of differing abilities are also marginalized. For instance, people with visual disabilities develop a sense of place through sensuous experiences that are not based in sight (see Rodaway 1994 for examples of hearing and sight impaired people’s experiences of space). However, the dominance of visual quality in heritage assessment and management means that such experiences will inevitably be disregarded.

The issues I have outlined in relation to the assessment of aesthetics are prevalent in both formal definitions and processes, and in practice. This results in a narrow range of values being considered under this criterion, and consequently many other values are overlooked (Pocock 2002c). At the same time there are strong assumptions about what constitutes aesthetics even though this is poorly articulated. It is for these reasons that Lucas *et al.* (1997: 49) found heritage attributes contributing to natural beauty and aesthetics to be “the poorest documented and least known set of attributes” of the Reef. As I have already suggested, one of the major problems is that the traditions of fine art and landscape painting continue to influence the assessment of landscape aesthetics in a heritage context. This is exacerbated in the case of the Reef because of the interrelationship between heritage and tourism. There is considerable research that demonstrates the dominance of visual amenity in tourism discourses and this is expanded through photography and particular landscape qualities (see, for example, Sontag 1973; Urry 1990, 1992; Picard and Robinson In press). Heritage places, particularly those of World Heritage status, are often popular tourist destinations and

inclusion in the World Heritage List is known to increase tourist numbers considerably. Consequently the dominance of visual amenity in tourism constructs the ways in which heritage is understood and experienced.

The Construction of Place

Within the practice of identifying, conserving and managing heritage the word place is used to describe a bounded geographic area that contains heritage values. Aesthetics are part of the heritage values that contribute to the establishment of these heritage places. However, the way in which places are constructed suggests that heritage values alone may not constitute place.

Until quite recently, anthropologists used 'place' as though its meaning was obvious and referred simply to the bounded geographic areas in which they conducted their particular field research (Augé 1995; Casey 1996; Kahn 1996). Similarly, place is used in heritage discourse to refer to the object of conservation or assessment. The concepts of space and place and their relative meanings are, however, much more complex issues and have been the subject of philosophical debate for centuries. This theoretical discussion is increasingly considered within anthropology, geography and other disciplines concerned with human relationships to space and place (Rodaway 1994; Kahn 1996). Unfortunately, those concerned with heritage practice have been much slower to realise the significance of these debates. This results from the profession's preoccupation with practice with little theoretical reflection. However, the failure to recognise and acknowledge the distinction between space and place has significant implications for the effectiveness of heritage management. These debates should therefore be considered in relation to heritage.

Philosophy has traditionally created a dualism between space and place and defined space as the abstract, prior concept in which particular places are inscribed. Within this division most would agree that space is the general and absolute category while place is that which is imbued with social meaning.

It is possible to argue that the practice of identifying areas and features that meet a criterion provides the meaning for heritage places. Within this framework heritage places might encompass specific locations such as ancient campsites or monuments, but also larger complexes of sites, streetscapes and relatively undeveloped countryside. For instance the Australian Heritage Commission (2001) which has a key responsibility for the identification and conservation of heritage places, defines place as “a landscape, seascape, feature, area, site, building or other work, group of buildings, or other works or landscapes, together with associated contents and surrounds”. Heritage places are therefore bounded entities in which heritage values have been identified. These particular bounded values and the way in which people understand them as changing experiences do not necessarily agree with each other. Furthermore, such bounded entities can be reduced to a series of unconnected ‘dots on maps’ which do not reflect their connections to each other and the broader region in which they exist. In an effort to redress this problem ‘landscape’ is increasingly used as a preferred term in heritage (Blair and Truscott 1989; Rose 1996; Strang 1997; Greer, *et al.* 2000; Lowenthal 2000; Cotter, *et al.* 2001; Bender 2002; Johnston 2002). However, the term ‘landscape’ suffers some of the same descriptive definitions, not least because it is often interpreted to be a larger form of ‘place’. This is exemplified by the Australian Heritage Commission (2001) glossary which defines landscape as a “place containing cultural and natural features and values which extend over a large area”. Furthermore, landscape is often conflated with ‘environment’ and arguments made to distinguish landscape and environment are similar to those used to distinguish place and space (Cunliffe 2000).

The Heritage Commission’s definitions of place and landscape are particularly problematic because they assume that places exist separate from a changing cultural context and fail to articulate that places are constituted through human knowledge and experience. This assumption remains unquestioned in heritage practice and space and place are rarely distinguished from each other. This allows heritage regimes to create an artificial dualism between natural and cultural heritage in assessment and identification processes.

Augé (1995) defines ‘anthropological place’ to contrast with the long held understanding of time and space as universal. His term makes clear the element of human interest and can enhance heritage use and interpretation. The interrelationship

between place and human knowledge is the basis of an extended review and argument by Casey (1996). He suggests that human knowledge is constructed first from personal experiences of the particular. As such knowledge is built, in the first instance, from place – a space animated with names, stories, associations and memories. In contrast with the commonly held position that space is prior and abstract, he makes a convincing argument that in human experience it is in fact place that precedes space. He argues that human beings are always emplaced and it is from this primary knowledge that they construct subsequent knowledge. His argument is based on, and supported by, the work of several others who regard places as culturally and corporeally informed. It is therefore useful to follow these arguments to explore the integral relationship between human experience and place.

Casey (1996: 14) challenges the position of space as prior, empty, indefinite and absolute and place as merely sections of that space. Using phenomenology he suggests that all people commence with their own experience and hence place is prior to space. Individual acquisition of knowledge of space as a place is mediated through a sensate and kinaesthetic body. He does not suggest that all knowledge comes from experience, but that experience is the starting point for all knowledge. Perception is central to this construction of place, and is localised in place and not merely a “confusing kaleidoscope of free-floating sensory data” (Casey 1996: 16-17). In other words, senses precede other forms of knowledge and are always emplaced. Casey (1996: 18) suggests that it is impossible to know or sense a place except by being *in* it, and that by being *there* a person is able to perceive that place. He therefore suggests that knowledge of place is an ingredient of perception rather than arising out of perception (contra Kant). Similarly, Basso (1996: 55) and Feld (1996: 98) suggest that places can be both sensed and sensation, and that sensing place is reciprocal.

Physicality and Location

The importance of being *in* place points to an essential characteristic of all places; that is that places are simultaneously social and spatial. In other words there is a physical component to place that is inseparable from the social (Augé 1995; Casey 1996). The human body is itself part of space (Augé 1995: 60) and consequently spatial relations of

the body are integral to the establishment of place. The primary means of emplacement is through orientation of the body. This stems from bilateral awareness or basic knowledge of the two sides of the body; of left and right, as well as other relative positions: up and down, in front and behind, top and bottom. Each of these is a specific referent of the conscious human body, and as such orientation is the first aspect of a sensuous knowledge of place (Rodaway 1994: 31-2; Casey 1996: 21-2). However, place is not understood through orientation alone. Geometric or Cartesian location is complementary to the configuration of spatial elements in place. Such geometric location is central to Augé's (1995: 56-7) definition of anthropological place for which he defines three spatial forms: line, intersection of lines and points of intersections. These translate into paths, crossroads and open spaces in everyday language and use. Although these are geometric points and akin to cartographic locations, they are not mutually exclusive. Rather these forms continuously shift because fixed points are part of routes, journeys take people through multiple centres, and centres themselves form and collapse in response to particular events and circumstances. As an integral aspect of a sense of place it is therefore useful to consider how location and orientation contribute to people's sense of place.

Content

Human knowledge is intertwined with another spatial characteristic of place. This is the capacity of place to gather animate and inanimate entities (Casey 1996: 24-6). These take the form of experiences, memories, histories, language and thoughts as well as objects or physical elements. These are not arbitrarily amassed in place, but ordered through human experience in a way that allows the (re)presentation of places to be controlled and understood. The particular ordering of these elements allows people to build associations and their own particular sense of place from the same location. This ordering of contents also makes it possible for people to return to the same place. These contents are thus an essential part of the place and without them place ceases to exist (Casey 1996: 25-6). It also points to the issue of social reproduction in which stories, memories and thoughts are transmitted within and between generations, and through which particular places may come to be valued as heritage.

Significantly, place contents include elements such as memories, experiences, histories and thoughts which may be no less real than the fabric of the environment (Byrne, *et al.* 2001: 52). Consequently there are moves afoot to focus more on ‘intangible heritage’ and move away from the traditional focus on fabric (Lowenthal 1998: 14, 19; Byrne, *et al.* 2001: 55-60; UNESCO 2003). This split is as problematic as the focus on fabric alone. Poor conservation practices focus on fabric as something that can be observed and objectified, in the distance and distinct from the self. As such it fails to recognise the many practices, experiences and embodied knowledge that constitute place. Similarly the shift to intangible heritage fails to recognise that place is constituted through the interaction of these values with the physical elements of location and space (Casey 1996: 24-6). The rise of ‘intangible heritage’ has resulted in some more particular definitions of place as part of space (UNESCO 2003), but has also focused on knowledge dissociated from any physical location. However, locality and social elements are inextricably linked and any given place is inseparable from the concrete location in which it exists.

Casey suggests that memories are kept in place, that they are not just part of thought, but held by the place. This raises a question about the relationship between contents that are taken away from their physical context and the place to which they belong. Taussig’s (1993) exploration of the sensuous provides useful insights into how contact operates as an essential element in copies. The effective representation of the original through copies is dependent on a sensuous connection between the perceiver and that which is perceived. He argues that copy and contact are different instances of the same sensory experience and that sensory experiences are themselves instances of contact and copy (Taussig 1993: 21). For example, emissions from an object (the original) are received by the body (contact) to reproduce signals (copies) that are understood as equivalent to the original. He suggests that this notion of contact underlies the capacity of copies to effectively replicate the original. Contact, he argues, is more important than any likeness and it is contact that ensures that copies are able to mimic the power of the original. He stresses that a lack of likeness can be compensated through contact. Significant in this ability to replicate the power of the original is the capacity for copies to maintain this power long after any physical connection has been broken. Hence copies or parts of a place may retain some of the significance of a place.

In this way too, contact is an essential element in the power of photography in contemporary society. Both Sontag (1973) and Taussig (1993: 200-201) have identified contact as the element that makes photographs particularly effective and meaningful copies of the original. Sontag has suggested that much of modern experience is gained through photographs and that the acquisition of images has become more important than the experiences themselves (1973). While these experiences may be significant in themselves, their relationship to place is less clear. The memories that photographs evoke do not depend on the quality of the image, but on the capacity of the viewer (Sontag 1973: 164). This supports the significance of contact in photography in that images do not depend on likeness, but on the continuing association with the original that is facilitated through a perception of contact between the subject and the photograph. The way in which elements of a place are collected, ordered and transmitted may therefore play an important role in people's construction and understanding of particular places.

Time

The qualifications that characterise place are derived from the contents of a particular locality and the manner in which they are described, narrated, characterised and discussed within any particular culture. The way in which they constantly change reflects a mutability that is echoed in Bender's (2002) exploration of landscape in which she suggests that landscapes are constantly in the process of (re)making themselves (see also, Basso 1996). These constantly shifting qualifications of place, and the temporal nature of narratives, mark time as an integral component of place. Similarly, Augé (1995: 52-3) suggests that history is one of the essential characteristics of all places. Places are constituted not only through physical elements that are socially interpreted but also through time (Augé 1995: 58-60; Casey 1996). The shifts that make and remake places are therefore spatial, social and temporal, and each is clearly integral to the other. It is worth considering the degree to which time changes, creates and maintains place through the transmission of the qualifications of any particular place (cf. Byrne, *et al.* 2001: 61-2).

Time as an element of place also suggests that the two key components of early modern thought – Time and Space – are encapsulated in place and also in landscape (Ingold 1993; Casey 1996; Bender 2002). Casey (1996: 20) suggests that the philosophical split of time and space has disempowered place as a concept worthy of consideration in human experience. He argues that these elements can reconnect through the lived body and thus reinstate place.

The Lived Body

The cultural nature of place and the located nature of culture ensure that place is primarily cultural. Places are always located through embodiment and are also cultural because culture is carried within bodies (Casey 1996: 33-4). Casey draws on Bourdieu's (1977) notion of '*habitus*' to suggest that the most elemental movements of the body are culturally patterned. In this way he suggests that as place is prior to space, *habitus* ensures that the body can never be pre-cultural. Consequently, the body is as culturally informed as the places it inhabits. Both Bourdieu and anthropological use of *habitus*, have been criticised for ignoring the contribution of phenomenology and the agency of the conscious human subject (Throop and Murphy 2002). However, Casey suggests that *habitus* not only operates in an unconscious way, but that the body is also intelligent about the cultural specifics of place. His observation that the body is "a uniquely valuable vehicle in the establishment of place" is qualified by its distinction as a knowing subject. Rather than being an inert body as defined in physics, the lived body is integrated through "corporeal intentionality" (Casey 1996: 21). This knowing subject is like Grace's (1996) *ego cogito*, the thinking ego through which people gain knowledge of their own places. Furthermore, this knowledge is synesthetic in that it involves the whole body and senses inform one another (Taussig 1993; Rodaway 1994; Feld 1996: 99; Casey 1996). Hence the knowledge is not acquired passively, but is absorbed and constructed through the *thinking*, moving, culturally informed and sensate body (Taussig 1993; Casey 1996: 18; Grace 1996; Berleant 1997: 12).

Casey (1996: 34) argues that the highly sentient lived body is simultaneously encultured and emplaced as well as enculturating and emplacing. This suggests that place and the lived body are integral to one another. Other authors in an edited volume by Feld and

Basso (1996) also highlight the role of corporeal experience in the knowledge of particular places. Similarly, Taussig draws on the work of Walter Benjamin and the idea that perception is not only formed by visual information, but in combination with tactile experiences which are “the great underground of knowledges” built from habit (1993: 25-6). Habits are themselves founded in an embodied experience and constitute a tactile knowledge (Taussig 1993). Casey suggests that these experiences build local knowledge of place. As the term suggests, local knowledge is constructed through a clear relationship between locality and knowledge (Casey 1996: 44). This is knowledge acquired through the lived body. It gives rise to local knowledge because it is appropriate to the particular qualities of place and is consistent with the sensuous properties and cultural characteristics of that place. In other words through the lived body, the knowing subject perceives the particularities of any given place (Casey 1996: 44). This knowledge is constructed through acquaintance that is itself facilitated by the perception of the body. Thus the body is not only central to place, but is fundamental to an authentically local knowledge gained through lived experience. This is not an experience that has already passed or that forms the basis of analytical or abstract knowledge, but experience that is of the place in time and space (Casey 1996: 18).

Social value as it has been used in recent times strives to recognise the cultural and local dimensions of ‘natural’ and other grander kinds of heritage places. To some extent then local knowledge is the focus of social value assessments and might well be served by understanding the ways in which the lived body and lived experiences construct such values and places. A question for World Heritage is the extent to which universal values might be constructed from, or contrasted with, this kind of local knowledge.

An Everyday Heritage

The culturally informed body and local knowledge of place reflect the everyday. It is this sense of the everyday and the way that we come to know places through habituation that makes identifying significant everyday places so difficult for the heritage manager. How can people consciously identify what is significant to them when so much of their knowledge is developed and experienced through actions that are barely conscious?

My review of place and of the way that aesthetics are used in heritage assessments suggests that place is established through more than visual amenity and that heritage assessments that seek to represent the everyday might also consider a broader range of values than currently reflected by these regimes. If the sensuous encounters that contribute to embodied experiences of space that constitute places are to be considered under the current model of significance assessment, the criteria which can be used to identify these values must be refined and clearly defined. It is appropriate for heritage regimes to consider a more inclusive social perspective and I have argued that the term 'sensuousness' might be used to understand how people experience and conceptualise places (Pocock 2002c). The encultured nature of the body or the taken-for-granted way in which local knowledge is based in the lived body also provides an opportunity to explore an everyday sense of place.

Of particular importance to understanding the Reef as a place is the consideration of the experiences of the lived body and the way this constitutes an everyday knowledge of place (Casey 1996; Byrne, *et al.* 2001: 48-51). A central argument is that body and place each animate the other and are subsequently intertwined by this reciprocal relationship. The lived body moves within a place and between places, and even while remaining in place the lived body gathers information about place. At the same time places do not exist without such animate lived-in bodies and this relationship is integral to a sense of place. In order to understand how people perceive and engage with a particular environment and through which they form associations that make up the dynamic social values of places, it is necessary to relinquish the strategic and outsider view that characterises assessments of landscape aesthetics and management to consider the way in which places are experienced through and within a moving, sensate body. This can offer useful insights into ways of being in and sensing place, and can contribute to an understanding of the 'everyday'. It may therefore be useful to think about the perceptions of the environment with due sensitivity to the cultural construction of interpretation of environmental stimuli. Rodaway (1994) provides a comprehensive overview of the nature of human sensory perception as both sensation and meaning. His work recognises the cultural constructions of these senses and uses examples that highlight not only regional cultural differences, but also those of ability. This opens up an understanding of the many ways in which different senses are perceived and interpreted to construct a sense of place.

My attempts to move beyond the visual do not exclude the visual from a sense of place. To do so would be an artificial distinction that failed to recognise the significance of visual experiences in many cultures, as well as the importance of the interaction of different senses (Taussig 1993: 57-8; Rodaway 1994: 25-38; Ackerman 1996). Furthermore, the visual is a particularly powerful experience for tourists (Urry 1990), and sight plays an influential role in how heritage is perceived and constructed. While heritage assessments should consider more than visual characteristics of places, I also recognise that sight plays an integral role in how other senses are interpreted, and through which places are constructed. Taussig (1993) offers interesting perspectives in this regard. He focuses on the visual and recognises the significance of making visual copies, but insists that images are more than visual. He also argues that visual stimulus can include other physical responses such as nausea and dizziness and that new technologies increasingly produce three dimensional experiences that come close to the moving sensate eye (Taussig 1993: 57-8). He suggests that the visual can be experienced as more than a static or singular viewpoint and that sight within a moving and fully sensate body can itself be multisensual and dynamic. It is this interrelationship of the senses that constructs our sense of place and rounds out our visual experiences to create a local knowledge (Rodaway 1994; Casey 1996: 17-19). Grace (1996: 3) uses the term *aesthesia* to refer to an ability to perceive and feel. She argues that this is “embodied *cogito*”, a term which links two somewhat divergent concepts, in which *cogito* refers to an intellectual process of self-awareness. Grace warns of the potential dangers of assuming that there can be any form of total knowledge, but recognises that *aesthesia* allows for a sensuousness of thought and a possibility of embodied knowledge. It is this idea of a phenomenological or embodied sense of place that can assist the identification of heritage to expand beyond its social and cultural constraints and to embrace a fuller range of experiential knowledge.

An everyday sense of place does not imply that places of particular significance do not exist. To the contrary, it emphasises that the significance of places within an active cultural context is so entrenched as to be taken-for-granted by its participants. In other words the places that have greatest significance are so integral to particular circumstances and practices that people who use and know them in these contexts are not actively conscious of them. It is for this reason that significant places often go

unrecognised by managers, developers and planners until they are under immediate threat or have been destroyed. Finding the everyday ways in which places are valued, used and known is therefore important in fulfilling the principle that the full range of values for which a place is significant is the first step in heritage management. However, there are many aspects of places that can go unrecognised because of their taken-for-granted status. Thus it is important to develop an approach that might identify new ways of understanding heritage values.

The taken-for-granted character of everyday practices, experiences and knowledge informs our notions of self and other. It is only through contrasts with our own experience or knowledge that we recognise the ways in which we usually experience particular phenomena. It is at these moments of rupture or contradiction that people recognise everyday activities and associations that are integral and important to them. It is because of this that the most meaningful places, constituted through these everyday practices, experiences and knowledge, are often only recognised when under threat or already lost.

Everyday Visitors

Identifying a heritage of visitors, particularly an everyday heritage, is particularly complex. It is the contrast with the everyday that establishes a tourist experience, or more particularly a tourist gaze (Urry 1990, 1992). Seeking to understand social values of visitors might therefore seem contradictory for it is not the everyday that tourists experience, nor is what they experience construed as the everyday. Certainly, tourists do not experience a particular environment in the way that local groups might.

In spite of the dominance of the gaze in tourist experiences, Urry (1992) concedes that tourists may also experience sensations other than sight in a heightened state of awareness. Even though it is the precondition of visual difference that establishes the tourist experience, tourists may perceive everyday and mundane experiences as exceptional. Tourists, then, might provide an avenue for identifying those aspects of the everyday that are usually taken-for-granted.

Management and the Everyday

In the context of heritage management the everyday is reminiscent of de Certeau's (1984: 92-3) observation that it is impossible to read how people use spaces individually or at a detailed level. In his discussion of how people walk the streets, he contrasts people as singular units of tactile reception and kinaesthetic appropriation with the way in which these experiences are translated into strategic knowledge. He suggests that it is possible to trace the generalised patterns of the directions and aggregations of movement on maps, but that these are incapable of capturing the act itself (de Certeau 1984: 97). Rather, these interactions are made static by a permanent mark on the map. The high vantage point from which the map is constructed, itself renders the practice invisible. As such de Certeau suggests that the height required by the strategic position renders everyday practices invisible. From this perspective the everyday or individual sensate body can only ever be known as other. It is also this divide between self and other that underlies the distinction between culture and nature and which conservationists, who seek the strategic management of places, also engage in. In contrast, locals may see such division as leading to false attachment as seen in an example of farmers and conservationists with interests in the forest areas of East Gippsland, Victoria. Hodges (1992: 77) reported that pastoralists made no distinction between cultural and natural land. Instead she found that the group cared deeply for altered land and so the division was an irrelevant one.

Furthermore, the strategic and distant mapping of human movement can only trace what has already gone and is no longer there. Hence de Certeau concludes that the "trace left behind is substituted for the practice" (de Certeau 1984: 96). It is at this point that management of heritage is also misconceived for statements of significance are substituted for the significance of places themselves. Statements of significance are translations of values into legally defensible forms. Once heritage assessments are made they impose a fixity upon the values of a place although the practices that produce those values may continue to develop and move away. Worse, practices may be cut short by the requirements of management plans that seek to conserve and control values that may no longer have social worth. What is recorded in statements of significance no longer represents practice. This occurs because no practice is entirely static, and what is

recorded will already have been subject to subtle and significant shifts. This is itself very like the Borges fable of the map cited by Baudrillard (1983) and through which he suggests that in the modern age people engage with the world through a series of simulacra that have no relation to a world outside of themselves. In the fable a map that is created in such detail as to be truly representative no longer represents the real because the real is dynamic and has changed considerably by the time the map is completed. In this way it seems that heritage also operates as a simulacrum of past values; neither representing history nor presenting the present, but constructing a replica in its place. It is possible to infer a parallel between de Certeau's tactical responses and engagement with the city as the equivalent of the moving sensate body, while the strategic view is more clearly aligned with management and the simulacrum.

Management processes by their nature can only map, trace and analyse that which has already ceased to exist or has otherwise changed. The values thus constructed by the manager are not those of lived experience. In other words the 'places' identified by heritage managers are not embodied places in which Casey suggests local knowledge and lived experience are equivalent. The fleeting nature of place itself may partly explain the dominance of monuments in heritage thinking. Augé (1995: 60-3) argues that monuments are deliberate attempts to achieve duration or even permanence without which history would remain abstract. The construction and maintenance of monuments creates an illusion of permanency that allows people to imagine those who have come before and those who may follow. While this illusion is constructed partly knowingly in the maintenance of particular cultural monuments, when conservation constructs such permanence for 'natural heritage' it facilitates a misconception that such places have enduring value in the absence of the people who ascribe the values.

Place and Non-Place

I have outlined the way in which place is understood as more particular than space, and as prior to space in everyday experience. Place is also a complex and ever changing intersection of concrete geometric space interpreted by bodily orientation and sensation and qualified by the cultural particularities of time and space. Place has a spatial context animated by stories, myths, legends and history and aspirations for the future. It is also

enlivened by the perceptions of a culturally informed and lived body. Augé (1995) similarly defines 'anthropological place' as established and symbolised; and socially constructed and inscribed in both space and time. However, he suggests that in 'supermodernity' there are also non-places; space which lacks these qualifications and which are characterised by a pervasiveness of the sign. This raises questions about the extent to which heritage is concerned with place or non-place.

Within heritage practice place describes the location and a circumscribed set of meanings. While these may reflect histories or physical features, they do not necessarily represent the kind of embodied and emplaced experiences that constitute place as outlined. As such they may constitute non-place rather than place.

Practice Severed from the Sign

There is an increasing desire to recognise heritage that is significant to a full range of people. This means considering not only the grand but also the everyday in heritage assessments (see, for example, Lowenthal 1998: 14; Byrne, *et al.* 2001: 48-9). This has also partly been the impetus behind the expanded use of social value as a criterion within Australian heritage regimes (Johnston 1992; Byrne, *et al.* 2001). However, heritage assessments that strive to represent more than an elite and sanitised view are difficult to decipher from a strategic position of management. This poses a major challenge for those wanting to use 'social value' as a means of identifying the everyday. Management or even the articulation of heritage does not allow access to the everyday because it can only recognise what has already gone. In this way the heritage assessment process, and the kinds of significance that are built from that process, replace the significance of the practice itself. The sign, whether a statement of significance or other heritage outcome, is misinterpreted as the original signifier. This misconception suggests a certain fetishism in heritage management where the process and products (statements of significance and management plans) are valued more than the practices that create heritage.

The distinction between places and non-places is relevant to consideration of intangible heritage. Intangible heritage considered in isolation from location, contents and history,

and separate from an encultured and emplaced lived body may create such non-place because it has the potential to further sever heritage (the sign) from the original (the practice). Such a division raises questions about the purpose of management. It is often claimed that it is the rapid rate of change that threatens to destabilise our world, and that the rapid changes to the physical environment in particular give rise to the need for conservation (Lowenthal 1998: 5-11). Without such pressures on the physical resource heritage would not require managing. Following from this, without a connection between the physical location and contents of place and the human practices and knowledge that create it, there would be no need for management or conservation. While values are by their very nature intangible, it is the link between the intangible and tangible that makes conservation necessary at all.

Loss of Contact

According to Taussig (1993: 21), copies are an important means by which people gain a sense of ownership or control over the original. Photography is a highly capacious means of (re)producing copies which Sontag (1973: 156) suggests are an effective way to develop knowledge that is dissociated from and independent of experience. The mystique and influence of photography lies in the perception of contact or the idea that photographs physically capture a part of their subject and hence gain this control over their subject (Sontag 1973: 153-5; Taussig 1993: 198-201).

The capacity of photographs to both replicate and control the original suggests that photographs can operate as simulacra. Thus photographs not only assist to gain power over the original, but can significantly transform the way in which people experience represented places. In contrast with the notion of contact, Umberto Eco (1986: 6) suggests that American celebrations of the past demand full-scale authentic copies for which he coins the phrase “hyper-reality”. He reflects that in American society where the drive towards futuristic developments is dominant, there is a corresponding nostalgia for the past. Consequently the recent construction is historicised through the creation of replicated history. This takes the form of perfect likenesses of an array of art museum pieces and even buildings. Eco found an obsession with exact replication in which the sign is forgotten and thus mistaken for the original. In other words the sign

becomes authentic and replaces the original. Without the element of contact the copies are dependent on likeness. These copies also take on aspects of the simulacra because their referents are often to an inferior copy of the original so that its effectiveness is measured in comparison with another copy rather than with the original (cf. Baudrillard 1983, 1993).

It is this confusion between copy and original that confounds discussions of heritage places. The past cannot be known or captured through copies, but only in an instantaneous flash of recognition that is elusive and may never be regained (cf. Taussig 1993: 38-40). Similarly, Bender (2002: S103) suggests that “landscapes, like time, never stand still”. The simulacrum of hyper-reality imposes a fixity that displaces and misrepresents the dynamic nature of places and the ways in which people come to understand them. The way that heritage is sanitised and experienced through contemporary sensibilities denies a much richer, contradictory and complex past (Bickford 1981: 1-7; Eco 1986: 9-10; Rodaway 1994: 164-5).

While Baudrillard (1983) links the dominance of the simulacrum with the modern condition, Massumi (1987) has argued that this may not be a recent development. To the contrary, he suggests that Baudrillard is bound to a nostalgic view of the past as real when it is possible that simulacra have always operated as important ways of understanding. It could therefore be useful to identify whether there is any set timing for the kind of transition that Baudrillard articulates or whether these stages are able to coexist in space and time (Rodaway 1994: 172-9). More significant perhaps is the idea that our views of the past, particularly as expressed through heritage, might themselves operate through simulacra. Heritage often sanitises the past, but the way it is recorded and fixed also denies the dynamic nature of experiencing place. As a result it is impossible to experience heritage as ‘real’. All heritage values are constructed in the present or, following the previous line of argument, the immediate past. However, the particular challenge for social value is that practitioners have tried to define it as contemporary value. Contemporary practices, however, are dynamic and cannot be understood from a strategic or distant visual vantage point required by management. The past is not only a foreign country (cf. Lowenthal 1985), but deliberately constructed as other because the dualism is a necessary part of gaining control. Interactions and understanding of heritage from a management perspective is restricted to the strategic

viewpoint of an outsider. Heritage managers seek a kind of consensus and also create their own values which are separate from the ones they think they are documenting and managing. The very steps of conserving heritage inevitably overlook the practice and hence the contemporary significance of the place.

Casey suggests that place is truly concrete and that his inverted order of place and space should not mean that place is the abstract form in this equation. Rather place should be recognised as having prior constitution through human experience (Casey 1996: 45-6). Place is therefore both physical and social and even part of human psyche (Casey 1996: 31). Casey observes that beneath all cultural and linguistic association there is no pure place or even pure space or time. Instead he suggests that there is only “continuous and changing qualifications of particular places” (Casey 1996: 28). It is therefore important to consider the way in which values are transmitted socially and it is an historic approach that allows me to consider this.

There have been several attempts to develop formal methods for the assessment of aesthetics. As already noted, these are often based on assumptions about intrinsic values in the landscape or are linked to arguments that fall within the judgement of fine arts and architecture. As outlined in the previous chapter, these interpretations of aesthetics do not consider the full range of sensuous experiences that constitute a sense of place, and through which people create places. The methods are therefore limited by the same issues identified in relation to the term 'aesthetics' and are largely inappropriate for this research. This chapter therefore examines methods used by heritage practitioners to identify social significance as a starting point for identifying aesthetics as a form of social value. The means of determining social values are not themselves without issue and I have proposed an expansion of methods to identify what are currently understood as social values. This expansion has the potential to consider a broader range of social values as well as offering support for the findings of more established techniques. Of particular importance is that the methods proposed are designed to allow a consideration of temporal change in the ways that people experience the environment, with particular reference to discussion in Chapter 3.

Lamb identified five principle 'research paradigms' used to assess landscape aesthetics. He lists these as component, formal aesthetic, psychophysical, psychological and experiential or phenomenological approaches (1994: 25-31). Of these the 'component' and 'formal aesthetic' models are based on the premise that aesthetic quality is intrinsic in landscape. Lamb further identifies the 'psychophysical' and 'psychological' models. The first attempts to identify a range of physical attributes and correlate them with psychological responses. The second is less deterministic and recognises that experiences of landscape are structured by people and psychological factors including prior experience and culture. The fifth of the categories summarised by Lamb (1994: 30), is the 'phenomenological' or 'experiential' model. Of all the models, this one approaches the intentions of my research. He summarises this model as one that focuses

on “the immediate subjective experience, feelings and expectations” and cites a number of very different studies that have taken an approach that might be categorised under this model, including fiction writers (Lamb 1994: 30). Major criticisms of the model are that it produces variable results, lacks theoretical content, and does not address the issue of ‘consensus’. This approach therefore shares some of the goals and some of the problems of social value assessment.

Clear and rigorous methods for identifying and assessing social significance are largely absent from heritage practice. This has led to many of the underlying problems identified by Byrne *et al.* (2001) in relation to how these values are identified and assessed. I have published a critique of existing techniques and proposed that some of the problems might be addressed through the use of a broader range of methods, the results of which might serve to support existing data and observations (Pocock 2002b). I identified a number of issues in relation to existing methods, particularly in relation to the dependence on direct questioning. This is problematic because the same methods of consultation are used for a range of different purposes, not all of which are appropriate to identifying heritage values. Furthermore, the dependence on contemporary voices has only a limited capacity to elucidate historical continuity or change because a current opinion is itself altered and reinterpreted in the context of those same changes and the present.

Social significance is often understood to be the values attributed to places by contemporary communities, and hence consultation is advocated as the key method in the determination of these values (Johnston 1992; Walker 1998). There are a number of ways in which community views can be sought. These include public meetings, workshops, competitions, oral history recording, interviews, demonstrations, advertising, submissions and observation (Johnston 1989; Walker 1998: 85-96). However, these methods are often misunderstood. In particular, they are often conflated with the more general practice of ‘consultation’ as a requirement of archaeological research or environmental impact assessments (Greer 1995; Greer, *et al.* 2002; Pocock 2002b). This often leads to the poor implementation of methods and the results produced in this way are questionable. It has therefore been suggested that the skills needed to identify these values might be found among anthropologists, but for the most

part these assessments are undertaken by people without this training (Greer 1995: 229-37; Pocock 2002b: 278).

The reliance on methods that all comprise some form of direct questioning, even when executed properly, has implications for social significance assessment. As discussed in the previous chapter, place and people are integral to one another (Casey 1996). Consequently the contributions of community members to assessments of significance are invaluable (Johnston 1992; Byrne, *et al.* 2001). However, identifying an everyday heritage or the everyday experiences that make places significant is not always possible through direct questioning of community members. People conduct their daily lives with little reference to, or consciousness of, the significance of their activities, or as Judith Kapferer observes, many communities or cultures are defined by the patterns and activities that are taken for granted (1996: 17, 33). Consequently significant experiences that are integral to how places are constructed and valued may not be consciously articulated by the people who know them. This is particularly the case in relation to sensuous experiences, an awareness of which is diminished through habituation (Rodaway 1994). Subsequently it is often only through loss or threat of loss that people realise the significance of the everyday aspects of places. It is therefore difficult for people to provide relevant information about significance in response to direct questioning, and without proper and extensive participant observation these everyday values are often overlooked or recognised too late to be accommodated within decisions about land use.

I have therefore suggested that methods used to identify social value should be expanded to consider materials that can be interpreted as texts of society and used to identify cultural patterns and places and practices of significance. Given that most heritage practitioners are trained in disciplines such as history, archaeology and architecture with a strong emphasis on material culture, it is surprising that so little emphasis is given to material culture and historical process (Pocock 2002b).

Using textual materials to interpret social value has the added advantage of being able to add greater rigour to statements about social significance. The way that community views are incorporated into statements of significance are either that they are overlooked completely, are included without any kind of assessment, or that there are

major gaps of the most significant kind. Generally heritage assessments lack the kind of cross-checking that is used to validate observations from oral testament in other contexts (Vansina 1965). Similarly problematic is the focus or reliance on a singular personal voice in understanding social significance. Cultural heritage is often assumed to be about the construction and maintenance of identity. As already outlined there are no singular places or spaces, and hence it is neither desirable nor feasible to reach a singular consensus about the significance of a particular locality. Such a consensus can never reflect any particular understanding and can only reflect an agreed point of departure. However, it is important that significance is established through more than isolated individuals. As Kapferer (1996: 32) has argued, cultures are not individual. It is therefore important that significance is identified as common to, if not all community members, then by significant sectors of those societies. Individual 'voices from the past' are used by historians to construct thematic histories, and are invaluable in public history which seeks to make the past accessible to the present public (see, for example, Stell 2001). In the context of researching heritage significance, these same sources can offer new ways of understanding human association, knowledge and experience of place, and the resulting connections and traditions that are the consequence. However, historians use these individual expressions against a backdrop of more comprehensive research and understanding of the particular society and temporal context. This context is essential for evaluating oral testament (Vansina 1965: 183) and there are inherent weaknesses in relying on what an individual says without an awareness of these contexts (Pocock 2002b).

As I have already outlined, my research aims to identify the way that social values form, continue and change over time. The way that social value is defined and assessed is based on the assumption that social significance is primarily concerned with contemporary society. It is clearly arguable that all heritage is constructed through the present (e.g. Brett 1996: 14; Lowenthal 1998: 21). However, heritage values are also historically constituted (Bickford 1981; Byrne, *et al.* 2001). The methods of consultation used to identify social values and other community concerns in Australia developed from a recognition that oral transmission is an important aspect of Aboriginal culture. However, oral testament is not restricted to those events and associations that have formed in the very recent past (Pocock 2002b). For those social groups that do not have these long-standing oral traditions, cultural information is transmitted in other

ways, and it is important that methods have the capacity to identify these sources. For example, in Western societies and particularly in relation to tourism, visual information is very important in the construction of place (see Chapter 3).

The methods that I have developed for the present research do not seek to replace the use of consultation as a way to gain insight into community issues. Rather, I seek to articulate methods that allow social value to be considered within a temporal framework that can account for change, and which can provide a mechanism to crosscheck information from different sources. Long term patterns may give greater veracity to the significance of particular social practices, particularly through an understanding of social reproduction. This is not to support the common assumption that traditions with long historic continuity are more significant than those of the present and recent past, but that a temporal context for individual comments and views may support and elucidate greater understanding of particular social practices and their transmission within and between generations. An historical approach might therefore provide insight into past patterns in the creation, loss and continuity of practices and values. This could expand and complement our understanding of present and future values identified through community consultation and participation. This is important because management would be irrelevant if all practices and values were temporary and fleeting.

It is also possible that these methods will articulate values that have been taken for granted and which can themselves be substantiated through better informed questioning. Oral traditions can themselves be tested and extended in this way by using additional historical sources such as written documents, archaeology, linguistics and anthropology. Any single discipline provides information which is limited in some way; but by considering all of the available information it is possible to greatly extend our knowledge of a particular aspect of the past (Vansina 1965: 182). In trying to assess social significance, this comparison of data sources is long overdue. It is therefore my intention to develop methods that may complement those predominantly used in the identification of social significance.

Beyond the issues identified in existing methods and their application in heritage assessments, the research questions I have posed demand a different approach. Accepted methods in social significance assessment do not have the capacity to

consider two key elements of my research; the temporal change and global significance. Change through time is an important aspect of my research. However, methods that depend on the active participation of communities cannot always help to understand social values. Oral testaments made in the present about the past are informed by the present and the changes of the intervening period. They are therefore limited in their capacity to provide the necessary context of temporal continuity and change that I seek to identify. Secondly, my research seeks to question the notion of global attachment. The reliance of the testament of local communities cannot address the difficult question of global significance that is so pertinent to the Great Barrier Reef as Australia's premier overseas tourist destination and World Heritage site. World Heritage listing implies that the Reef is significant beyond the local, and in terms of the social significance the communities of interest may be widely dispersed and quite diverse. While local community views are important, it is the construction of global significance and the conceptualisation of the Reef as a whole that have informed my particular research questions (see Chapter 1). The methods used to gather and analyse data for my research are therefore found in an anthropological analysis and interpretation of historic data and comparable contemporary sources, as discussed below.

Historical Sources

My methods are predicated on the argument that social value is reflected in the texts of societies that produce them. It is therefore various kinds of texts that I have turned to as my data sources. The Great Barrier Reef is one of the most recorded places in Australia. It has been painted, photographed, and produced in other artworks like tapestry, posters and silks. It has been written about in popular magazines, newsletters, travel literature, science journals and books, fiction and innumerable postcards, diaries and letters. It has been the backdrop and inspiration for feature films and documentaries, television programs and advertisements. Through these media, the significance of the Reef is portrayed and transmitted to and from individuals and groups, within and between generations. The wealth of these materials is enormous and there is no shortage of sources for research. With the exception of a few local histories (Barr 1990; Blackwood 1997), and two recent publications on environmental philosophy and history at the Reef

(Love 2000; Bowen and Bowen 2002), these materials have seldom been used for research purposes and remain a rich and varied source.

The materials are so plentiful that I have had to be selective in the use of collections. I have maintained a primary focus on the ways in which the majority of visitors might have experienced the Reef in any given period. In other words it is the early group tours and later mass tourism ventures that I have used to focus the study, rather than the exceptional experiences such as boutique and ecotourism enterprises that have emerged more recently. The materials that form the focus of the study show a strong bias towards personal materials of the 1930s and the contemporary period. This is partly reflective of increased government involvement from the 1950s onwards and the likelihood that collections from this time onwards remain in private hands. After the 1970s there was also an increased homogenisation of facilities as outlined in Chapter 2 and these large multinational style resorts continues to characterise Reef tourism today.

Written Texts

Historic written texts and official documents are biased towards the dominant colonial discourse that produced them. They are therefore unable to adequately represent the views of Aboriginal people, or those of other marginalised groups such as women and lower socio-economic groups. However, these texts are able to say something about the dominant society or at least particular sectors of that society.

A range of written texts relating to the Great Barrier Reef was accessed for this research project. These include books, newspaper and magazine articles, as well as written material accompanying promotional advertisements, brochures and pamphlets. There are also a number of published and unpublished personal accounts by visitors to the Great Barrier Reef. These include personal diaries, published memoirs, field notebooks and private letters written by different individuals who visited the Reef during the twentieth century, as mentioned in Chapter 2.

Visual Sources

Visual sources are texts in their own right, even though they are often regarded as secondary to words (Scherer 1992: 32-3). The visual characteristics of the Reef dominate the management discourse in relation to aesthetic values of the World Heritage Area (Pocock 2002c). As visually mimetic technology became increasingly available and affordable in the twentieth century, photographs and film became a common way for visitors to record their personal experiences of the Barrier Reef. Visual records for the region are therefore abundant. There are stand-alone photographs, posters, paintings, and other images, as well as those that accompany words in magazines, journals, newspapers and advertising. These reflect a range of significant social values. They illustrate how the Reef has been portrayed by the tourism industry, and by inference, the constructions that have attracted millions of visitors to this place over more than a century. The wealth of visual imagery also constructs an experience and knowledge of the Reef for people who have never been there (Pocock In press).

The analysis of images has therefore been a central part of this research. The vast number and diversity of images makes it impossible to investigate all of these. However, all the accessed collections were analysed on location, as will be discussed below. In the majority of cases the entire collection was analysed. This includes almost a thousand individual photographs from unpublished collections, in addition to the images that accompany published materials.

Collections

A diverse array of materials relating to the Great Barrier Reef is available in public collecting institutions around Australia, in Commonwealth, State and local libraries and museums. Although the Reef is part of the State of Queensland, significant collections of material are held in other parts of Australia, and indeed in other parts of the world. I initiated this project when I was based in Canberra and so I initially identified sources that were available to me in that city. This was partly opportunistic, but the resources in Canberra cover a cross section of published and unpublished materials, both private and public. The National Archives of Australia and the National Library of Australia hold especially relevant collections and include a diverse range of material. These provided

an initial awareness of the types and range of sources available. In Townsville, I have been able to use resources of the Great Barrier Reef Marine Park Authority library and the James Cook University North Queensland Collection. Many early Reef tourists came from New South Wales, and to a lesser degree Victoria and I therefore visited Sydney and Melbourne to access relevant collections. I was also able to return to Canberra on two occasions. The collections of the Australian Museum in Sydney were particularly rich, as were private papers and collections in the Mitchell Library in the State Library of New South Wales. Although I have listed all the primary sources that I have cited directly for my research as part of my bibliography, I will briefly elaborate on the key elements of the collections that I have used.

National Archives of Australia, Canberra and Melbourne

The National Archives is the repository for Commonwealth Government archives. In addition to its central office in Canberra, there are offices in the capital cities of every Australian State and Territory. The Canberra office holds the majority of files and photographs of relevance to the Great Barrier Reef, though there are also materials of relevance in Melbourne and Sydney. For the purposes of this research, the central office was used extensively from March to June 2000 and in January and November 2001. I also accessed files held in the Melbourne office during February 2001.

The Commonwealth archives of relevance to the project include military and scientific research records, papers from the office of the Prime Minister and various government departments with responsibilities for tourism or those with interests in the Reef. Significant materials are found in relation to the Great Barrier Reef Committee, established in 1922 to oversee and undertake scientific research on the Reef (Jones 1967; Hill 1984; Bowen and Bowen 2002: 235-6), and the Australian National Travel Association, an organisation established to coordinate the promotion of Australia as a tourist destination (Harris 1965; Atkinson 1993; Hetherington 1999: 4; Davidson and Spearritt 2000: 78-82). Both organisations, in very different ways, have played a significant role in the development of the Great Barrier Reef as a world renowned heritage and tourist site as outlined previously. The National Archives also holds files relating to miscellaneous matters such as the establishment of air services to the Reef

and the coordination of a royal visit to the region. These files contain tourism brochures and reports that are now otherwise unavailable in public collections.

In addition to departmental and ministerial files, the National Archives also holds a comprehensive collection of photographs. These are mostly promotional and were produced by government agencies with an interest in tourism, particularly government tourist bureaux (Davidson and Spearritt 2000: 59-96). The images therefore seek to portray an official image of the Reef for use in promotion. They are often formally composed and depict professional models, although there are innumerable others that capture tourists on location.

National Library of Australia, Canberra

The National Library of Australia holds all Australian publications, and includes manuscript and rare book collections. This institution was useful for accessing a number of now rarely available journals and magazines, as well as some travel and tourism brochures that have survived from the first half of the twentieth century. Publications on the Reef, diaries and maps from early European exploration, and many journals and magazines not available in other collections were all accessed here. In the manuscripts collection I was able to access and use the personal papers of a number of people who have long associations with the Reef, notably Isobel Bennett, scientist and conservationist, and Henry Lamond, a long term resident and commentator on islands of the Whitsundays. Within the pictorial collection I was also able to access a private collection of photographs from a cruise to the Reef in 1933 (Berryman 1933), and a fairly extensive collection of posters including some early Australian National Travel Association posters for the Great Barrier Reef. In addition, the National Library maintains an oral history collection that includes one particularly useful recording with a tourist operator from Mission Beach (Harvey and Borschmann 1994). As with the National Archives, I was able to use the resources of the Library on three separate occasions. This was particularly useful as I was able to re-examine images that I had analysed at the beginning of the project, to ensure that initial observations had remained constant as the project developed.

ScreenSound Australia, Canberra

The National Film and Sound Archive of Australia (ScreenSound Australia) holds extensive collections of motion films produced in Australia including a significant number of films relating to the Great Barrier Reef. There are about 376 titles listed that relate to the Reef in some way. Some of these are restricted and could not be viewed. The high financial cost and time involved in viewing films made it necessary to select only a portion of the available material. Based on the reasonably detailed ScreenSound catalogue entries, and paying attention to the sampling of other types of sources, it was relatively easy to select those films which were most useful to my specific research questions. I initially viewed and analysed 70 feature films, news stories, advertisements, television serials and home movies. I was particularly interested in films relating to tourism or other kinds of visitors to the Reef, especially any early film footage. There are a significant number of home movies which provide particular insights into personal experiences of the Reef. The initial 70 films were available as preview material and could be watched and analysed at ScreenSound offices. However, several others were only available in preservation material which could not be reviewed, stopped or paused. The use of this material also has to be supervised and it is therefore even more expensive to view it. It was therefore necessary to order copies. This required preservation material to be cleaned and repaired prior to copying. It was also necessary for me to negotiate with the individual copyright owners in each instance. This process took some time as contact information held by ScreenSound was inaccurate in several instances – people had moved away or ownership had changed hands. Wherever I succeeded in making contact, the copyright owners consented, but in several instances individuals could not be traced and it was necessary to enter into an indemnity agreement with ScreenSound.

Mitchell Library, State Library of New South Wales, Sydney

The Mitchell Library holds three particularly significant collections in relation to my research. Within the Fry Family papers is a significant collection of photographs from the aspiring young scientist, Dene Fry. It is the earliest collection of photographs that I located during my research and dates to his 1910 trip to the Reef. His album is a careful and painstaking record of his time on Masthead Island and reflects a way of life as well

as his scientific interests. It also includes a number of photographs from a 1905 trip that he had acquired from elsewhere. Dene Fry was just sixteen when he accompanied this Australian Museum expedition. He was enthusiastic about the experience and subsequently published a number of his own papers about the trip. He was appointed as a cadet at the Australian Museum, but was killed during the First World War at Hermies in 1917 (Fry Family 1910; Whitley 1935b).

The Mitchell Library also holds a large number of photographs from the Embury expeditions. These photographs appear to have been handed down through his family and original captions have been annotated at a later date. However on my return to the Mitchell Library in November 2001 I found that some of the later annotations had been removed. These collections also include an early brochure from one of the Embury expeditions and a family history (Anonymous n.d.).

The third significant collection is the papers of Charles Melbourne (Mel) Ward, a scientist with the Australian Museum, who had a long history of involvement with both research and tourism on the Barrier Reef. His papers include a wide range of materials relating to his interests, including film-making and museum collections from his Reef research.

Australian Museum, Sydney

The Mel Ward papers led me to the Australian Museum where I found a wonderfully rich collection of material relating to the Great Barrier Reef. Much of the collection comes from staff members who have been active in Reef research throughout the twentieth century. It includes newspaper cuttings, photographs, publications and unpublished manuscripts from Reef excursions. Frank McNeill's records are particularly rich in relation to visitor experiences as he participated in several of the Embury scientific expeditions. His papers include brochures, newspaper reports and essays that reflect both sides of these activities. I initially viewed these collections quite briefly as my time was limited, and as I found nothing else comparable I returned to analyse and reanalyse these materials in more detail in November 2001. The McNeill press clippings include articles that I accessed elsewhere, but provide a comprehensive

coverage of the Embury expeditions and other trips made around the same time. As such they provide a good snapshot of tourist activities on the Reef during this period.

North Queensland Collection, James Cook University, Townsville

The North Queensland Collection at James Cook University holds a number of rare and out of print books relating to the Reef. The collection also includes some brochures and government reports relating to tourism on the Reef.

Great Barrier Reef Marine Park Authority Library, Townsville

The Great Barrier Reef Marine Park Authority Library does not have a systematic program of archive collection. However the librarians have recognised the significance of some key items as they have become available and recently acquired a number of photograph albums. Several are the personal photograph albums of Maurice Yonge, expedition leader at Low Isles in 1928, and his first wife, Martha. The images show a much more personal experience of the couple's time on the Reef. There is also another album in the GBRMPA collection which is from a tourist's visit to Heron Island in 1953 (Love 1953). Like many early albums the photographs are beautifully compiled and displayed and includes a map and other details.

Proserpine Historical Museum, Proserpine, Queensland

While undertaking observation in the Whitsunday region of the Barrier Reef, I took the opportunity to visit the Proserpine Historical Museum. This initially seemed promising as the Embury family had donated a significant photographic collection to the Society (Proserpine Historical Museum Society 1991). Unfortunately, however, the albums had been dismantled and individual images filed under the arbitrary location system of the organisation. As a result the potential contribution of these collections to my research was seriously diminished. Given the richness of other resources relating to the Embury expeditions, I did not pursue the Proserpine collections further.

Analogous Contemporary Sources

The intention of this research is not simply to identify experiences of people in the past, but to place these within a temporal context that is meaningful for contemporary social values. It also aims to identify the mechanisms invoked in the formation, continuity and changes associated with social significance. Another objective of this research is to identify new ways in which social values might be identified that will allow different sources of information to be compared and cross-checked with one another as a means of ensuring consistency. For these reasons, comparable contemporary texts were chosen to illustrate means, other than personal interview, by which to identify contemporary social values. The historic data are therefore contrasted with contemporary sources as a way of identifying corroborating observations, and in this instance to identify changes in the way the Reef has been perceived, experienced and captured.

Written Texts

Travellers today are less likely to keep diaries, or even to write long letters home as people did in the first half of the twentieth century. Even if they do, they would probably be reluctant to part with such personal items in a period contemporaneous with their production. However, there is a recent reflective tool available to the traveller. The major tourist centres on the Australian mainland adjacent to the Great Barrier Reef are Airlie Beach and Cairns, and both centres are conspicuous for their large numbers of internet cafes. Young backpackers and other tourists fill these venues each day to relay their adventures and stories to the people they have left behind, and others they have met along their way.

It is proposed as a future research method (Pocock 2002b) that these users be invited to participate in an on-line forum where they might share their ideas with each other, as well as with the researchers. This would be the equivalent of a community meeting or workshop but one that would facilitate a global rather than a local forum. In the current research project, however, the internet has already proved rich in contemporary visitor observations of their experiences at the Barrier Reef. Many travellers now build personal home pages as records of their experiences, and some of these are publicly available. They provide relatively unselfconscious arenas in the sense that the authors

would not have foreseen that their opinions and comments might form part of the assessment of 'social value' or any other heritage process. The pages often include photographs as well as written texts that give personal and frank accounts of experiences at the Great Barrier Reef.

The accessibility and freedom of publishing on the internet has also meant that there is less formality in publications, and a greater range of individuals, groups and organisations are able to publish magazines and newsletters on a range of topics. These include sites set up by scuba-diving groups to share information about dive locations and equipment. Some of these contain personal accounts of experiences that occasionally include stories relating to the Great Barrier Reef. Similarly, many individuals compose web pages about their holidays. These include written narratives and photographs from several Reef vacations.

On-line materials of relevance to this research have been identified by periodic searching of the internet using a number of different keywords and combinations of search engines. The written texts associated with promotional materials, newspapers and magazines have also been used in the contemporary context.

Visual Materials

There is a plethora of contemporary colourful promotional materials relating to Great Barrier Reef tourism that can be contrasted directly with historic sources of a similar nature. There are brochures, magazine and television advertisements, posters and, as already mentioned, internet sites. In order to sample these materials, the annual Townsville Travel Show was attended in both 2001 and 2002. These events display information about a range of travel destinations in Australia and overseas. Large and small tourism operators of the islands of the Great Barrier Reef, the associated mainland and major tourism centres such as Cairns exhibit their brochures and information services. Representatives from regional centres also produce promotional material for these occasions. Copies of all available brochures, pamphlets and magazines relating directly to the Great Barrier Reef or associated centres were collected in both years.

During the period of research, television programs relating to the Great Barrier Reef have been recorded. This has been an *ad hoc* process of recording documentaries, segments of travel shows and other programs that have been screened on Australian television from 2000 to 2002.

In addition to using contemporary visual texts in print and electronic formats, and media coverage of the Reef, two weeks of field observation was undertaken in the Whitsundays region of the Great Barrier Reef in May 2001. This fieldwork aimed to gather information about the way in which the Reef is presented and interpreted for visitors. Fourteen well-advertised tours, walks and island resorts were observed with reference to the research questions (Appendix 8). These included a trip to the Outer Reef, two ecotourism guided tours, and four self-guided tours to island resorts. I also travelled further south to the Town of 1770 to take part in an advertised day trip to Lady Musgrave Island. Some level of interpretation of the Great Barrier Reef and the region was offered on all of these. One of the ecotours was based on the adjacent Australian mainland, but all others involved transport across the sea, the majority by way of the Whitsunday Passage. Observation allowed the tourist centres to be analysed for the physical presentation they make to tourists. This can be contrasted with the environments recorded in early photographs, as well as with the wider region in which the tourist centre is located. The tours and resorts observed during my fieldwork were mostly those associated with large-scale commercial operations. As such they represent a typical or common way in which the Reef is experienced in the contemporary period.

I initially proposed to contrast promotional presentations of the Reef with the experiences that tourists record in their own photographs. I intended to do this by viewing, subject to permission of the owners, photographs printed in major tourist centres. The archival sources and other materials have proved so fertile that I have not pursued this avenue at this time. However, it may still be worth conducting this kind of comparison in the future, as these images would offer a very direct contrast with personal photographs taken in earlier historic periods. This would also be a useful approach for studies where the photographic history is less rich and continuous than it is for the Reef.

Analysis

The analysis aims to address the questions relating to the social significance of the region as identified in Chapter 1. I am particularly keen to identify the range of activities and experiences that contribute to human knowledge of the Reef. I was interested in how people oriented themselves in relation to the Reef in order to understand it, and also how the physical interactions with the environment of the Reef contributed to their knowledge of the place. Several people have suggested that heritage significance is linked to community identity (Johnston 1992; Ashworth 1994; Greer 1995; Bennett 1998; Byrne, *et al.* 2001: 146) and a basic question to ask of the data was the extent to which the Reef is important in the construction of identity. In other words to what extent was, and is, the Great Barrier Reef experienced as an Australian place? How has the Reef been represented and experienced as a place that offers visitors access to cultures and landscapes that might be regarded as characteristic of Australia? The converse was also considered. As a global icon, suggested through World Heritage listing and recognition of its 'outstanding universal significance', how is the Great Barrier Reef constructed as a place of global significance? In other words, what are the mechanisms by which social significance for individuals outside the local communities are developed and recognised?

Database Checklists

Database checklists were used to ensure that each source was analysed for the same range of themes and motifs (see Table 1). The initial database was designed to aid the analysis of visual images. This checklist was subsequently refined as more sources were analysed and the material became more familiar. It formed the framework for textual analysis and modified versions were produced to aid the analysis of motion film, and field observation (Appendix 9).

The historic, social and geographic context of production for each source was recorded in the database. The checklist also comprised a broad range of indicators, including physical and emotional experiences; landscape characteristics; presence of flora and fauna; the attributes of human subjects such as gender, age and ethnicity where discernible; the purpose of (re)production, and a range of activities represented. After

results of the initial analysis these were refined to target particular research questions. Separate databases were constructed for each collection, and later all data were consolidated in a summarised format within a single database.

Some Indicators of Key Themes				
Tropics	Australia	Reef	Activities	Perspectives
sunset/rise sun sandy beaches palm trees coconut mangroves hotel/resort swimming pool islands moonlight bananas papaya hibiscus Pacific props pineapple bright flowers	Indigenous people Aboriginal paintings/artefacts accents architecture casuarinas hoop pines eucalypts tournefortia pandanus grasses lizards kangaroo koala birds water lilies general context maps	coral cay coral island coral fishes corals turtles turtle eggs dugongs clams stonefish gropers slugs shells crab jellyfish crocodile shark diving reef edge birds starfish	water transport swimming- sea swimming pool coral viewing glass-bottom boat underwater observatory collecting reef walking fossicking turtle riding science snorkelling diving sailing line fishing game fishing spear fishing hunting bush walking camping relaxation sunbathing shopping clubbing socialising dancing waterskiing speed boat racing parachuting photography	landscape seascape from water from land above water below water below water (observatory) aerial view raised view horizontal view upward view large scale small scale microscopic disoriented

Table 1: Themes and Motifs Analysed in Primary Sources

Historical and Geographical Context

As with any historic research there are inherent biases in the surviving records. Archival material relating to the Great Barrier Reef, although extensive, is no exception and an arbitrary number of influences have effected the survival of materials. The research has accepted the bias within the records, using available collections in their entirety.

Furthermore, not all collections have been identified or accessed. The historic context of the collections, however, provides an important mechanism by which to understand some of the biases of the surviving materials (Albers and James 1988; Scherer 1992).

For the most part, the documentation relating to the 1930s is some of the richest and most readily available material relating to Reef visitors. This is certainly a direct result of the flourish of tourism in this period (Barr 1990: 16-19). It is also due to a number of high profile and influential individuals who participated in Reef excursions, and whose private papers have been archived. Films, diaries, letters and photographs survive in abundance and complement a variety of published articles in journals and magazines of the time. Although there is a bias in these materials because of the links between many of those involved – especially as facilitated through the Australian Museum – this also reflects the predominant way in which tourists experienced the Reef at this time.

Although there is a particular wealth of material relating to the 1930s, there are also similar records in the preceding and subsequent decades. Records from the first two decades of the twentieth century are primarily from members of scientific expeditions – both amateurs and professionals – who kept journals and photographs. Materials from the 1940s are scarce due to the suspension of activities during the War (Barr 1990: 21). However, by the 1950s there was a resurgence in tourism accompanied by a greater influence of government and tourism sectors. As outlined in Chapter 2, the tourism industry became more formalised and as a result there are more promotional and official records available from this period, including a proliferation of government photographs that is reflected in the National Archives photographic collections. Individual collections are less comprehensive from the second half of the twentieth century. This is partly a reflection of the relative worth placed on older materials and the fact that more recent collections may still reside in private hands. Promotional materials in the form of brochures and posters, and postcards that are both personal and promotional in nature are all relatively rare. In general it was noted that there was a lack of responsibility for these types of materials, being either outside the primary scientific interests of some agencies, and too recent or trivial to have attracted the attention of historical societies. The project therefore identified that these types of materials are at risk. This was highlighted by two incidents during the course of identifying collections. The integrity of a photographic collection was diminished when it was removed from its original context, as mentioned above, and in another case a collection of postcards had recently been destroyed to make a display collage.

The database therefore aimed to gather basic information about the historic and geographical context of the materials. This included any available dates, details about the creator and location. The context of production was recorded wherever possible. For example, I assessed and recorded whether each image was produced for private or promotional purposes, scientific or public education, and whether it was a personal, government or company output. I also used secondary interpretations such as annotations made by later family members which also demonstrate continued use and relevance of the materials.

Indicators of Australianness

The question of national identity is a contentious one, and perhaps particularly so in colonial contexts like Australia. There is an extensive literature on the question of Australian identity. Although this literature largely regards the construction of the nation as one steeped in myth and error (see for example, White 1981; Kapferer 1988; McGrath 1991), there is also a recognition that there are elements which are held to be indicative of Australian identity. Judith Kapferer (1996: 52) has pointed out that the debunking of myths by academics and the media does little to undermine how strongly Australians hold onto the portrayal of particular national characteristics. Many aspects of this Australian identity rest on elements of the Australian landscape. This includes both the native fauna and flora, and the cultural affiliations that people have with the bush and particular totemic species (for an example of the significance of the kangaroo in white Australian identity, see Morton 1990). It was therefore identified that native flora and fauna might be key indicators of the extent to which the Barrier Reef was presented, experienced and recollected as a place located within the construct of Australia. The database checklist that was drawn up to aid the analysis of images therefore included a list of elements symbolic of the Australian environment, particularly the bush and its most recognisable components like eucalypts, casuarinas and other flora. It also included lists of Australian fauna that are recognisable and definitively Australian, particularly marsupials such as the kangaroo and koala.

It is more difficult to find physical determinants that are cultural indicators of the Australian location. The exception to this is Aboriginal cultural materials and the

presence of Aboriginal people themselves. A key way in which many national identities are constructed is through the appropriation of indigenous cultures. In Australia this is illustrated through the appropriation of Aboriginal culture, particularly material artefacts, by wider Australian society (see, for example, McGrath 1991; Rowe 1993; Byrne 1996; Langton 1996; Bennett 1998; Rowe 1998; Harrison 2002). These elements (Aboriginal people, paintings and artefacts) were therefore also identified as potential indicators of Australian affiliation, and included in the checklist. It was also recognised that more general contextual information that might not actually be part of the Reef, such as maps, landmarks and famous buildings, might also symbolise the Australian location.

Indicators of a Familiar Exotic

In the absence of indicators that are clearly Australian, or in parallel with these indicators, it was also pertinent to question what, if anything, the alternative motifs represented. For this reason, and partly based on preliminary viewing of materials relating to the Reef, it was possible to identify a range of alternative indicators. These are not specific to Australia, and are in fact distinctly 'unAustralian' as will be discussed in Chapter 8. In particular, landscape elements such as palm trees, hibiscus and frangipani, and cultural elements such as Hawaiian dance nights, clothing and architectural elements are symbolic of the Pacific. These were therefore included in the checklists to identify the extent to which they were promoted by tourism industry and recorded by tourists.

Visual Texts

Most archival images could not be copied, so all analysis had to be completed on site at the collecting institution. In the case of the first collections reviewed, these were revisited and reanalysed to ensure consistency of the evolved databases. In one instance the National Archives misplaced my order of photographic prints. As photographic prints take some time to be located and brought from cold storage it was impossible for me to view them during the planned visit. The office therefore scanned the images for me so that I could view them in electronic format. Although this gave me access to the

images, it also resulted in a loss of some original contextual information. Wherever I had used the original images I found useful information and detail inscribed on the reverse side of the print or in the photographic sleeves. This information was not included with the scan. As the catalogue captions differ markedly from those on the reverse of the prints, the scanned images provided no means of accessing the original captions or information and the images were less useful.

In spite of the restrictions on access to collections, the analysis of photographs followed methods used by anthropologists in the examination of images (see for example, Collier and Collier 1986; Albers and James 1988; Scherer 1992; Harper 2000; Blaikie 2001). As such, both a content and semiotic analysis was used. Content analysis focused on the primary message or intention of the image, with the exclusion of extraneous elements. This recorded any indicators of the themes outlined above and summarised in Table 1, and indicators of emotions expressed in words or through other signifiers were also recorded. The checklist also included viewer perspectives, landscape features, the number of people, their genders and the activities they were engaged in. The semiotic analysis considered the images as a whole, compared them with other images and related them to any accompanying texts. For example some captions allowed greater interpretation of the content such as when it might point out that a particular dwelling belonged to Aboriginal people. The analysis also considered both the purposeful inclusions and extraneous elements captured by the photograph. Furthermore, the photographs were interpreted in the light of the available written documents.

Written Texts

As with visual images, many archival texts had to be analysed on location at the collecting institutions. Each written text was read for its content and general theme, according to the framework described above. A number of key words and themes were identified for each. Where the document was highly relevant to the research questions it was either fully transcribed, or extended passages of relevance were recorded to allow reanalysis at a later stage.

Part 2 of the thesis demonstrates how these sources have been used to identify the way in which people have experienced the Reef and how this has changed over time.

Part 2

Experiences

This part of the thesis uses data gathered from archival sources to show the way in which visitors have oriented and located themselves in the landscapes, interacted sensuously with the region and captured and transmitted these experiences. It also includes examples of written and photographic accounts that illustrate these experiences and their transmission.

Come and Get It: The Voyage of the *Cheerio*¹

It was a beautiful sunny day when M.L. *Cheerio*, with a very happy party of Sydney folk, left Mackay bound for an extensive cruise through the islands of the Great Barrier Reef.

A party of twenty-six adventurous souls, eleven girls and fifteen men solved the problem of a winter holiday in a novel fashion, and went off to find warm sunshiny days, whilst their friends in the south shivered and froze in the cold westerly winds of July.

Drawn from various walks of life, of ages ranging from the early twenties to late middle age - their one thing in common being a love of adventure, their main character trait to be a good mixer...

Our new home, the *Cheerio*, was a roomy boat, with twelve bunks forward; the engine amidships, and a spacious cabin at the rear with the cook's galley in one corner. Everyone was impressed with the sturdy construction of the craft.

As the launch was so tiny, luggage had to be kept to a minimum, and clothes were therefore very simple - these consisted of shorts and shirt - the latter article more often than not dispensed with by the male members of the party - a pair of thick soled shoes or boots, and a sun hat.

Meals were partaken of on board the launch, which boasted a cook who was a very real character in himself, and in a tiny space measuring 14' x 10' cooked and served the most delectable meals. In this space also were a refrigerator, a dining table, a couple of cupboards and a small kerosene stove, and everyone marvelled at the adaptability of the cook in the management of his tiny domain. The meal gong was a summons by the cook in a stentorian voice to "Come and Get It," and needless to say there was a great rush from all sides to obey the call.

¹ This case study presents an example of the way in which visitors wrote about their experiences at the Reef at the beginning of the twentieth century. This voyage was accompanied by Marshall, Livingstone and McNeill from the Australian Museum in 1935 and represents a typical holiday. It also introduces a number of observations and patterns which I examine in the forthcoming chapters. The material is drawn from surviving eye-witness accounts, including those of Watson (1935), Pandion and Pandanus (1936), Anderson (c. 1935) and Pizzy (c. 1935). The presented material is primarily drawn from Watson (1935) with additional details inserted from Anderson (c. 1935). The map is from a published version (Pandion and Pandanus 1936).

During the cruise which extended over a fortnight, numerous islands were visited, and hundreds of others were passed, to which alas time alone did not permit a visit.... The usual procedure was to make camp for a night or two on a central island, and then explore the surrounding islands.... The men slept on board in the very comfortable bunks provided, a tent being pitched on the island chosen for camping, for the girls, and many amusing incidents happened in making and breaking of camp, which usually took about an hour, including the transporting of the camp beds from the ship to shore and vice versa.

Unfortunately, the tide was on the ebb [at Scawfell Island], necessitating a laborious portage of the tents and stretchers for the camp ashore.... Then all ashore for our first camp-fire, made from dead pandanus leaves and cocoanut husks. We were a very happy party that evening, and were agreeably surprised by the fine singing of one of our members and the musical ability of our skipper.... Several others did their little bit towards making the impromptu concert a success.

The setting was extremely beautiful; the tide came right up to the camp, while a full moon enhanced the tropical effect of the cocoanut palms. The party, somewhat tired after a strenuous day, broke up about mid-night, but three enthusiasts, fired by hope and a rum toddy, went fishing. We are sorry to say they returned home about 3.45 a.m. without fish and with their ardour and other things very much dampened.

As the weather was particularly good on the second day, we set off early for Bushy Island, a little coral cay east of Scawfell Island. On the way at Tern Island, some of the party went ashore and returned with glowing accounts of fish, coral pools and sea birds, which included osprey, red-bills, gulls and terns. The remainder stayed on board to fish, and running up to anchor at the edge of the reef were delighted by the under-water views of the beautiful coral gardens and nigger heads submerged by the high tide. Strange to relate, the first fish caught by a "mug," although he swears he knew all about it; but we were able to show the returning party a nice catch of Island Schnapper, Coral Cod and Shark. Continuing to Bushy, we went ashore at ebb tide and spent the whole afternoon either on the island or wandering over the extensive reef, while two enterprising members of the party brought home a young green turtle, which was subsequently rendered into an excellent soup.

It was with deep regret that we left charming Bushy Island with its beautiful trees, beach and bird life. The close of that afternoon was marvellous. To the south we could see Red Bill Island standing sentinel to acres and acres of reef; to the east, Bushy, just green and yellow; north we saw Tern Island, and west, the sinking sun across a beautiful expanse of

water. That night our concert was held on the return trip, and it seemed no time before we were once again moored at Scawfell.

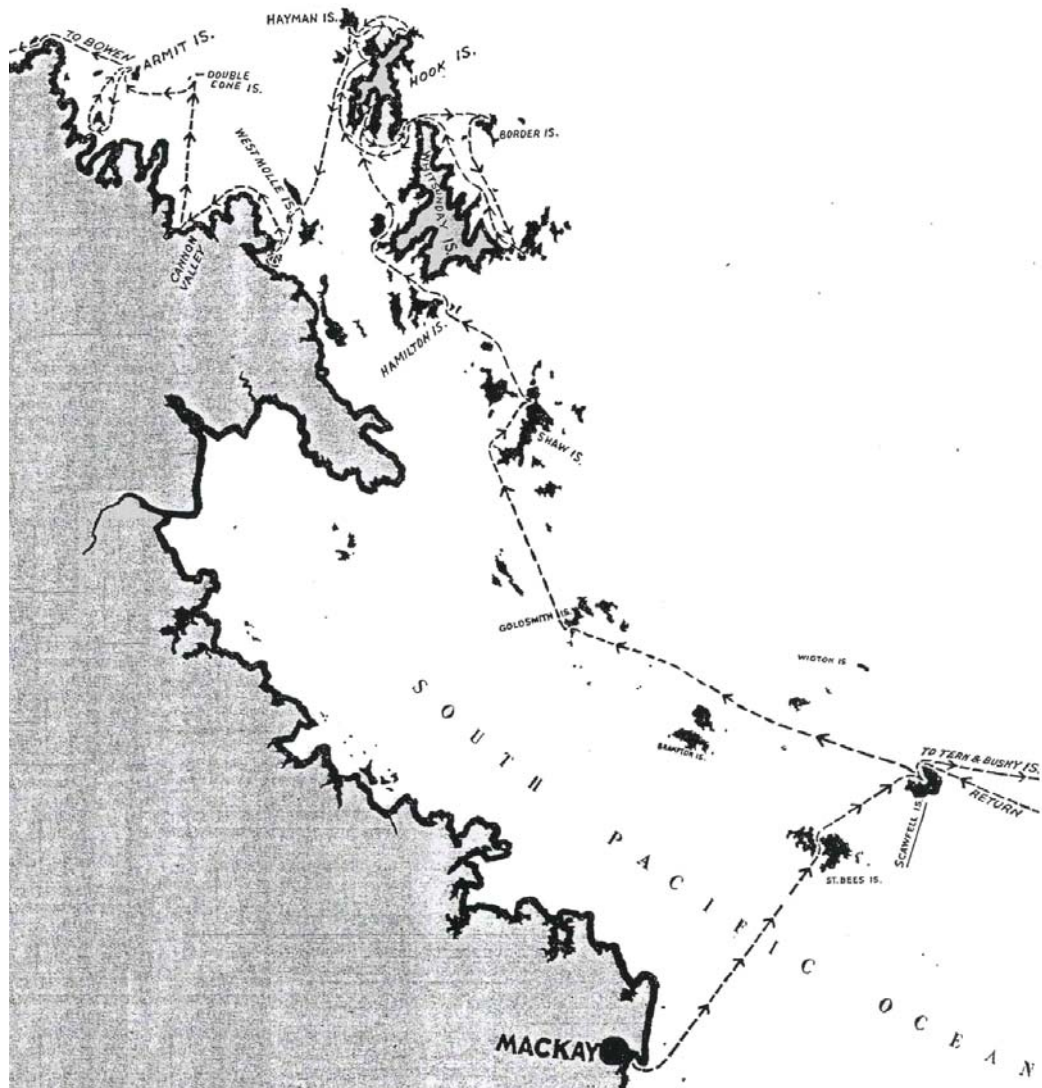
The following day was fishermans' day, but somehow [*sic*] or other the fish must have known. One of the trolling enthusiasts - we shrink from calling him anything else - hooked a nice fish, but lost him when his trace parted. He is quite sure that it was at least a 12ft. shark!

Striking camp next morning, we set our course northward. The sea was a little choppy, but the scenery was enchanting, and we ran past Carlisle and Brampton Islands, on through the Sir James Smith Group and reached Shaw Island late in the afternoon.

Each base camp had its own particular charm; that at Shaw Island was scenically superb. Situated on a narrow neck of beach at the foot of Mount Shaw on the one side, with a rising hill on the other, it was all that one could wish for. Cocconut palms, casuarinas and pandanus palms fringed the shore, while to the west we could see Lindeman, Seaforth and Pentecost Islands.

Most of the party rambled on "Shaw" next morning, and after an early lunch we went over to Lindeman Island. We were very cordially welcomed by Captain Nicholson, who is the lessee of this island. He gave us the freedom of the whole of Lindeman, which was greatly appreciated.

The majority of the party decided to climb Mount Oldfield, but tired themselves out by taking the wrong route, endeavouring to reach the summit by scaling the cliffs immediately behind the beach. Five of us made this arduous climb, which reached a climax when we struggled up the last two or three hundred feet via a goat track. We were rewarded by wonderful panoramic views, and, looking east, we saw our base camp and Shaw Island in perfect silhouette with two other islands in the background. To the north was Pentecost, outstanding and rugged, resembling a lion couchant, and to the west, the mainland; in the distance and south a long expanse of Lindeman Island, with Shaw Island Seaforth Island further on. The sun was slowly disappearing in the west, and the whole formed a perfect setting.



After dinner we participated in a concert held in the hall on Lindeman Island, but most of the entertaining was left to us, and we congratulate those who sacrificed themselves to make the evening a success. The party broke up early, and we ran home to our Shaw Island camp very tired after a strenuous day.

We pitched camp in the dark that night at the southern end of Hook Island, and had an early night, which enabled us to get up with the sun and obtain early morning impressions of the grandeur of Whitsunday Island over 2 miles away, and of the snug little beach on which we had pitched the camp.

After lunch that day several of the crowd tramped around the rocks to end the misery of an old billy-goat which had apparently been badly wounded in combat; also to enable "Jock" to scale a very high hoop pine and obtain a fine sea-eagle's egg.

Our camp fire that night was a masterpiece for size and warmth.... The fire, unfortunately however, created too much warmth in the trees overhead for the green ants which abound in the leaves, and they descended in a shower much to everyone's discomfort.

The following day we all went aboard for a trip around the eastern side of Whitsunday Island to Whitehaven beach. We saw many fine vistas on the way, stopping at Border Island for lunch and were agreeably surprised by the pure white "whistling" sand at Whitehaven, which is, I believe, the finest grained sand known. Although we were troubled by showery weather, the sun finally came out and we had a very pleasant run back to our Hook Island Camp in the dusk. Before leaving camp next morning, [a] collecting enthusiast stirred up a snake while searching for "giddy-giddy" berries. Archie dashed over to investigate and picked the snake up only to get bitten for his pains. He was given the usual treatment and soon recovered. Then off we went north to Hayman Island, where a cordial welcome from Bob and Bert Hallam made us feel very much at home. On looking around the island we were surprised at the extent of the settlement, which caters for very large parties at times. As at Lindeman, we again staged a concert, and enjoyed quite a good night.

...On our return, the reefers went on shore to examine the fine Hayman reef.

[M]embers of the party preferred exploring the coral reef at close quarters, either roving over it at low tide, or rowing over it when the tide was up.... [I]t is an extremely fascinating experience to row over the coral reef, which looks so marvellous under water. To gaze down through the deep blue, yet somehow crystal clear water, into what appears to be an enchanted flower garden, with blooms of unimaginable colouring and formation, and inhabited by the most weirdly and quaintly shaped marine life, of every rich conceivable and inconceivable hue, criss-crossed, zigzagged, circled, and spiked, with colours mingled and inter-mingled in a vision dazzling to the eye, proved a never ending joy, and held on spell-bound at its beauty, as the ever changing picture of the waterscope was revealed. Yet even in this paradise of beauty the cruelty of nature was manifest, for whilst gazing with almost breath-taking interest at the wondrous beauty of these pools, quite often sinister shapes would be seen lazily cruising round in search of prey, for sharks of a very large size were seen daily. Even from the shore it was quite a common sight to see large shoals of fish leap into the air as they rushed past the beach closely pursued until their numbers gradually diminished as they were inevitably overtaken.

The coral at low tide is at first glance very disappointing, and looks like a mass of dirty brown rock. It is only when walking over it and discovering all

sorts of fascinating specimens of live coral, shell fish of beautiful and uncommon variety, etc., that one becomes intensely interested and realises how truly strange and marvellous are the workings of nature.

About 4.30 the fishermen set forth to do or die, and I am pleased to relate that they did. Five fine spanish mackerel and a bonito were caught trolling that evening. ...

We were all sorry to leave Hayman Island next morning, as we had been exceptionally well treated. However, pulling out, we nosed our way into a fairly solid sea, and had our roughest trip to the Molle Island Group. Our object was West Molle or Day Dream Island. On arriving there the launch ran right up to the very steep beach, and the whole party was able to go ashore via a gangway. Day Dream is a very pretty little tourist island and, as the name suggests, should be an excellent spot for anyone who desired a very quiet holiday.

Archie's call, "Come and get it," was heard early the following morning, and after a hearty breakfast, which included fish fillets from our previous night's catch, cooked as only the inimitable Archie could, we set forth to Grassy Island. We watered at this island, and as the tide was on the ebb, we had a rather tiresome job, that was not improved by the tropical weather. After lunch we cruised back to Armit Island, and then went fishing and reefing. Our fishermen had no luck whatsoever. All ashore for our last camp fire that night, and we carried on till very late, finishing off with coffee and biscuits at 1 a.m., and so to bed.

Breaking camp next morning, we left Armit Island and the good old *Cheerio* set forth for Bowen past Saddleback Island, and then through the Gloucester passage, finally tying up at Bowen Wharf about 4 p.m. We were a little depressed when we realised that our trip had finished, but this feeling soon wore off, and we all toddled up town to have a bath, etc., at the hotel; then back to the ship for dinner.

And so we write "Finis" to the finest holiday anyone could desire; a holiday that was carefree, adventurous, and healthy amidst as fine a crowd of folk as one could ever hope to meet, and although we may each go down our separate paths in life we all will look back on those happy days we spent together and long for the time when we shall again awake to the cry of "come and get it."

Chapter 5

Orientation

*They'd sailed all day outside a coral hedge,
And half the night. Cook sailed at night,
Let there be reefs a fathom from the keel
And empty charts. The sailors didn't ask,
Nor Joseph Banks. Who cared? It was the spell
Of Cook that lulled them, bade them turn below,
Kick off their sea-boots, puff themselves to sleep,
Though there were more shoals outside
Than teeth in a shark's head. Cooked snored loudest himself.*

Five Visions of Captain Cook
Kenneth Slessor (1944: Part II)

Orientation of the body is a fundamental aspect of the way in which the body is emplaced. It is the position of the ego relative to its surroundings that forms a primary element in human sensuous knowledge of place. This is different to Cartesian positioning in which directional reference points are taken as external to the body and in some way absolute. The latter characterise geographic location which is often assumed to be an important and fundamental step in determining a heritage place. However, as previously argued, places are only spatially determined through the social practices that create them. Both orientation and location are defined in relation to something else and hence it is a fluid and constantly shifting notion. Nevertheless, as argued in Chapter 3, the physicality of space is an important aspect of all places and embodied knowledge is partly constructed through these senses of orientation and location.

This chapter therefore considers both orientation as the immediate awareness of the body relative to its surroundings and location as a Cartesian marking of physical space. Both are considered in relation to how people encounter sensuous stimuli and from which they construct their own knowledge of spaces. In particular I explore the role of orientation and location in visitor experience, knowledge and construction of the Great Barrier Reef. The

purpose is to understand the role of both bodily orientation and geographic spatial knowledge as these contribute to human understanding of particular places. I therefore examine the ways in which visitors have oriented and located themselves within the landscapes of the Reef, with particular emphasis on spatial awareness as a means by which knowledge of the region is acquired and through which concepts of the Reef are constructed.

As a broad generalisation, people tend to have a strong sense of orientation within their own local landscapes. This knowledge becomes second nature through a number of bodily experiences (Tuan 1977: 69; Hazen 1983). In contrast, visitors have to consciously construct a geographic knowledge in order to understand and traverse new territory. The latter is characterised by a dependence on Cartesian referents, and is consistent with the way in which explorers, navigators and managers articulate the unknown. This chapter considers how this kind of strategic orientation controls perceived dangers within new spaces. It also considers how visitors' orientation in relation to the spaces of the Reef has changed over time. Other bodily experiences that contribute to a sense of place are explored further in Chapter 6.

I consider European navigators to be among the earliest visitors to the Reef because, with few exceptions, these individuals came from a considerable distance away. Their knowledge is built from short term or transitory experience, and they were often without any prior knowledge of the locations in which they found themselves. Navigators therefore needed to develop a spatial knowledge that would not only allow them to move from one location to the next, but that would enable them to record information that could be comprehended by those who followed. It is a characteristic of human orientation that acquired knowledge can be transferred to other people (Tuan 1977). The locational experience and knowledge of early Reef visitors has been passed on within and between generations. The experiences of navigators therefore provide insights into how non-local people first understand a new location, and how this might establish a pattern in subsequent encounters with that place. Initial navigational experiences of the Reef have been extremely

influential in the way that the region is perceived, experienced and constructed by later waves of holidaymakers and tourists.

Disorientation and Danger

The earliest European navigators traversed the Great Barrier Reef with a limited knowledge of its geographic location, and with the express purpose of creating and enhancing that knowledge. Furthermore, these navigators had an explicit mandate to create charts and portraits of landmasses. As specialist surveyors their constructions of the Reef were based firmly within a Cartesian model of marking space and had a strong influence on the way in which successive visitors perceived it. As discussed in Chapter 2, Captain James Cook is the most revered and foremost acknowledged of the European navigators. He is credited with the ‘discovery’ of the Australian continent even though it was encountered by the Spanish and Dutch centuries before and had been home to Aboriginal Australians since time (im)memorial. The voyage of *H.M.S. Endeavour* along the eastern coast of Australia in 1770 is thus the principal event in Australia’s colonial history, and it was on this voyage that Europeans first encountered the labyrinth of islands, shoals and cays that came to be known as the Great Barrier Reef. I will therefore spend a little time outlining some aspects of this voyage and the influence it has had on perceptions of the region.

Like many encounters with new territories, the voyage of the *Endeavour* was characterised by danger, fear and excitement. These are important attributes of the exploration narrative and serve to enhance the status of Captain James Cook as a brave and intrepid navigator. Within the Australian context it was the Great Barrier Reef that posed the greatest navigational challenge to Captain Cook and his crew. This is invoked in the telling and retelling of the Australian conquest. One of the most commonly cited references to the Reef from this voyage is one that is similarly recorded by both Cook and accompanying botanist, Sir Joseph Banks, who wrote that:

A Reef such a one as I now speak of is a thing scarcely known in Europe or indeed any where but in these seas: it is a wall of Coral rock rising almost perpendicularly out of the unfathomable ocean, always bare at low water; the large waves of the vast ocean meeting with so sudden a resistance make here a most terrible surf Breaking mountain high, especialy [sic] when as in our case the general trade wind blows directly upon it.

(Banks 1770: 14 August)

However, this focus on the dangers of the Outer Reef, or the Grand Reef as Sir Joseph Banks called it, was not the primary or overall experience of the region. Its formidable nature had been constructed from a number of incidents in which the hazards of navigating the coral encrusted coastline became apparent. Initially Sir Joseph Banks' journal gives the impression of a labyrinth stretching itself out before them, day after day. For instance he recorded on one day that when "there was no passage ahead of the Ship we were obligd [sic] to return" (Banks 1770). Hence the relatively sheltered waters were not perceived as a dramatic danger, but a hindrance to the journey that slowed the voyage and created mounting frustration. The risk was from the numerous uncharted shallows and corals strewn throughout the region, and on the 10th of June 1770 the *Endeavour* collided with a reef north of present-day Cairns. It is this and the subsequent events that particularly mark the voyage and that have since come to characterise navigation of the Reef.

[W]e were little less than certain that we were upon sunken coral rocks, the most dreadfull [sic] of all others on account of their sharp points and grinding quality which cut through a ships bottom almost immediately.

(Banks 1770: 10 June)

The crew's fears were not only of drowning but also of being trapped in an alien land.

[P]robably the most of us, must be drownd [sic] a better fate maybe than those would have who should get ashore without arms to defend themselves from the Indians or provide themselves with food, on a countrey [sic] where we had not the least reason to hope for subsistence [sic].

(Banks 1770: 11 June)

It is well known, at least in Australia, that Captain Cook survived this particular ordeal. He managed to sail the damaged *Endeavour* to a sheltered river mouth on the Australian mainland where the party repaired the ship through the last weeks of June and most of July.

This was consequently named the Endeavour River and a nearby town is called Cooktown (Figure 1). Having experienced the dangers of the coral the *Endeavour* party was keen to escape the treachery of the lagoon. During this time members of the party made exploratory trips to try and find a way through the reefs and when this was unsuccessful Joseph Banks described their situation as “indeed melancholy” (Banks 1770: 1 July). The party had still not found a suitable passage by the time the ship was repaired and they were anxious that they might never escape.

We were ready to sail with the first fair wind but where to go? – to windward was impossible, to leeward [sic] was a Labyrinth of Shoals, so that how soon we might have the ship to repair again or lose her quite no one could tell.

(Banks 1770: 20 July)

Consequently they sailed cautiously among the reefs for a few more days. On the 10th of August the party thought they had left the Reef when they found themselves among steep landmasses. However when they climbed the hills of Cape Flattery they discovered that they were still within the reefs and what they had taken for land was only a number of high islands. Significantly, however, the height of these hills allowed them to gain a view of the region. The following day Cook and Banks climbed what is now known as Lizard Island “in order to see whether the grand reef had really [sic] left us or not” (Banks 1770).

The island itself was high; we ascended the hill and when we were at the top saw plainly the Grand Reef still extending itself Paralel [sic] with the shore at about the distance of 3 leagues from us; through it were several channels exactly similar to those we had seen in the Islands. Through one of these we determind [sic] to [go] which seemd [sic] most easy.

(Banks 1770: 11 August)

The *Endeavour* set out for this passage and on the 13th of August passed through the Outer Reef and into the open ocean.

For the first time these three months we were this day out of sight of Land to our no small satisfaction: that very Ocean which had formerly been look'd upon with terror by (maybe) all of us was now the Assylum [sic] we had long wishd [sic] for and at last found.

(Banks 1770: 14 August)

This pleasure was short-lived, and their earlier frustration and fears were trumped by the force of seas that threatened to dash the *Endeavour* onto the coral wall of the Outer Reef. Sir Joseph Banks recorded that “a speedy death was all we had to hope for”. Although they had spent so long trying to escape, the *Endeavour* once again entered the relative safety of the lagoon (1896: 16 August 1770). They eventually made their way to the northern end of the Reef and through the Torres Straits. However, it is the danger of wrecking and entrapment that distinguished this journey and, as I will discuss below, accounts of subsequent navigation of the Great Barrier Reef continue to be characterised in this way.

Narratives of Navigational Danger

The Reef is characterised as a navigational hazard in two principal ways: as an invisible confusion of obstacles within the lagoon and a visible forceful threat on the Outer Reef. While these two forms of danger are related they have been incorporated into concepts of the Reef in different ways. Both have been ameliorated by maps and charts.

In the first instance, the Reef poses hidden dangers through the presence of numerous submerged reefs and coral rocks within the Great Barrier Reef lagoon. Although the lagoon offers relative safety and calm waters, navigating the complexity of shoals and reefs without prior knowledge is confusing and difficult. This poses some dangers to vessels. A key strategy of Captain Cook in overcoming these dangers was to gain an elevated or panoramic view of the surrounding area from which to determine a route through the maze and from which to take measurements to create his charts. Subsequent voyages were aided by extensive sailing directions, charts and beacons and by the late nineteenth century the Inner Route was being likened to a highway (Saville-Kent 1893: 94).

Maps and permanent markers like lighthouses and beacons, created signs that were comprehensible to Cartesian navigation, and through them it was possible to transform the physical and unknown space of the Reef into one that was familiar and safe. Maps and charts are interpreted from a bird’s-eye view that characterises all Western cartography.

Like the panoramic view on which it depends, the aerial positioning of the map facilitates control through its panoptical perspective. The importance of this strategic view is well articulated by de Certeau (1984). Ryan (1996: 9-10) has used this theory to examine the way in which colonial explorers have depended on this vision to colonise new territories by creating a framework that is familiar to them. Similarly, visitors have used an elevated view to transform the Reef from a bewildering unknown into a geographic space constructed through familiar Cartesian coordinates.

The elevated view is a particularly important one in construction and understanding of the Reef. It is this view that enables visitors to navigate their way safely through the hidden dangers. It is also the view that gives rise to the notion of the Reef as a single entity of unparalleled scale. It is the bird's-eye view of maps that initially provided a visible means of understanding the Reef as a single entity. More recently images of the Reef from outer space have furthered this perspective, and allowed people to be awed by the scale of the Reef which is said to be the only living organism visible from space. The construction of the Reef as a single phenomenon thus gives rise to its unprecedented size and through this combination of attributes the Reef is constructed as unique. The orientation of people in relation to the Reef from an elevated view is thus an essential conception that underpins its recognition as a World Heritage Area (Pocock In press).

While this view seeks to control the hidden dangers, it necessarily diminishes the complexity of the many reefs and cays and islands that comprise the region. The strategic view that creates the conceptual whole therefore contrasts with the experiences of those who know the Reef at a more intimate level. Many descriptions of the Reef by those who know it emphasise that it is not a single reef, but a composite of many different reefs, islands and cays. Nor is the strategic view the experience of personal navigation in which some dangers persist because it overlooks peoples' negotiations over, through and within the Reef (cf. de Certeau 1984: 91-2). While the hidden dangers of the lagoon are controlled and reduced through cartographic conventions, the dangers of the Outer Reef remain and this constitutes the second of the key dangers in Reef narratives.

This danger of the Outer Reef presents an extreme physical hazard at the juncture between the wild seas outside the Reef and the tranquillity of the waters within it. With few openings wide and deep enough for a ship it is particularly difficult to pass from one set of conditions into another without being thrown onto the coral wall. It was this danger that led Matthew Flinders to coin the term “the Barrier Reef” because it inhibited access to the Australian coast (Flinders, *et al.* 1814: 11 October 1802). The perception of danger was so strong that it is cited as a reason for the mutiny on board the *Bounty*. And in 1820 Lieutenant Richard Bastard made note while passing the Reef on board a female transport ship that: “[p]assing the Barrier Reef is considered the most dangerous part of the navigation of Torres Straits” (Bastard 1820: 11 May 1820). The Outer Reef was established as a place of extreme physical and, to some extent, visible danger which even today is linked with authenticity in Reef experiences.

Maintaining a Sense of Danger

As well as navigators I include early scientists among the earliest Reef visitors. As discussed in Chapter 2, the tradition of scientific investigation was established as part of early navigational voyages. Science was later established in its own right and many scientific expeditions were launched in the late nineteenth and early twentieth centuries. These scientists also came from distant places and even though their visits were longer than those of the navigators, they remained in the region for finite periods. Many of the natural scientists drawn to the Reef, both professional and amateur, visited the region in their own leisure time. As Love (2000: 105) has suggested about Saville-Kent, “the boundary between work and recreation for an enthusiastic zoologist is blurred”. And for others it was indistinguishable from leisure. As one commentator noted about Charles Hedley, a Reef scientist from the Australian Museum:

His holidays are usually devoted to work of this kind, and no layman simply on pleasure or adventure bent could derive more enjoyment than Mr. Hedley does from his scientific expeditions.

(The Brisbane Courier 1904)

So in many ways scientists were among the first holidaymakers to the Reef, and it was through their activities and interest that the region was first promoted and through which tourism initially flourished in the late 1920s and 1930s. One of the earliest publications to draw this attention was William Saville-Kent's *The Great Barrier Reef of Australia* (1893), exquisitely illustrated with his own photographs and paintings. One of his written descriptions of the Reef is as follows:

The linear chain of reefs that form the outer edge of the Barrier, together with the innumerable secondary reefs that are congregated closely within its boundaries, constitute a natural breakwater against the ever-reverberating surges of the Pacific Ocean, and thus convert the "Inner Route" into a relatively shallow and tranquil inland sea, which the largest ocean steamers traverse, for the greater part of the year, with open ports and on an even keel.

(Saville-Kent 1893: 3)

It is also Saville-Kent who described the Reef as a highway (1893: 94), and in many ways he is at pains to demonstrate how the dangers of the Reef have been overcome. However, he follows this description, somewhat contradictorily, by describing the dangers of Reef navigation. He cites the recent grounding of a ship and, importantly, uses this as an opportunity to remind readers of the 120 people who drowned when the *Quetta* sank at the Torres Strait entrance in 1890 (1893: 46-8). So although he emphasises the safety of navigating the Reef, which is important for trade and the use of its resources, he continues the narrative of danger of which he is both recipient and transmitter.

While particular navigational routes were established as safe through cartographic conventions, dangers still existed in those parts that were unknown or that were unmapped. The size of the region contributed to the impression that it could never be fully controlled, and it was therefore important to stay within the established routes. As people became more acquainted with the Reef and were more comfortable (and complacent) about it, visitors and would-be visitors were reminded of its treachery.

“I wonder where the Captain is?” said the Lady in the Deck-chair. “And that nice Chief Officer. Why, we’ve hardly seen anything of them since we left Cairns. I shouldn’t think they’d be unsociable, but – well I haven’t seen either of them for two whole days.”

A passenger who heard the complaint of the lady in the deckchair, laid down the book he was reading. The title on the back of its green cover was “Northmost Australia” by R. Logan Jack. He took up the book again, opened it to page 86, and handed it to the lady. She read:-

“What ‘frightfulness’ means in navigation can be fully appreciated by any passenger on a mail steamer who has the run of the chart-room on the bridge between Cooktown and Cape York.

“The narrow passage between the land and the Barrier Reef, charted, lighted, buoyed and beacons though it now is, is crowded with reefs ready to punish remorseless any deviation from the right path.

“That this passage is navigated daily in safety and comfort is due to the skill and ceaseless watch of the officers. What must the passage have been when this was an unknown sea and the frail sailing craft depended upon the caprice of the winds!”

(Simpson 1933: 16 November)

As this newspaper article suggests, cruises had become relatively commonplace. At the time of its publication tourism was flourishing in the Great Barrier Reef region and cruises offered the greatest ease of access particularly to the northern parts. However, the threats posed by the maze of islands, cays and shoals remained a central part of how journeys in the region were perceived and recorded. The retelling of the treacherous reefs, wrecks and sunken treasure is the subject of juvenile and adult fiction, scientific and popular non-fiction, newspaper and magazine articles, and even tourist brochures. Through these various and multiple narratives the navigational dangers of the Reef were transmitted from one generation to another, and within this discourse the importance of cartographic location was reinforced. There are, of course, navigational hazards associated with the Reef, and even today with advanced technologies, detailed charts and sophisticated warning systems, ships occasionally founder on the coral. However, it is the life-threatening nature of the Reef that is conveyed in many of these accounts. This builds on the colonial and heroic narrative of Captain Cook and the *Endeavour*. The consequences of straying outside the known passages were quite literally deadly and orientation was therefore established as an important activity in visiting the Reef. Navigational dangers, in particular, offered a special thrill to visitors who experienced them first hand. For instance Hilda Violet Marks who accompanied one of the Embury expeditions recounted the experience of a party that ran into a cyclone:

The “Bird” party returned late on the fourth day after exciting experiences. They had been away three days, and met a cyclone soon after leaving Hayman Island. The dinghy was lost, and they could not land on the islands which were their objective, so took shelter and were marooned on one of the other islands for two days. But from all accounts they were a happy party and had a cheery time round the camp fire, making the best of things.

(Marks 1933: 6)

And in another incident a group of holidaymakers were stranded on an island for six days. An anonymous family biographer of Mont Embury suggested that:

This incident highlights the risks taken in those days when boats of perhaps less than seaworthy condition were pressed into service to carry the large contingents of visitors to their various destinations. However the thrill of such incidents was a part of the adventure of the occasion which for many was a unique experience and perhaps today’s tourist are missing something as they travel about in air-conditioned arm-chair comfort.

(Anonymous n.d.)

Visitor Traditions of Orientation

The central role of danger in conceptions of the Reef ensures that cartographic knowledge remains important in visitors’ experiences of the region. Hence the dangers of the Reef, both real and imagined, shaped visitor activities. For instance, the earliest holidaymakers to the Reef oriented themselves using maps and other navigational conventions to locate themselves in the landscapes. To this extent, visitor knowledge builds on and mimics the experiences of the first navigators.

The scientific parties who visited the Reef in the first decades of the twentieth century included several expeditions by staff of the Australian Museum and international researchers like Maurice Yonge from Britain. The Yonge’s personal photograph albums (Yonge 1928a, 1928b, 1928c, 1928d) suggest that orientation was an important part of establishing themselves at Low Isles. A significant portion of the images and their captions indicate some directional information. Twenty-one of the 223 images contain information about the location of the island, its position in relation to other nearby isles and geographic

features, as well as information about the arrangement of the dwellings, laboratories and the lighthouse. The relevant captions also make reference to compass points in providing this information. The album also includes a number of aerial views that were taken when an seaplane visited during their stay. The Yonges spent a relatively long time at Low Isles so it is perhaps not surprising that they have determined and recorded such a strong sense of spatial location. However, photographs and records from other shorter visits demonstrate a similar interest. For instance the albums of both Dene Fry (1910) and a tourist who visited the Reef aboard the *TSS Katoomba* (Berryman 1933), include a number of photographs that locate or orient their experiences. This is particularly noticeable at the beginning of their albums, but throughout the collections there are references to the direction of scenes, islands and landmarks both in relation to each other and to the camera (Plate 4). These directions are both Cartesian and relational in character. Although they name particular geographic features or locations such as islands and other landmarks, there are few references to compass bearings and the viewer is instead located in reference to the camera through such descriptors as left or right and in relation to the particular landmarks. These and several of the surviving Embury images also show camps or other scenes as viewed from hillsides of the continental islands.

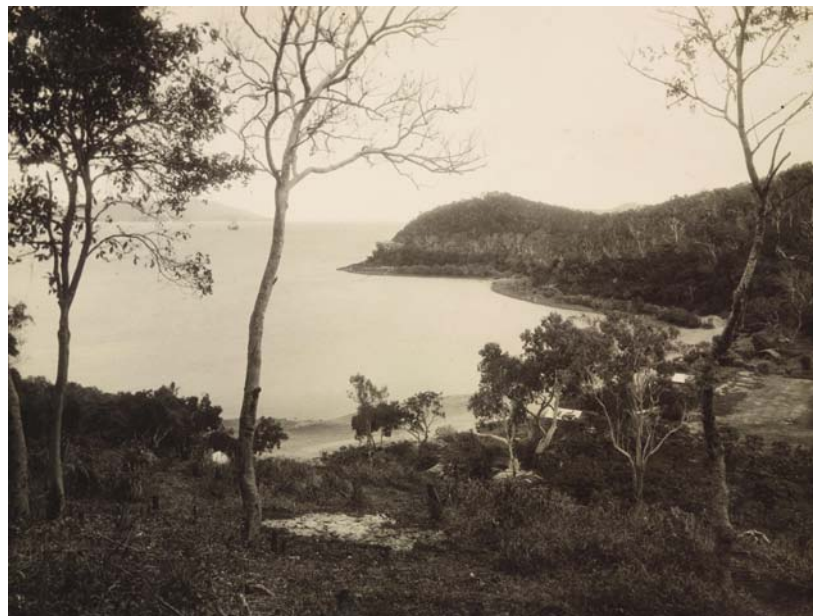


Plate 4: Scene from Long Island, looking West. (Berryman 1933)

By the 1930s the scientific expeditions of the Australian Museum were accompanied by large groups of holidaymakers. These included the relatively large scale operations organised by Mont Embury and other smaller parties like that of the 'Voyage of the *Cheerio*' in 1935 which is highlighted as a case study at the beginning of Part 2. Many of these expeditions were organised in a similar way. Usually people travelled from southern cities by rail, and less often by motorcar. From a Queensland port such as Mackay, or further north at Cairns, they would travel by launch to particular islands. Visitors would establish one or more base camps during their time at the Reef, and from these they would make excursions to other islands. And, when conditions were suitable, they would also venture to the Outer Reef. Other excursions were facilitated by cruise ships that traversed the Barrier Reef and made stops at particular islands along the way, with some groups of visitors remaining on the islands for a period of days.

In general sea travel was an integral part of the Reef experience, and slower journeys, often in small vessels encouraged people to take an interest in their surroundings. This enabled holidaymakers to engage actively in orienting themselves in the land, sea and islands of the region. Individuals not only observed the routes they travelled, but kept notes, made maps and took photographs to record their position and movement within the landscape. In this sense they followed the traditions of navigation and re-enacted the activities of Captain James Cook and other pioneers in a way that is reminiscent of McGrath's (1991) observation that contemporary Australian travellers re-enact exploration in the outback. The importance of travelling through the islands is constructed as an important activity within the Great Barrier Reef region. Henry Lamond, the former owner of the Molle islands in the Whitsundays, wrote in 1948 that he and other local operators believed it was important to promote the whole Whitsunday passage not just one island (H.G. (writing as "U.9.L") Lamond 1948: 13). This idea of travelling about the islands is an important one, and it certainly characterises these early excursions.

Visitor maps of the Barrier Reef are numerous and varied, and suggest the importance of orientation and location in relation to external referent points. Most tourism brochures show

in some detail the many islands of the region and even the journeys offered by specific excursions. This is particularly so for earlier brochures, though the tradition persists in contemporary promotion as well. Similarly, there are few books about the Reef from the first half of the twentieth century that do not include detailed maps of the region, and they often decorate the inside cover of these publications. Although the early tourists were travelling for the most part within well-defined and recorded regions of the Reef, they made their own maps or traced details of their journeys on those provided in brochures or other sources. For instance in a letter to his parents dated 14 September 1925, Crosbie Morrison included a map showing the route that he had travelled to the Palm Passage of the Great Barrier Reef (Morrison 1925a). Similarly, a photograph album from a holidaymaker to Heron Island in 1953, includes a map of the island within its overall Reef context, and also shows the route taken by sea from the mainland (Love 1953).

In the Footsteps of the Navigators

The accounts from the excursion highlighted in the 'Voyage of the Cheerio' and others from the period include many references to landmarks, sailing directions and other directional information. Another activity that is noticeable from this 1935 excursion was the importance of climbing Mount Oldfield. Mount Oldfield is situated on Lindeman Island, a continental island with steep topography that was cleared of dense vegetation by goats left as a food source for stranded mariners (Henry George ("U.9.L") Lamond 1948: 19). This made it a particularly suitable place from which to gain a view of the surrounding waters and other islands. Consequently the climb became well established as a visitor activity in the Whitsundays. It was promoted by the Australian National Travel Association (1931) as part of a tour to the Great Barrier Reef, and visited by many different parties in the late 1920s and 1930s. The view from the summit is captured in several different photographs, including those of the Embury expeditions in 1928 (Embury Bros. et. al 1925-1945), and one of the Australian Museum scientists who visited the Reef in the 1930s (Whitley 1935a).

The emphasis of the climb is on both achieving the summit and of seeing the panorama of the Whitsunday Islands below. The latter is distinctly a tradition of navigation. The act of climbing the hills to view the surrounding landscape was the means by which Captain Cook tried to find his way out of the maze of reefs. The view from the summit provides a strategic vantage point that is central to the construction of Western maps. The perception of the Reef as a maze, and the enjoyment offered by panoramas of its scenery is reflected in the following quote:

At the north end of [Whitehaven] bay is a sound which one might well miss since it is blocked up with Sandbanks and up here we sailed. Keeping careful watch for shallow water. In spite of this we were stranded several times. The View along this sound is magnificent, and in the morning I intend to take a panorama of it.

(Morrison 1925b: Monday, 27 July 1925)

While the panoramic view is also used in a strategic way by other cultures, it manifests in a particular mode in relation to Cartesian mapping (cf. Ryan 1996). In orienting themselves from Mount Oldfield holidaymakers of the 1930s were therefore emulating the activities of early navigators and in doing so they linked themselves with their own colonial past (cf. McGrath 1991: 122-3). The consciousness with which early visitors constructed their experiences in relation to the navigators is apparent in the following passage from a published account of the ‘Voyage of the *Cheerio*’:

[A] full exploration of our surrounding on the following morning, with a hill climb by some to view and photograph from the heights one of Australia’s wonder spots – a prospect of cobalt blue sea, dotted right to the hazy northern horizon with the myriad isles of the Whitsunday Passage. From such a vantage point it was easy to see that the island chain owed its origin to an almost submerged mountain range. On the mainland to the westward was Cape Conway, defining the southern end of ... the long passage The principle islands to be seen on the landward side were Pine, Long, and the Molle Group, while along the seaward margin were the closely-packed Whitsundays, strung along in what appeared to be a continuous series of rugged hills and valleys.

To-day great liners regularly steam through the Whitsunday Passage, and it is practically as intact as it was on that day one hundred and sixty-six years ago when the famous navigator who gave it its name sailed through on his little barque “Endeavour.” Here is the record that Captain James Cook penned in his journal: -

“Monday, 4th [June, 1770] ... a gentle breeze and Clear weather. In the P.M. Steered thro’ the passage which we found from 3 to 6 or 7 miles

broad, and 8 or 9 Leagues in length.... Our Depth of Water in running thro' was between 25 and 20 fathoms; everywhere good Anchorage; indeed, the whole passage is one Continued safe Harbour, besides a number of small Bays and Coves on each side, [...] The land, both on the main and Islands, especially on the former, is Tolerably high, and distinguished by Hills and Vallies [sic], which are diversified with Woods and Lawns that looked green and pleasant. On a Sandy beach upon one of the islands we saw 2 people and a Canoe.... At 6 we were nearly the length of the N. end of the Passage.... This passage I have name Whitsundays Passage, as it was discovered on the day the Church commemorates that Festival...."

With these deep impressions the climbers returned to camp to await others less fortunate of the party who had satisfied their interest with a fishing tour off Kennedy Sound. A run across to Linderman [sic] Island was made in the afternoon, and a regular round of inspection commenced. More climbing was indulged in, several being ambitious enough to climb Mt. Oldfield, an imposing peak seven hundred odd feet high. From here there was a duplication of the view previously described, with some of the closer islands to the north standing out in greater detail.

(Pandion and Pandanus 1936)

This view from the strategic vantage point of “one of Australia’s wonder spots” creates a sense of the sublime and this sense is significant in landscape aesthetics. It is for the sublime – as mixture of terror and exultation – that the Great Barrier Reef is perhaps most famous. The awe-inspiring nature of the Reef is evoked in every interaction and lies at the heart of the alterity that frames human relationships with the region. The sublime as an aesthetic experience has roots in the seventeenth century reappraisal of human capacity for awe. Porteous (1996: 76) has likened the move from one inspired by God to the same reaction inspired by the largest features of landscape – mountains, oceans and deserts. The Great Barrier Reef represents yet another perhaps more lasting example of such an awesome landscape, incorporating mountains, oceans and human desert. Its apparent endlessness is controlled by the panorama. At the same time, however, it is extended through the diversity of marine life and the intimacy of landscapes in which people interact. Even though the panorama from Mount Oldfield disconnects the viewer from those landscapes, in the first part of the twentieth century efforts to reach the summit facilitated encounters with the environment that gave rise to sensuous knowledge as discussed in Chapter 6.

Disorientation

My observations at Whitsunday island resorts and in the adjacent mainland centre of Airlie Beach in 2001 suggests that determining geographic location is no longer a conscious and popular activity among tourists. Bush walks to summits or otherwise were poorly promoted. Although walks across islands are accessible from several of the island resorts, they are not featured noticeably in promotion for the region and the information about them is only available at the resort reception areas where it must usually be requested. The information is presented on black and white A4 photocopied sheets. These stand in stark contrast with the proliferation of glossy full-colour brochures for other Reef activities which are readily available at several outlets throughout the resorts and centres like Cairns and Airlie Beach, and which make up promotional material at more distant travel agencies. Needless to say, only a few of the many tourists visiting the islands each day participate in these activities. Furthermore, all walks are self-guided and the information sheets do not include many details about location, so that even when people do walk across the islands they may have little idea about where they are or the specifics of what they encounter. Geographic location and orientation is therefore of secondary importance to the generalised panorama that is observed. It is possible that the panorama has been surpassed by the detail of readily available maps and satellite images of the Reef. There are also easier and more effective ways of achieving an aerial view of the Reef through a number of tourist activities such as sightseeing flights, helicopter rides and even skydiving. However, it seems from other evidence that geographic orientation itself has been diminished as an important activity for Reef visitors. This may partly result from fewer visitors taking a directly 'scientific' approach to their Reef interaction. It may also be that the Reef is no longer characterised and perceived as dangerous, as I discuss later.

Contemporary Reef tourism is characterised by high speed travel, both in reaching the general vicinity and in travelling to and from particular destinations. Many travellers reach their mainland destination by air, and often fly directly to one of the larger island resorts. While the view from the air is facilitated by this kind of travel, the experience is quite a fleeting one and is not the main way in which people experience the region. Even the aerial views on offer are usually quite short in duration and are focused on a particular site. For

instance there are aquaplane trips to Whitehaven Beach or helicopter rides to Heart Reef. The idea is to quickly reach a particular location rather than gain a sense of spatial relationships between different localities. This contrasts strongly with navigation which is more concerned with travelling through regions rather than to reach a specific end point. The desire for rapid transport and the speed of travel even across water has significantly reduced the impact of location in contemporary Reef experiences. Time spent travelling by sea was longer and slower in the past, and this provided people with more time to orient themselves and to take an active interest in the process of navigation. The journey was as much a part of the experience as any other. This has changed in recent times with the emphasis being much more focused on island resorts and underwater life, as discussed in Chapters 8 and 9. The primary goal is now to reach the particular location in which a number of essentialised Reef experiences can be acquired. The prominence of marine life in contemporary experiences of the coral reefs even breaks down the distinction between the Outer Reef and the fringing reefs of islands in the lagoon.

The more recent period of tourist experiences of the Great Barrier Reef is characterised by disorientation. In contrast with the earlier period of taking part in the navigational activities, large high-speed vessels transport visitors from island to island with little interpretation about the voyage. During my travel on the larger tourist vessels in the Whitsundays, skippers rarely made any effort to provide information to passengers about their location. Very occasionally they noted the name of a particular island being passed *en route* to the final destination, but generally it was only the points of embarkation and disembarkation that were named and noted. Directional information was non-existent. Although maps of island locations are included in brochures, these tend to be more stylised and less informative than those from the first half of the twentieth century. I did not note a single person referring to one of these or any other map on any of the voyages. On the longer journeys, such as the trip to the Outer Reef, passengers were actually discouraged from observing their voyage. The company screened videos about underwater life of the Great Barrier Reef and light entertainment in the form of British television comedy. The journey to the Outer Reef can therefore be seen as a 'boring' necessity that requires distraction, rather than being part of the experience. The sea journey is no longer conceptualised as part

of the experience of the Great Barrier Reef, but is rather a means to an end which in this particular case was the underwater marine life.

Orientation: Continuity and Change

Geographic orientation on the Reef can therefore be seen as a means by which the unknown is familiarised and controlled. In gaining the perspective of Western cartography the landscapes are not only colonised and controlled but give rise to the concept of the Great Barrier Reef as a singular whole. However, this view diminishes the complexity and intricacy of interaction at a more localised scale. The result of the ultimate strategic view, that from outer space, is that visitors are able to become disoriented in their actual experiences of the Reef. In the first part of the twentieth century, in an effort to replicate colonising activity, Reef visitors gained a localised and oriented sense of place through slow sea voyages, lengthy stays in particular locations and a desire to experience and record their own way through the reefs and islands. In the contemporary context, Reef visitors travel more rapidly and the journey is not a valued part of the experience but only a means by which to reach ‘the Reef’ – a concept made possible by the strategic view. In other words, people’s experiences have shifted from spatial knowledge of lines that join particular points to experiences of isolated points (cf. Augé 1995). This suggests a shift in which one of the defining aspects of places, orientation, is replaced by disoriented experiences.

A similar ambiguity characterises management of the region. The Reef is recognised and valued for its singularity and the boundaries that define the region are constructed from the aerial and strategic vantage point. However human interactions with and understanding of particular locations within the Reef are constructed differently. In the following chapters I will look at the types of bodily experiences that further contribute to visitor knowledge of the region.

Photographic Essay

Changing Environments and Accommodation on the Great Barrier Reef Islands



Plate 5: Ornithologists Camp, Masthead Island 1910

Dene Fry © Mitchell Library, State Library of New South Wales



Plate 6: Mess Tent on North West Island 1928

Mel Ward © Australian Museum 230/87



Plate 7: Lindeman Island Camp Site 1928

© Mitchell Library, State Library of New South Wales, PXA 642 (135)



Plate 8: Embury Campsite, Whitsunday Islands

© Mitchell Library, State Library of New South Wales, PXA 642 (181)



Plate 9: Embury holidaymaker at her tent, North West Island c. 1930

Embury © Mitchell Library, State Library of New South Wales, PXA 642 (116)



Plate 10: Hayman Island c. 1932, View from hill looking down on resort and swimming enclosure

© Mitchell Library, State Library of New South Wales, PXA 642 (121)



Plate 11: Picnic at Scawfell Island during cruise of *Katoomba* 1933

Berryman © National Library of Australia



Plate 12: Grass huts on Lindeman Island 1930s

Australian National Travel Association © National Archives of Australia (M914/1, 4187)



Plate 13: Beach on South Molle Island c.1950

Frank Hurley © National Library of Australia (PIC AN 23217584)



Plate 14: Royal Hayman Hotel swimming pool 1951

© National Archives of Australia (A1200:L13672)

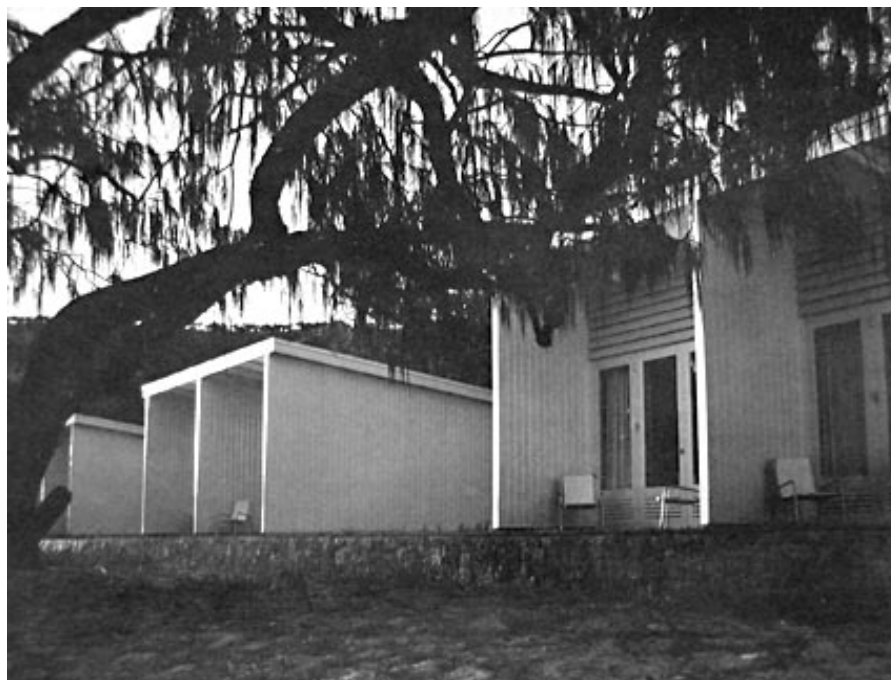


Plate 15: Hayman Island cabanas 1951

© National Archives of Australia (A1200:L13693)



Plate 16: Lindeman Island 1961

Gordon De Lisle © National Archives of Australia (M914/1,1635)



Plate 17: Hayman Island 1962

A. Edward © National Archives of Australia (A1200:L41235)



Plate 18: Hayman Island 1963

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Plate 19: Daydream Island 1970

Bob Nicol © National Archives of Australia (A1200:L92315)



Plate 20: South Molle Island 1972

© National Archives of Australia (A6135:K24/1/72/7)



Plate 21: Lindeman Island 1977

© National Archives of Australia (A6135:K20/7/77/53)



Plate 22: Dunk Island 1980

© National Archives of Australia (A8746:KN10/6/80/36)



Plate 23



Plate 24



Plate 25



Plates 27



Plate 26

Hayman Island Resort 1980

© National Archives of Australia
(A6135:K26/6/80/27; A8746:KN10/6/80/63, 65,
81; KN16/12/80/67)



Plate 28: Hamilton Island 1984

© National Archives of Australia (A6135:K3/1/84/45)



Plate 29: South Molle Island 2001



Plate 30: Club Crocodile, Long Island 2001



Plate 31: Hamilton Island 2001



Plate 32: Hayman Island c. 2002

© www.hayman.com.au



Plate 33: Lindeman Island c. 2003

© globenettravel.com.au

Chapter 6

Sensuousness

Young Australians were once taught that Australian trees cast no shade; that Australian flowers had no scent, and Australian birds no song; that the stones of Australian cherries grew on the outside of the fruit, that the bees had no sting, and the dogs did not bark. In those days a gentleman with a military title improved upon the then popular list of contradictions by asserting that in Australia the compass points to the south, the valleys are cold, the mountain-tops warm, the eagles are white, and so on. ... It was discovered that thousands of square miles of Australian soil never catch glimpses of the sun in consequence of the impenetrableness of the shade of Australian trees; that the scent of the wattles, the eucalypts, the boronias, the hoyas, the gardenias, the lotus, etc., are among the sweetest and cleanest, most powerful and most varied in the world; that many of the birds of Australia have songs full of melody; and that the so-called Australian cherry is no more a cherry than an acorn.

(Banfield 1908: 47)

In the previous chapter I suggested that early visitors engaged with the Great Barrier Reef by translating it into familiar colonial cartographic and scenic conventions. I now turn my attention to the way in which knowledge of the region is developed through bodily engagement with the environments of the region. These sensuous experiences are less strategic and more corporeal, depending on the perceptions and responses of the human body. As the Banfield quote suggests, knowledge built in this way can undermine many colonial assumptions. However, it should be remembered that although sensations are a physical response between environmental signals and human sensory organs, their interpretation is culturally constructed. In other words, the same signals and sensations have different meanings for different people and thus space and place are always constructed as culturally distinct (Rodaway 1994: 145-7).

Australian heritage management regimes have the capacity to assess and recognise various sensory experiences through criteria that identify place aesthetics. As argued in Chapter 3 however, the term aesthetics has a cultural baggage that is not conducive to understanding

the full range of experiences and knowledge that contribute to peoples' sense of place. 'Aesthetics' as a criterion therefore limits our assessment of heritage values to only particular kinds of experiences, primarily visual ones (Pocock 2002c). At the same time, it is visual experiences that dominate many aspects of Western cosmology including the construction of space and place. Visual dominance is particularly notable within tourism promotion and tourist experiences (see Urry 1990). The importance of the panoramic view (Chapter 5) and the predominant representation of the Reef in contemporary society (Chapter 7) both suggest that visual qualities dominate perceptions of the Reef. In particular, it is the scenic views that are most often assumed to comprise the aesthetic values of the Reef. I have already suggested that sensuousness is a much more useful concept by which to explore how people physically experience space and construct places. The term leaves open the possibility of considering a broader range of experiences than those usually considered in heritage assessments and is thus more able to reflect a diversity of cultural knowledge. It is therefore the sensuousness of visitor interactions with the Reef that I consider in this chapter.

Sensuous experiences comprised of smell, touch and sound are highly evocative of place (Porteous 1985; Carles, *et al.* 1992; Feld 1996; Pocock 2002c) and there are a number of such experiences that contribute to visitor knowledge of the Great Barrier Reef. In her book *Reefscape*, Rosaleen Love (2000) explores a variety of contemporary sensations generated by visits to the Reef. Accounts of visitors who camped on islands during the 1920s and 1930s similarly disclose distinctive sensory elements of the environment. Through these and other sources discussed, I have identified sensations that contribute to visitor knowledge and understanding of the region. This chapter explores the extent to which sensuous engagement is characteristic of particular historic periods, and the degree to which this is influenced by changes in technology as both a product of and influence on social change.

Senses are intertwined and inform one another in a number of ways. It is therefore inappropriate to discuss sensuous experiences of space or place without considering all of the senses and their interaction with one other. Furthermore, the division of the senses into

separate bodily experiences is somewhat arbitrary. However, the division is a useful mechanism for the purpose of analysis (Rodaway 1994: 26-30) and I have subsequently considered sight, sound, taste, smell and haptic senses as separate experiences in people's interactions with the Reef. I therefore identify some of the particular sensuality of Reef experiences in the following sections, though the reader should be able to see in some of the selected passages and in the interpretation that, more often than not, these are interrelated.

Feelings of Reef

Our sense of touch is perhaps the most immediate and bodily of all our senses. Because touch is enhanced and complemented by visual and auditory information (Rodaway 1994: 48) it is often overlooked as an important contributor to our sense of place. Many haptic experiences are therefore taken for granted and it is only the extremes like rough/smooth; cold/hot; hard/soft, that tend to be noticed. This is certainly the case in how the Reef is recorded by visitors, as will be shown. According to Rodaway, 'touch' implies a form of sensuousness limited to extremities of the body, particularly the fingers and hands. For this reason, he suggests that the haptic sense is a more inclusive term for the many senses taken in by our skin. Rodaway identifies four kinds of touch: global, reach, extended and imagined (1994: 48-54). He describes these respectively as the general multi-sensual exploration of the environment; the active process of reaching out which is analogous to common understanding of 'touch'; the extension of our sense of touch through the use of tools like walking sticks and reading glasses; and imagined touch based in memory and expectation. While the fourth more readily fits within my discussion in Chapter 9, I consider the first three of these in this section. Haptic experiences are interactive (Rodaway 1994: 44-45) and through reciprocity between the body and the environment people develop a sense of place (Rodaway 1994: 54). Visitor knowledge of the Great Barrier Reef is based, at least partly, on haptic experiences. These are both passive and active exchanges between visitors and the environment, and can be characterised as more or less reciprocal in different eras.

Fossicking

But the girls, whose privilege it is to have first close view of the coral and first using the water glasses, are not satisfied, and leap from the dinghies into the shallow water to touch the beauties of the ocean and rescue the coral from its bosom. Pink tinted coral is drawn forth by one, mauve tinted by another; in fact, all colors [sic] are brought to the surface, and staghorn rivals with clusters to win the admiration of the fair women gazing upon it.

(Collins 1933)



Plate 34: Mont and Ted Embury fossicking on an exposed reef at low tide c. 1932

© Mitchell Library, State Library of New South Wales

The way in which people use the Reef islands has changed significantly since the beginning of the twentieth century, and is partly a reflection of the means by which people access the reefs and associated life forms. These changes have had particular impacts on haptic experiences of the reefs, islands and flora and fauna. Walking and fossicking on exposed corals at low tide was a central activity for Reef visitors for a large part of the twentieth century (Plate 34). This exposed them to a variety of tactile sensations, notably as they reached out to touch and handle the textures, movements, weights, forms and densities of different shells, corals and other creatures on the Reef.

Like a flash also disappear as one touches them the pink or green or blue feather heads of the sea worms (Serpula), that take their homes in the coral rock.
(Council for Scientific and Industrial Research 1926a)

The cotton bech-de-mer is very peculiar. It is a long, spongy substance, which, when touched with a stick, lets out long strings of cotton.
(Daly 1933)

[O]ne could easily fill pages with untechnical ravings about the loveliness of the marvellous burrowing clams, the queer thrill of holding a little cat shark up by his tail, and the collecting mania which seems to descend on everyone paddling among the pools and coral boulders.
(Stainton 1933)

The intimacy required by this kind of touch also brought danger. In an immediate sense this danger took the form of physical threats from venomous species like stonefish and cone shells. In 1935 a young Reef visitor in his twenties, Charles Garbutt (*Auckland Star* 1943), died as a consequence of handling a cone shell:

Cone shells containing the live animal should be handled with care when found along the Australian coast, Mr. F.A. McNeill, marine zoologist at the Australian Museum, warns the public.

His warning follows the recent tragic death of one of a party of visitors to Hayman Island, on the Barrier Reef, after being stung by a specimen of conus geographus.

Mr McNeill has received a photograph of the actual shell, containing the animal that stung the man. It is shown herewith[.] Eye-witnesses said that on picking up the shell, which was covered with a thin skin, the finder held it in his palm and started scraping it with a knife.

FIRST WHITE VICTIM

A barb-like spike, about half an inch long, was thrust out by the animal, and penetrated his palm.

He took no notice of it for some time, but then complained that his eyesight was failing.

He next lapsed into a coma, and exhibited all the symptoms of snake-bite.

Rushed to the mainland, he died soon afterwards.

Museum authorities state that this is the first case of a white person having been killed by such means in Australia, although natives of Fiji and other Pacific islands have been affected and avoid handling live specimens carelessly.

(The Telegraph 1935: 9 August)

The health issues were therefore a real concern to the Belgian scientific expedition that visited the Reef in 1967. Prior to their arrival they specifically requested advice about “whether it would be possible to obtain instructions for the treatment of such particular problems as snake bite, stings by venomous fish (stonefish etc) and wounds or irritation

caused by certain corals, sea wasps and so on". In response, the Prime Minister's Department wrote that although there was no specific guide:

Injuries that the expedition may possibly suffer would include sunburn, dehydration, cuts from coral, external otitis, stings from hydroids, coral and jellyfish, puncture wounds from fish in general and particularly from Stonefish, Butterfly Cod, Mai-Mai, Pearl Perch etc.

There is also the possibility of injury from sea urchins, seastars, stingrays, cone shells, sea snakes as well as attacks from sharks. In addition, certain fish may be poisonous when eaten in certain seasons of the year.

(Prime Minister's Department 1967: 25th May)

These and other dangers comprise a significant part of the way the Reef was portrayed in the first part of the last century. Giant clams were regarded as dangerous and deadly for divers and many unknown or mysterious creatures were reputed to pose a menace. Some of this stems from the experiences of the navigators as discussed in Chapter 5. However, touch is not only linked with danger. Its role in establishing place is profound, and for locals it is strongly linked with their sense of ownership. Henry Lamond, whose comments on tourists were never very positive, reflected a concern about visitors who assumed the right to touch parts of the island that was his home:

Honeymoon couples are the nusiances [sic]. She wants something. He thinks she should have it. There's nobody got the right to touch anything on this island only me and my family. There's nothing for sale here. When the big strong man of the pair pulls out a wad to buy something for the bride---Well, then, the fun starts. Tell me, will you, who the hell are they that they think my soul has a price! It isn't being done.

(Lamond 1934)

Contemporary conservation concerns have transformed these relationships of danger and ownership considerably. It is now perceived that the Reef is in danger from our tactile engagement. As recently as 1990, however, documentaries showed Valerie Taylor, one of Australia's foremost advocates of underwater conservation, spinning, touching and playing with Reef creatures in a way that encouraged similar interaction by non-scientists (Film Australia 1990). The emphasis in these activities and the associated commentary is that these creatures are not dangerous. The most recent films present a much less invasive science. Although scientists continue to touch, play, kill and otherwise engage with these

creatures, it is a more hidden activity. Conservation regimes have diminished and eliminated many historically interactive activities for Reef visitors. The protection of corals and shells prohibits fossicking as it was practised by both amateur scientists and enthusiasts alike. Instead, the Reef is now a conservation zone sanctioned primarily for use by the scientific community.

Like fossicking, the activity of turtle-riding, a pursuit that facilitated direct contact between people and Reef creatures, was once popular with both scientists and vacationers (Plate 35 and Film Compilation).

The visitors bathed twice daily in the warm and clear water of the lagoon, while turtle riding was frequently indulged in, and caused much merriment.
(*The Sydney Morning Herald* 1925a)



Plate 35: Bob Embury riding a turtle c.1932

© Mitchell Library, State Library of New South Wales

This is now regarded as inhumane. More sensitive engagement with animals is encouraged through activities such as bird and fish feeding which are popular on resorts of the islands.

However, these seek to entice animals to the food and do not necessarily provide immediate haptic experiences. Rather than emulating scientists as holidaymakers once did, conservation has wrought a relatively recent division between holidaymakers and scientists. Whereas these two groups once worked together in cooperation, touch and intimacy with the Reef is now reserved for scientists who extend their sense of ownership through touch.

Heat

The skin feels the air, its movements, heat and humidity as it envelops the body. While many visitors sought to escape the cold wet winters of southern Australia, the tropics were often significantly warmer than anticipated. This was particularly the case for many of the early expeditions which were scheduled for the Christmas holidays – the northern Wet Season – typically the warmest and most humid time of year. For these physically active visitors living with little shelter from the environment, the heat could be stifling. The following newspaper account about the Low Isles Expedition portrays this at some length:

[A]s men of flesh and blood they sank slowly into a sort of melting decay under the savage heat of a humid summer.

About 9 o'clock in the morning one begins to feel on Low Island as though one's spine is being slowly boiled away. Sydney people would call it hot.

On Low Island they say: "It's cool yet, but I suppose it'll get warm afterwards."

BURNING SAND

It does. It continues to warm until, at 10 o'clock, the temperature stands between 90 and 95 degrees. The humidity varies from 78 to 80. The trade winds have passed months ago. Everything is still and quiet, unreal, with the quality of a mirage. Only the heat moves. It bursts up in tangible waves from the sand. If a man wants to walk twenty yards across the beach he has to run the last fifteen. He goes out in sandshoes hoping for some relief. The heat melts through those, and standing about on the torrid ground he feels like a fakir doing the cinder pavement trick and forgetting the magic formula halfway through. The air wraps him round in stifling veils of heat, till he feels as though he is tangled in curtains of heavy velvet.

WARM IN THE WATER TOO

On shore a bathing costume makes him think he is wearing sealskin in a Turkish bath. He escapes into the water. The sea is like a neutral bath. Sometimes its temperature rises to 82 degrees Fah. Night is notable, because the temperature falls a few degrees. Still the lightest exertion melts the body into perspiration. The day's work done, one may fill in an hour or two by lying in the lagoon. People do

that at 9 o'clock in the evening sometimes. Anyway, one escapes in the darkness the glare of the sun which cuts at the eyes with brazen blades of torturing light.

There is never more than just enough fresh water. Often it is very scarce. Of course, one does not find water on coral islands. A launch brings 800 to 1000 gallons from the mainland, and the whole party settles down to row it ashore, 200 yards across the lagoon and carry it in kerosene tins up a beach sloping 12 feet in 60. What that means in such a climate is easy to imagine. The job occupies two and a half hours once each week.

LUXURIOUS 45 DEG. [F.]

What is happening to the butter and the jellies during all this? Thank heaven for a refrigerator, say the Low Islanders, for it enables them to achieve the luxurious temperaturte [sic] of 45 degrees, and make possible many amenities which otherwise the party could not expect.

(*The Sydney Morning Herald* 1928: 29 November)

As this suggests, visitors were often required to perform arduous tasks to maintain basic living conditions. Carting fresh drinking water was necessary on many of the islands. Without jetties and other facilities this required heavy manual labour which was particularly burdensome in the heat.

We watered at this island, and as the tide was on the ebb, we had a rather tiresome job, that was not improved by the tropical weather.

(Watson 1935: 12-13)

Islands that did have freshwater were therefore important, and the turtle factory on North West Island provided a reliable source.

Very important to us were the several water tanks which collect the rain water falling on these buildings, for this is the only fresh water obtainable on these coral islands unless one takes a supply from the mainland — a laborious undertaking for a large party making a stay which may be prolonged by bad weather.

(Pollock 1926a)

Warm and Salty Water

In spite of the discomforts associated with the heat, it was also an important part of a Reef experience, particularly the novelty of warm sea water. This was a necessity in the absence of more sophisticated facilities. Crosbie Morrison recorded in his diary that he “[h]ad a bathe in the dark before tea. The sea was beautifully warm and the bathe very pleasant” (Morrison 1925b). The absence of amenities meant that people used the sea to wash as well

as to swim, and for many this was an unusual activity. Even though people often remained fully clothed and on the surface while fossicking and netting fishes (Plates 34 and 36), these activities brought them into contact with the warm water.

On the reef parties quested around, thrilled at every pace with the bounteous life as soft warm waters laved their limbs.

(McNeill 1932: 1 July)

For others it also became an excuse to get in the water when conventions may otherwise have restricted this kind of behaviour:

By this time one of the girls in her excitement has slipped, and all her clothes, shorts, shirt, and even sun hat have been soaked. This is merely an invitation to the others to do like-wise, and the coral insects, anemones, demoiselles, and other beautiful creatures of the deep are undoubtedly admiring their fierce but charming attackers.

(Collins 1933: 10 January)



Plate 36: Nicholson and Party netting fishes at Masthead Island 1910

© Mitchell Library, State Library of New South Wales

Swimming also became an activity that people sought out, and when Mont Embury first leased Hayman Island in 1932, a swimming enclosure was one of the key amenities constructed (Plate 10). Being in the water exposed visitors to a range of sensations distinct from the everyday, and this continues to be an appealing aspect of a Reef holiday. Snorkelling and diving on the Reef, in particular, have become commonplace and even people who are usually unwilling or weak swimmers, readily take the plunge off one of the vessels or platforms on the Outer Reef (see Chapter 9). However, visitors in both the past and present have found saltwater irritating to their skin, and freshwater for bathing is highly desirable.

A sudden tropical downpour yesterday started the drainpipes from the roofs of the tin huts surrounding the turtle factory spouting out torrents of water. It was our first chance of a freshwater bath since our arrival, and nude figures suddenly appeared, soap in hand, beneath the jets to take advantage of the opportunity. But the deluge ceased as suddenly as it had started, and one of the party was left lamenting bitterly that he had got all lathered up and had been left with the supply of fresh water cut off before he could rinse himself.

(Wigmore 1931)

Insects

The heat also brings discomfort in a secondary form. Tactile sensitivity is mediated by clothing and in the heat people tend to wear less of it, exposing more of their skin to the environment. At the same time, warm temperatures foster a proliferation of insects that are especially annoying to visitors living outdoors. Mosquitoes and sandflies, in particular, bothered Reef visitors from the earliest times. In 1843, Jukes recorded how a camp had to be moved to avoid the clouds of mosquitoes and sandflies (1847: 26). They also kept the party from sleep.

Compared to these pests, savage men or ferocious beasts are really slight evils, since they may be guarded against or overcome, while these plagues render life miserable, and paralyze all one's energies by continual irritation and long want of sleep, without either the dignity or excitement of danger.

(Jukes 1847: 41)

It is interesting to note that Jukes would have preferred some of the danger and excitement that might more usually be associated with exploration or navigation, as discussed in Chapter 5. Maurice Yonge writing about Low Isles also highlights this theme and uses the very same words in stating that insects provide irritation “without dignity or excitement of danger” (Yonge 1930: 36-7).

Insects pestered the camping holidaymakers, and on the first Embury expedition to Hayman Island in 1933 sandflies appear to have been the most annoying of all.

A sudden [sic] descent during a breathless day by sandflies and mosquitoes left a trail of woe and drove many from shorts into long trousers.

(Wigmore 1933b: 14 January)

Mosquitoes were not very bad and I did not have occasion to use my mosquito net, but a plague of March flies, which lasted about a week, worried us very much, as also did the sand flies, the worst pest of all.

(Marks 1933: 6)

Most of the girls have brought with them some outsizes in sandfly bites which were given as a parting reminder of their stay in the North. They were not troubled with the little winged pests until the day before they left.

(*The Telegraph* 1933a: 20 January)

The absence of mosquitoes and sandflies is therefore regarded as a positive experience. And a newspaper account of a trip to Masthead Island reported that: “The climate they found salubrious, and they were absolutely undisturbed by mosquitoes or other insects, or by reptiles” (*The Brisbane Courier* 1904: 4 November).

Even if mosquitoes and sandflies were absent, other insects posed different problems. Some are potentially painful, as suggested by one of the narratives of the ‘Voyage of the Cheerio’ which related how “a wasp took a violent dislike to one of the young men and provided us with some amusement at his expense” (Pizzy c. 1935). Green ants were also the cause of discomfort on this trip when a nest was disturbed by a camp fire (Case Study 1). And ants were a problem for scientists working at Low Island in 1928:

Nobody is ever lost on Low Island. It has an area of only three acres, has about nine palms, six or seven other trees, and some low scrub, and one may walk around it briskly in two and a half minutes. Fortunately it has no mosquitoes — because it has no water — and very few flies.

But its little red ants often make nuisances of themselves. For example, when somebody did at last manage to develop some photographic plates, an operation the heat makes almost impossible, and put them up to dry, the ants came and chewed off the emulsion.

Twenty scientists are living on that island for a year. It is not a rest cure by any means. But there are such a lot of delightful things to be collected in the place that they put up with the inconvenience.

(The Sydney Morning Herald 1928: 29 November)

The conclusion of this excerpt is also significant. Many accounts of the Reef suggest that discomfort and danger are the price of pleasure. For many visitors it is the physical cost that complements and therefore heightens the pleasures of their Reef experiences. In spite of this, however, many aspects of camping on islands brought physical discomfort and the haptic experiences of the Reef are often characterised by negative sensations rather than positive ones.

In promoting the Reef as a tourist destination, it was therefore regarded as imperative to improve facilities. It is perhaps not surprising then, that every resort and large tour has taken full advantage of cooling technologies. Air-conditioning has made it possible for people to enjoy the region at any time of year, without overheating or being pestered by insects. At the same time, however, it cushions visitors from many of the associated sensations, not only tactile ones, but sensations of sounds and smell as well. Similarly, contemporary visitors can avoid saltwater altogether. Visitors no longer use the ocean for washing or swimming. Even on some of the trips to the Outer Reef, swimmers are provided with freshwater showers on board the boats or pontoons. For those visitors on the islands, swimming in the ocean is merely an option as almost all resorts have swimming pools. These are a necessary facility with the presence of life-threatening Irukandji jellyfish (*Carukia barnesi*) and deadly box-jellyfish (*Chironex fleckeri*) present in the waters of the Reef during the Wet Season, from November to May each year (CRC Reef 2002; Seymour 2002b, 2002a). However, even in the winter or Dry Season when I visited the Whitsundays, many more guests were using the pool facilities than were on the beach or in the ocean. This was particularly noticeable at Hamilton Island Resort which offers six resort pools that

stretch along the immediate beachfront. Far from being the novelty of the Royal Hayman pool when it opened in 1950, swimming pools have become ubiquitous.

Reef Sounds

Many of the sounds visitors associated with their Reef experiences in the first part of the twentieth century come directly from living and sleeping outside. To this extent their experiences are like those of other campers in Australia. It is particularly at night that these sounds are noticeable, presumably when visitors are themselves quietest and when diminished light heightens their non-visual senses.

We turned in on the first night with the thrilling noise of rain drumming on a canvas tent lulling us to sleep, and I think the beginning of our state of supreme contentment dates from that moment.

(Stainton 1933)

Similarly, some of the sounds are linked with the coastal context and enhanced through an emphasis on signifiers of a tropical location. The seas of the Reef are noted for their calmness, and their gentle sounds. The swish of coral fragments on island beaches are particularly valued by Reef campers. A diary entry by Crosbie Morrison (1925b: 25 August) recollects the sound of the waves, crabs in the sand and the cry of sea birds at night. The palm trees are important tropical signifiers (Chapter 8), but the sounds are also sufficiently important and memorable to be relayed to his parents in a letter from Cairns three days later:

[A]nd so to Green Island, where we put in the night sleeping on the Sand [sic] with the moon and stars above, the long waves swishing on the shore, and behind, a thick grove of palm trees silhouetted against the sky. It was queer to hear immediately beneath your pillow the sound of crabs burrowing in the sand.

(Morrison 1925d: 28 August)

Sighing She-Oaks

One of the most prominent auditory sensations that I have identified in the historic texts, is the sound of she-oaks, or casuarinas, on Reef islands (Pocock 2002c). Casuarinas are a colonising tree of coral cays, and fringe the beaches of Great Barrier Reef islands. In the wind these trees produce a distinctive sound that gives them their common name, she-oak. Early Reef visitors recall casuarinas for their sound which is deeply impressive, and an important and typically Australian sensory experience. Mel Ward, a naturalist who spent many months living on Reef islands, wrote of being “[l]ulled by the music of the sea and the sighing trees” on Lindeman Island (Ward 1939). These “haunted trees” (Ward 1935) were an integral part of his Reef experiences and he wrote of them on several occasions.

The ... casuarinas at first appeared drab and even bedraggled in the daylight – their forlorn foliage hanging in shreds but at night they seemed to become imbued [sic] with some mystical spirit at first scarcely definable but as the inevitable nights followed each other, this nameless presence claimed the imagination.

(Ward 1939)

The presence of casuarinas is visually testified in numerous newspaper and personal photographs in the early part of the twentieth century (see Photographic Essay). Their presence is also noted in written descriptions of island vegetation.

Later, after a hot meal and a good warming before the blazing kitchen fire, we were introduced to our little tents sheltering under a grove of tropical trees – wild magnolias, glossy-leaved wild plum and drooping casuarinas.

(Stainton 1933)

However, it is the sound of she-oaks that is particularly noted by these early visitors, and for both long term users of the Reef and locals this sound continues to be significant. For Captain Tom McLean, a tourism operator in the Whitsundays from the mid 1940s to the 1980s, they remained an important part of a Reef experience.

From afar [the Reef islands] are outlines of green apparently suspended above the sea. On closer approach they resolve into wooden humps indented with bays from which shine curving crescents of white sand, often with the touch of a few coconut palms that most people expect on a tropical island. The palms are not an essential part of the enchantment for many a beach is shaded by the pine-like casuarinas

known as she-oaks in Australia. These have their own magic in the soft sigh the wind makes through them, a sound infinitely more subtle than the rustle of palm fronds.

(McLean 1986: 2)

Birds

For people to give significance to particular sounds they need to not only be exposed to them, but also be aware of their presence. Perception of sound is diminished through habituation or exposure. Tourists are often more keenly aware of their environments and the associated senses because they are set apart from their everyday experience. In addition, their motivation to experience particular phenomena makes them conscious of senses. In the case of Reef tourism, bird watching was such an activity in the first part of the twentieth century. Although the name suggests it is the visual that is most important, bird sounds were also an integral part of this popular activity.

Bird watching was enthusiastically pursued as a visitor activity in the first part of the twentieth century. Like their involvement in other aspects of Reef research, holidaymakers were included in ornithological investigations. Dr William MacGillivray was a key participant on several Reef expeditions, including those organised by Mont Embury and the Pollock excursion to North West Island in 1926 (Pollock 1926a, 1926b). An amateur turned expert ornithologist, he provided many visitors with the opportunity to count, ring and observe birds. People were struck by bird life on Reef islands from the earliest European encounters as attested to by the paintings of Edwin Augustus Porcher who accompanied the voyage of the *H.M.S. Fly* in 1878 (see, for example, Porcher 1843; Porcher 1844). Some islands were renowned for an intensity of avian life and Reef trips were organised to take advantage of this phenomenon. The density of birds meant that the sound was an inescapable part of the experience. The richness of bird life is captured in some of the earliest films of the Great Barrier Reef including one of a trip to Hoskyn, North West and Masthead Islands in 1931 (Monkman 1931). Although the film is silent, birds dominate in such numbers that when viewed with the following description in mind it is possible to get a sense of the intensity of sound.

*Then we went on to Michaelmas Reef, whose Sand Cay is known (and erroneously) as Oyster Cay. The first we saw of this was a dark cloud on the horizon, which through a glass resolved itself into large numbers of sea birds. Then the yellow line of sand appeared over the horizon. Next a noise of blown dead leaves, and a few Sooty terns (*Sterna fuscata*) flew over the mast. We came upon more and more, until anchoring under the lee of the Cay, there were thousands overhead, uttering sharp cries. The noise on the shore, where a dozen natives were flushing the birds and taking their eggs, was now like a frying pan working overtime. We landed and had birds all round us, wings every now and again touching our hats. It was impossible to tread without every now and again smashing an egg. These are speckled with brown or blue green and present great variation in marking. They are large for the size of the bird, as only one is laid each season.... [S]lept on the shore, without getting any lice or ticks, and we soon got used to the noise, and slept soundly.*

(Morrison 1925b: 26 August)

As with other diary entries, Crosbie Morrison subsequently relays his observations to his parents in a letter. Two days after the diary entry he wrote the following, which suggests that sound was important enough to recollect and reemphasise.

The first we saw of the cay on the horizon was a dark cloud (of birds) — then, as we got nearer, the sand showed up, and approaching closer and closer we heard their noise — first like the swishing of dry leaves on a windy day; then like the sound of fish frying briskly; and finally, when we got amongst them, it was like a continuous shower of stones falling into a stone crusher with squeaky bearings. Speech was impossible on the island. Every step brought you on top of a speckled egg laid on the sand without the suspicion of a nest or hollow.

(Morrison 1925d: 28 August)

The density of bird life and the sounds it induced are reported privately and publicly. The following newspaper account vividly portrays the profusion of birds that occupied North West Island during an expedition in 1931. The birds are a physical presence that effected many aspects of the visitors' experiences.

Birds, birds, birds — everywhere. The sky is full of their wheeling battalions; the ground is haunted beneath your feet with black, somnolent shapes; and around your head their anxious cries set up a stupefying din. When night falls, nothing accentuates the strange stillness more than the gentle murmur of the surf, and the eerie cries of the mutton birds in their earthy catacombs, often so uncannily like the wail of a newly-born child that one of our doctors imagined for a moment that she was back at a children's hospital in Sydney.

OUT TO SEA

The first glimmer of dawn is a signal for the gathering of the mutton birds preparatory to the day's fishing. The black-garbed figures come scrambling from

their murky dungeons, and the pisonia forest is alive with the rustling of the birds hopping and running through their highways and byways to the assembly grounds — open spaces in the bush upon which they can conveniently converge.

The very ground seems to be moving, so thickly is it covered by the jostling, chattering crowd, raising above them a cloud of dust like sheep on a hot day at a saleyard. In the half-light of dawn, this strange rally of literally millions of inhabitants of an islet less than three miles in circumference creates an eerie sensation among the few human beings who have risen early enough to be the spectators. Now and then there is a flutter and a swirl as some disturbance breaks out; but order is swiftly restored, and the seemingly inexhaustible stream flows on. A swift run and a glide once they are clear of the trees, and the first batch is sailing out to sea. Another and another follow, wave after wave, until by the time the sun has flushed the sky the migration is complete, and the black battalions are soaring and dipping over the seas in a cloud like motes of dust in a beam of sunlight.

(Wigmore 1931: 2 January)

The islands that were heavily populated by birds, such as North West and Masthead Islands and others in the Capricorn group, were characterised by noise, day and night.

Considerable flocks of mutton birds and sea gulls camp on the island during night; the former make a weird sound which resembles at times the cry of a child, and again the howl of a dingo. They are to be found on parts of the beach and inland burrowing into the sand, and can be easily caught, as they do not fly at night, being apparently unable to see in the dark. During the day these birds traverse the ocean for miles, and return in the evening.

(*The Queenslander* 1925: 26 December)

[M]illions of “ghost-birds” (petrels) were heard wailing and shrieking at night; many other varieties of water-birds were observed in large numbers.

(Gilbert 1926: 5 January)

The wooing of the petrels was the most remarkable scene. They generally assembled in open patches in the moonlight. The male (naturally enough — among birds) seemed to be the most active during courtship — an extremely noisy ceremony. After singing to the female in various murmuring notes he terminated his song with a frightful cat-howl. The pandemonium created is beyond the imagination of all who have not heard it. Try to think of a million cats “chorusing” together, and you may get a broad idea of the dreadful din.

(Gilbert 1925: 30 December)

The lecturer related amusing incidents of life on the coral islands, telling how the mutton birds, attracted by the light at the camp created so much noise that lectures were disturbed and camp concerts interrupted.

(*The Sydney Morning Herald* 1932: 8)

Even on those islands where nesting birds were less prevalent, “the call of the birds was the alarm clock” for the 1930s Reef campers (Anderson c. 1935). This is not uncommon for campers anywhere, but bird song remained noticeable to Reef visitors even when accommodation became more substantial than canvas.

During recent years the Whitsunday Passage and islands have been glamourised by the erection of the luxurious hotel on Hayman Island, the Hotel Royal Hayman. I recall to mind a delightful sojourn spent there during the “winter” of 1955. Each morning I was awakened by a reveille no human beings could emulate. It came direct from an orchestra of birds.

(Lock 1955: 13)

It is not only the mass of birds, but the variety and curiousness of their sounds that attract visitor attention. As Urry (1990) has argued in relation to the tourist gaze, sound can similarly be argued to be significant in tourist experiences in the past. Human perception of noise is diminished through habituation and as the Crosbie Morrison account suggests this can occur quite quickly. So it is visitors who perhaps have the keenest awareness of sounds in Reef landscapes, particularly in relation to those that contrast with their everyday experiences.

The love song of the mutton bird is about as weird a sound as can well be imagined. ...

(Pollock 1926a: 16 January)

[W]eird call of the curlew, created quite an eerie effect.

(Watson 1935)

Many birds abound in this paradise, and we saw numerous bee eaters, Caterpillar eaters fantails pigeons, etc. and heard the curious bubbling call of the Swamp pheasant [sic].

(Morrison 1925b: 29 August)

There are limited means by which sound can be recorded as part of personal experience. Even though video now facilitates both sound and film recording, the majority of the early sources are written. However, the presence of large numbers of birds are recorded in many images of the Reef. Paintings, film footage and photographs from the beginning of the twentieth century suggest that, like casuarinas, birds were a prominent and noteworthy

experience. In contrast analysis of contemporary sources suggests that the role of birds has changed significantly in Reef promotion and experience.

In 1950 bird watching was still promoted as part of an experience on Heron Island (Queensland Government Tourist Bureau 1950), but this is no longer an active pursuit in contemporary Reef visits. Instead interactions with birds depend on those species that thrive in modified environments. The contemporary tourist surroundings appear to favour parrot species like lorikeets and cockatoos. At Hamilton Island, sulphur-crested cockatoos have become a nuisance. They fly high on the towering hotels and have become adept at getting into hotel rooms and even the bar-fridges of unsuspecting guests. Bird feeding occurs at some of the resorts and is promoted for tourists. The birds that are fed are the highly coloured rainbow lorikeets. Every afternoon at Club Crocodile on Long Island the air is filled with the raucous squawks of lorikeets as these birds congregate for the regular feeding sessions provided by staff and tourists. Similar activities are organised on South Molle Island and birds are still promoted within resort advertising.

The Whitsundays and South Molle Island are ... a haven for birdlife. Some of the species you're very likely to see here include: Osprey, Sea Eagles, Brahminy Kites, Kookaburras, Sulphur-Crested Cockatoos, Currawongs, Pheasant Coucal, Australian Scrub Turkeys, Bridled Terns, Rainbow Lorikeets and Eastern Curlews.

The most noticeable of these are the Rainbow Lorikeets, which are fed every afternoon by the Golf Club and the Eastern Curlews, which are the long-legged ground dwellers you will see around the resort area, which are responsible for the loud screeching noise, often known as "the cry of the lost sailors".

(South Molle Island 2002)

Although birds are still present in large numbers, and visitors may be interested in the varied bird life of the islands, it is only a few species that dominate visitor experiences. As visitors tend to be relatively sedentary, they are only aware of those species that come into the resort areas. Consequently the majority of today's tourists tend to experience only a limited range of bird life and associated sounds. For those who do stray outside the confines of the resorts, bird sound still contributes to their experience.

Eventually an excess of sun drove me to seek the cool of the forest of eucalypts, rare indigenous red coondoo, and scaly ash trees, full of the liquid calls of honey-

eaters and the whistles, sudden squawks, and raucous screeches of squabbling lorikeets.

(Baker 1998-2001)

When we exited the plane, we immediately noticed all of the common (white-capped) noddies nesting absolutely everywhere. The whole [Lady Elliot] island was a rookery, and most of the tree-areas were off-limits to humans. ... There were obviously plenty of noddies around making plenty of noise.

(micktravels.com 2001)

Whistling Sand

One of the few auditory effects that has distinct continuity in visitor experiences is the sand of Whitehaven Beach. The importance of its sound has a long history in visitor encounters with the region. In 1925 Crosbie Morrison wrote to his parents of “Whitehaven Bay, a beach of ‘Whistling Sand’ — white and 11 miles long” (Morrison 1925d). Similarly, participants in the ‘Voyage of the Cheerio’ visited Whitehaven and noted both texture and sound of the sand in their accounts of the beach:

We saw many fine vistas on the way... and were agreeably surprised by the white, whistling sand at Whitehaven.

(Pizzy c. 1935)

At Whitehaven Beach on Whitsunday Island there is sand so fine and white that it feels like the softest powder, and whistles as one walks. This beach is 7 miles long, but the atmosphere is so clear, and still it is impossible to realise distance, and it was hard to believe one could not walk its length in half an hour.

(Stainton 1933)

The following day we all went aboard for a trip around the eastern side of Whitsunday Island to Whitehaven beach. We saw many fine vistas on the way, stopping at Border Island for lunch and were agreeably surprised by the pure white “whistling” sand at Whitehaven, which is, I believe, the finest grained sand known.

(Watson 1935)

During field observations I accompanied two different tours to Whitehaven Beach. One was a large operation run by *FantaSea Cruises* that travelled specifically to this destination. The second was a smaller *Ocean Rafting* ‘ecotour’ that included Whitehaven Beach as one of several stops in a full-day tour. Tourism brochures publicising these tours and others to

Whitehaven do not provide information or even mention the sound of the sand. In spite of this, the sound was integral to both of my visits to Whitehaven.

On the first tour passengers were asked to remove their shoes and disembark barefoot so as not to bring sand back on board. In contrast with historic visitors who walked the length of the bay, contemporary visitors were explicitly told not to do so as time would not allow it. We were also asked not to walk into the scrub behind the beach which is fairly typical of unmodified coastal island vegetation. Visitors were therefore confined to the strip of promised fine white sand between the sea and the bush, with the emphasis clearly on the beach. In spite of these restrictions, the excursion brought visitors into contact with at least two non-visual sensuous experiences. The fine texture of the sand was apparent to every person who landed on the beach because we had all been made to proceed barefoot. The sound of the dry sand was also obvious. Each step or movement produces a squeak that one tourist described as “a very satisfying noise” as she stomped her way deliberately up the beach.

During my first visit to Whitehaven I also observed tourists visiting the bay by seaplane. On this particular day all participants were young heterosexual Japanese couples, and it is likely that they were mostly honeymooners. Each couple’s visit was bracketed by the departure of the previous couple and the arrival of the next. Each was brought to shore with a champagne hamper and they were able to spend less than an half an hour on the beach before returning on the seaplane. They were prevented from leaving the immediate area of landing by a staff member waiting on shore. Given the brevity of their visit and the restricted space in which they found themselves on this lengthy bay, they had little opportunity to engage with the environment. Their purpose was therefore to capture this experience within a limited time, and they focused on taking photographs and posing in particular activities which in reality they had no time for. For example they posed as though enjoying a lazy unhurried day, looking dreamily across the bay for only the moments that the camera was held and the picture framed. In the almost frenzied activity of recording their photographs, it seems quite possible that some of these visitors remained unaware of the sensuousness of Whitehaven sand.

On the second tour, the *Ocean Rafting* vessel approached Whitehaven from the northern end of the beach, and travelled the length of the bay before anchoring in the southern corner. This gave a real sense of the length of this beach. On arrival the guide provided the group of fifteen participants with a brief environmental history of the bay. This included a description of the fine silica sand, its texture and sound. He encouraged everyone to touch, look and listen to the sand. This guide was noticeably concerned to provide visitors with information particular to the location and ensure that they were aware of a range of experiences.

Even though the qualities of the sand are readily apparent to visitors, the smaller tour certainly ensured that people were aware of the experience. The role of the tour guide was very important in shaping people's experience because only a short time was spent in each location. However, this tour was conducted on a vessel that did not have self-contained amenities like toilets or air-conditioning. This generally facilitated greater involvement with the landscape. For instance, the limited facilities encouraged participants to walk off the beach and into the scrub to use public toilets, and without air-conditioning, most participants were keen to swim. In contrast with this tour and historic excursions, larger groups and the fly-in-fly-out visitors were less likely to have engaged with the environment of this location, even though many noted the sound of the sand. In these instances it was visual qualities that dominated visitor encounters, and one woman on a seaplane visit was observed taking a close up photograph of the white sand – an image that would surely be visually uninformative. This focus on visual amenity is echoed in promotion for the region. In spite of the acoustic importance of the sand in both historic and contemporary visits to the beach, a survey of visitor experiences at Whitehaven (Ormsby and Shafer 2000) failed to recognise or address this as part of visitor perceptions. In the survey sound is only assessed as 'noise' and this confirms the view that smell and sound tend to be assessed as polluting or unwanted (Porteous 1985: 373; Porteous and Mastin 1985: 170). The survey by Ormsby and Shafer (2000) used a quantitative approach without any basis in qualitative understanding of visitor experiences. As a result an important aspect of visitor knowledge is ignored within the management regime.

It is less usual for tourists to camp on Reef islands now and most resort accommodation is air-conditioned and solidly built. As a result few people sleep where they would be aware of the many sounds of the Reef environments. Even during the day amenities and activities shield tourists from auditory experiences. Observations of resort facilities in the Whitsundays suggest that most visitors stay within the confines of the resort and travel by fast transport. Hence air-conditioning, music and other amenities mask or obliterate the sounds of the outdoors. This is referred to as 'lo-fi' sound, characterised by a large amount of noise in which few discrete sounds are distinguishable (Schafer 1977, 1985; Rodaway 1994: 88-9). Consequently, at the Reef the increase in 'lo-fi' sound has led to the loss or lessening of auditory tourist experiences, particular those that are distinctive of the Reef environment. This is particularly noticeable in relation to the sound of she-oaks.

While casuarinas are present on many beaches of the Reef, they have all but disappeared from the dominant discourse that frames Reef tourism and have been displaced from contemporary tourist experiences (Pocock 2002c). Together with other sounds within resorts, the more obvious sound of palms has obscured the sighing of she-oaks even when they are present. In spite of this casuarinas continue to be valued by locals who use and access parts of the Reef that are less modified. This became apparent when I presented this research in a Townsville forum. I was told by local island residents in the audience that the sound of casuarinas at Florence Bay on Magnetic Island continues to be an important experience in their knowledge of the locality. However, tourists tend to stay within the confines of resorts and other landscaped areas. In these contexts the sound of she-oaks is no longer an integral part of visitor experiences as it was in the past and as it continues to be for locals.

Reef Smells

Smell is a strongly evocative sense, and a particularly memorable description by Rosaleen Love is of the unmistakable smell of a coral cay. Her description is conspicuous because it

is unconventional among the more common portrayals of the Reef in advertising. It seems unlikely that the “distinctive fertiliser smell of the true coral cay”(Love 2000: 20) would ever be used in contemporary promotion of the Barrier Reef. And yet this smell was once an integral sense of being on the Reef. The smell of guano that Love refers to was pervasive on many islands used by visitors in the first part of the twentieth century. Likewise, the smell of the ocean and the exposed reefs had a particular odour.

The general brown appearance of the reef, faint odour of things of the sea, and crepitation of moving molluscs, gives it a very special character of its own.
(Council for Scientific and Industrial Research 1926b: 19)

The islands themselves are also characterised by particular odours. At the beginning of the last century, E.J. Banfield, gave a lengthy account of the different smells of Dunk Island in its various seasons and moods. For him the smells of the island were a distinctive part of his knowledge of place:

Many a time, home-returning at night when the black contours of the island loomed up in the distance against the pure tropic sky tremulous with myriads of unsullied stars has its tepid fragrance drifted across the water as a salutation and a greeting. It has long been a fancy of mine that the island has a distinctive odour, soft and pliant, rich and vigorous. Other mixtures of forest and jungle may smell as strong, but none has the rare blend which I recognize and gloat over whensoever, after infrequent absences for a day or two, I return to accept of it in grateful sniffs. In such a fervid and encouraging clime distillation is continuous and prodigious. Heat and moisture and a plethora of raw material, leaves, flowers, soft, sappy and fragrant woods, growing grass and moist earth, these are the essential elements for the manufacture of the ethereal and soul-soothing odours suggestive of tangible flavours.

(Banfield 1908: 14)

Like sound, awareness of smell tends to diminish with habituation (Rodaway 1994: 67-71). Hence odours are most noticeable to outsiders (Porteous 1985) or, as in the case of Banfield, someone who returns to a familiar place after an absence. Smell is therefore particularly conspicuous to visitors in new landscapes, either for the first time or as returning holidaymakers. And for short-term visitors smells of the islands were an important part of Reef experiences:

The vivid scarlet fruit of the wild plum lay scattered in profusion on the soft, rich loam — soil that would make the eye of a true gardener glisten with joy. We never tired of that long trek from the dining hall each night to our own tents on the far right wing of the little colony; the springy feel of trodden earth, the leafy smell of luxuriant vegetation, the brilliant stars winking through the dense foliage and the enormous shadows of our striding legs cast upwards towards the tree-tops by the warm yellow light of the swinging hurricane lamps.

(Stainton 1933)

In the contemporary context, the types of odours from sea and islands are overpowered or displaced by new commercial products, particularly sunscreen and fried food. The beaches are cleared of debris and it is only in walking away from the resort areas that one encounters any ocean-like smells. This was particularly noticeable at some of the bays off the path between the Club Crocodile and Palm Bay Hideaway on Long Island. These beaches are not far distant from the clean white sands in front of the resorts, and yet they are covered in seaweed, and vegetated with pandanus and casuarinas. My companion commented at one location on the ‘unpleasantness’ of this aroma, but it was essentially a weedy, sea smell. Ironically, perhaps, the smell only appeared pungent because it had been eliminated from the populated beaches on the island.

The smells that exist in present-day resorts are associated with human activities. However, unlike the pursuits of historic visitors, the odours are primarily generated by imported products. In other words, the odours do not originate from the vegetation and other physical elements of the locality. In contrast, the extremely popular historic activity of collecting shells and corals produced distinctive, if unwelcome, smells around the camps and on the return homeward journey.

Branches of various corals were taken ashore, boiled and bleached, while to camp were brought shells of many kinds, in varying stages of decomposition, causing at least some variety to the disagreeable odour of the guano from the seabirds.

(Pollock 1926b: 23 January)

There are wonderful shells out on the reef, which have to be taken alive, when the color [sic] is gorgeous — purple, orange, and yellow. They are called spider shells, and you cannot find them unless some kind person puts you wise where to look. When you have gathered all you want, you boil them for 10 minutes, and then dig the inside out with a button hook or a bit of wire. It is amusing to see little groups of people, each with their own little camp fire boiling their day’s collection

of shells, using petrol tins, fruit tins, or jam tins. If you don't boil and clean your shells, very soon the whole camp knows about it and then uncomplimentary remarks are made about the people who keep "smellers" on the premises.

(Carr 1933: 9 January)

There is much to interest one, and those whose purse or time permitted them only a four days' holiday were regretful that time passes so quickly. They consoled themselves by carrying from the island enoiled shells or pieces of coral, causing fellow travellers on the Canberra to wonder what was the cause of the peculiar odor [sic] in the cabin.

(Collins 1933: 10 January)

This continued to be part of the experience for decades. In the 1960s workers at island resorts could smell the vessels returning from the Reef before they saw them. The huge quantities of coral and shells that had been collected by these parties could be smelt a considerable distance across the sea (Barbara Mair, former housekeeper at South Molle, pers. comm.). This rate of collecting is regarded as unsustainable, and shell and coral collecting is now prohibited within the Great Barrier Reef World Heritage Area. When people do take shells away as souvenirs, they are purchased cleaned and polished from retail stores. It is not even clear that the shells come from Australia or the Reef itself. As a consequence, the smell of the Reef and its associated life and death are no longer familiar odours for visitors. The demise of collecting and fossicking on the Reef has also led to the loss of other sensory experiences, particularly haptic or tactile ones as discussed.

More than the displacement of sound, Western focus on visual characteristics and the provision of sanitized tourist landscapes has resulted the displacement of characteristic odours. The smells of decay on the Reef, both natural and as a result of human activities, are particularly pungent because of the heat. Smells are therefore largely regarded as negative by Reef visitors. As a consequence many Reef odours have been displaced or deliberately removed from tourist environments.

Reef Flavours

Taste is closely linked to smell in human experience and some regard these senses as so closely linked that they should be considered as part of the same sensory system (cf.

Rodaway 1994). This does not necessarily hold true for the way in which people have recalled and recounted their experiences of the Reef. Taste is seldom mentioned as being directly related to the Reef. With a few exceptions the catering for visitors is largely based on imported foods. For Reef visitors, food in the large camps like those of the Embury expeditions was “quite good and well cooked but rather monotonous” (Marks 1933: 8). However, for very active ‘reefers’ like those on the ‘Voyage of the Cheerio’, a healthy appetite rendered all food delicious and desirable as can be seen in the frequent references to Archie the cook. Beyond these fairly typical attitudes to camp food, some subsistence activities can be seen to characterise time at the Reef. Most notable is the abundant seafood from the surrounding waters. In the late 1800s Australians primarily ate imported fish and Saville-Kent lamented this fact in extolling the riches of the Reef:

[The Great Barrier Reef’s] waters abound with shoals of fish akin to the European herring, mackerel, anchovy, and pilchard, which run to waste. And yet, with these indigenous supplies swarming at their doors, Queensland and all the neighbouring Australian colonies, import vast stores of tinned, smoked, and salted fish, from the lordly salmon to the lowly sprat, from Europe and America.

(Saville-Kent 1893: 311)

Fresh fish from the Reef was therefore a particular experience. Fishing was, and continues to be, a highly prized activity on the Reef, and the resulting catch provided a plentiful food source. This was particularly important in the absence of effective storage for fresh food. A variety of scale fish was caught in line fishing, including Spanish mackerel, bonito, coral trout and other large species. Fishing was occasionally shore based, but more typically undertaken from boats. It was also supplemented with shellfish gathered during reef foraging activities at low tide.

Mrs. Cole is an ardent shell collector, both practically and scientifically. On the practical side, the several dishes of oysters which found their way into camp were mainly due to her energy on the reef. On the scientific side she unveiled some apparently rare cowries, which will require study to place them. Cones and other treasures unwillingly yielded to her expert hands.

(Gilbert 1926)

Even as late as 1969, an advertisement for Dunk Island encouraged visitors to eat oysters directly from the reef (Trans Pacific Enterprises 1970). Photographs of fishers with large

and plentiful fish abound in the records, and this continues to be a tradition for Reef fishers today (see Plate 37 and Film Compilation). Fishing is a somewhat specialised area of Reef tourism and an area that is deserving of study in its own right. Some Reef tours still offer participants the opportunity to fish as was the case with the cruise from the Town of 1770. However, this trip was quite ‘old-fashioned’ in many respects and fishing was not offered during any of the other tours I participated in. Like many other activities, fishing has been replaced by the more passive activity of watching. Watching fish is now the prevalent means of engaging with these species.



Plate 37: Fishing on the Barrier Reef, 1946

© National Archives of Australia (A1200: L8091)

Turtle

Turtles were once a source of both recreational pleasure and food for Reef visitors. As well as being trapped for the frivolous pursuit of turtle riding, turtle was also a source of food. In the absence of refrigeration turtle, like fish, was an important readily available fresh food. A newspaper account of an expedition to Masthead Island reported that “[f]or fresh food the expedition had to depend largely upon turtle, which were very plentiful” (*The Brisbane Courier* 1904: 4 November). Beyond this necessity, eating turtle was also highlighted as one of the attractions of a Reef holiday:

And there will be real turtle soup, and turtle steaks cut from any turtle that happens to be wandering near the cookhouse.

(The Sun 1931: 8 December)



Plate 38: Holidaymakers visit a turtle soup factory on North West Island

Fry 1910 © Mitchell Library, State Library of New South Wales

Turtles were particularly common on North West Isle where Embury first based his expeditions, and as such turtles gained prominence in Reef experiences as sources of both fun and food. Their abundance also saw the establishment of turtle soup canneries on both

North West and Heron Islands in the early 1920s. Several expeditions visited North West while the factory was in operation (Plate 38). Some of these visitors were obviously moved by the fate of the turtles:

Mrs. Lowe... is keenly interested in wild life generally.... her keen sympathy with dumb creatures was more than once evidenced by her carrying buckets of water to throw over green-back turtles which had been turned on their backs by turtle-hunters and left in the broiling sun on the beach.

(Gilbert 1926: 5 January)

The methods of turtle hunting appear even more callous from a contemporary perspective of conservation. However, others were more than happy to enjoy the product:

I tasted some soup straight from the tank & thought it delicious. That morning for breakfast, we had turtle steak. I can best describe it as looking like fried fish and tasting like veal.

An enterprising firm would probably find use for many of the by-products, such as bones which are at present thrown away, & in my opinion, the turtles should be allowed to lay their eggs before being turned over for killing.

Soup of the evening — beautiful, beautiful soup.

(Whitley 1925b)

Apparently, however, turtle soup was rather an acquired taste and not everyone enjoyed it.

[Turtle soup] has been made for six or seven years in the Capricorn Islands. There is a constant demand for the production, mostly abroad. A tin of the soup, containing enough for four people, is sold for 1s 6d. The soup is thick, brown and heavy, and needs breaking down. The majority of people have not acquired a palate for turtle soup, possibly because of its heaviness.

("Whampoa" 1930: 21)

Although varying, these are all strong views, which suggests that turtle meat and turtle soup were probably strongly associative for those who did partake of them. Similarly, the associated smell of both turtle and fish must have been strong around the islands, but this is not recorded as conspicuous in the records of the time. This indicates that it may have been such an established characteristic that it is diminished in conscious experience through habituation.

While some were pleased to see the demise of the turtle industry, turtle remained a valued food for return visitors who had prior pleasurable experiences of its consumption. When Embury moved his expedition base from North West to Hayman Island, a newspaper account emphasised how “[m]embers of advance party see whales, enjoyed turtle soup and turtle steaks” (Wigmore 1933b). Turtle is now protected within the Great Barrier Reef World Heritage Area and there are few non-Aboriginal people who have tasted this food from the Reef. To the contrary anecdotes suggest that people now regard eating turtle as a form of desecration and appear to find it deplorable to even contemplate such consumption.

Fruits

The other significant category of taste in visitor experiences is fruit. The tropical climate of the Reef is conducive to growing exotic fruits and this is highlighted in the presentation of the region. Fruits like papaya, pineapple and bananas are not native to the Barrier Reef islands, but are strong signifiers of the tropical location as I discuss in Chapter 8. They are therefore highly prized for this association. They also contrast from the everyday. This was particularly the case in the first part of the twentieth century when the capacity to transport fresh tropical fruit to the south would have been limited. The following is a fictitious account of a generalised Reef island from the *Cummins & Campbells Monthly Magazine*:

Let's assume we've landed from the launch. After the romance of being on an island has faded a bit, we look for inner sustenance. What do we expect? I'll tell you. Our minds and stomachs are all lined up for tropical fruits, fish[,] oysters. If we want a change then we'll alter the precedence of the menu and put it oysters, fish, tropical fruits. What do we get? I don't know what's on the bill of fare. But I do know the oysters are there in countless millions, just waiting to tickle palates; I do know fish, of the sweetest variety, swim lazily through the coral on the search for a hook and bait; I do know that pineapples and fruit of that kind ripen while you look at them and beckon with their delicacy.

Much has been written about the charm of the papaw. I agree with every superlative. In addition, as this is my day for giving free advice, I'll tell you something about the hidden virtue of that thing as a pick-me-up.

(Rechner 1948: August)

Similarly, coconut palms hold particular associations with the topics. However, their fruit also discloses particular tastes important to visitors. Taste was not the only motivator or

prize in the interactions with these plants, but drinking coconut milk was an experience sought out by many. This is witnessed by newspaper articles and private photographs and films which show people climbing coconut trees (Plate 39), picking the fruit and drinking the juice (Plate 40). One newspaper photograph is captioned:

Plenty of free drinks were available to members of the Australian Museum expedition to the Great Barrier Reef, although it was not so simple as in a Sydney milk bar! The travellers had to adapt themselves to coconut techniques.
(Daily Telegraph 1937)

The image shows three women. In the foreground one woman looks at the camera while holding up a coconut in which a second woman has her face buried to drink the milk. And a more recent photograph similarly shows a woman drinking from a coconut, this time captioned “Sydney Actress Anna Bowden samples fresh coconut — one of many delights to be found on North Queensland beaches” (*Tropics* 1975: 26).



Plate 39: Climbing coconut palms on Brampton Island

Berryman 1933 © National Library of Australia



Plate 40: Drinking from a coconut, Green Island 1966

© National Archives of Australia

Coconut palms are important symbols at Reef locations today (Pocock 2002a). However, the nuts are removed to keep resorts tidy and avoid potential injury. In spite of the plethora of coconut palms, it is therefore difficult to find fresh coconut at any of the resorts. The natural product had already begun to be displaced by the time a Dunk Island television advertisement was produced in 1969 (Trans Pacific Enterprises 1970) (see Film Compilation). In this people are shown drinking cocktails served in artificial coconut shells. Although I have occasionally seen fresh coconuts for sale in Cairns, I did not observe them being available in any of the Whitsunday tourist centres during May 2000. Cocktails mixed at the bars of island resorts instead used canned coconut milk. The tactility of consuming these foods is therefore also diminished. This is particularly noticeable in relation to climbing the trees, but also in husking the tough outer covering and breaking the hard shell. In the late 1960s and early 1970s Whitsundays Island festivals hosted coconut husking and oyster eating competitions (Plate 41).

While topical fruits continue to be important signifiers today, they are more likely to be pre-packaged for tourist consumption so that few people would pick or even prepare any of these foods before eating them. They also tend to be brought from elsewhere and stored in refrigerators; a condition which diminishes the intensity of many flavours and smells.



Plate 41: Whitsunday Island Festival Coconut Husking Competition 1970

© National Archives of Australia

Reef Sights

Sight is a dominant sense within Western society, particularly in the modern era. However, as suggested in Chapter 3, the visual experiences are also influenced by the other human senses. This interrelation is apparent in many of the quotes I have chosen to illustrate senses other than sight, particularly where I have used visual images to substantiate non-visual experiences from written texts. The significance of sight, however, is particularly

pertinent to visitor experiences and according to Urry (1992: 172), it “is the distinctiveness of the visual” that heightens tourists’ awareness of other senses and experiences. Chapter 4 illustrates the significance of the scenic view in visitor experiences, and shows how this strategic vantage point facilitates control over new landscapes. This analysis of vision is as a more removed sense. However, the visual can also be more immediate. It is the close up visual experiences of coral reefs that dominate both contemporary and historic descriptions and are thus integral to any story of the Reef. They are also an integral part of an authentic tourist experience. These sights are considered in this section.

Many early descriptions of the corals focus on the colours and forms of the life. These were observed in the coral pools of the exposed reef at low tide, or from the side of a dinghy by way of a water telescope – a simple innovation of a glass bottomed tin that allowed a clearer view below the surface (see Chapter 9).

Although the rain had gone, there was a heavy swell and many of us succumbed. However, we cheered up at the sight of Masthead Island, and about 3.30p.m. we sighted North West; after another hour we landed at dead low tide on the coral reef and made our way across to the beach, realising then how well worth while it was. Nothing could be done until high tide brought the boats with our belongings over the reef, so we all sat down to watch thousands of moleys and mutton birds manoeuvring against a glorious sunset, while in the near foreground white reef herons and sea gulls found their prey in coral pools.

Next morning, the morning of our one perfect day, camp was pitched, but the afternoon found us all on the reef; never before in our leader’s wide experience had the pools been calmer — not a ripple marred the beauty of their countless treasures — coral in soft pastel shades, green, pink, brown and mauve; sea weeds and anemonies [sic] of every hue, and any number of fish, painted with iridescent, metallic colours — blue and black, red and black, peacock blue, lemon, black and white; while others, more original may be, preferred fins of blue or green, and stomachers of yellow and red. From under the protection of his rock the green crab aggressively resented our invasion, and the red hermit peered suspiciously out of his borrowed home.

At the edge of the reef we looked down into deepness, transparently green, surrounded by the softest of corals and sea weeds; and from time to time a bright fish flashed and vanished, to return for the food we scattered.

Our collectors had a marvellous time — corals of every type, money cowries, tigers, bailers, whelks, pearl oysters and trocus [sic]; most low tides we saw them across the shallows — shorts and gum boots, buckets and picks — silhouetted against the deep blue ocean.

(Wilkinson 1932)

I will now tell you as quickly as possible what one sees when one goes on to a reef. As one approaches by boat its dead mass[,] one passes over the live coral that surrounds it, and looking through a water-telescope — a box or cylinder with a glass bottom that one thrusts below the rippled surface of the sea — one sees what has been described as the forms and colours of a tropic forest. There are blocks and lumps of the more solid corals — porites and astrea — and the tree-like forms of the madrepores, all coloured and covered by the living organisms, purple, green and blue, pink and brown. Here and there as one gets closer to the solid mass, one can see brilliant fishes — orange with black and white bands, iridescent green and blue, scarlet and black, blue and yellow, and of many other colour schemes, passing between the branches of the coral growth. Then on the bottom are the clams, the smaller species nearly buried in the coral, and the larger ones, sometimes as much as 2ft. 3 inches across, (Tridacna giagas) lying on the surface. The open serrated edges of their shells show mantles of brilliant and varied colouring — deep purple, brown with yellow lines, with emerald edges or with green points, clouded grey and blue and numerous other combinations. These bright lipped clams one sees possibly better because more closely, as one steps on to the uncovered reef at low tide.

(Council for Scientific and Industrial Research 1926b: 19)

Colour is a very important part of these descriptions, and not only of the reefs, corals and fishes, but of sunsets, water and sea:

The colours of the Sunsets are glorious, but as we have had no clouds, the Sunset is not as wonderful as it might be — it is only a series of coloured glows on the sea and the sky.

(Morrison 1925c: letter from Great Palm Island)

The night fell very quickly, leaving an orange glow in the western sky quite equal to any pictures I have seen.

(Morrison 1925b: 22 May)

You never saw water so blue as that round the Outer Barrier. It is a wonderful intense colour, with no trace of green in it at all, and when you are in the shade [of the] ship's side, looking down to where the shadow ends and the light strikes again, the effect is exactly the same as the blue colours in Black Opal.

(Morrison 1925d: letter from the Whitsundays)

Demoiselles, amongst the most brilliantly coloured fish of the tropics. Most observers of life on coral reefs recall these tiny fishes of vivid blue and orange, like living gems, that flash in and out of the maze of coral branches.

(Manilla Newspaper Co. 1932)

Mention must also be made of the entrancing beauty and colouring of the sunsets and twilight hours. The wide vision of the sea dotted about with the vari-shaped islands, all so clearly silhouetted, then gradually becoming bathed in the softest

tints of indescribable colourings as the sun finally slipped into the sea, leaving a shimmering silken sea girt world which cast a spell over all. One evening in particular stands out, when there had been promise of a storm, which was dispelled by a rainbow of dazzling brilliance and colouring, which verily seemed to encircle the whole scene. It was unusual sights of this kind that added so piquantly to the trip.

(Anderson c. 1935)

The colours of their experiences seem to be remarkable in every instance, even the less expected as described in relation to the dissection of a turtle at North West Island:

A beautiful colour-scheme of yellows, reds & whites presents itself as the entrails are exposed.

(Whitley 1925b: 1 December)

The significance of colour in written accounts from the early part of the twentieth century is partly a reflection of the inability to capture these in any other way (see Chapter 7). Only those who visited and viewed the Reef beneath the sea would have realised and remembered the colours.

Rowing to the reef crest in the dinghy, and stepping out into the warm surge among living coral growths, whetted our appetites for adventure. And as we picked our way towards the beach over the coral on the reef flat, we tried vainly to be in four places at once, so great was the variety of things new to our experience. Quaintly-formed and gaily-coloured coral fishes were seen in the deep pools in water of astounding transparency. We saw the beautiful shells of which we had read, including the clams with the flesh of their expanded bodies displaying every conceivable combination of colours. All these, and the indescribable beauty of the live coral satisfied us that we had not listened in vain to our urge.

(Fletcher 1935: 14)

In many instances these descriptions of the underwater corals appear to be the climax of any voyage and it is this that is the reward for any discomforts suffered. Similarly in contemporary tourism visual access to the Reef is a highpoint, and most tourist activities are oriented towards facilitating a direct and intimate view of the underwater world. This is strongly linked with technology as discussed further in Chapter 9.

The importance of visual qualities is complex, particularly in the context of tourism and contemporary consumption of images and these ideas will be discussed further in Part 3.

An important aspect of understanding the dominance of the visual is through an appreciation of how the Reef has been captured and recalled, pictured and told. The visual has been a key way in which the Reef has been captured and transmitted as experience between and within generations and will be explored in the next chapter.

Merging Senses and Movement

Even in trying to analyse sources for different experiences it becomes apparent that this kind of dissection of senses is artificial and perhaps misleading in relation to the identification of people's sense of place. Birds, for instance, provide an aesthetic of movement, sound and smell; they also present visual pleasure through colour, form and diversity, and people reach out to touch them. Breezes, movement in the air, and waves, movement in the seas, give rise to sounds in trees and sand. They also stir the skin, and bring fragrances to our noses. So movement or kinaesthesia is an important aspect of sensuousness that reconnects movement, sight, touch, sound, smell and taste and contributes to a sense of place.

Taussig (1993) has suggested vision may be a tactile sensation and the way in which the visual is informed by the other senses is illustrated by the following description of soft corals from the narration of a 1952 documentary:

Soft corals are abundant over the whole area of the Great Barrier Reef. They are for the most part ugly and repulsive; their texture being leathery and they're slimy to the touch.

(Cine Service Pty Ltd 1952)

This description of soft corals strongly contradicts current perceptions. Even though the above description accompanies visual film footage, the narration is informed by the tactile engagement that characterised Reef visits of the time. In contrast current haptic senses are almost entirely displaced by visual experience. In the absence of any physical touch it is therefore possible to reappraise the soft corals and focus only on visual aesthetic as suggested by the following description:

While soft corals contribute in only a small way to the formation of the limestone structure of the reef, they play an important role in reef ecology. They are also a beautiful, diverse and colourful element of the reefscape.

(CRC Reef 2001)

Although there are many sensations available to tourists on the islands today, these have largely been tamed, controlled or even globalised by tourist facilities. Whereas tourists were once immersed in the Australian landscapes, they are now cushioned by resort infrastructure from this environment. Sounds of casuarinas and even palm trees are swamped by music filtered through speakers hidden in trees. Cafeterias and the smell of fried food has replaced the smell of seaweed and fresh fish. Sand and saltwater is eliminated by the provision of swimming pools only metres from the ocean. Even the tropical air, so balmy and warm and once sought out as a refuge from southerly winters is replaced by air-conditioning. In the absence of distinctive senses, tourists increasingly rely on visual qualities to create a distinction from their everyday.

I suggested in the previous chapter that visitor experiences have become increasingly focused on isolated points. Visitors are no longer aware of the connections between these points which form the lines of intersecting journeys. As such the knowledge of physical location and orientation that contributes to a sense of place has been diminished. The material in this chapter suggests that further to this, sensuous engagement with particular locations is depauperate in comparison with those of the past. Knowledge of the isolated points has itself been diminished as a result of increased visitor comfort and a conservation agenda, both of which expanded significantly in the second half of the twentieth century. As illustrated above, the visual considered in isolation can be misleading. It allows for particular interpretations and denies other knowledge or ways of conceiving elements of the environment. All the senses are a vital part of how people develop corporeal knowledge of space, and from which they draw their knowledge and understanding of particular places. The senses inform each other and the culturally informed body to create places. The senses therefore cannot be considered in isolation if we are to fully comprehend human sense of place. These interactions are also emplaced and dependent on a sense of orientation. Both characteristics have been diminished in the later decades of the twentieth century.

The cultural and social aspects that construct knowledge of place from orientation and the senses are informed not only by the physical components but through the associated content of stories, narratives and other information that is transmitted within a culture. In the next chapter I examine some of the mechanisms that have facilitated the transmission of these experiences and knowledge.

Chapter 7

Capture

The previous two chapters outline visitor activities and the experiences that flow from these. These illustrated how engagement of the thinking sensuous body with the environments of the Reef contributes to visitor understanding of the region. As suggested in the previous chapter, changes in infrastructure and ideology have influenced the way in which these senses are perceived and interpreted. This suggests that visitors' sense of place at the Great Barrier Reef has also evolved and changed. As previously discussed, the knowledge that transforms space into particular places is constructed from everyday senses, experiences and activities. This everyday sense of place contrasts with the way in which tourists define and know a locality or space. Urry (1990) suggests that visitors seek that which is different from their everyday experiences in order to define their tourist self or identity. However, if a location is to gather and maintain meaning for visitors, the sensuous must be experienced in forms that allow them to become familiar. I have already outlined how this was achieved through the Cartesian conventions of mapping and geographical location, a practice which is diminished in contemporary tourism. However, other experiences can also be translated into forms that provide visitors with the means to understand them in relation to the everyday. In particular visitors maintain connections beyond their immediate and temporary interactions with space through a number of mechanisms. In this chapter I explore the ways in which visitors are able to translate and therefore capture their experiences and how these are used to communicate particular ways of conceiving the Reef to others.

Visitors anticipate and remind themselves of their adventures through reflection and storytelling and through the maintenance of physical contact with the places they have visited. By taking relics from the Reef visitors retain links with the sensuous experiences of having been there. And through these objects other people come to know the place as represented in a particular discourse. In this way visitors relay their

experiences and adventures of distant localities to those who have remained behind. It is through the retelling and representation that distant places are thus constructed and known by those who have never experienced them in person. This is a key idea in relation to my aims which identified the need to articulate the relationship between identities, knowledge of place and World Heritage listing that implies global 'ownership'. In this chapter I look at some of the means by which people have created these links with a distant Reef. I have deliberately entitled the chapter 'capture' because it implies a certain control and it is this that enables the Reef to be constructed in particular ways. It also reflects the importance of the connection between the original and copy as identified in Chapter 3.

Visits are by definition temporary, often once-off occurrences experienced by only a select group of people. The capture of the Reef and associated experiences is an important way of making that knowledge accessible to a broader range of people. Capture therefore fulfils an important role in extending the continuity of experience and increasing the number of people who can share in it. As well as providing contact for people at a distance from the locality, access facilitated by different forms of capture is also important to Reef visitors who do not have the capacity to experience particular aspects in person. At times when technology and environmental factors like tides and weather could exclude people from certain experiences, captured forms of the Reef were particularly important. Similarly, these more readily accessible reproductions of the Reef continue to be important for people who do not have the ability to access it in person due to physical incapacity. Reproductions of the Reef therefore provide access for a broad range of people and have become an important part of how the region is understood and valued. It is also the way in which people who have never been to the Reef understand it, and this is particularly relevant in considering the Reef as a World Heritage site of 'universal' significance. However, this may not constitute the kind of local knowledge identified in Chapter 3 and raises a question as to whether social value is only derived from direct experience.

The Means of Capture

The ways in which people have captured the Reef include the acquisition and display of its physical parts, as well as verbal and pictorial interpretations of personal bodily experiences. The means available for sampling, recording, relaying and describing different Reef experiences has evolved along with a range of new technologies. The visual bias of these technologies is a reflection of the importance of sight (Chapters 5 and 6) but is also a reflection of the mimetic capacity of technology. This has a direct impact on which senses and experiences are portrayed and to what extent these are represented. What tourists capture is therefore a reflection of both what is important in the marketing and consumption of the Reef, and what is possible to capture in a secondary form.

Many of the ways in which the Reef has been captured will already be apparent to the reader, particularly through the discussion of methods (Chapter 4) and the types of sources cited in previous chapters. This chapter looks more specifically at these sources as a means by which visitors have captured their experiences of the Reef and transmitted them to others. I have already considered how strategic orientation and sensuousness contribute to a sense of place and have illustrated the importance of non-visual experiences. This is important because non-visual experiences are often neglected given the dominance of visual amenity in heritage assessments generally, and in relation to the Reef and tourism in particular. However, the visual aspects of the Reef contribute significantly to the portrayal and perception of the Reef, and this is apparent in the ways that people have sought to create and record their understandings of the region.

Words

The predominant portrayals of the Reef at the beginning of the twentieth century are in the form of words. While many works of art, posters, brochures and photographs and a few segments of film footage date to this period, these were less prolifically reproduced than they are today. Words used to describe the Reef were by far the most available and flexible means of describing the region and visitors wrote in many forms about their observations, experiences and feelings. Communication in words is a dominant means of transmitting information in Western society, and visitors and promoters of the Reef

continue to use a range of written and spoken formats. In the historic period, journeys to the Reef were longer and people tended to write more. In the absence of telephones and other immediate ways of staying in touch, letters and diaries were an important means of sharing and reflecting on personal experiences. In a somewhat circular journey, the newest technologies of internet web pages and email have reinvigorated writing as a means of communicating from and about the Reef.

As outlined in Chapter 3, written accounts are found in private and published form, including diaries, notebooks and letters, books, newspaper, magazine and journal articles, and increasingly on personal web sites. Descriptions are also contained within more formal documents such as government administrative archives and research reports. These necessarily differ in the degree of passion, style and detail they provide. In spite of the differences, there are consistencies in how the Reef is portrayed.

The spoken words of the past are not generally accessible to contemporary researchers. The many private conversations and stories that contribute to the construction and portrayal of the Reef are especially fleeting. However, archival records include references to public lectures and talks about Reef experiences. Short newspaper articles provide little more detail than the venue, timing, speaker and topic for particular events. In a few instances some of the content is elaborated on in articles reporting on the lecture itself.

Lectures and lantern slide evenings were a central part of Reef holidays in the 1930s. In addition to general publicity and education about the Reef, scientists who participated in excursions gave lectures to holidaymakers on location. This was not always based on prepared materials, but was an opportunity for everyone to share in the day's research. This practice was an important way in which visitor expectations were shaped and their experiences explained within an existing paradigm. Through the presentation of this scientific framework, lectures ensured that the Reef was portrayed and perceived consistently by a range of visitors.

This Christmas the ninth venture will be by far the most ambitious Embury Expedition to be set afoot. A new permanent headquarters is being established on Hayman Island, some 16 miles out of Bowen.

Vessels which will accompany the expedition will enable visits to be made to some dozens of other islands in the vicinity and a special 17 mile trip to one of the reefs of the Outer Great Barrier Reef is also in the itinerary. Dr Macgillivray will deliver lectures, and it is hoped that Messrs. McNeill, zoologist, and Fletcher, assistant palaeontologist, will accompany the expedition and also deliver lectures.

(The Education Gazette 1932: 1 November)

Lectures and presentations were also important after the visit had concluded. Like the talks given at the Reef, the public lectures were most often made by scientists who had accompanied a particular expedition. However the events also gave scope for holidaymakers to exchange and recall their experiences. This was an important part of maintaining the experience and public lectures often doubled as reunions of ‘reefers’. For instance in 1933 there were three such reunions in Sydney during 1933, and at the January meeting:

Members took along their collections of photographs and snapshots, and enjoyed the exchange of reminiscences.

(Daily Telegraph 1933: 28 January)

Spoken information about the Reef was also broadcast in radio programs. A small number of manuscripts from these have survived in family papers. Together with other writing by the speaker, the transcripts provide some insight into the way the Reef was spoken about publicly. For instance, an article titled “The Mighty Polyp” was printed in two Magazines, *Bank Notes* in July 1933 and *The Education Gazette* a month later. It was also the basis of a lecture during the 11th Embury Expedition that year (McNeill 1923; *Bank Notes* 1933).

Yet other spoken depictions of the Reef survive as part of film footage. While the earliest material, particularly private material, is silent, sound is recorded for one film as early as 1930 (Anonymous 1930). These recordings provide information that goes beyond that of written words, in that it is possible to detect the emphasis and enthusiasm or other emotions placed on particular phrases or expressions. One of the most predominant characteristics of these narratives is the focus on scientific interpretation and appreciation. It can also be assumed that this focus was also transmitted to the many teachers participating in Reef excursions, and that they in turn would have passed this

on to children in classrooms in a different time and space. The tradition of learning and shaping the Reef through science was therefore prevalent in how it was perceived by in person visitors and those who only imagined it. This conception of the region also continues today. Marine biology graduates are employed on many of the tour boats that visit parts of the Reef. These individuals provide information to visitors in a way that guides what they see and how they experience their excursion. In addition, some of the larger vessels also screen video documentaries about the Reef which similarly shape people's expectations.

Images

Film provides more than words. It combines images, sound and movement. The importance of visual imagery is not restricted to motion films, but is also an important aspect of lectures or other public presentations about the Reef. Talks appear to have been popularised through the presentation of slides and other pictures that complemented spoken information. Even when presenting information while at the Reef itself, illustration was important.

Mr. Frank McNeill, zoologist of the Australian Museum, College Street, supplied enough information to more than satisfy the most curious concerning marine life, etc., and all through the long journey to Gladstone, Queensland, and the sea trip to the island, jealously guarded the lantern slides with which he illustrated his evening lectures on the specimens gathered by the party during the day.

(Weaver 1932: 12 June)

When lectures were presented in distant locations, such as Sydney or Melbourne, illustrations took on an even more important role. Photographs, in particular, were able to communicate visual aspects that were not in physical proximity or within immediate sight.

An intensely interesting Illustrated lecture Queensland's Tropic Isles and the Great Barrier Reef. Manly Art Gallery, West Esplanade, Manly, To-night (Thursday) at 8 Sharp. By Mr. F.A. McNeill (Aust. Museum.) Collection for New Pictures.

(The Manly Daily 1934: 5 July)

While images are used to support and embellish lectures and articles, they are also an important form of capture in their own right. There are many images of the Great Barrier Reef which range from early artworks such as the watercolours by Porcher (1843; 1844) through to more abstract pieces of fine art held by the National Gallery of Australia (see for example, King 1983a, 1983b, 1984; Mategot c. 1968). There are also more commercial and stylised depictions of the Reef associated with tourism promotion. These include brochures and highly coloured travel posters dating from the early 1900s through to the present (see for example, Mayo 1953; Northfield c. 1930b; Lambert c. 1950). All these works are interpretations of the Reef which manipulate elements of the environment for presentation to the public. Above all else, however, the Reef is recorded in photographs. It is these images that hold particular significance in how visitors capture their experiences. Photographs are influenced by the photographer and can be manipulated. This is especially true in the digital age in which compositions can be constructed from many elements and unwanted content can be removed. This allows the presentation of 'pristine' or 'natural' landscapes. In spite of this, photographs are perceived as much more immediately and accurately representational than drawings or other depictions (Sontag 1973: 153). They are assumed to represent a reality.



Plate 42: The photographer of Plate 36 is photographed in action

Fry 1910 © Mitchell Library, State Library of New South Wales

Scientific exploration of the Reef and the development of photography have strong chronological parallels that have resulted in a well documented history of the Reef and a well documented record of the development of photography. Although photographic reproduction increased in quantity and sophistication throughout the twentieth century, the Reef has always been well represented in photographic images. The records not only point to how people experienced the Reef, but how it has been communicated among visitors, scientists, and the public and between generations. The historical significance of photography, particularly in the first decades of Reef visitation, is attested by the discussion of photography and a number of images of photographers in action (Plates 42 and 43). Similarly diaries and letters record that photographs have been taken of particular scenes or sights.



Plate 43: Photographing overturned green turtle

Fry 1910 © Mitchell Library, State Library of New South Wales

The importance of photography in science (Taussig 1993: 25) has meant that the Reef, which is largely understood through science, has been documented extensively through this medium. Photography is also important for tourists and even on the early expeditions to the Reef visitors went to significant efforts to photograph the region, the people and activities that were part of their holidays. The Embury expeditions are comprehensively recorded in photographs. Their photographs are reproduced in many different collections and contexts, including private albums and newspapers. They also

appear many times in different magazines, including *National Geographic*. In a letter Arch Embury recalled that he “went along with [Mont] and did a lot of camera work, mainly for publicity and to please the tourists” (Embury 1981). It was not only professional photographers who took pictures. Amateurs have increasingly taken a keen interest in photographing the Reef. Photography was an important visitor activity in the early decades of tourism, and photographs were highly valued as is suggested by the care with which albums were compiled.

As photography became increasingly sophisticated it became possible to photograph not only still objects, but to capture moving ones, to film underwater and even to make motion films. The development of colour film provided a means to record visual dimensions that had been previously inaccessible. These developments together with an increasing availability of the technology meant that the Reef was visually captured and portrayed by more and more visitors. Visual reproduction is no longer within the control of only a few individuals, but has become a commonplace activity available to and used by almost everyone (cf. Sontag 1973: 176). New technologies also allow almost immediate sharing of imagery with distant friends and family through the use of digital images transmitted by email, posted on the web or sent through mobile phones. The need for personal photographs continues despite the more perfect imagery produced by professional photographers who create striking compositions and brilliant scenery with perfect focus and exposure. The act of taking photographs for, and of, oneself continues to be important because it offers a connection between the represented and the original as I discuss in Part 3.

Objects

Collecting and fossicking on the exposed reefs involves a physical interaction and intimacy with the Reef that fostered a range of sensuous experiences (see Chapter 5). Early visitors, both scientists and holidaymakers, collected vast quantities of shells, corals, fish and other organisms. These were pickled, dried, boiled, oiled and otherwise preserved for taking away. As such they provided a connection with the Reef that extended beyond the duration of the visit. While many shells and corals made their way into the homes of visitors, others were gathered and collected for more public display.

These displays were intended to depict the Reef to potential visitors and to represent the Reef in a way that could be shared with many.

Fantastic crabs, whose colouring varies with the weather; blue starfish, a foot wide; coloured, curiously-shaped shells; and coral fragments of beautiful colour and shape are among the marine wonders of the Great Barrier Reef included in a collection displayed by the Queensland Tourist Bureau in its show window in Martin Place [Sydney].

Their exotic colouring, suggesting the glamour of the tropics, and their beautiful or bizarre shapes fire the imagination

The growing popularity of the reef as a tourist resort is indicated by the fact that there are now five tourist "bases" on reef islands, whereas three years ago there was none.

(The Sydney Morning Herald 1933: 15 November)

The importance of these collections, not only the activity of acquiring them, is reflected in the enormous numbers that were gathered and maintained by private individuals. The importance of collections is also testified by some home movies which document the shells and corals displays at home, away from the Reef. One in particular devotes almost as much screening time to the ordered collection of shells as it does to footage of the Reef (Hall 1945). In this film scenes of the Reef are interspersed with images of the collected specimens. There are literally thousands of shells shown. They are displayed according to a classificatory system and laid out in patterns: alternating species in concentric circles around a large central shell; others in rows, some in clusters, some arranged in fanning shapes. The care and patterning is deliberate and considered for size, colour and pattern. The footage also shows close ups of particular parts of the display: polished trochus, cowries in multiple rows of colour and size. The film makes the collection seem endless. The product of the collecting is obviously as important as the activity itself. The same film also shows shells that have been modified into various items of use or decoration. A baler shell is shown as both a foot rest and a vase. This use of coral and shell was identified as a potentially significant industry by Saville-Kent who said that:

The directions in which their artistic adaptations of Nature's products can be developed is almost unlimited, and to anyone possessing a suitable collection of shells the suggestion may prove acceptable.

(Saville-Kent 1893: 66).

However, the decorative use of these shells appears to have been secondary to the collections themselves and most shells remained unmodified even though carefully curated. As suggested, collections and collecting imitated scientific activity, and made the Reef more accessible through the provision of continuous contact with the original. As such collections also played an important part in communicating aspects of the Reef to other people, and were used in the promotion of the region as a tourist destination.

The data collected from the study of the fauna, flora, and marine life will be used by members of the expedition for the purpose of lectures with the idea of turning the attention of tourists to the wonderful possibilities of a holiday in this region.

(Daily Mail 1932: 23 December)

While shell collecting is a recognised and widely practiced hobby, it also performs particular functions in relation to understanding the Reef. In the absence of diving equipment and other direct underwater access, or even the limited access provided by the waterscope, shell and coral collections enabled visitors to get a closer view of corals and shells than was otherwise possible. This enabled a close-up view of the underwater world that is so significant in Reef experiences. A number of large collections were therefore displayed on Reef islands, and some of these survive today.

Uncle Tom, a genuine Embury Uncle — Tom Scott originally from Gundagai. He was a Chef by profession, for many years employed in Dining Rooms on Sydney Central Station. He acted as our chief Chef for some years, then later returned to Hayman, establishing himself in one of the huts which he nameplated 'Uncle Tom's Cabin'. Tom had an extensive collection of Reef Shells which he obtained chiefly from the Island crews of the Japanese fishing luggers which occasionally called at Hayman.

(Embury 1981: 1-2)

It is interesting that although collecting was itself embodied and emplaced, some elements of the large public displays of shells were not local to the area or even from the Reef itself. Similarly, the shell collection of George Sax on South Molle which was very impressive comprised both local and exotic shells. An article written during the 1950s said that “his shell collection, [was] one of the finest in Australia” (Lane 1957), and elaborates further to give a sense of the scale and intensity of collecting:

The shells have come from all over the world, but particularly from the Barrier Reef area. Over a beer in the island bar George mentioned them, and, when I showed interest, he took me off to the old cottage and showed me the wooden trays and boxes, stacked ceiling high, which house his collection temporarily. It took us four hours to look through the collection; and for the most part it was a fairly quick look.

...
In the eight years of collecting, George Sax has accumulated what he roughly estimates as 20,000 shells of 3,500 species. He did not gather them all himself, but has trawler crews and fishermen all over Australia and the islands looking out for him. He also exchanges shells with collectors and museums in twenty-five different countries, including India, South Africa, Persia, Canada, U.S.A., Brazil, Hawaii, England, Spain, Mauritius, Mexico and several central American countries. Before being mailed overseas, the shells have to be cleaned up and polished. Then they are carefully packed in newspaper inside boxes and sent duty-free, labelled as museum specimens of no commercial value.

After collecting the shells, George gets rid of the animal inside, then uses a caustic soda bath to clear off the limey skin. Hydrochloric acid and water bring out the natural colour and lustre. Some of the shells are gloriously coloured, in bright pinks, oranges, yellows, even tartans. The patterns could give inspiration to many fabric designers in search of a contemporary line. When on display, the shells will be, as many of them are now, scientifically grouped on trays lined with cotton wool or velvet.

(Lane 1957: 36-7)

Significantly, in 2001 a portion of George Sax's collection was still on show at South Molle Island Resort in an original display case. The impact of such extensive collecting both by individual collectors and the number of tourists taking their own specimens raised conservation issues early in the Reef's history.

Beautiful and rare corals and shells are disappearing from the more accessible parts of the Great Barrier Reef owing to looting by visitors.

In the interests of science this must be checked, declares Mr. F.A. McNeill, zoologist at the Australian Museum, just returned from the reef with the Embury expedition.

(The Sun 1932b: 31 January)

Coral is protected over the whole length of the reefs and if it is desired to collect, it is necessary to obtain a permit. All marine life associated with Heron and Wistari reefs is protected and permits are necessary for collecting. There is no difficulty in bona fide research workers obtaining permits.

... of recent years there has been much collecting, especially of mollusca, from reefs for sale to collectors and some reefs including Low Isles have been virtually swept clean. For this reason, it would be better, if possible, to arrange any collecting to be done from "outer" reefs. We are considering ways and means of trying to control collecting for commercial purposes, but it is a very difficult matter in so large an uninhabited area.

(Prime Minister's Department 1966: 24 May)

This was also one of the concerns of the advocates of a Great Barrier Reef marine park (Wright 1977). The controls on collecting and fossicking, to the extent that they are deemed 'looting', have increased to the point where it is almost impossible for amateur collectors to engage in this kind of activity. Visitors are warned of penalties for removing even fragments of dead coral washed up on the shoreline.

Aquariums are a more elaborate form of collecting and these have increasingly replaced coral and shell displays as part of education and promotion of the Reef. However, in the first decades of the last century, the technological challenges meant that most fish died in transport or after a short time in a tank, and it has only been relatively recently that collections of living organisms have been successfully transported and maintained. And aquariums continue to be plagued by problems such as keeping hard corals alive (Michalek-Wagner 2002). Aquariums also tend to be professionally established, and fish for small home tanks are stocked with fish from breeders and retail suppliers rather than visitors' own collections.

Transmission of Experience

The capacity of these different words, images and objects to represent and transmit knowledge varies in relation to the types of experiences and the available technology. It is visual aspects of the Reef that are most easily reproduced, and as mentioned, this is a reflection of the visual bias in human senses and in modern developed societies. This itself has led to a focus in invention and creativity in mimetic technologies on the capture of visual attributes and, to a lesser extent, sound. However, these technologies have not always been as capacious as they are now. Their limitations in the past meant that other forms of capture were used to reflect human experiences. While limitations still exist these are diminishing particularly in relation to visual capture. As visual reproduction improves and becomes increasingly affordable, other means of recording sensations and experiences are marginalised. Consequently less attention is given to these other means of recording, and the senses that are non-visual, and which may have been recorded in earlier periods, are disregarded. In this way visually reproductive technologies effectively shape and focus visitor experiences towards visual amenity.

The Panoramic View

Through photographs visitors have tried to capture many of their Reef experiences. Most striking in the earliest images are the panoramas and other scenic photographs of the islands and seas (Plates 1, 4 and 44). In the absence of underwater cameras, photography was restricted to island, land and seascapes. The view from hills and other raised vantage points was an important experience (Chapter 4). As such visitors wished to capture it in their mementos, and Crosbie Morrison thus wrote of Whitehaven Bay:

The view along this sound is magnificent, and in the morning I intend to take a panorama of it.

(Morrison 1925b: Monday, 27 July)

Views of islands and panoramas are still important, particularly as depicted in promotional materials and postcards. Satellite and aerial photography achieves many of these scenic vistas. However these aerial scenes are less likely to be experienced in person by tourists. Rather, the images are produced by unknown photographers and as a result the panorama is experienced in the same way by visitors and distant populations alike (Pocock In press).



Plate 44: Tyron Island, a coral cay

Otto Webb c. 1932 © Mitchell Library, State Library of New South Wales

The Underwater World

The underwater world was particularly difficult to capture and represent at the beginning of the twentieth century. Underwater access was difficult to achieve in person as will be discussed in Chapter 9, and capturing these fleeting experiences on film was particularly challenging. While visitors could view the underwater world on the exposed reef, through clear still water or through a waterscope, it was difficult to photograph these experiences from the surface.

By dint of diving we managed to get up a couple of pieces of coral, but the reef was not one of the most beautiful of the Barrier. Still, it was a sight I shall never forget to look down through a water glass and see the glorious colours, and to find sudden deep holes full of beautiful fish. I tried to take some snaps, but fear they will be very poor indeed.

(Morrison 1925d: 14 November)

Many early images of the Reef were taken at very particular times of day and in particular weather conditions. Saville-Kent's (1893) *The Great Barrier Reef* is probably best known for its exquisite photographic plates. Love (2000: 103) comments that his photographs capture the Reef "at exceptional moments of low tide and dead-calm weather" and that "[f]ew visitors see the reef like this". She goes on to say that:

As a scientist Saville-Kent was well aware that the flip side of reef beauty on the windward side of the reef, the conditions under which corals grow at their best, was large bare patches of reef rubble on the leeward side, the conditions under which dead coral helps build coral islands. As photographer he framed beauty in such a way that it proved – not deceptive, exactly – but scientifically misleading.

(Love 2000: 103-4).

Love says that this produced a photography that was realer than real, and hence suggests that Saville-Kent was in fact one of the earliest travellers in hyper-reality. This seems a bold assertion given that the technological constraints of photography required such perfect conditions. However, the confusion between the real and reproduced Reef may well have developed from the way in which others have viewed the images of Saville-Kent and other photographers (Chapter 9).

Without such careful framing, photographs were either blurred because of movement on the water surface or because of the movement of living creatures. Alternatively marine forms were photographed out of water. For many this spelt doom.

Mr. F.A. McNeill, of the Sydney Museum, captured several excellent specimens, some of which have been preserved in spirits. Others are still more or less enjoying life in a tank on the vessel, not to mention a thorny sea-urchin who presides over a little domain all his own. Some of the fish died on the trip down the coast, but Mr. McNeill is living in hopes of getting some of the specimens to the museum.

(*The Telegraph* 1933a: 20 January)

In the absence of underwater cameras or film that could respond to movement many early photographs depict marine animals that are already dead. This was a necessity in without cameras that to penetrate the water surface. Furthermore, film speed was incapable of capturing living specimens. This is especially true of many of the reef fishes that rarely stay still and which are better viewed from side-on. As a result creatures were often killed in order to be photographed. So while we now associate photography with less invasive souveniring, this was not necessarily the case in the past. For example, a photograph in *The Sun* (1932a: 15 November) was captioned “Here is something which the camera brought to Sydney from the advance party of the Embury Expedition, on Haymen [*sic*] Island, Great Barrier Reef”. The image, however, is of a fish that is quite clearly dead. And dead prey was often the focus of photographs, and motion film. Many of the early films viewed for this project show animals taken out of their habitat in order to be captured by the camera.

Then the boy got a three foot six shark, and there was no more fishing that night from the boat. Soon after Stanley took a female, slightly longer. Both played well in the water and were shot when they came to the surface. We left them aside to photograph in the morning.

(Morrison 1925b: 28 July)

Although I did not locate the particular images alluded to in this paragraph, there are many other images that show tourists with dead sharks. This includes a group of women who bounce up and down on a dead shark in the film of the Embury expedition (O'Sullivan 1929).

The development of underwater cameras was therefore a significant breakthrough. It was also one that preceded diving as a popular activity. Consequently the first underwater images were in many instances the first time people had ever viewed the Reef from this perspective. An early Embury brochure used one such image – the caption indicating its significance: “This study was made through ten feet of water” (Manilla Newspaper Co. 1932). This and other underwater images were captured early by the experiments of Arch Embury and Mel Ward.

The Scientists came mainly from the Australian Museum. They included Frank McNeill, Bill Boardman, Joyce Allen (Museum Artist), Melbourne Ward. Mel Ward was deeply involved with the Scientific side of the Expeditions.... On one occasion Mel, Mont and I carried out some of the earliest Australian attempts at Underwater Photography. Mel intended going on a Lecture Tour in America and required underwater Reef Pool shots for his slide series. I got together what was one of the earliest underwater cameras by building a plate glass fronted case, inside which my camera was fitted with lens pointing through the glass front. Our method of operation had Mel swimming around the bottom of a pool probing amongst the rocks with his prospectors pick & on one occasion wrestling with a turtle! I leaned out over the pool, poked the glass front of the case under the surface and worked the shutter, while Mont's job was to hang back onto a strap around my waist to prevent me going headfirst into the pool with Mel. We got quite a good series of pictures.

(Embury 1981: 3)

This innovation was a success and reported quite widely in the press, along with a number of the reproduced photographs. One was captioned as follows:

Amazing photograph taken with special camera through a depth of several feet of water. Mr. Mel Ward, of the Australian Museum, wearing special water goggles which enable one to view clearly the wealth of life in the coral pools.

(*The World* 1932a: 17 October)

This image of Mel Ward in shorts with a belt, gaiters, no shirt and geopick in hand was a significant breakthrough. Even though it is slightly blurred and it is more a picture of Ward than of the Reef, it was reproduced several times in different journals, and an original print (Plate 45) remains in the collection of photographs at the Mitchell Library (Embury Bros. 1930). Nevertheless underwater cameras did not become commonplace for some time and other photographic developments that enhanced the reproduction of the Reef were equally important.



Plate 45: Early underwater photograph showing Mel Ward underwater c. 1932

Arch Embury c. 1932 © Mitchell Library, State Library of New South Wales

Motion film was an exciting development and is well documented by Reef visitors. Crosbie Morrison wrote to his parents from Cairns that:

Some Cinema men took a photo of us starting off from Alligator Creek, and this will probably be shown in Melbourne at the end of October. However, if you can arrange a time, you can have a private view of it at the film Censor's office....

(Morrison 1925c: 28 August)

Many of the early films analysed for this research focus on the movement of various creatures. Animals are prodded to elicit movement of an otherwise inactive creature. Similarly living shells that are otherwise seen lined up in static displays are positioned out of water or upside down so that the creatures will emerge from their shells to move and expose themselves. The importance is not only on the animal movements but also the capacity of technology to capture it.

Similarly, the colours of the underwater Reef which were so important in visitor experiences could not be captured in photographs until the development of effective colour emulsions. The brilliant, if not lurid, colours for which the Reef is known are now taken as synonymous with Reef images. However, in the early period of Reef

tourism people would have had no notion of the colours of the Reef except through direct experience. Photographs of the Reef and its islands were in black and white, and the colours of the underwater world difficult to communicate. In spite of people's apparent capacity for writing copiously and speaking frequently about the Reef and its loveliness, many suggest that what they have seen is beyond words. In writing of the living corals in the 1930s, Mel Ward said that the "colours are elusive and frequently indefinable" (Ward n.d.). Similarly, in her reminiscence of a Reef holiday, Hilda Marks stated that "[n]o words can describe what we saw" (Marks 1933: 14). The Reef is thus described as indescribable as indicated in the following (and see Chapter 6):

"I shall never again have any hesitation in applying to coral the most lavish description that I can conceive," declares Mr. F.A. McNeil [sic], zoologist at the Australian Museum. "Its caverns, caves, and gardens are beautiful beyond the power of words".

(Wigmore 1933a: 21 January)

Great brilliantly-coloured fish were the components of a picture which Mr. McNeill said was beyond his power to describe.

(*The Sydney Morning Herald* 1933: 4 February)

I won't try and describe these colours. I couldn't. You wouldn't believe me if I could. I'll say a cubist artist in the throws of a nightmare never splashed paint more recklessly than did Mother Nature when on her loving job of adorning the Passage.

(Rechner 1948)

It was here that the best-dressed fish apparently held their gayest fashion parades. The fish were innumerable and most of them, indescribable.

(*The Telegraph* 1933a: 20 January)

The colours and forms of the underwater corals and shells could be reproduced and imparted through collections as already discussed. This gave people a sense of the diversity of form, textures, size and density of marine life. It also gave some sense of colour.

Miss Chase is demonstrator and lecturer in zoology at Sydney University. The wealth of animal life on North-West Island kept her fully occupied, especially that which abounds on the coral reefs. At low tide collecting claimed most of her attention, and many rare and beautiful specimens found their way into her collecting-bag. At high tide most of her time was taken up with preserving and fixing the form and color [sic] in the organisms collected.

(Gilbert 1926: 5 January)

While colour could be fixed for shells in this way, this was not the case for corals. Although coral collections were important because of the capacity to bring texture and tactility to visual representations of the Reef, they could not represent the colours for which underwater life was renowned. The colour of coral is largely produced from the living polyps of living hard corals, and when taken from the water these animals quickly die. Consequently coral loses its colour out of water, and bleached white specimens were hand painted to recreate the colours visible underwater. The capacity to reflect the original is such that the painted versions are described with almost as much care as the living Reef:

In Bowen there are several collections of coral formations coloured in semblance of their gorgeous natural hues. In the Bowen School of Arts' display are included orange and lilac, mauve with white centre, white flowering coral with pale green heart, buff and blue branching coral, and specimens of pink with yellow tips, and white blushing to rose pink.

(Queensland Government Tourist Bureau c. 1930)

Prior to the development of colour emulsion, film and photographs were incapable of producing the colours of the Reef. Narration accompanying film points to this limitation and written text with black and white photographs describe as best as possible that which was unable to be reproduced.

Here is a garden of coral. The picture does not record the wonderful colours of this most marvellous coral growth.

(Anonymous 1930)

Early colour reproductions in the form of hand tinted photographs and postcards are pale and subtle in comparison with the photographic images of today (Plates 46 and 47). The earliest published multi-coloured photograph I have located is from the front cover of *Life* magazine in 1933. This is a hand tinted image of four men at the prow of a boat looking over blue seas, an island on the horizon (Purcell 1933: 14 October). The colours in this image are fairly muted in comparison with present day photographic images of the Reef waters and islands. The reproduction of colour has therefore been elusive for a large part of the twentieth century, in spite of the development of some forms of colour photography.

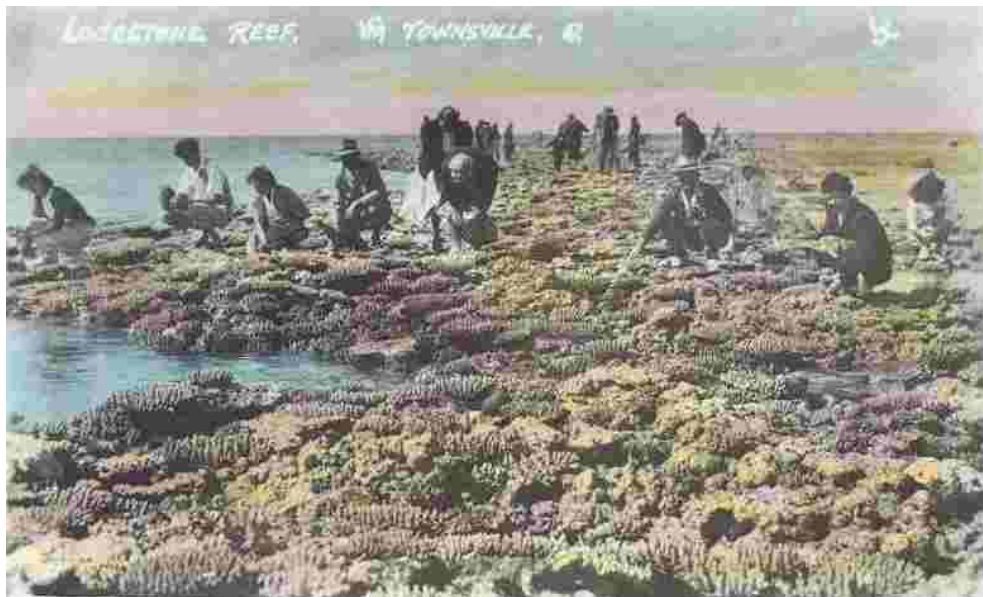


Plate 46: Hand coloured postcard of Lodestone Reef, c.1920

© National Museum of Australia



Plate 47: Hand tinted photograph of corals from surface

Frank Hurley © National Library of Australia (23252095)

It is still very difficult to reproduce brilliant underwater colours photographically without sophisticated lighting and other equipment. Colourful painted coral displays were therefore used quite widely until relatively recently. In writing to the Commonwealth Government in support of her own skill in recreating the colours of

living forms, coral artist Shirley Keong provided colour slides of her own work (Plate 48) and stressed that:

[O]verseas displays of coral should not be of the “icing sugar” colourings, that have been sent in past years, (to me it has been the worst form of false advertising in relation to one of the worlds [sic] Greatest Wonders).
(Keong 1965: 20 December)

However, by the end of the century full colour images enhanced by filters and night diving equipment as well as fully immersible and moving cameras have brought a brilliantly coloured and moving world to the surface.



Plate 48: Colourfully painted coral display by Shirley Keong, 1965

© National Archives of Australia (A463/50)

Multi-Sensuous Reef

The Great Barrier Reef and its highly regarded visual aesthetics are closely linked with the role of the camera and the purposes to which it has been put. Photographs provide a means by which people can acquire knowledge and experience (Sontag 1973: 155-6). The development of new types of technology made new forms of knowledge available and shaped peoples' experiences of the Reef. In the early twentieth century, photographs were still, black and white images taken from above the water surface. Technological development of underwater cameras, colour film emulsions, motion film

and macroscopic lenses gave people access to new experiences and impacted directly on how people perceived the Reef. Before colour photography was available, people had to experience the colours of the Reef themselves or not at all. Improvements in photographic technology, particularly the advent and improvement of colour film and underwater cameras, have focused aesthetic appreciation of the Reef on particular visual qualities. A conservation ethos has similarly turned visitor attention to the visual. These shifts have come at the expense of other sensory experiences that contribute to a sense of place, as outlined earlier.

The importance of contact is central in the effectiveness of any captured form. It is an element of writing produced, collections made and photographs taken within the Reef landscapes. Those activities that provide a physical link in the development of place knowledge and which maintain a sensual connection beyond the personal interaction are of great importance. Haptic experiences of Reef life have been severely diminished with the decline of fossicking and collecting. While there are new forms of haptic experiences through diving and snorkelling technologies, these are only partially reproduced through visual technologies.

Aquariums have developed ‘touch pools’ and other means of facilitating a multi-sensual experience through copies of the Reef. However, like shells and corals that can be purchased as souvenirs, they do not hold the particular and personal associations that collections acquired through emplaced and embodied activities do. Hence they are unable to recreate the sense of exploration and discovery that is expressed as delight and surprise in many of the early encounters with the Reef. Both collections of dead and living Reef creatures are now divorced from the embodied experiences of the Reef itself, and souvenir shops and aquariums both tout objects that could be from any tropical waters. This is illustrated by the observation that images of reef creatures used to represent the Great Barrier Reef often depict species that are native to other regions of the world but which are not found on the Reef itself (David Williams, Deputy Chief Executive Officer – Research, CRC Reef, pers. comm.).

The use of generic and generalised tropical fishes reflects the lack of connection between these forms of representation and the original. Aquariums are not always constructed in this way, but without a definitive connection between Reef creatures and

those placed in an aquarium the contact which is so central to capture is lost. In this sense aquariums do not represent a form of personal capture as photographs, writing and shell and coral collections do. Instead the loss of contact suggests a shift to the hyper-real because the connection with the original or 'real' is no longer relevant to the experience.

Part of the success of photography is its capacity to maintain this sense of contact between the original and the copy (Taussig 1993: 21-3) and this is an integral element of any successful capture. Many senses are unable to be captured in secondary forms of representation, and there is an ever increasing focus on visual qualities in forms of capture and the way in which distant people imagine and recall visited and unvisited landscapes. In spite of this limitation, new technologies have enabled the visual experience to be enhanced through sound, colour, greater access to different environmental conditions such as the underwater, as well as rapid motion and low light levels. Movement, words and colour are all ultimately combined in film, and have the capacity to create multidimensional views of the same phenomenon. The interrelationship between senses discussed in the previous chapter is also able to be evoked through contemporary filmic techniques. The Reef is thus able to be photographically portrayed in more complex ways. However, it is also subject to more deliberate manipulation through digital technologies.

People's efforts to tell the story of Reef experiences have required more than words. In seeking to maintain and transmit these experiences to others, visitors have resorted to taking souvenirs or, more particularly, items that were once part of or in close contact with the Reef. This has taken the most physical or tangible form through collecting and fossicking. These activities simultaneously replicate the activities of legitimate researchers – or people with rights to the Reef, and provide visitors with a tangible part of the Reef. This provides the link between the original and the copy that is so significant in maintaining a relationship and a sense of control over the original (Taussig 1993). As restrictions have been placed on these activities, and through the limitations of such collections, other means of taking the Reef home have developed. This has two principal forms; aquaria and photographs. These emphasise the visual through the panorama and the underwater world and have displaced other sensuous experiences of the Reef, as I will elaborate in Part 3. Capture of the Reef has become

increasingly sophisticated but the success of the new technologies privileges particular sensory experiences – notably visual ones – at the expense of others. The emphasis on visual qualities is an upward spiral in which the development of new technologies reflects a bias towards visual amenity, and in recording and furthering these visual experiences, visual dominance continues to grow.

The way in which capture has changed during the twentieth century suggests that the element of contact that links the original and the copies has been diminished. To this extent copies no longer represent the original, but instead make reference to the sign. As such copies of the Great Barrier Reef no longer represent a place, but rather captures a generalised image of a ‘tropical reef’ that is reminiscent of the hyper-real (cf. Eco 1986).

Part 3

Constructions

The previous three chapters presented a compilation of data that show how the Reef has been experienced by visitors. This includes knowledge built through navigation, strategic control, geographic location, sensuous engagement and through various forms of capture. In this third section of the thesis this material is drawn together to illustrate how the region has been constructed as a land and seascape that is understood by visitors within particular paradigms. It investigates constructions of the Great Barrier Reef that have particular currency within the tourism industry; namely the paradise islands, coral gardens of the underwater world; and the concept of a single Great Barrier Reef.

The previous chapters have shown that the Reef is not only experienced as submerged corals, fishes and other living organisms of the underwater sphere, but that the islands, cays and other land masses and associated flora and fauna are an integral part of visitor experiences of the region. This chapter explores how visitor experience and knowledge of the islands have changed over time and how their knowledge of place has accordingly changed. The ideal of a paradise on earth has been particularly influential in achieving the physical changes to island environments. The changes are such that landscapes are no longer perceived as quintessentially Australian but rather as ones that are generic and displaced. This transformation is suggested and confirmed by the range of visual and textual materials referred to in Part 2. These illustrate how a place regarded by many as being an “Australian icon” has become a place where visitors rarely enjoy an Australian experience. And in the next chapter I consider how the construction of the underwater world parallels and complements the island paradise.

I have argued elsewhere that management of the heritage values of the Reef is focused on particular visual aesthetic qualities, and that this has displaced some elements in the landscapes experienced by visitors (Pocock 2002c). This chapter explores how the failure to recognise and manage these attributes has led to the transformation of the physical environment.

Through an analysis of this material, I have constructed a representation of the Reef as it has been seen by visitors and portrayed by tourism industries in different eras. The data suggest how representations and experiences of the Reef have changed over time. One of the most significant changes is the physical presentation made to visitors. As we have seen in the preceding chapters tourist interactions with the environments of the Reef have been diminished through changes in technology and facilities. These changes in experience are also a result of significant changes to the physical environments in which

visitors find themselves. I pay particular attention to those indicators of ‘Australianness’ that are outlined in my methods and which help to address my aims.

Australian Landscapes of the Great Barrier Reef

Australian native vegetation thrives on most of the islands of the Great Barrier Reef and it is managed and maintained as part of the World Heritage Area. The vegetation, particularly of the continental islands of the Whitsundays, shares many characteristics with the bush of the adjacent Australian mainland. However, the areas frequented by visitors are vastly modified. Tourism activity is heavily focused in the coastal and offshore areas of Cairns and the Whitsundays with ninety-five percent of tourism activity focused in just five percent of the Marine Park (Wachenfeld, *et al.* 1998: 93). Within these areas the vegetation has been significantly altered. The central tourist destinations are well serviced by a range of hotels and resorts and while native vegetation persists in close proximity, and even within view of major resorts, the majority of visitors stay in accommodation surrounded by highly manicured gardens. These gardens contain a variety of exotic plants such as coconut and other introduced palms, hibiscus and frangipani that are not characteristically Australian. Rather they are characteristic of created tropical gardens. As a result contemporary visitors are buffered against the surrounding environment that is more distinctive of its Australian location.



Plate 49: Camp on the edge North West Island c. 1928

Mel Ward © Australian Museum (230/87)

In contrast, the earliest visitor accommodation on the Great Barrier Reef comprised canvas tents pitched on the water's edge, among trees of the islands as is seen in Plates 5-9 and 49. Communal facilities and laboratories were makeshift structures often simply using the shelter of larger trees (Plates 6-50). And as discussed in the previous chapters visitors were exposed to a range of sensory experiences, including those produced through interactions with native vegetation. In this historic period visitors spent longer at particular locations, and travelled to more places on the Reef than they usually do today. Their experiences of particular Reef locations and of their relationship to each other were therefore more intense. People were subject to a greater range of sensations than contemporary visitors, and while many of these were uncomfortable or even dangerous, they provided the backdrop against which the Reef itself was celebrated. It even seems that the adversity heightened the pleasures of their experiences. While accounts are full of somewhat predictable rapture about life on the Reef, other aspects of the environment made deep and lasting impressions on visitors. In particular, the landscapes and environs of the Reef islands were an integral part of their experiences.



Plate 50: Dene Fry working in an outdoor laboratory on Masthead Island 1910

Dene Fry © Mitchell Library, State Library of New South Wales

My analysis of photographs from the early part of the twentieth century suggests that the vegetation in areas frequented by Reef visitors was distinctly Australian. Many of the photographs are quite small and indistinct. In spite of this, the vegetation is still visibly unmodified and ‘Australian’ in character. Other photographs show the island vegetation more clearly, and it is apparent that pandanus, eucalypts, hoop pines, she-oaks, tournefortia and pisonia trees were prolific. These species surrounded camps where visitors slept, ate and entertained themselves. It also covered much of the islands where visitors went walking, bird-watching or where they climbed to the summit of hills to look at a panoramic view.



Plate 51: Commonwealth Government promotional image for Heron Island used Pandanus, a native species, to frame the visitor experience.

ANTA © National Archives of Australia (M914/1, 5566) c. 1950

Within this rich range of sensory experiences the sound of she-oaks was highlighted as an integral and evocative element of the Reef islands (Pocock 2002c). The environment also offered a distinctive visual outlook. Some written accounts refer to the visual attributes of the native vegetation, but it is the photographs that really bear witness to its abundance and predominance in the landscape. Photographic images capture, both deliberately and incidentally, the dominance of the bush setting. Their forms are used to

frame photographs and lend texture and shape to black and white images. Photographers make use of the pandanus or screw palms to lend their striking silhouettes to black and white photographs of Reef twilight, and she-oaks add delicate fringes to the edges of images. This use of native species in promotional images lasted well into the second part of the twentieth century (Plates 51 and 52). She-oaks are also incidentally captured in photographs of outdoor science laboratories and other Reef localities. Their branches peek around the edges of tents and are scattered on the ground and among coral compositions (Plates 50 and 53). The analysis of historic photographs indicates that the Australian bush was predominant in the landscapes that tourists visited, and was thus integral to Reef experiences. It was also an unavoidable element in the presentation of the Reef to people who had never been there.



Plate 52: Casuarina branches soften the edges of black and white promotional images of Reef islands c. 1950

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Prior to visiting the Great Barrier Reef themselves, people had access to photographs through magazines, newspapers and private collections as discussed in Chapter 7. However, the number of images was in fact quite small. Photographic technology was not as prolific as it is today, and so the same photographs were recycled in a number of

formats and contexts as I have already pointed out. For instance the two images in Plates 32 and 33 were originally taken in 1910 when they became part of Dene Fry's personal photograph album. The same images were subsequently reproduced in association with a *National Geographic* article by Charles Barrett (1930). Furthermore, the limitations of photography, particularly its inability to represent colour or underwater life, meant that publicly available images were black and white stills taken from above the water surface. The vast majority of which are (is)landscapes in which native vegetation is prevalent.



Plate 53: Coral composition set among casuarina branches on Masthead Island, 1910

Dene Fry © Mitchell Library, State Library of New South Wales

The photographs used in advertising brochures were likewise black and white images characterised by the Australian bush. While advertising and other promotion also used drawings and posters that allowed the inclusion of more stylised elements, photography was a particularly important means by which the Reef was captured as discussed in the previous chapter. For early twentieth century visitors, the majority of whom were Australian, the bush landscapes of the Reef were not particularly distinct and on his train journey from Victoria to Queensland, Crosbie Morrision made the following notes in his diary:

General scenery very similar to Victoria—main bush is Eucalypt—mainly Maculata and Corynocalyx, with later a number of fine specimens of E. Alba [sic].

(Morrison 1925b: 20 May)

His diary entry for the next day is as follows:

At Mackay The Pioneer River is crossed, and the country settles down to become fairly uninteresting. The only features of interest are Canefields and a pineapple field. Pandanus continues to be a feature of the Creek beds, and in two cases beautiful slender palms in flower were seen.

(Morrison 1925b: 21 May)

His interest is clearly in those elements of the landscape that in some way represent the tropics. In writing to his family he summarises some of these observations and makes additional comments on the vegetation:

[The vegetation is] *very similar to that of Victoria because of the gum trees which form the forest tree from Tasmania to Cape [York].*

[From Rockhampton] *the tropical flora starts, since Rockhampton is actually in the tropics. In all Creek beds are found a curious branching palm – the screw pine or Pandanus, – called by the natives Bread fruit – although it is not at all like the true bread fruit from the South Sea Islands. Another botanical curiosity – a tree-fern-like thing called Cycads – is also found along the line, together with grass trees very similar to those on Kangaroo Island.*

(Morrison 1925c: undated)

An element that is noticeable in Morrison's interpretation of the landscape is that the vegetation that is similar to elsewhere in Australia is not as interesting as the more exotic and clearly tropical elements. He therefore pays particular regard to sugar cane, pineapple, palms and pandanus or breadfruit, noting that the latter is not authentic. This points to an interesting paradox. Pandanus trees are native, and thus arguably authentic within Australian landscapes, but they are not a true form of breadfruit and are thus only substitute symbols of the South Pacific. Even though Morrison was a scientist, he was seeking something exotic. To this extent he was a holidaymaker like many others and his desires and motivations appear to agree with Urry's (1990) theory that tourists seek a view that is different to the everyday. However, it is clear that the 'different view' that Morrison sought was one that he conceptualised prior to travelling to the Australian tropics. There is no suggestion that what he is seeking will be truly surprising, only that it will fulfil a preconceived idea of a tropical location. At the same time, however, the view that Morrison wanted to see, was not that of the Australian bush.

Australian Bush as the Everyday

As an iconographic landscape of attachment, the Australian bush is most typically portrayed as harsh, dry, inland rural country. It may at first seem that the bush is not necessarily an everyday experience for Australians because Australia is one of the most urbanised countries in the world and the majority of its residents live in urban areas on the coastal fringe of the continent. History has also shown that colonial Australians have systematically replaced the Australian bush with cultivated plants from Europe to reduce their sense of alienation in the Australian landscape (Franklin 1996: 39-56). However, the importance of the Australian bush in the construction of Australian national identity has been articulated by researchers from a variety of disciplines, including historians, philosophers and anthropologists (see, for example, White 1981; Kapferer 1988; Schaffer 1989; McGrath 1991; Spillman 1997). As this environment became more familiar, and nationalism strengthened, elements of the native landscape were subsequently protected, enhanced and reintroduced and now persist as valued elements in many urban areas of Australia. The bush also remains a place where urban Australians go to reinforce their identity (Knowles 1997).

In spite of inconsistencies between how people live and what they value, the bush remains a strong symbol in constructions of Australian identity. McGrath (1991: 114) has suggested that critiques of the bush legend have given a misplaced emphasis to finding realism in the myth, rather than paying attention to ideological purpose. The continuing role of the bush myth in Australian ideology is certainly suggested by its use in important national events, notably the Opening Ceremony of the 2000 Olympic Games in Sydney. The bush played an integral part of the symbolic presentation of Australia to the world at this event. As in academic discourse, the validity of bush imagery to portray Australia was discussed widely by the media, and is neatly encapsulated in the first of a four part television series, *Selling Australia*, screened by the Australian Broadcasting Corporation in 2001 (ABC Television 2001). However, Judith Kapferer (1996: 52) has argued that discussions that seek to undermine Australian myth-making do little to change the way in which Australians see themselves

and the bush thus continues to play a powerful role in the portrayal of Australia and its people.

The bush myth is also an important aspect of marketing Australia as a tourist destination. Rowe (1998: 76-7) has argued that it is easier to use Australian 'nature' as a unique signifier of an Australian tourist destination than any built or cultural element. In spite of an awareness in intellectual and public discourse that the bush image is a construct, Australians' own conceptions, and the perceptions of other nations, is that this is Australia. The bush continues to hold a central place in how communities in Australia assert themselves, and how they are perceived by others. Although the bush of popular mythology is not part of the everyday experience for most Australians, it is the imaginative norm.

In Pursuit of Paradise

So Crosbie Morrison, *en route* to the Reef, sought an experience that contrasted with the everyday bush of the Australian landscape. My analysis of sources suggests that the physical context of Reef experiences was transformed during the twentieth century in an effort to meet this expectation.

The potential for tourism to make an important contribution to the Australian economy was recognised in the late 1920s and the Australian National Travel Association was established in 1929 (Chapter 2). Attention was focused on the most lucrative overseas markets and those with the potential to attract desirable immigrants. The United States of America was a particular target (Prime Minister's Department 1927). In seeking to promote the Reef to these markets the travel industry considered the existing facilities deficient for the establishment and maintenance of a larger tourism enterprise. In particular, the standard of accommodation and activities at island locations, and the supporting transport infrastructure, were judged to be inadequate for American tourists. Several tourism reports made strong recommendations for change (see for example Queensland Tourist Development Board 1947; Department of the Interior 1957), and during the following decades a series of alterations occurred within resorts.

A major impetus behind the nature of these changes is seen in the European idealisation of tropical islands. Western European fascination with the tropics has its origins in a search for the Garden of Eden, and in both medieval Europe and Arabia the creation of botanical gardens was a way of recreating an earthly paradise (Grove 1995: 21-4). During the ensuing centuries the need to maintain and exploit an increasing demand for resources took colonists to lands characterised by unfamiliar animals and plants. Colonial economic interests combined with the growing curiosity in scientific explanation made exotic lands even more attractive. Nowhere seemed more abundant in life than the tropical regions, and so they came to represent an actualisation of the idealised garden (Smith 1992; Grove 1995; Sheller 2001). The islands of the tropics drew particular attention because they served as self-contained units in which Europeans could more clearly delineate their observations of natural processes (Grove 1995). Sheller (2001) has argued that this taxonomic and spatial ordering initiated new ways of conceiving the landscape. The ways in which these new visions of landscape became standardised and imposed on other colonial landscapes is well documented (see, for example Ryan 1996).

Parallel with the utilitarian interest in the environments of the tropics, is a deeper psychological interest in islands. Along with the expansion in colonialism was a desire to find paradise. Social discontent in Europe encouraged people to imagine a Utopia, free of the burdens of their societies, and the tropical islands described by explorers seemed to offer the social refuge that people wished for. These islands became a rich source of material for popular literature in Europe, particularly in France from the 1600s, and so the tropical island fantasy became entrenched through fictional works like *Robinson Crusoe* and *Treasure Island* (Grove 1995; Sheller 2001). These works influenced popular thought about exploration, and most importantly shaped the colonial nature of tourism. *Robinson Crusoe* also experienced a resurgence in the late nineteenth century and was influential in a time that saw a shift in landscape preference from the cultivated to the romantic and wild. Sheller (2001) has argued that this influenced the conception of the tropical landscapes, particularly those of the Caribbean, as a natural Eden even though the landscapes had been vastly modified by human use.

It was the reports from Tahiti that most particularly captured the European imagination, rather than the lives of Australian Aboriginal people or Patagonians who were perceived

as leading much harsher lives. The Australian continent was, of course, also the subject of European colonial exploration but it is the harshness of this continent that is highlighted most frequently in accounts of the period (White 1981: 11-14). In contrast with descriptions of the Pacific, Australian indigenous peoples and the environment, flora and fauna of the continent are often described in derogatory terms. Accounts of the time seem to emphasise the lack of water and infertility of Australian soils. There is a particular focus on dangers and 'weirdness' that stems back to a time before the continent had been 'discovered' by Europeans (Langton 1996; Ryan 1996: 105-11). Although Ryan has argued that the inverted world of the antipodes placed Australia in a pre-existing paradigm, it was not one in which the perfection of the Garden of Eden is recognised. Rather it placed the Australian continent firmly at the extreme edge of the world where all that is perverse and strange resides (Ryan 1996: 105-11). The strangeness of the Australian landscape and the threats and disagreeableness it produced are well documented elsewhere. The alienation felt by the new colonists led them to modify the Australian environment to recreate the landscape aesthetic of Britain as a way of making it feel more like home (see for example Franklin 1996). However, by the nineteenth century the bush was regarded by Australians as home, and for many painters and writers it served as "an imaginative refuge" (White 1981: 102). The bush also developed a much deeper iconography, within Australian society and it is this that led to the link between national identity and the bush.

Barr has given an account of the developments that took place in the Whitsundays where locally owned resorts were replaced by ones controlled by non-local entrepreneurs (Barr 1990: 33-45). This was at least partly to do with a sense that the industry required operators to break Australian cultural practices. Sheller (2001) has argued that the Caribbean was a place where labour was done by others and this created a setting for abandon and indulgence to take place. In order to replicate this at the Reef, Australians had to change the way they thought about themselves. The provision of a labour-free environment was only partly true of the Australian context as the early tourist industry relied on pastoral family hosts more than the exploitation of indigenous labour. Although Aboriginal labour was used on the islands, Aboriginal people have largely been made invisible in the Great Barrier Reef tourism industry and it was not constructed around the same transparent paradigm of servitude. Barr (1990: 21-32) suggests that there was considerable resistance to the development of a tourism industry

around the Whitsundays as it came at too high a social cost. The money was not worth the breakdown of the egalitarian status that Australians liked to maintain about themselves (Kapferer 1988). This is implied in the comment by Henry Lamond when he said in 1931 “I wasn’t going to have my children dictated to by any half crown tourist” (cited in Barr 1990: 10). It is possible to read into Lamond’s comment that tourists behaved, and expected hosts to behave, in a way that was rather ‘unAustralian’. In particular, hosts were expected to assume a role of inferiority to the tourists which did not sit well with the concept of egalitarianism.

In spite of this local resistance, changes did occur and infrastructure was provided as early as 1932 when Embury first based an expedition on Hayman Island. This, however, was unusual, and visitors were provided with the option of camping, which suggests that it may have been a preference.

Members are to state whether they prefer a tent (as above) to a bed on the verandah of a community room. There will [be] such community rooms for either men or women. The community room with bed on verandah is recommended as most suitable for the climate.

(The Australian and New Zealand Traveller’s Gazette 1932: October)

Huts have been erected on Hayman Island, and for those who prefer them, there will be tents.

(Daily Mail 1932: 23 December)

On Lindeman Island in the 1930s, accommodation comprised grass huts (Plate 12) described as being of Torres Strait style (*The Sun Sunday* 1935: 20 January). From the 1940s onwards there was an increase in planted gardens, filled with exotic palms and hibiscus, and lined with white painted stones. This transformation occurred at different rates at different locations, but generally the resort accommodation became more substantial and the scrubby grasses all but disappeared in the immediate vicinity of tourist facilities. The Australian bush was no longer so invasive (see Photographic Essay).

These changes were encouraged by the tourism bureaux and Australian National Travel Association (ANTA), and local operators were encouraged to develop better accommodation and to provide a greater variety of activities and entertainment. Beyond the amenities, however, there was a less explicit, but concerted effort to change the

physical landscapes associated with the Great Barrier Reef. In a submission to ANTA, Theodore Roughley, a strong advocate of Reef tourism, said:

I consider an ideal plan would be to choose a mainland island, on which a capacious modern hotel could be erected, and to run in conjunction with it one or more coral islands where comfortable thatch-roofed cabins could be disposed in such a way that the natural beauty of the island is enhanced and not spoilt, as so often obtains at present.... Most people have a mental picture of a coral island in a tropical setting of palm trees, of the crystal-clear water of a lagoon where multi-hued fish and other forms of colourful marine life abound, and where life may be idled away with the cares of the world forgotten. Every effort should therefore be made to present this picture to the tourist in actual reality, otherwise he [sic] may leave the Reef disappointed by his [sic] experience, with consequences that will be anything but fruitful.

(Roughley 1947: 97)

The implication of Roughley's statement that "[m]ost people have a mental picture of a coral island in a tropical setting of palm trees,..." and that "[e]very effort should therefore be made to present this picture to the tourist in actual reality..." is that, not only is the accommodation to be of a particular standard, but that the presentation of the physical landscape also had to change. Roughley's statement indicates that in an unaltered state, the Reef did not fulfil the ideal tropical destination that many people expected.

In its native state the Great Barrier Reef islands could therefore be a source of disappointment for visitors. The incongruity between the imagined and experienced environment was reported in a newspaper article about the British expedition to Low Isles in 1928.

Palm trees, turquoise lagoons, sand-like gold filings, cobalt skies, purple shadows, the lisp of the sea, staring moons -...

In light fiction, yes; in practice, as the British scientists on Low Island are finding it, scarcely so alluring.

(*The Sydney Morning Herald* 1928: 29 November)

And in 1933, another newspaper article reported the disillusionment of the first Embury expeditioners to Hayman Island.

A sudden [sic] descent during a breathless day by sandflies and mosquitoes left a trail of woe and drove many from shorts into long trousers. The newcomers experienced the inconveniences and discomforts attendant upon settling into a newly-formed camp. Others who were visiting these languorous

latitudes for the first time looked in vain for the blue lagoons and coconut palms, the turtles and mutton birds of fame and fiction. Picnic make-shifts and at first a rather uncertain dining schedule, were a new and disturbing experience for many.... This was not what they expected....

(Wigmore 1933b: 14 January)

This expectation of blue lagoons and coconut palms was not necessarily drawn from early twentieth century advertising. As noted, the photographs that were available were largely black and white images that could not fail to capture the native bush that surrounded the camps of early island holidays. The idealised landscape could, however, be introduced through images that did not rely on photography. Palm trees were sometimes sketched alongside text and photographs in brochures. Similarly the few early travel posters of the Great Barrier Reef that have survived include elements that were not necessarily present. Posters have the imaginative capacity to provide underwater views that were not necessarily available to visitors, as well as the capacity to manipulate elements of the associated landscapes. Images of the underwater world, fishing and boating are all present in these posters. Although landscapes are not always included or dominant, where they are represented they include some elements of the idealised island. A poster by Percy Trompf includes a glimpse of pandanus in a palm like formation on the edge of an island (1933) (Plate 3), while another by James Northfield (c. 1930a) gives prominence to palm trees on the edge of a sandy beach.

A 1947 report to the Queensland Tourist Development Board recommended that advertising be controlled to avoid misleading promotion. The report notes that the Great Barrier Reef, in particular, was the subject of deceptive advertising in Victoria and New South Wales. This was highly unsatisfactory for tourists (Queensland Tourist Development Board 1947: 50-1). Although it does not specify what aspects had been misrepresented, the concern was serious enough to make it a major recommendation. It can be assumed that at least part of the misleading advertising related to the facilities and access to the Reef. This is suggested by an account published in 1955 in which the author talked to a southern visitor at a Townsville hotel:

"I came to the tropics to play bowls – something you can't do in the winter where I come from – and to explore the Barrier Reef. There's a bowling green," he pointed across the road, "but where's the reef?"

"Out there," I nodded towards the east, "forty miles away."

"I thought it was closer than that. How do you get there?"

"You don't, as a rule," I replied.

His face assumed a quizzical expression.

“I don’t understand you. I came up here expecting to spend about half my time out on it, studying it and collecting shells. What about these advertisements you read, and the posters you see plastered up on railway stations about big game fishing on the Barrier Reef and all that?”

I explained that whilst Barrier Reef advertisements flamboyantly depicting the fishing, beauty and marvels were not exaggerated, in some respects they are grossly misleading. They convey the impression to the intending tourist that it is as easy to travel from the mainland to the reefs, as it is to go from Circular Quay to Manly [Sydney] or from the bridge across the Yarra to St. Kilda [Melbourne]. One advertisement I had recently read invited tourists to “Come and play on the coral islands”, but no mention was made how inaccessible they are, or how limited the accommodation.

(Lock 1955: 38-9)

This suggests that as late as the mid 1950s visitors experienced difficulties actually getting to the Reef. People who travelled a considerable distance from southern cities and towns were consequently confined to mainland towns and never reached an island or the Reef itself (Lock 1955: 39). It is also possible, however, that the problems with misleading advertising might have related to the comparisons of the Reef to other islands of the Pacific.



Plate 54: Honeymooners at Hayman Island in 1960. In spite of the Australian setting, the woman wears a hula skirt as representative of the tropics.

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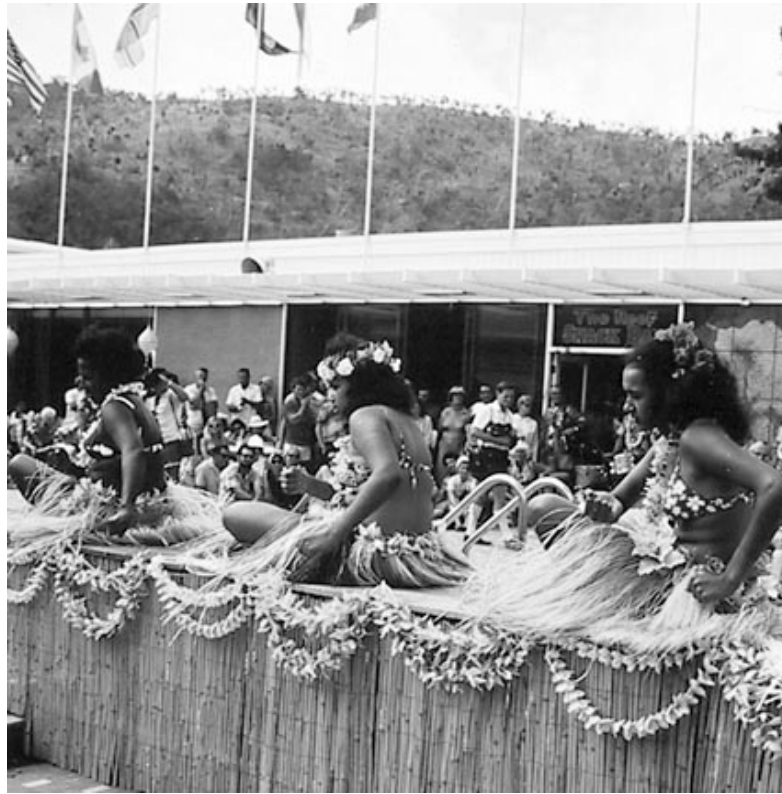


Plate 55: Hula Dancers at Hayman Island 1972
 © National Archives of Australia (A1500:K26494)

The South Pacific had become synonymous with an idealised paradise since the time of European colonial expansion, and tourism promotion consciously inserted the Great Barrier Reef into this paradisaical paradigm. In spite of the fact that the South Pacific was itself a construct and experiences of places like the Caribbean could be just as disappointing (Sheller 2001), the Reef was frequently compared to the Pacific in brochures, newspapers and magazines. In 1934 *The Telegraph* newspaper captioned a photograph with the following description: “the Great Barrier Reef, where every year more Australians go to seek the glamour of the South Seas” (*The Telegraph* 1934). And in 1950 a brochure for the Whitsunday Islands proclaimed that “Queenslanders need not go so far afield as Polynesia for romantic coral-girt isles” (Queensland Government Tourist Bureau 1950). These aspirations were increasingly reflected in the physical landscapes of the Reef. As part of the upgrading of accommodation and facilities of the Reef, the Pacific theme was introduced into island resorts. Increasingly the Reef islands were portrayed as a Pacific destination. Photographs show an escalation in the generic Pacific elements in the resort landscaping as well as in architecture and decoration. Resort accommodation, meals, decor, dress and entertainment of an Hawaiian or generic

Pacific theme were fairly standard by the 1960s and 1970s (Plates 54 and 55, and Film Compilation).

The Coconut Palm as Signifier of Paradise Found

Even before extensive changes were made to tourism facilities and environments, tourists searched for paradise on the Reef. Their search was not always in vain. Both tourists and industry found elements of the tropical ideal they were looking for. Coconut palms, in particular, played an important role in meeting visitors' expectations of a tropical location. There is some debate as to whether *Cocos nucifera* is native to Australia. Its absence from islands and coastlines at the time of Captain Cook's voyage suggests that it arrived in Australia by human agency after European colonisation rather than by floating across the oceans (Cribb and Cribb 1985: 88-9). Even if coconut palms existed on the Australian coast prior to European colonisation, they were not present in significant numbers. Early photographs of the Reef support this, and show coconut palms to be quite unusual on Reef islands. Where they are present at all, they are growing around settlements and are much more noticeable in places like Low Isles where the lighthouse had been established since 1878, some time before the British Expedition was based there. The introduction of coconuts in these locations is usually attributed to mariners who planted coconuts and introduced goats to the Barrier Reef islands as a source of food for those using the Inner Route and working on ships in the region. Henry Lamond provides the following account which suggests that the coconut was not only introduced, but that it continued to be scarce in the Barrier Reef for some time after European invasion.

I remember my father telling me, during a trip along the coast, that the government of the day, in the early 'nineties, had put goats and rabbits, planted coconuts on many of the islands as an aid to shipwrecked mariners.

The wrecks never came; the goats jumped ahead and prospered; the rabbits never survived a second generation; the coconuts took hold and grew where it suited them—which wasn't in many places and on few islands.

(Henry George ("U.9.L") Lamond 1948)

In spite of the scarcity of coconut palms, early tourists to the Great Barrier Reef islands did expect to see them. When they were sighted tourists rushed to capture them in photographs and to engage with the traditions of climbing the long trunks, opening the

fruit and drinking their milk. Captions of photographs and accounts by people indicate that visitors are generally excited when they see coconut palms for the first time. The relative dearth of the trees was enough to make recording singular specimens worthwhile, and in extolling the beauty of Whitehaven beach in 1933 a holidaymaker wrote that “Whitehaven also possesses a stately cocoanut palm” (Stainton 1933). While this suggests that these trees were something of a novelty, they were obviously important to visitor experiences. In spite of their rarity, coconut palms are relatively over-represented in photographs in comparison to their actual presence. Promotional photographs and other images deliberately used particular elements which were subsequently captured in personal images. In this way their influence is made real by reportage of the photograph (Albers 1992; Watts 2000). The coconut palm in particular is used as a signifier of a tropical location. For example a picture of the writer Edmund Banfield’s bungalow on Dunk Island in a 1935 issue of *Walkabout Magazine* (Plate 56) purports to show the dwelling (Barrett 1935: 36). The photograph is dominated by a coconut palm even though the vegetation surrounding his home is distinctly native. Without the palm there is nothing to indicate that this is an image of life on the Great Barrier Reef, or even that it is on a tropical island.

Wherever they were found coconut palms became a focus of tourist attention. As signifiers of the tropics they were carefully framed by tourists’ cameras. So in spite of their relative scarcity on Reef islands in the historic period, photographs containing palm trees are quite numerous even though the surrounding bush is quite clearly less tropical and the palms unusual (see Plates 57 and 58). Both individuals and tourism organisations focused their attention on those parts of the Reef that did meet preconceived ideas of tropical islands. The following description from the Queensland Tourist Development Board in 1947 describes such an idyllic location.

For 50 miles our twelve-ton launch dipped and rolled into the swell of the Pacific. A speck appeared on the horizon – Heron Island in the Capricorns. About an hour later we reached a tiny tropic isle, just a few giant handfuls of coral thrown up some fifteen or twenty feet above the reef, a thousand vivid green trees and palms jumbled together in riotous luxuriance, and there was your island paradise where the white coral shores are washed by the warm waters of the Pacific.

(Queensland Tourist Development Board 1947: 23)



Plate 56: Banfield's Home on Dunk Island. Photograph from *Walkabout* magazine (Barrett 1935).

The attention given to the palm appears to reflect a distortion in how people perceive the islands. This description of Heron Island suggests a bias in what is actually seen and remembered. The statement that “a thousand vivid green trees and palms jumbled together in riotous luxuriance” is somewhat at odds with a collection of photographs from a trip to Heron Island in 1953 (Love 1953) or the image published in the same period by Dakin (1950) (Plate 59). These black and white photographs suggest that the description of Heron Island is reasonably accurate. However, in none of the images is it possible to discern any palm trees, native or otherwise, and even today Heron is one of the few resorts that maintains native vegetation within the resort areas. Palms may have been present but they were not conspicuous, and the writer has remembered and focused on an atypical element in the jumble of plants.



Plate 57: A tourist poses in front of a young coconut palm while holding two coconuts, 1933

Berryman © National Archives of Australia



Plate 58: Tourist posing with coconut in front of palm trunk. Note the casuarinas and other scrub that dominates in the background.

Berryman 1933 © National Archives of Australia

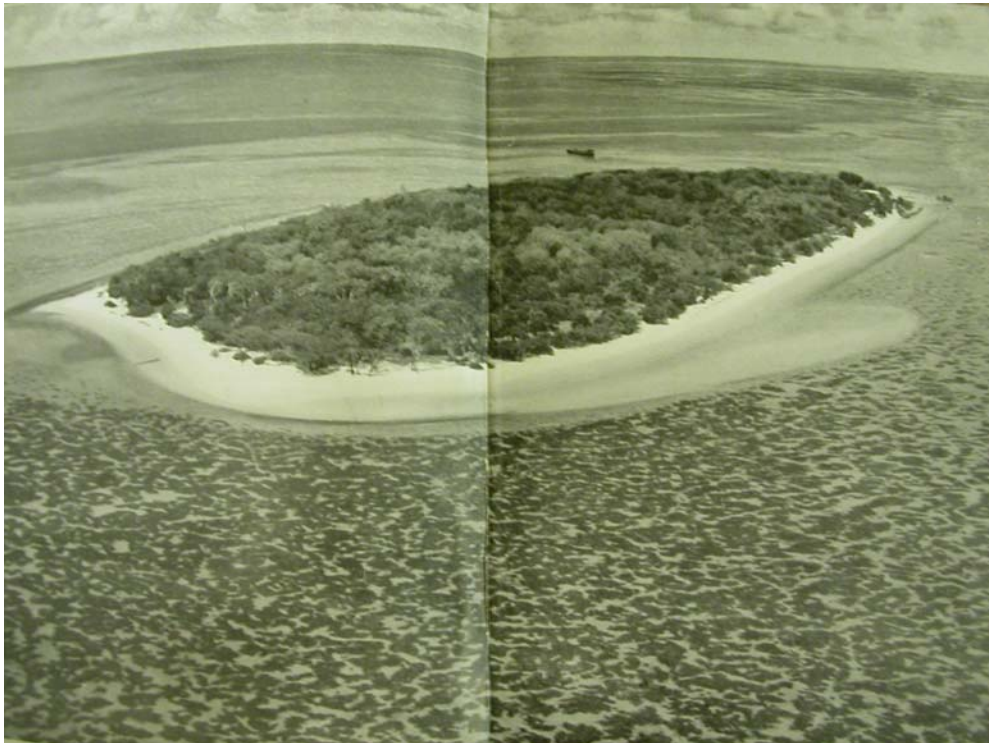


Plate 59: Aerial photograph of Heron Island from Dakin (1950)

Throughout the tourism history of the Great Barrier Reef, visitors are fascinated and drawn to the coconut palm. In 1925 Crosbie Morrison accompanied a scientific expedition to the Reef and spent considerable time on the adjacent mainland. His account of the beauty of Yarrabah Mission, south of Cairns, is linked with the presence of coconut palms.

The Mission Station is a picturesque place with lots of Coconuts [sic] and grass houses, and a white jetty and white cross.

(Morrison 1925b).

His descriptions of other locations on the Reef also contain this imagery of palms, and as cited earlier he paid particular attention to the “thick grove of palm trees silhouetted against the sky” (Morrison 1925d: 28 August). In the ‘Voyage of the Cheerio’ example, the importance of palm trees is clearly expressed by the different authors, including Eric Watson who said “[t]he setting was extremely beautiful; the tide came right up to the camp, while a full moon enhanced the tropical effect of the cocoanut palms” (Watson 1935).

By the 1960s and 1970s the idyllic tropical island had become a reality for many tourists visiting the Great Barrier Reef. Palms were planted in ever increasing numbers. Although these trees were no longer unusual, they attracted attention and formed an important part of realising an imaginary place. The planted coconuts were mature enough to be used in almost all promotion for the Reef, and the environments surrounding the resorts conformed to the imagined landscape. In visiting Green Island in 1975, Marjorie Bradsworth recorded in her diary that:

... Green Island ... certainly lives up to its name. A real tropical island with its palms and thick undergrowth and trees set in the very blue ocean which pales to a bright green in the water surrounding the island.

(Bradsworth 1971: 8 July 1975)

The Reef offers tourists what they want to see, and Green Island has become a “real tropical island”. For Marjorie Bradsworth this is signified, above all, by the palm tree. Early photographic images available of the Reef, as I have shown, depict an environment rich in Australian flora. In spite of this, people expected to find another landscape when they visited the tropics. The strength of the Pacific island fantasy was such that the desire to see coconut palms was expressed in disappointment when they were not found, and they generated considerable pleasure when they were. People seek out these trees because they symbolise being somewhere different. More than this, however, they represent paradise, and have been used in this way in other contexts (see, for example, Watts 2000).

The Coconut Palm as a Symbol of the Great Barrier Reef?

Locals who understand the Reef on the basis of long term relationships and experiences, and those who have worked and lived on the Reef for significant periods of time, find the palm and the ideal it represents not only misleading but unnecessary. For people with a longer term knowledge of the Reef, attachments are developed on a range of sensory and personal experiences that are independent of fantasy (Pocock 2002c).

As we saw in Chapter 5, long-time tour operator Captain Tom McLean found palms to be a poor replacement for casuarinas. In his opinion the sound of she-oaks was “infinitely more subtle” than palms (McLean 1986: 2). They also provided a good

source of shade that would have been very appealing in the heat of the day (see for example the picnic on Scawfell Island, 11). McLean's sentiment is echoed by local communities in Proserpine, a small rural town on the Australian mainland coast adjacent to the Whitsunday passage. The Proserpine community has been resistant to the growth of tourism for a long time (Barr 1990: 21-32), and their relationship with the Reef is a complex mix of personal attachment through their own holidays and work experiences, and a dislike for what it has come to represent. In 1994 the president of the Proserpine Historical Museum Society expressed her sense of loss of the Australian landscape at the Reef:

Hundreds of palms have been planted at various islands – sure this makes them resemble Tahiti, but where are the trees natural to the locality? In the days of the Embury expeditions, scientists called Hayman “a botanists’ Paradise”.

(Price 1994)

It is difficult to find an environment within any of the resorts in the Whitsundays today that does not conform to the ideal. Imitation cultural elements prevail in the ubiquitous Hawaiian style shirts of staff, thatched roofs and umbrellas. This is particularly noticeable at South Molle where hibiscus motifs, thatched roofing and Polynesian dance nights are highlights of the resort (Plate 60). However, they are not alone. Resort photographers on both South Molle and Long Islands are employed to wander among the guests to capture their images. They carry with them a suite of props including leis made of artificial frangipani and other exotic flowers to ensure their subjects will be captured within a context of the tropical illusion.

Common to all contemporary tourist islands are the smooth green lawns and neatly trimmed coconut palms (and other kinds of palms that look similar but require less maintenance) that dominate resort landscaping. Interestingly, however, native vegetation is abundant on Reef islands, even on the very edge of the resort properties. Tourists use very little of the Great Barrier Reef, and most of the 1,200 miles of reefs and associated islands and coast are relatively unchanged since European invasion in the late 1700s. The vegetation seen in the early photographs persists in vast tracks of the Great Barrier Reef Marine Park World Heritage Area, which is carefully managed and protected. It is even possible to camp on a few of the islands in settings similar to those of the past. However, camping is barely promoted, and access to information about it is

limited. The vast majority of visitors stay in international style resorts with lush planted gardens. The environment that tourists are exposed to is one that is highly manicured and the way in which people interact with it is highly controlled.



Plate 60: “Flames of Polynesia” performers, Whitsundays, Great Barrier Reef
(www.hamiltonislandweddings.com.au 2003)

Although native trees, bushes and grasses are present in some of the landscapes surrounding resorts, they are much less conspicuous in the immediate vicinity of accommodation, eating facilities, public areas, popular beachfronts, poolside or in other areas most often used by tourists. Similarly, contemporary promotional materials use palm trees to frame tourist experiences. Thus, both promotional images and the experience of being at one of the resorts is characterised in this way. For the most part the space around resorts is highly controlled with distinct areas for staff and maintenance activities, and pathways and roads that steer tourists to particular parts of the islands and keep them within the confines of the constructed landscapes. There is also an emphasis in contemporary tourism on relaxation and indulgence and few people exert themselves enough to leave the confines of the resorts. The predominance of palm trees in the central parts of the resorts is unmistakable, and on disembarking at the jetty it is the clusters of palm trees that clearly indicate where the resort is located (Plate 61).



Plate 61: Long Island Jetty. Note the native vegetation on the island and the cluster of palms where the centre of the resort is situated

A Tourist Gaze for Australian Visitors

The comparison between historic sources and observation of contemporary tourist locations suggests that the Great Barrier Reef has become more idealised and less reflective of its Australian location. The exotic has been sought out and propagated. Although native vegetation persists in abundance on Reef islands and cays today, it is largely absent in the locations presented to visitors. The Australian bush has been removed from the daily experiences of visitors at the Great Barrier Reef, and is no longer a central image of the landscape. Some essential characteristics of the region have changed and consequently fewer people are exposed to an Australian landscape at the Reef (Pocock 2002c). At a time when the Australian Commonwealth Government is moving to establish a list of nationally significant places, on which Australian World Heritage properties will automatically be inscribed (Australian Heritage Commission 1998: 8) the Reef is experienced by the majority of visitors as somewhere that could be anywhere. The changes to the landscape of the Reef have implications not only for the conservation of flora particular to Australia, but also for commercial interests of tourism.

Increasingly overseas visitors are wanting to experience something that is more particular of place (Rowe 1998), and generic tropical islands can be found more cheaply elsewhere. Native flora and fauna of the Reef may not be exotic to Australians, but it is distinctive of the region and also of its Australian location. As such it could establish a necessary tourist gaze for overseas visitors. However, the exotic that tourists seek is not necessarily one contrasting with the everyday, but a contrast that is already known and understood within existing imaginative paradigms.

Furthermore, the Great Barrier Reef islands were and continue to be an important tourist destination for Australian people. The tourist context that has been constructed at the Great Barrier Reef is at the expense of an environment that is distinctly Australian.

Regrettably, these resorts offer such features as Bamboo decor, Polynesian and "Aloha" evenings with dancers in grass skirts. Australians must learn to create their own particular image, not copy that of other countries. Overseas visitors come here to see Australia and do not appreciate a false imported atmosphere.

(Bennett n.d.)

In spite of Bennett's claim in relation to overseas visitors, this "false imported atmosphere" has been created *because* it is distinct from the landscapes found elsewhere in Australia. It is also a generic 'exotic' that provides many visitors with their desired tourist experience.

Early written accounts of visits to the Great Barrier Reef do not generally focus on the visual aspects of vegetation on the islands. However, historic photographs show that early Reef holidays were essentially bush camps not dissimilar to those on mainland Australia that continue to be popular today (see for example Davidson and Spearritt 2000: 171-2 for a brief descriptive history of camping holidays in Australia). Knowles has argued in relation to families camping in the Tasmanian World Heritage Area that these activities are an important aspect of local identity. The interaction with the bush is much more than one of admiration "as you drive through it", but rather is "meant to be 'felt, smelt and experienced with the senses'" (Knowles 1997). In the early period, tourists who visited the Reef were primarily Australians and holidays on the Reef were similar to bush camping on the mainland. Without the ready access to the Outer Reef, or the underwater world of contemporary Barrier Reef tourism, visitors spent as much time

exploring land as they did reefs and the bush was indeed ‘felt, smelt and experienced with the senses’. Longer and slower journeys provided a strong sense of orientation and these experiences contributed significantly to the knowledge visitors built of the region, and through which they developed a strong sense of place. I have suggested that the symbolic importance of the bush in constructions of Australian identity is sufficient to make the bush an everyday experience for Australian people. Australians do not regard going bush as a tourist activity, but one that (re)establishes identity. For many, then, camping or going bush does not construct a tourist gaze that is distinct from the everyday. The Australian native vegetation is therefore incapable of constructing the tourist gaze, and in this state the Reef does not offer a desirable tourist experience for Australian visitors. In contrast, the idealised tropical islands presented at resorts of the Great Barrier Reef allow Australian tourists to believe that they are somewhere else.

Anticipation and imagination are important factors in modern consumerism, and Urry argues that these are constructed through advertising and the media (1990: 13). The barrage of visual promotion associated with Reef tourism is certainly dominant in consumers’ experience and knowledge, regardless of whether they have visited the Reef or not. However, promotion alone is not responsible for the way in which the Reef has been imagined and anticipated, or how those forces have effected physical transformation of the Reef environment. The expectations that early visitors had of the Great Barrier Reef region could be regarded as unpredictable within their temporal context. Black and white photographs dominated by Australian scrub cannot have been entirely responsible for people’s expectations. The strength of the expectation that left visitors looking “in vain for the blue lagoons and coconut palms”, or caused them excitement when they saw a coconut palm, suggests that this ideal was one entrenched through some other mechanism. People’s desire to find a tropical ideal at the Reef is a strong force in the changes to landscapes of the region. This desire is fuelled by the mental image of an idyllic Pacific island vitalised by fiction and adventure writing.

The ideal of Pacific islands was fostered and grown within a European tradition of romance about tropical islands described and depicted in the writings of Daniel Defoe, Robert Louis Stevenson, and artists like Paul Gauguin. This dates back to the fourteenth century in Europe and was renewed and reinvented in colonial contexts. Not all Pacific locations met the idyllic image that people had constructed, and eighteenth century

travellers to the Caribbean sometimes felt disappointment at the landscapes they found there (Sheller 2001). However, they were able to select particular elements of the scene to reconstruct an experience that mirrored that which was presented through popular literature and art of the time. Unlike the Caribbean, the Australian continent was characterised by Europeans as harsh and strange. In spite of this, Australian landscapes became familiar to colonists and ultimately this harshness became an important characteristic in national identity. The Great Barrier Reef offered an opportunity for Australian tourists to construct a paradise that was distinct from their everyday experience. This was not only an image consumed and desired by tourists, but one which the fledgling tourism industry shared. They truly believed that the recreation of this landscape would ensure the burgeoning of tourism in the region, and they have not yet been proved wrong.

The evidence provided by personal accounts of early Reef visitors suggests that the way in which the Reef is imagined and dreamed of, parallels and possibly precedes any major advertising. At the same time, personal experiences of the Reef mimic those of the advertisers. The Reef is therefore not experienced as 'new' but as a place that meets pre-existing ideals. Unlike the explorers of the Australian mainland who sought a pre-constructed blank, the Great Barrier Reef is already filled with elements of the tropical ideal before it is ever physically colonised, and stands apart from its continental affiliation. McGrath (1991: 123) has suggested that Australian tourists who now visit the outback "imagine that they are explorers", and live out the Australian myths through a kind of historical re-enactment. Early visitors to the Reef express a similar interest in going to the unknown and orienting themselves in the landscape. However, whereas the outback myth creates a distinct past which is central to Australian nation creation (McGrath 1991: 122-3), the Reef provides the elusive promise of escape from the everyday. As such the region forms part of a larger mythical paradigm of a utopia free of the problems of society. Although the Pacific has become synonymous with paradise, the utopian landscape is no truer of any other part of the Pacific than it is for the Barrier Reef. As such the paradisaical paradigm is essentially placeless. The deliberate construction of a Pacific landscape is created because it meets the expectations of a preconceived and therefore familiar and controlled 'other'. The generic Pacific is thus a copy of something that has never existed and can be seen as a final stage simulacrum in

which the copy has no relation to an original and hence is hyper-real (cf. Baudrillard 1983).

Unlike the outback that provides an Australian colonial nationalism, the Reef fulfils another colonial vision: that of the generic and familiar other. While tourists who are predominantly of Western middle-class backgrounds demand a gaze that contrasts with their everyday experiences, they also want those differences to be comfortable and non-threatening. As Watts (2000: 248) has suggested, the palm is an example of the exotic made familiar, typical and therefore non-threatening and an attraction for visual consumption. It has been argued here, that the coconut palm is a forceful emblem of the idealised tropical island. The palm is not an isolated element, but part of a broader image creation of a Pacific ideal that includes tropical fruit, hibiscus and frangipanis and stylised architecture. The desire to find paradise at the Reef, however, is particularly expressed as a search for palm trees and the capturing of them in photographs. It is the lack of palm trees that are commented on, and expressed as disappointment in the early part of the twentieth century. It is also the palm tree that reinforces and satisfies people that they are in fact in the tropical location. This is not necessarily a Great Barrier Reef location, but it is a tropical fantasy. The essential element in tourists' imaginative attachment to the Reef islands in the twentieth century is the palm. The coconut palm is a prolific and, importantly, an apparently 'natural' element of the landscape. It is also easily recognised in shape and form, and readily reproduced in gardens, photographs, drawings and cartoons. It is a striking motif in the earliest images of the Pacific, and as such is a powerful synecdoche of an imagined tropical paradise.

The changes to the tourist landscapes of the Reef are influenced not only by a visually prolific industry, but also by a colonial imagination. The human imagination is a powerful force (Taussig 1993: 22), and in the case of the Reef an abstraction has been given a physical presence. In creating an alter experience, tourism draws heavily on imaginative imagery and fantasy which underlies the power of the representations (Barthes 1957: 74-77; Rowe 1998: 78). The tourist gaze of the Great Barrier Reef that is created as alter through production of an imaginary ideal is a copy of a copy, or a simulacrum with no reference to the real. This produces a quintessential modern holiday in which the Reef is perceived and experienced in the same way as any other tropical holiday destination. The articulation of fantasy that is captured in this paradigm remains

both a construct and a spectre, and therein lies its continuing dominance in tourist imagery.

The simulacrum of the island paradise is also recreated through the underwater world, as I will discuss in the next chapter.

Coral Gardens

In the previous chapter I argued that the Reef has been constructed to fulfil a colonial vision of paradise. The focus of my argument was on the landscapes of the Reef and the shift away from sensuous knowledge of vegetation to the importation of visual symbols of the imagined paradise. In this chapter I similarly consider sensuous experiences in the experience and construction of the underwater Reef. This is a sphere that seems to deny human beings an everyday knowledge and experience, and yet many innovations in the twentieth century have facilitated greater access to this environment.

The corals, reefs and associated life of the underwater world are characterised by colour, light and sound that contrast strongly with the human terrestrial environment. To this extent an experience of the Reef remains otherworldly and hence maintains its charm as a tourist destination. In this chapter I look at how the underwater has been constructed as strange and marvellous and yet contained within familiar and everyday constructs. As with other modes of colonisation, including those inferred in relation to landscapes in Chapters 5 and 8, scientific explanation provides a means to lessen the strangeness of the underwater world. And it is through science and conservation that the Reef is commonly portrayed and understood. At the same time, however, science separates nature (other) from humanity or culture (self). In this chapter I consider the role of the human capacity to mimic and draw analogies as a means to undermine this distinction. Through mimesis the underwater world has been constructed and reconstructed as both familiar and fantastic, and people have manipulated and conquered aspects of the other which is the natural world.

Cartographic Mimesis: Control Over the Other

Since initial European colonisation of the Australian continent, observers of the Great Barrier Reef, in all generations, have highlighted the otherness of this natural

phenomenon. Whether it is a source of joy or fear, the alterity of the Reef is regarded as unsurpassed. Western philosophy, by and large, separates cultural and natural aspects of the world and through this binary positing Nature is defined as other in relation to human experience (Glacken 1999; Fullagar 2000; Lowenthal 2000). The sense of otherness is heightened in human encounters with those parts of the natural environment that are perceived as a direct threat or as inhospitable to humans. People are essentially terrestrial beings, and although many can swim and dive, human life cannot be sustained underwater. The underwater world therefore remains closed to everyday experiences. Human engagement with this world is restricted by the physical limitations of the human body and time spent underwater is always finite. As such this landscape is largely an alien one in terms of human phenomenological knowledge and the underwater world is constructed as a colonial frontier.

As outlined in Chapter 5, the earliest documented encounters with the Reef by European colonisers are characterised by bewilderment and fear. The Reef was constructed as alter partly through its geographical position in the antipodes (See White 1981: 1-15; Langton 1996; Ryan 1996: 105-7) and the fear of the unknown was an integral part of its physical threats. Early navigators perceived that the dangers of the Barrier Reef lay within its sheer physicality. The imagined and actual perils emanated from the labyrinth of coral reefs and the confusion of underwater formations that threatened to wreck or entrap their ships. They sought to conquer their fears of the unknown, as perceived from the surface of the sea, through a process of mimesis.

Navigators who charted the seas depended on a clear distinction between land and sea (Ryan 1996: 120), but the Reef constantly challenged this delineation through the myriad of corals and shoals. The labyrinth in which they found themselves was largely invisible. In the 200 years following British colonisation, mapping the Reef was a continuous concern. In the earliest period navigators used extensive sailing directions and made charts, maps and drawings to aid their progress through the coral maze and eventually to enter and leave the lagoon through the outer wall. European cartography is conducted within a Western scientific discourse that ignores the social construction of maps. Within this discourse maps are regarded as reflections of the real and are also confused with the real (Ryan 1996: 101). It is from this perspective that charts of the Reef were constructed as both mimetic reflections of the Reef and as copies through

which the original could be controlled. The threatening experience was eliminated by the establishment of a familiar route through the Reef facilitated by charts. In other words, the maps and charts made by navigators were copies of the Reef through which its dangers could be controlled. Although a sense of fear continues to be associated with the navigation of the Great Barrier Reef today, for the most part it has been overcome through cartographic mimesis.

Baudrillard (1983) has suggested that simulacra represented by maps are not reflections of a reality, but reflections of an abstraction. He has argued that the abstraction is now at the point where the map precedes the territory, and creates the territory (Baudrillard 1983). Furthermore, he suggests that simulacra are now defined by their significance as more real than the real, that is the hyper-real. While early navigators may not have confused the reefs and shoals with charts of the Reef, the ability of the simulated version to convert the unknown into familiar conventions is integral to how these copies operated as a powerful means of controlling the physical phenomenon. As Ryan (1996) illustrated that explorers drew on pre-established conventions, charts created the Reef as a construction of European maritime conventions. Mapping the Reef depended on reading and interpreting existing signs and using panoramic and controlling vantage point that characterises Western cartography. Another important aspect of the Jorge Luis Borges fable that Baudrillard draws on is that when the map finally rotted away, the original landscape felt foreign and unfamiliar to the people. This reflects knowledge of the Reef, particularly, as early navigators charted it and each generation of navigators adjusted the recordings of their predecessors. More importantly, however, this reflects the problem of using maps to manage human interaction with the Reef. Maps and charts continue to be used as a central component of the management of the World Heritage Area. The Great Barrier Reef Marine Park Authority seeks to control not only the physical Reef, but also the way it is constructed and used by people, through provision of zoning maps and approved navigational routes. Human interaction with and experience of the Reef is not so easily captured and transformed through cartographic mimesis. Rather, it sets up a site of resistance, or creates the capacity for human interactions to go unnoticed (cf. de Certeau 1984). Maps are constructed through a static Cartesian construction whereas technologies have allowed people to expand their experiences beyond the panoramic. Human interactions with the Reef change more rapidly than maps, and while the simulacrum of the map provides a comfortable place

from which managers seek to control the Reef, an historical exploration of visitor experiences at the Reef suggests that human experience is antithetical to this type of surveillance.

Historically, then, maps and charts of the Great Barrier Reef operated as copies that allowed control over the original. Maps also depend on an aerial, strategic view that is controlling and panoptical. Although charts were partly constructed through the use of soundings which gave navigators some sense of the sea floor and its composition, charts themselves operated from the surface. The underwater world that is now synonymous with the Great Barrier Reef was not yet accessible to direct human experience and remained a sphere of chaos and danger.

Out of Control: A Return to Otherness

As the superficial navigation through the coral shoals and islands became more familiar and people gained control over the Reef through mapping, modern developments offered a different view of the Reef that threatened to destabilise this position of power. According to Baudrillard, the simulacrum is a more comfortable place for (post)modern experience than the real world, and even in historic times cartography offered a means of building a simulacrum that created the familiar within the unfamiliar. However, initial interactions with the underwater world of the Reef initially plunged people back into the 'real' world. There was no equivalent to the cartographic simulacrum for them to experience the Reef at an intimate scale.

Science and technology facilitated and encouraged the opening up of an underwater frontier that was distinct from the surface world and cemented the Reef as definitively different and other. Scientific observation of the late nineteenth and early twentieth centuries paid greater attention to the life of the Reef itself, and thus began the human journey into the world beneath the sea. Scientists made observations in the coral pools on the exposed Reef at low tide. Essentially observation depended on still weather conditions and favourable tides. Holidaymakers routinely mimicked scientific activities and this type of observation from the surface was the predominant way in which the Reef was experienced in the earliest period of non-Indigenous visitation. Like the

scientists, these visitors peered opportunistically into clear water pools left by the receding tide. Here they were able to see underwater life, but it was a view through the water surface. The scene was quite volatile and any disturbance of the surface stranded the viewer in the superficial sphere. A good view of the corals could not be guaranteed.

Incautiously you move for a better view, when suddenly the world of brilliant fish-gems vanishes, like some illusive spectre, into the shade of the coral.
(Gilbert 1925)

Examination from above the surface did not allow participation in the world of the other, because disturbance of the surface closed the viewer out. Access to the underwater world was ephemeral, and the encounters were chance-like and thrilling. The experience was voyeuristic with the scene observed from outside as a non-participant. There was a lack of sensuous engagement within the living underwater world, even though collecting facilitated sensuous interactions on the surface. Examination of the Reef as a distant and alien world, separate from the superficial, maintained the Reef as distinctly other. The world within the pool was observed as distinct from the self and the characteristic view of activity is as an outsider or even omnipotent being.

These glimpses gave people their first idea of the particular nature of the underwater world. Without the simulacrum, human experience was challenged and overwhelmed by the excursions into the real which was an uncomfortable space. In 1925 an Australian Museum scientist, recorded that “[t]he first glance into a coral pool is bewildering” (Gilbert 1925).

Some early technological developments enabled greater visual access and facilitated more prolonged viewing of the Reef. The waterscope was a precursor to the glass-bottomed boat. Commonly comprised of a piece of glass at the bottom of a paraffin tin, it was used to look underwater without the interruption of surface disturbance. This equipment allowed people to view the subsurface at high tide, and from the sides of boats. Access was no longer dictated by the ebb and flow of the ocean and clement weather to gain access. The greater access afforded by waterscopes and glass bottomed boats made the frontier underwater landscape more accessible. People were able to observe and compare the landscapes above and below the surface. Like many colonial

descriptions of new places, particularly the antipodes (White 1981; Langton 1996; Ryan 1996), descriptions of life on the Great Barrier Reef are characterised by a sense of the other. Many include the adjectives ‘bizarre’, ‘weird’, ‘odd’ and ‘astonishing’.

Altogether the impression one of teeming life, altering in the course of centuries by an infinite amount of tiny efforts, one of the strangest features on the face of the earth.

(Council for Scientific and Industrial Research 1926a: 19)

Early Reef visitors used the sea to bathe rather than to engage with the underwater world. Some early scientists, notably Mel Ward, developed swimming goggles to dive and collect samples. However, the vast majority of visitors had to settle for a view from the exposed reef, or through a waterscope or glass bottomed boat. Early views of the underwater Reef were from the surface looking in from above. There is a detachment that we do not necessarily perceive in the immersion of the modern diver. This position places the viewer as an outsider and the alter, and from this stems the desire to engage sensuously with the other. There is a sense of frustration at being separate, and a desire to get closer to the underwater world, to experience it in multi-dimensional and multi-sensual ways. The limitations of visual access compelled some early twentieth century visitors to enter the water fully-dressed. The desire to enter this world is also expressed in the following quote:

Alice should certainly have extended her adventures in Wonderland to Nor'-West Islet. It is a matter for distinct regret that not even the doctors in the party are able to devise a potion to enable us to shrink sufficiently to go for a ramble in the burrows of the mutton birds, and to enjoy an occasional tea party with the crabs, instead of poking a clumsy forearm or forefinger into their haunts and receiving only a sharp nip by way of communication; and the fascination of a leisurely swim and the intricacies of the coral fronds, with their gaily-colored [sic] population of fishes and sea-stars and eels and animalculae, finds its nearest substitute in some fleeting glimpses through diving goggles or a water-glass.

(Wigmore 1931)

This introduced a tension between the need to maintain a controlling aerial view, and the desire to engage in a multi-sensual way with the living Reef. Sensuous engagement is less strategic and hence life observed below the water appeared strange and confronting. The strategic view of the Reef that was offered by maps and charts of the region enabled navigators to steer around dangers that threatened ships on the surface.

However, they did not provide a strategy to control the living threats of the hidden depths. In fact, there was as yet no comparable simulacrum of underwater life. As people acknowledged the complexity of the environment beneath the surface of the sea, new perceptions of danger emerged. People were forced to confront the real Reef in a way that maps had mitigated from a strategic vantage point. Many creatures that are now regarded as benign and passive were once characterised as malevolent.

Here one has to pick one's way carefully to avoid stepping into the quickly but forcefully closing mouth of a giant clam, or knocking one's shin against the poisonous knitting-needle-like spikes of black echinoderms or sea-urchins, made especially evil looking by their points of light.

(Council for Scientific and Industrial Research 1926a: 19)

Clams, in particular, were regarded as killers, and there are few accounts of the Reef from the first part of the twentieth century that fail to mention the risks of becoming trapped by the giant molluscs. Modern science has disclosed that certain dangerous animals do exist on the Reef. However, many of the earlier fears have been declared unfounded. Contemporary conservation ethics render the natural world benign and fragile, as opposed to the threat and dominance the environment posed to earlier generations (see for example Knowles 1997; Lowenthal 2000). In spite of this, fear continues to be an important element in the construction of the Reef. Fear enhances the alter state of the Great Barrier Reef and stages it for control and conservation.

In spite of many Reef dangers being alleviated through the construction and explanation of maps and science, first encounters with the underwater world continue to be marked by surprise and disbelief. The exclusion of surface turbulence meant that the scene through a waterscope was sometimes in stark contrast to the surface of the water. Groups of visitors who used this simple but effective tool gave out “[e]cstatic cries of wonder and admiration” (*Manilla Express* 1933). The waterscope thus opened up, not only fear, but a delight in the other that constituted the underwater world.

You adjust your water telescope – this is usually an ordinary dipper with a glass bottom cemented in. When it is placed on top of the water and you look through the glass there is no ripple to obstruct the view, and you can see everything below as clearly as you can in your room at home. You make yourself comfortable by sitting down in the six inches or so of water at the edge of a pool, and place your feet on the coral ledge below. Then you begin

to "listen in." You throw your bread crumbs and meat into the pool, and your "picture show" commences.

("Whampoa" 1930: 20)

The invention of the waterscope provided the opportunity for visitors to see the Reef and its underwater life at close quarters. The view offered is microscopic and much less amenable to control than that which had been constructed from the surface. In other words, the view through the waterscope did not provide a vantage point from which to construct a strategic view. The view through a glass bottomed boat or waterscope is disorienting and results in a loss of control, or a loss of the composite picture available from a raised vantage point or a map.

Even though the view through the waterscope did not achieve the multi-sensual and multi-dimensional sense of participation that accompanies snorkelling and diving, it was more like that of a participant. The experience of the Reef through the waterscope sacrificed the panoramic view, and therefore is more analogous to 'walking the streets' (de Certeau 1984). It is an activity much less amenable to management through maps. However, the experience through the waterscope, like later ways of accessing the underwater Reef, provided an opportunity to elaborate a different view; that of coral gardens.

Seeking Similitude: Coral Gardens

The greater visual access to the Reef, facilitated by the invention of waterscopes, led to the naming of the 'other' with nouns and adjectives of the terrestrially familiar. The features of the underwater world are described in terms that make them known. This is not simply a matter of using the language of the colonising people, but describing elements of the underwater as artefacts of that cultural world. The choice of vocabulary is based on people's recognition of similarities between underwater objects and those of the terrestrial cultural landscape. More particularly, nouns are used as adjectives to describe this very different world in terms of the superficial everyday.

A common description, including those from participants in the ‘Voyage of the *Cheerio*’, is the characterisation of the Great Barrier Reef as comprised of ‘coral gardens’.

The remainder stayed on board to fish, and running up to anchor at the edge of the reef were delighted by the under-water views of the beautiful coral gardens ... submerged by the high tide.

(Watson 1935: 7)

As people peered into coral pools at low tide or by means of a waterscope, the corals are seen as gardens of flowers:

For a moment nothing is observable but the clear, still water and numerous forms of coral, the polyps of which spread out their tentacles like the petals of a small daisy.

(Gilbert 1925).

To gaze down through the deep blue, yet somehow crystal clear water, into what appears to be an enchanted flower garden, with blooms of unimaginable colouring and formation, and inhabited by the most weirdly and quaintly shaped marine life, of every rich conceivable and inconceivable hue, criss-crossed, zigzagged, circled, and spiked, with colours mingled and intermingled in a vision dazzling to the eye, proved a never ending joy, and held on spell-bound at its beauty, as the ever changing picture of the waterscope was revealed.

(Anderson c. 1935)

Other descriptions refer to corals as being like “a tropic forest”, and having “tree-like forms” (Council for Scientific and Industrial Research 1926a: 19). This animal world is more often equated with the plants that make up the gardens of Europe than with any marine or Australian landscape.

The nomenclature of similarity extends to the individual species of corals and other marine life. Within the coral gardens are mushroom, table, plate, staghorn, fan and brain corals. This nomenclature is so easy to understand that a group of uninformed tourists is able to readily recognise which species is which. These names persist today, and on one tour in the Whitsundays a tour guide commented how easy it is for visitors to recognise the corals from their names without him having to physically point them out. A similar observation is made in the narration of a 1952 documentary which states that although corals have complex scientific names, common names are given “for similarity to

objects with which we're familiar in our everyday life" (Cine Service Pty Ltd 1952). Similarly, fishes are named in reference to terrestrial animals. There are porcupine, squirrel, and bat fishes, as well as clown fish. Many of these names are reminiscent of European countryside. And as the coral is to a flower garden, fishes are to butterflies and birds. There are several species of butterfly fish on the Reef, as well as bird fish. There are hawkfish, several species of parrotfish and "beaked" varieties of other fish, all of which invoke their avian counterparts. The parrotfish is brightly coloured, and its name suggests that the fishes of the coral reefs are brighter than any bird in Europe.

It is possible that the analogy between butterflies and fishes comes partly from the netting of both in collections and research (Plate 36). One might expect the analogy to birds to be stronger in the correlation of fish names to those of birds and butterflies. On reflection, however, the nomenclature of fish dates back to a time before snorkelling and diving were a common visitor experience. In peering into the coral gardens from above people still had a perpendicular view of the garden rather than a horizontal one that is more characteristic of human participation. Birds are more common overhead in terrestrial experience, whereas butterflies are creatures that fly all around human stature. The analogy of water to air may not have been as apparent when peering into the world of fishes from overhead. The correlation between the underwater Reef and the terrestrial environment is made more complete through a range of technologies. It is also apparent in contemporary visits to the Reef that underwater participation is much more a focus of the experience than it was or could be in the past. To this extent fish-watching has largely displaced bird-watching and other land based activities.

Susan Buck-Morss (cited in Taussig 1993: 20) has suggested that new technologies have provided "a new schooling for our mimetic powers". In this way, new technologies that give people greater access to the underwater world have engaged a range of senses beyond the visual. They have also facilitated a much more tactile vision, the eye becoming "an extension of the moving, sensate body" (Taussig 1993: 25-6). This sensate eye is able to conceive of the world around it in new ways and motion film has unveiled new human experiences of the Reef. Citing Koch, Taussig (1993: 36) suggests that film provides a sensuous connection; a blending together and dissolution of images and their movement. The capacity for free-diving, including snorkelling, also facilitates this new conception of the underwater world because, like film, movement in water is

analogous to flying and gives the human body the capacity to gain multiple views of the same object. The analogy of diving or snorkelling to flying is a common one, and the underwater landscape is conceived of as one of garden and air rather than coral and water. The coral garden is a construct that closely links Western notions of landscape with the world observed beneath the water, and the analogies are an important way for people to engage with the underwater in reference to their daily multi-dimensional experience.

The viewpoint is central to the construction of the picturesque and the panoramic (Ryan 1996) and the view of the coral garden is similarly constructed as panoramic and picturesque. While some explorers insert the 'familiar other' into unknown landscapes (Ryan 1996: 84, 117), in the case of the Reef, it is the very familiar and tamed garden that is projected onto the other. Through the construction of an underwater garden, the Reef is therefore transformed from a place of threat and danger to one of safety and discipline. Gardens are essentially tamed places in which the wildness of Nature is controlled and in which human agency is paramount. As such they are simulacra of Nature. They are peaceful places, and in constructing the coral reefs as gardens, the Great Barrier Reef came to be regarded as a benign place.

This taming of the wild and dangerous is reinforced by the creation of the tropical paradise simulacrum. Transformation of tourist landscapes at the Reef to meet an imaginary Pacific ideal replaces the characteristically harsh and dry Australian bush with an exotic, rich and plentiful tropical growth. The colourful coral gardens and the tropical paradise with its palms, hibiscus and frangipanis mimic each other. While the coral gardens are inhabited by brightly coloured parrot and butterfly fish, the island paradise is represented by colourful parrots and butterflies. The brightly coloured denizens of each simulacrum can be seen in the people wearing brightly printed shirts and leis around their necks in the island paradise, and the colourful fishes of the coral gardens. The fish of the underwater world are described as though they are indeed people at a social gathering. They are not only named after terrestrial creatures, but are attributed with human characteristics.

Numbers of fish are to be seen everywhere, scampering from under your feet as you bathe, and playing hide and seek among the coral.

(Morrison 1925c: undated letter)

Creatures that are perceived in this way are constructed as engaging in activities that parallel human occupation and play. The following description translates the strangeness and diversity of the underwater world into the equivalent diversity of contemporaneous Western society. It attributes anthropomorphic characteristics to the fish, distinguishing them with human temperament, and describing their colour and form as human clothing. They are also attributed with human vocation and share our sense of play and emotion. This social gathering is befitting of a coral garden.

Unmistakable flappers in dainty and charming garden dress of pale corn colour or pale green, bright young he-men in blue and green racecourse suits, long lank students in drab brown, fussing matrons in black and grey, scholarly parsons in black with white collar all complete, grass widows flitting here and there and flirting their spotted muslins and fur-belows, gay bachelors in greys, steady bankers going golfing in plus fours, footballers and tennis players in accoutrements that would satisfy the soul of the most exciting international representatives, shy and modest young things with blue bows and eyes that peer shyly from an almost hidden corner, tiny babies carrying a blue light and sporting their ribbons as babies were wont to do since Father Time first set his clock ticking, the stay-at-homes in black, brown, deep red, lurking in the background – all are there in one small coral pool, and also intensely interested you may stand there every day for two hours on the edge of such a pool gazing through a water telescope, and at the end of a month's sojourn among them all find your "insatiable curiosity" is still an "insatiable curiosity".

("Whampoa" 1930: 20)

The Great Barrier Reef as Commodity

The two simulacra, the coral garden and tropical island paradise, fuse the underwater Reef and the islands into a commodity. The commodity is itself an opportunity for fetishism in which the notions of the natural and wild are essential elements. This is the case even though the experienced landscape is entirely a simulacrum, and the way in which the Reefscape is experienced is a social construction. The endless reproduction of images of both the coral garden and the tropical island paradise are integral to the process of the Reef being made into a fetishised commodity. I will elaborate on some of the means by which this has been achieved.

The colonial history of the Great Barrier Reef has a temporal parallel in the development and use of the camera in Western societies and it has been photographed by an enormous number of people, from every conceivable vantage point. All possible still and moving images, from satellite and aerial photographs to microscopic underwater vignettes, have been used to portray and enhance the mystique of the underwater corals. These advances have also opened the way for personal experiences and conceptualisation of the Reef, providing some of the first horizontal and underwater views. Photography of the region parallels the tug-of-war between panoptic control and microscopic disorientation.

Life underwater seems quite beyond what human beings can imagine or describe, based on their experience of the terrestrial world. A certain magical or dreamlike quality is attributed to the experience that seems to have no equivalent in their terrestrial knowledge.

Then, of a sudden, the incredible, blazing beauty of coral hues of every conceivable shade and color [sic], and of infinitely varied structure such as no human mind could conceive, leaps to the eyes. It is a shock that electrifies the imagination.

(Wigmore 1932)

While visitors struggle for words to describe the Reef, photography provides a capacious means of reproducing and communicating the phenomenon (Chapter 7). Photographs can be carried and kept far from the Reef itself, and in this way they have brought the Reef from its state of alterity into the everyday. Photographs provide a means for people to experience the Reef, without visiting it in person. Although the coral garden and the tropical island are constructions, they are both held to be natural and pristine. Photographs of the Reef enhance this view through the elimination of any human, particularly industrial, activity. Postcards, tourism brochures, advertisements and other commercial reproductions largely exclude the industries that thrive on the Reef and adjacent mainland. In this way they serve to enhance the commodification and fetishisation of Nature. It is this aspect of the Reef that is misconceived and that gives rise to the Reef as a fetishised commodity.

The power of the photograph is due, at least in part, to the element of contact between the original and the copy which provides the copy with some power of, and over, the

original (Sontag 1973; Taussig 1993, and see Chapter 7). In this way photographs of the Reef have maintained and expanded the element of contact that is so central to the effectiveness of Reef mimesis. The camera has made the Reef tangible and communicable. This role is particularly valuable today when conservation management has lessened direct contact between people and the Reef. Contact is a central element in the authenticity of a Great Barrier Reef experience. Although contemporary divers gain greater access to the underwater world through immersion, people are actively discouraged from touching any of the creatures or objects beneath the surface. Photographs remain one of the few ways in which contact can be achieved and the vast proliferation of photographic images of the Barrier Reef is reminiscent of Taussig's observation that: "[a]s with cinema, the eye grasps at what the hand cannot touch". (Taussig 1993: 183). Close up views of Reef life are therefore an important indicator of authenticity in contemporary tourist experiences.

Divers grope with words to express the gap between the experience and the recollection. The diver wants to latch onto and hold the feeling of being there. This helps explain the popularity of underwater photography. To me, holding camera gear gets in the way of actually 'being there', but, to many, film conveys better than words the immediacy of the underwater experience.

(Love 2000: 10)

The activity of photography has a long history and continuity of use in Reef experiences. It has become more affordable and accessible to a broad range of people. At the same time conservation has diminished other practices of capture. Consequently, photography has expanded to fill these niches. I therefore suggest that photographs, film and video are the modern equivalent of fossicking and collecting; activities that were once an integral part of visiting the Great Barrier Reef. Like other kinds of collections, photographs can be sorted and catalogued and modern forms of photography also have the capacity to invoke other senses. The specimens once collected by visitors were part of the larger conceptual whole of the "Great Barrier Reef", and this gave these items particular significance. More than mere memory aids, these acts of souveniring gave visitors a tangible object that was part of the original, and hence assumed this power in its own right.

After the "lions have been fed," each seeks from the organisers his own washing basin and hurricane lamp, and prepares for nightfall. As a little of the afternoon is left, the beach is visited, and the amateur conchologists are seen picking up shells that would be despised on the beaches of Sydney, Melbourne, and Southport. In the evening the electric torches with which the visitors have provided themselves make the island look a veritable Venice and the lights shining in the tents give the island the appearance of having large Chinese lanterns resting on the ground.

(Collins 1933)

The above quote also suggests that it is not the intrinsic aesthetic qualities of the shells or objects themselves, but rather their connection with the Reef. The coral fragments and shells that are scattered around the world are powerful connections between the Reef and visitors, and create a link between the everyday experience and the otherworldliness of the underwater Reef. Shells are still dominant in the souvenir trade associated with the Great Barrier Reef and some of their significance rests in their status as 'natural' objects, or as a part of 'Nature'.

In this way, too, aquariums have come to be an important and 'natural' link between the underwater world of the Great Barrier Reef and the everyday terrestrial experience. Aquariums present a sophisticated form of collecting, voyeurism and imitation. They also provide a sense of immersion. They represent both contact and copy, and bring the Great Barrier Reef into the everyday while maintaining distinctiveness. However, the element of contact is slightly displaced in that visitors do not collect their own specimens for display. In other words, aquariums have no direct equivalent in visitor participation. However, they facilitate control of the unknown through the provision of a simulacrum, which is itself a part of the commodification of the Reef.

Early aquariums were no more than holding tanks constructed on Great Barrier Reef islands. They allowed scientists to observe specimens collected from nearby water in close detail. Without access to the underwater world, scientists needed to create controlled environments in which to make observations. Aquariums of a more sophisticated nature are still used in this way by marine researchers. The creation of a copy in the form of an aquarium represents an act of mimesis in which both copy and contact ensure the power of the original are maintained, and even expanded. Life in aquariums is observed as though it is the original and the scientific explanation is in no way undermined by the artifice. The control provides a means of gaining greater

accuracy and thus the aquarium operates as a simulacrum that is more powerful and significant than the original.

Aquariums also offer the opportunity of holding and observing the Reef some distance from its original location. Early attempts were intended for both scientific examination and as a way of bringing the Reef to those who had no personal experience of the place. Photography and collections of shells and corals were not always sufficiently powerful copies of the original. The loss of colour in both photography and collections was particularly problematic in recreating the wonder of the Great Barrier Reef (Chapter 7). The sense of movement was also lost and viewpoints were limited. The expertise and technology required to transport and keep reef creatures in non-tropical environments is complex and costly. Many early experiments were unsuccessful, but the possibility of creating a part of the Barrier Reef in a more accessible location was, and continues to be, vigorously pursued.

The collection for the Zoo is an experiment which may lead to many of the vividly coloured coral fish being brought before the eyes of the Sydney public, but this first consignment was seriously depleted when the wire net in which the catch was being towed to the boats fouled a snag.

(Wigmore 1933a)

The aquarium is able to bring the other of the underwater world into the everyday human experience in comfort and convenience. Before the technology was fully developed, underwater viewing chambers were constructed on islands and these offered similar convenience, comfort and ease of access for tourists on short-term visits. The underwater viewing chamber offered secure and guaranteed access to the underwater world by submerging the viewers beneath the surface where weather could adversely affect the experience. This way of viewing the Reef still provides good access for those of differing abilities who cannot snorkel and dive, particularly the elderly and the very young. In the second half of the twentieth century underwater viewing chambers removed the necessity of uncomfortably bending over coral pools, squeezing around the glass panel in glass-bottomed boats or in fact being on water at all. People can enjoy the Reef while seated or standing in completely dry surroundings, and yet still engage with the visual experience of immersion. The chambers are likened to lounge rooms at home and so the extension of the familiar into the frontier landscape is expanded. In this respect the underwater viewing chamber was a real prototype for the modern aquarium.

The commercial aquariums we know now, are large-scale enterprises with large glass fronted tanks which allow the viewer to look at the exhibits from the vantage point of the underwater diver or participant. More than this, observers tend to stand and walk around as they might on land and so the sense of routine participation in the underwater world is accomplished.

The Great Barrier Reef lies some distance off the Australian mainland, and many tourist centres on the associated coast have some form of aquarium for tourists to visit. Many refer to the Great Barrier Reef in their presentation and promotion. Townsville is situated adjacent to the Central Section of the Great Barrier Reef World Heritage Area. In spite of this proximity to the original, Townsville has an aquarium of its own, called “Reef HQ”, self-proclaimed as “the world’s best living reef experience” and a more recent refurbishment of the facility has seen the adoption of the slogan “see the reef up close”. It is synonymous with the Reef itself, and allows people to experience *the* Great Barrier Reef without leaving the Australian mainland. In Sydney, the Australian gateway for the majority of overseas visitors, there is a large aquarium that boasts a “Great Barrier Reef” section. A promotional web site for the aquarium states that “[h]ere you will see the Great Barrier Reef close up” (Quakk.com/). The aquarium facilitates access to the Reef for those who cannot visit the original location in person, and the Reef is thus experienced and understood through an elaborate simulacrum.

As copies of the coral pools and the underwater world, aquariums continue the chain of replicating images of the Reef that is necessary to the fetishised commodity. Relatively early in the colonial history of the Reef, the original begins to be described as the copy as a way of communicating its significance. The coral pools and underwater world of the original Great Barrier Reef are described as aquariums. The narration of the 1935 Film, *This is Australia*, suggests that the Great Barrier Reef is an aquarium and the life within it, merely items of display:

The Great Barrier Reef, the grave of many a ship, a golden expanse of amber coral, built by tiny insects, a marvellous aquarium. Now look at the exhibits: there's a dogfish ... a bêche-de-mer....

(Gamon 1935)

Aquariums allow people to walk around and view the underwater world as a participant. However, they remain terrestrial – they dress conventionally, breathe without artificial aids and talk, hear and feel as they do in everyday life. In spite of the success that aquariums achieve in bringing the Reef into the everyday, facilitating access and providing almost unlimited close up views of underwater life, there is an incomplete metamorphosis particularly as sensuous experience is limited to the visual. Diving, even more than snorkelling, is therefore hailed as the ultimate Reef experience.

Free-diving and snorkelling provide some freedom of access to the underwater Reef, but the need for oxygen limits the sense of real participation and forces people to the surface. The transformation of the human body has certainly been aided by the development of new technologies. Scuba gear allows people to breathe and balance in water as though they are fishes, and it is possible to remain submerged for extended periods. Nor is it necessary to maintain a physical link to the terrestrial sphere by ropes and tubes of earlier diving helmets. However, for contemporary divers, the limitations are all too apparent, and the intrusion of time, as oxygen supplies dwindle, is a reality that transgresses the transformation from human being to sea creature (Love 2000: 12). These means of knowing the Reef, however, are primarily visual means. Although the capacity to dive has created new sensuous interactions in the form of floating and immersion, other senses are diminished through the same technologies. Although divers can hear sounds of the Reef and fishes, they are even more likely to hear their own bodies – particularly breathing. The air is pre-packaged in aqualung and tastes are limited to the mouth piece with only the general taste of salt. Access to the underwater world is thus always limited to particular visual qualities.

The Great Barrier Reef is largely understood through scientific explanation, and the history of the Reef is also a history of science. People's engagement with the underwater world of the Great Barrier Reef, however, suggests that mimesis has been equally important in its appropriation and control and the visual amenity valued in the underwater vignettes is the same as that of the terrestrial world.

The Great Barrier Reef

I have argued that the Reef is understood through the construction of two simulacra, the tropical island and the coral garden. The fusion of these simulacra into the conception of a single ‘Great Barrier Reef’ creates a commodity that is central to how the region is appreciated by tourists and valued by managers. It is a fetishised commodity because both tropical islands and coral gardens are misconceived as ‘natural’ or part of Nature.

The conception of a single and natural entity is fundamental to the World Heritage status of the region, the way it is managed and how it is appreciated by visitors. The natural quality of the Reef is its most important attribute. World Heritage isolates and rarefies naturalness as distinct and important. Nature is assessed under its own system that makes no reference to those who ascribe or inscribe the values. Visitors’ authentic Reef experiences are also dependent on this ‘naturalness’, or an encounter between humans and ‘nature’, self and other. The way in which heritage systems and visitors value these natural qualities is also dependent on the unparalleled scale of the Reef. The fusion of these attributes into a single commodity is itself dependent on the simulacra of maps and imagery. This chapter explores how these attributes of uncontaminated nature and unprecedented scale, both essential to the World Heritage status of the region, are constructions that cannot be experienced except through simulacra.

A Single Reef

In earlier chapters I have outlined the ways in which the Great Barrier Reef has been constructed as a single entity. This commenced with navigators and the cartographic conventions that allowed them to conceive of the Reef in terms that were familiar to them, and which enabled the region to be represented in a single view. The creation of maps and charts of the region have also gained a visual reality through the advent of aerial photography and satellite imagery. Although these technologies make use of a

number of manipulative techniques, photography is credited with representing an actuality and through them, the Reef as a singular entity is visually confirmed. The cartographic and aerial syntheses are also integral to the way in which the region is managed. The promotion of the region as a single Reef was also important for the conservation lobby and resulted in the establishment of the world's largest marine park and the inscription of the largest World Heritage property. Support for the preservation of the whole Reef, rather than a series of discrete marine parks, rested largely on ecological arguments that the many individual reefs operate as an interrelated whole (Wright 1977). The conception of a single Great Barrier Reef is also responsible for its characterisation as unique because it creates a Reef system of a size that is unparalleled by any other. In this way the size of the Reef stems from its creation as a single entity and, although a construct, is taken as synonymous with the natural qualities of the region, including its aesthetics.

Nature is also misconceived in management itself. The notion of Nature as other is essential to management. Without the dualism between nature and culture, management and conservation lose their purpose. For if human activity is considered to be part of natural processes, managers and conservationists would not feel obliged to reverse instances of human impacts. On this basis Milton (2000) has argued that it is in the interests of conservation to uphold and extend the separation of people and nature. The insistence on this binary opposition results in an ambiguity in the way in which conservationists themselves operate. Management and conservation wish to eliminate human interference in the natural sphere, but this requires a denial or exclusion of their own activities that are other forms of intervention (Milton 2000). In this way too, the control of the Great Barrier Reef is ambiguous.

(Mis)Management: Magic and Contagion

Management is not simply about allowing biological and geological processes to continue, but rather involves controlling and disciplining the Reef. The control that management seeks is the prevention of contagion between industry (or people) and the Reef (or Nature). The threats from people are seen as both direct as in instances of physical collision or oil spills, and indirect through occurrences like global warming and

associated coral bleaching. Both are regarded as instances of contamination, in both a magical and physical sense, that leads to a loss of Nature.

Humans have had it good till now. Now the corals are telling us – beware. Our time may be coming to an end. Watch out for the corals. When they go, we'll follow.

(Love 2000: 188)

This statement suggests that the future of the Reef is directly linked with the future of humanity. Love's comment clearly indicates, that in spite of her own deep time account of geology and the coming and passing of reefs and other phenomena, that the future of humanity is interchangeable with the future of the Reef. This suggests a totemic relationship between people and Reef.

The symbolism of the Reef is therefore ambiguous in the way that Knowles has identified a conflict in the relationship that bushwalkers have with the bush. She identified that the bush was both a threat and a source of well-being to bushwalkers (1997: 57). Likewise, the health of the Reef is a reflection of the health of the people, and yet it is possible for the people to be drowned, stung by deadly marine stingers or eaten by any number of large carnivorous creatures on the Reef.

Control over these dangers has been effected through mimesis as a means of colonisation. This is a two way process (cf. Taussig 1993) in which people transform the otherworldliness of the Reef into the everyday, and simultaneously desire to become other. This has been accomplished through a range of mimetic technologies and the creation of simulacra. These allow visitors to experience the Reef in ways that are analogous to their everyday activities and surroundings. At the same time, other technologies allow visitors to enjoy intimate encounters with the underwater world as participants. This is seen in technologies that enable the transformation of the human body from terrestrial to marine creature. However, the desire to be other runs contrary to conservation in which humans are excluded from Nature.

In spite of the control that mimesis facilitates over the other, contagion threatens to undermine that relationship. The distinction between the Reef and people, its position as Nature in opposition to culture, is essential to the way in which the region is managed.

Reef management is founded on the dualism of industry and nature. The production and reproduction of Reef images and other simulacra are careful to eliminate elements of the everyday. Images in postcards that proliferate around the North Queensland tourist industry are largely free of sugar mills, mine sites and other evidence of industrial activity in the region. Pictures of the Reef show brilliant colours and healthy marine life. There are few images of the everyday industrial or domestic world. Maintenance and work associated with the tourist industry itself is carefully disguised; taking place in the early hours of the morning, in segregated parts of islands or towns, or elsewhere that it can be made invisible. Human intervention is hidden and the simulacra is made more effective. This is not merely a matter of creating the tourist gaze (Urry 1990), but of maintaining Nature as other.

Instances of contagion between Nature and people disrupt these relationships and also highlight other misconceptions in management of the Reef.

Case Study: *Bunga Teratai Satu*

On 2 November 2000, the container ship *Bunga Teratai Satu* crashed onto the Great Barrier Reef, 22 nautical miles southeast of Cairns. The incident and the subsequent reparation made national and international headlines. The ship had stuck fast to Sudbury Reef, in essence a small part of the whole. However, the reaction that the incident sparked suggested otherwise. The perceived impact was far greater, and it seemed that the whole of the Great Barrier Reef was under threat. Similar arguments were successful in the lobby to create the Marine Park in the 1970s (Wright 1977). However, unlike the issues of oil spills, mining, coral bleaching and Crown of Thorns outbreaks the damage resulting from this particular incident can be seen as relatively contained. Nevertheless it represented an instance of direct contagion between industry and nature, and as such threatened all of Nature. Contagion between the two opposing elements threatened not only that particular location on the Reef, but the phenomenon as a whole.

Significant physical damage occurred to the corals of Sudbury Reef when the tanker struck. Initial reports suggested that the ship had left a seventy metre length gouge in the coral. Further threats were also identified from the contents of the vessel. There was no suggestion that the ship itself was damaged or that its contents would escape their containers. However, media coverage sensationalised the oil, chemicals and other pollutants on board. Freeing the coral of the ship became a priority, and several unsuccessful attempts were made to refloat the *Bunga Teratai Satu* in the days after it was grounded. It was almost two weeks before tugboats were able to pull the tanker from Sudbury Reef, and not until three sections of the reef had been removed with explosives. A history of Reef navigation and the passage of time have demonstrated that wrecks can in fact be as rich, if not richer, in biological diversity as other marine locations. However, the possibility of leaving this ship on the Reef was never considered – not least because the vessel was in tact and its cargo destined for Australian consumers. Nevertheless its presence was seen as particularly polluting because of the anti-fouling agents used on the ship's hull. This is toxic to marine life, and even after the ship had been removed, conservation groups were suggesting that its effects would be felt for anything up to five years (WWF Australia 2000). There is also something more to this repulsion which is echoed in Love's (2000: 77) comment that "[h]umans build artificial reefs from old tyres and concrete blocks. Nature, one hopes,

will do better". Why is the interference of humans, or the addition of artificial materials to the Reef, so abhorrent if they ultimately extend the diversity and richness of marine life that is valued and revered in World Heritage listing?

Once the ship was freed from the Reef, divers immediately went underwater to see what damage had been done. A film from this excursion was released for television news and the public was shown an underwater desert with lots of sand and coral rubble. In these colourless depths viewers saw not the colourful fish and coral usually associated with the Reef, but grey sharks and stonefish that had begun to recolonise the area. While this might have been considered a positive and remarkable speed for initial signs of recovery, what is emphasised in the reports is the return to danger and chaos. *The Australian* reported on 12 January 2001 that a clean-up operation had begun to restore the area of impact.

With a shark as an inquisitive visitor and poisonous scorpion fish providing an occupational hazard, divers were yesterday cleaning up the mess left by a Malaysian container ship that ran aground on the Great Barrier Reef late last year.

(Pryor 2001)

Scorpion fish include lionfish and firefish which although venomous are renowned for their striking form, brilliant colour and beauty. In this report, however, the scorpion fish, together with the sharks and stonefish shown in the news footage, have been relegated to the poisonous, dangerous and ugly. Stonefish are adept at camouflage and are able to transform themselves into the grey and mottled colours of the sea floor. Because they present a hidden danger they are characterised as threatening and malicious, and the stonefish is also referred to as the ugliest of all fish. In contemporary promotion and experience of the coral underwater these dangerous creatures are seldom highlighted. The incident of the tanker and the destruction it caused can therefore be seen to have disrupted more than this specific area. The colourful coral gardens were returned to a colourless and dangerous threat. There was also a loss of the order and containment of the garden. A strong call by conservation groups to have all vessels escorted through the Inner Route suggests that the control achieved through cartographic mimesis had been lost.

The contagion caused by the tanker also hints at another form of contagion that is not often recognised in relation to the Great Barrier Reef and World Heritage listing. The recognition of the Reef as a place of universal value brings with it a strong implication of global ownership which has been a source of conflict for many local communities at World Heritage properties. The Reef is also presented and constructed through an idealised Pacific that displaces its Australian context (Chapter 7). Furthermore, the tropical islands and coral gardens can both be seen as colonial constructs laden with values of the British Empire. The *Bunga Teratai Satu* therefore poses another form of pollution, and that is of the exotic. The fact that the tanker was Malaysian – Asian and Other – was given considerable attention in the press even though the goods were intended for Australian consumption. At a time when the refugee polemic was raging, the Reef incident reflected heightened Australian xenophobia. It was one of the few instances in which the Reef was claimed by the Nation and not for the world. This exposes some of the values implicit in heritage regimes and the groups whom they best represent.

The physical area of impact from both the collision of the Malaysian tanker and the consequent management and recovery strategies is relatively small in relation to the 350,000 square kilometres of coral reefs and islands that constitute the Great Barrier Reef World Heritage Area. The contamination, in a magical sense, however was polluting of Nature. Contagion occurred when the carefully separated elements of nature and industry mingled as a result of the accident. Maintaining the separation of industry from nature forms the focus of Reef management today. The idea of the authentic, pristine naturalness of the Reef is an essential part of the way it is valued by the listing processes of World Heritage. It is these underlying concepts of authenticity, nature and wildness that underpin the value of the Reef as a commodity. Management and experience of the World Heritage Area are oriented towards maintaining and witnessing these ‘natural’ values, and preventing contagion between two opposing forces.

It is ironic that the human influence so central to the establishment of the garden, the islands and the conceptual whole that provide people with control over the Reef, is also a source of contamination and destruction. This ambiguity creates a series of contradictions that undermine conservation of the Great Barrier Reef. The four major contradictions are:

- Through mimesis people seek to control the other, and also to become other.
- The Reef is both a source of well-being and a source of danger.
- People must not interfere with Nature, but intervention is necessary to (re)construct or maintain 'nature'.
- Biodiversity enriched through artificial means is less valuable than naturally occurring biodiversity.

A further point of particular interest is the idea that the threat to one small reef could undermine the integrity and authenticity of the whole Reef, and by implication, the health and future of all humanity.

The Whole is not a Sum of its Parts

The ultimate view of a single Great Barrier Reef is that from space. In one picture it is possible to conceptualise the Reef as a whole, to comprehend and control it through a reproduction that has the power of the real. At the same time the complexity and diversity of the Reef is illustrated through reproductions of its intimate life forms. In this way the Reef that people experience is a cinematic collage. The collage is made up of multiple images at different scales and from different viewpoints. It comprises strategic satellite and aerial imagery, scenic panoramas and images of islands and seascapes. There are also surface images of and by tourists, in hotels or by pools, on islands, ships and dinghies, walking on beaches and resting under palm trees. The collage also brings underwater divers and the living reef to the surface in detailed close-up imagery of polyps, fish, sea slugs and micro-organisms in the sea floor. The challenge to management is that these activities and views are not singular or strategic.

For all that the Reef is renowned for its immensity, most people experience it through very small parts. These experiences of the Reef are antithetical to management. Management is dependent on the panopticon, or strategic view as represented by maps, aerial photographs and zoning. However, the way in which people actually experience the Reef, through snorkelling and diving, aquariums and glass-bottomed boats, is through its parts. In other words management operates through a misconception of the Reef as a whole. This is analogous to de Certeau's (1984) walking the streets in which the strategic view of management is unable to reflect the experiences and practices.

The way in which people experience the underwater Reef is also reminiscent of Dr Aziz in Salman Rushdie's *Midnight's Children*. Dr Aziz treats a female patient through a hole in a sheet that is held up to preserve her virtue. In diagnosing and treating the woman in small sections, Dr Aziz falls in love with the parts rather than the whole.

In short: my grandfather had fallen in love, and had come to think of the perforated sheet as something sacred and magical.

(Rushdie 1981: 24).

In this way, too, people have fallen in love with the Great Barrier Reef, and the technology that facilitates access to the underwater is itself sacred and magical. Human

love of the Great Barrier Reef is also a love of the human capacity to mimic the ultimate other, Nature.

Whether looking through the water surface, a waterscope, glass bottomed boat, aquarium porthole, camera, microscope, or even facemask, visual interaction with the underwater Reef is analogous to looking through a perforated sheet. In spite of all the technology that facilitates access to the underwater world, the Great Barrier Reef remains alter and human experience limited. People try to control and understand this through the production and influence of technology. Reproductions pull the Reef in many directions. They subjugate its sublime character, extend its infinity and control its dangers and difference. The elaborate chain of mimesis that is processed through maps, photographs, films and aquariums, is integral to the fetishisation of the Reef as a commodity. The appeal of the Reefscape stems not only from its otherness, but also from the way in which its signifiers have captured and enhanced the power of the original. A history of experiences of the Reef suggests that it is not a linear history of controlling events, but a constant pulling and pushing of the mimetic faculty that both gives and removes governance over the phenomenon.

Hyper-Reality

The elaboration of ways in which the Reef has been reproduced and replicated is an indication of its status as a fetishised commodity. The endless production of photographs and the creation of aquariums also leads to the production of the hyper-real (Eco 1986). Effective mimetic technologies produce a hyper-reality in Reef experiences in which the copies appear more authentic than the original. For many snorkellers and divers the experience of entering the underwater world of the Great Barrier Reef is reminiscent of the aquarium, so that in relating the thrill of her first dive on the Great Barrier Reef, Karen Miller recalls that “[t]here were many mixtures of parrotfish and butterfly fish, which always remind me of aquarium fish” (Miller 2001). This inversion of the role of copy and original, between the aquarium and the Great Barrier Reef, is further sublimated in the example of ReefWorld.

ReefWorld is a self-contained aquarium centre. Like many modern aquariums, it offers a viewing chamber, souvenir shop, kiosk and dining. It is a little more unusual in that visitors are provided with sundecks and a facility to actually swim with the exhibits. At ReefWorld you can do almost everything that you can do in a city aquarium. But you can also do more. You can take a helicopter ride to gain a controlling aerial view of the Great Barrier Reef and you can sit in the comfort of a semi-submersible boat and view a wall of coral. All this is possible because of the extraordinary fact that ReefWorld is situated on Hardy's Reef on the Outer Great Barrier Reef (Figure 1).



Plate 62: ReefWorld offshore pontoon, Hardy Reef

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ReefWorld (Plate 62) is a large offshore pontoon, and shares some similarities with theme parks such as Disney World (see for example, Eco 1986; and Berleant 1997 for an aesthetic analysis of Disney World). It is different in that time intrudes and there are real dangers associated with the Outer Reef. Pontoons act like small islands and offer a sense of security to what otherwise would surely be recognised as a foolhardy activity; plunging into the depths of the ocean. "Walking on the pontoon is comparable to walking on land, and the structure allows easy access to all activities" (Pure Pleasure Cruises 1999). People can swim along the coral wall at Hardy's Reef, and there are ropes to guide them. This provides a sense of security and containment, as well as a necessary safety measure. Visitors are advised to stay within this vicinity and lifeguards keep a lookout for anyone straying too far. Strong currents are a real threat and deaths in

similar enclosures are reported in the media from time to time. But in theory visitors are at liberty to explore any part of the Reef. Only one area is declared a no-go zone. Snorkellers and divers are requested not to swim in front of the glass wall of the underwater viewing chamber.

On one end of the pontoon is a darkened auditorium with rows of benches where visitors can sit in dry comfort and watch the world of fishes. This is like many theatres in aquariums built on land. The water through the window is a luminous blue from the daylight that streams through from the surface. It is at once very familiar and very different and seems to represent a moment in which mimesis and alterity blur. At one level the rule about not swimming in front of this chamber appears to simply ensure that fish are not chased away by divers and snorkellers, and to guarantee the presence of fish on the outside of the chamber. However, there is another interpretation. Schools of fish flow all around the snorkellers and divers swimming along the edge of the wall and some, like the maori wrasse, Wally, seem to actually seek visitors out, having become accustomed to them. At other less elaborate pontoons such as that at Kelso Reef off Townsville there are no such restrictions and fish appear to be unbothered by people in the water. As Love (2000: 6) says “fishes move largely indifferent to human intrusion”. So the presence of an occasional snorkeller is unlikely to scare away all the fish. It is more likely that the prohibition on people in this area of the ReefWorld pontoon is aimed at enhancing the sense of Nature. It also enhances the sense of the aquarium.

The Outer Barrier Reef is regarded by many as the most authentic part of the Great Barrier Reef and is promoted as providing visitors with a ‘genuine’ Reef experience. It is for this experience that people must travel beyond the mainland city aquariums. This is what it is all about: the vastness, the vivid colours, the swirls of corals and ribbons of blue, the depth of water beyond the security of the coral wall, the vast and infinite phenomenon, all out of reach of land. ReefWorld achieves this through mimicking the mimesis of the aquarium. It is a brilliant case of what Taussig has described as “an almost drug-like addiction to mime, to merge, to become other – a process in which not only images chase images in a vast, perhaps infinitely extended chain of images, but one also becomes matter” (1993: 43). For ReefWorld is not simply a facility in which people can view the ‘real’ thing. It has captured essential elements of the modern day aquarium in its construction, presentation and associated amenities. It has also captured

many of the other elements of a Great Barrier Reef experience that include a range of historically constituted activities such as sunbathing on islands, climbing down into the underwater observatory, viewing corals from a glass sided vessel, taking helicopter rides and learning to scuba dive and snorkel. ReefWorld is therefore a simulacrum of several simulacra.

ReefWorld is another expression of Taussig's observation that more than ever mimetic technology has led to an excess that results in mimetic faculty and mimetic historical product turning on one another, so that the self is no longer separable from its alter (1993: 252). The effectiveness of the aquarium or the pontoon as a copy of the original depends on both copy and contact and is not dependent on realism alone (Taussig 1993: 10-11). Rather, the aquarium encapsulates the sublime, and transforms that which is beyond human comprehension into a package for consumption. The original experience of the Great Barrier Reef is thus likened to an aquarium.

ReefWorld's ascendancy lies in its mimesis of the original and its copies. It brings together all aspects of Reef visitors' history in a space that could constitute the original. The original has been observed, copied and sampled, taken away, and then brought back to the authentic location in which it originated; transformed, enriched and more powerfully authentic.

From Place to Non-Place

ReefWorld brings together aerial scenery and close up intimacy of coral gardens, the Outer Reef and the safety and comfort reminiscent of an island or aquarium. Although it is described as providing authenticity in Reef experiences, as a third stage simulacrum it no longer represents any original. Further to this, the experiences offered by ReefWorld suggest the degree to which contemporary Reef visitors fail to experience a sense of place. I have argued in Chapter 3 that a sense of place derives from the experiences of a knowing sensate body, a sense of orientation and location, as well as a sense of time. Visitor activity at ReefWorld suggests that few if any of these attributes are experienced by contemporary Reef visitors.

Augé (1995) has developed the concept of non-place in contrast with his definition of 'anthropological place'. He identifies anthropological place as established and symbolised; and socially constructed and inscribed in both space and time. In contrast he defines non-place in the following way:

If a place can be defined as relational, historical and concerned with identity, then a space which cannot be defined as relational, or historical or concerned with identity will be a non-place. The hypothesis advanced here is that supermodernity produces non-places, meaning spaces which are not themselves anthropological places and which ... do not integrate the earlier places: instead these are listed, classified, promoted ... and assigned to a circumscribed and specific position.

(Augé 1995: 77-8)

It is the pervasiveness of the sign, and lack of both identity and relationship that characterises the non-places of supermodernity of which travellers' space is taken to be an archetype (Augé 1995: 86). De Certeau (1984: 103-4) suggests that the proper names attributed to places also attribute direction to an itinerary and are thus the impetus for movement. He argues that this movement could not be foreseen prior to the action itself and hence proper names are always retrospective of practice. Consequently proper names supplant places and these named locations are transformed into passages of movement and create non-place or 'nowhere place'. However, Augé (1995: 85) suggests that through such place names, the places themselves gain status as a part of a journey. He argues that a horizon is a necessary part of any journey and that movement traverses places so that place names are accumulated as words and non-places to create the necessary itinerary. A journey such as this is one of more than a single place and is brought about through the traveller's own movement and the external moving landscape which is accumulated by the traveller as a series of 'snapshots' (Augé 1995: 85-6). These snapshots can also be interpreted as the isolated single points in an itinerary as opposed to the journey which links them together. These snapshots characterise the way in which travellers' experiences of place have changed. Journeys of supermodernity are routed around places by way of highways and other corridors that skirt around places with living history and identities. The traveller is no longer privileged with insight into everyday lives of particular places in travelling through those places. Instead signs along highways declare the historical nature of a particular region and thus history is replaced with its signifiers (Augé 1995: 73). So non-place is firstly without history.

Importantly, Augé identifies how an individual can fulfil the role of spectator without having a focus on the spectacle itself. One of the conditions of supermodernity is that the individual loses the usual referents of identity and instead is only defined by their role or action within a particular non-place (Augé 1995: 103-6). The traveller who thus identifies through the act of being a spectator, rather than focusing on an actual spectacle, is illustrative of this. As such the tourist identifies as a spectator and this becomes the spectacle itself (Augé 1995: 86). This idea is significant because it expands and complements Urry's (1990; 1992) discussion of the tourist gaze to recognise that it is not only the subject of the tourist gaze, but also the act of gazing itself that is important to the traveller and of establishing tourist identities in supermodernity. This act of gazing enables tourists to identify with the promotional imagery of non-places, to imagine themselves in the position of the gazer. In this Augé suggests that while the image only portrays something about the would-be traveller, the object of the gaze is named as a particular destination and thus constitutes a classic non-place (1995: 86).

The third factor in non-places is the question of relatedness. In contrast with modernity in which old and new were interwoven into a working whole, supermodernity reduces all history, local particularity and exoticism into forms of spectacle. There is also a lack of synthesis with any particular curiosity along a journey equated to all others, so that they remain equivalent and unconnected (Augé 1995: 110-11). This is reminiscent of Casey's (1996) discussion of how regions, defined as a broad spatial units comprised of a number of interrelated and co-located places, can be undermined by the lack of relationships and a lack of distinction. He suggests that the absence of any clear relationship between a series of places results in the obscuration of local knowledge. Additionally he suggests that when places of a related region lack individual specificity or distinction they merge into one another and the region reverts to abstract space (Casey 1996: 45-6). Augé, however, characterises the equivalency and unrelatedness with non-place.

Such idealised destinations are identified by Augé as another form of non-place which is more properly an imaginary place. These places are 'banal utopias' and clichés that only exist as the words that evoke them. Unlike de Certeau's non-places which represent a disjunction between everyday use and lost myth, in imagined places words create images which in turn create myths that are realised through television, imagining

and tourism (Augé 1995: 95-6). These imaginary places are not classic non-places by Augé's own definition either. His non-places are defined by the words and texts which provide instruction or information to people and which thus define their behaviour and in turn their prescribed identity as traveller, shopper or driver. Non-places are also defined by time because they are subject to timetables and itineraries. However, this is not expansive or historical time because non-places are only lived through in the present and history is only present when it takes the form of spectacle (Augé 1995: 103-4).

The Reef as Non-Place and Space

The journey from the island resorts of the Whitsundays to ReefWorld was by way of a large fast catamaran. The timetable suggested that there were several alternative departure times on any particular day. This gave the impression that the trip was analogous to everyday commuting. However, the different departure times simply reflected the time it took to travel between all the island embarkation points. This reduced the sense of time that passengers could expect to spend on the journey to the Outer Reef and time was therefore distorted even before passengers boarded the vessel. The journey to Hardy's Reef commenced with ports of call at key island resorts, and these were some of the few locations mentioned by the skipper. It took just under two hours to travel from South Molle Island, the last point of embarkation, to the ReefWorld pontoon. During the voyage, the majority of passengers sat inside in the air-conditioned cabin. There and on the outer deck were a number of televisions which screened video for the duration of the voyage. These served to distract people from observing their movement in space and time.

Although ReefWorld provides several means by which to access aspects of the Reef, these are by-and-large focused on visual experiences. The focus of these activities, including diving and snorkelling, is on *looking* at the Reef. As Rodaway (1994: 131-3) has suggested, human vision is always partial rather than panoramic or all encompassing. And contemporary experiences of the Reef increasingly focus on visual amenity in isolation from a fully sensate and thinking body. The all encompassing vision of the Reef, from the air or outer space, is not an embodied sensuous experience and does not contribute to a sense of place. Similarly, intimate encounters with the

living Reef are increasingly experiences of dislocated and disembodied visual sense. The Reef commodity represented simultaneously by close-up and distant imagery is only possible through the camera and interactions with the underwater sphere are similarly mediated by technology. There is always technology between people's bodies and the Reef itself. While some technologies enhance our sensuous appreciation (cf. Rodaway 1994), the increasing focus on visual senses has displaced many others. In addition, the living Reef can only be experienced sensuously as small parts of the strategic whole. It is not possible to have a multi-sensuous knowledge of the conceptual whole. Human appreciation of the Reef is therefore strongly tied to technological advances and mimetic capacity.

At ReefWorld guide ropes create a swimming enclosure that provides security for visitors. They ensure that people can find their way back to the pontoon with only the most basic sense of relative orientation. Even danger is no longer a personal concern. The Great Barrier Reef is presented as synonymous with this small cordoned off section of the Hardy Reef lagoon. The catamaran and pontoon on which people spend most of their time are both examples of archetypal non-places that characterise modern travel (Augé 1995). These are inhabited by large numbers of people who, unless travelling together in groups, remained anonymous – only identified by their participation in the trip and by the activities that establish them as tourists.

The lack of a sense of place is not, however, restricted to ReefWorld or even to aquaria or other pontoons. Instead the history of visitor interactions with the Reef suggests that contemporary tourists' experiences are of an imaginary non-place rather than place in contemporary encounters with the geographic space of the Reef. This can be seen in tourist resorts on the islands which mimic one another, but most importantly they mimic other parts of the Pacific and an imagined destination. As such they have become a series of equivalent and unrelated spaces in a broader region which itself lacks distinction. Consequently the Great Barrier Reef is experienced as non-place.

This is not to say that the region cannot be perceived as place. Augé's arguments project a rather bleak image of contemporary society – or as he portrays a lack of society. However, he recognises that there are many forms of contemporary existence and that the non-places of supermodernity are only one of these. Significantly, too, he maintains

that even within non-place places can be constituted and so non-place is never an absolute state.

Much of the conservation effort at the Reef is focused on conserving particular aspects of the physical environments. The same elements that form the basis of distinctive experiences of place for visitors at the beginning of the twentieth century continue to thrive in the area today. They also continue to contribute to local residents' sense of place. The factor that has changed is the way in which visitors interact with these environments. This has occurred primarily through the focus on visual qualities that characterises management, tourism experiences and heritage assessment and are reinforced through conservation measures. The reliance on visual amenity allows many aspects of the Reef to be misconceived. The beauty of the Reef is presumed to be intrinsic in the 'natural' qualities of the region. This visual appreciation is not ameliorated by the smell of death and decay, a slimy touch, excess of heat, insect bites or danger. Hyper-reality transforms the underwater Reef into the everyday and renders the unknown and other dangers benign. It also creates a commodity in which the interference of humans is rendered invisible. And most significantly this allows the Reef to be known as 'natural' and synonymous with Nature.

I set out to examine visitors' experiences of the Reef, and how places are constructed through sensuous knowledge. The project originated in a recommendation to the Great Barrier Reef Marine Park Authority that social values are an important element of heritage significance often overlooked by management (Greer, *et al.* 2000). My task was to identify social values of the Great Barrier Reef to assist in its effective conservation. Like many aspects of heritage practice, the definitions and use of criteria are under-theorised and often misinterpreted. In the first instance, I therefore reviewed 'social value' as a criterion to assess heritage places. I found that social value is poorly defined and articulated and consequently the methods used to identify and assess these values are equally unclear. I concluded that social value can in fact be equated with heritage value more broadly, because all heritage is socially constructed. In doing this I not only questioned the distinction between natural and cultural heritage, but questioned the very merit of social value as an assessment criterion.

In spite of my conclusion that social value is a poorly conceived and unsuitable criterion, the purposes for which it was developed and is used in Australian heritage contexts are important. There is an increasing acceptance in many spheres of heritage practice and research that heritage needs to move beyond the traditional realm of the grand and elite, to consider the everyday and to recognise cultural and social groups traditionally underrepresented by heritage regimes. At the same time and in parallel there are persuasive arguments that the division between natural and cultural heritage is artificial and unsustainable. It is partly in response to these two issues that social value has gained such currency in Australia. Nevertheless, the term is poorly defined and ineffectual in assessment. I therefore sought an alternative avenue through which to consider these issues.

Another problem with a focus on 'social value' is that very few heritage management regimes in Australia or elsewhere in the world include 'social value' as a specific criterion. World Heritage listing, under which the Reef is recognised and celebrated,

does not have the capacity to assess significance solely on the basis of social significance. Nor does it have the capacity to consider natural and cultural values under a single framework. In contrast, aesthetics are used to assess heritage in many different heritage regimes and, in the case of World Heritage listing, aesthetic criteria are specified for both natural and cultural heritage. Furthermore, some heritage regimes recognise that aesthetics are socially constructed and can be an important means through which people express association with particular environments. I therefore focused my research on the aesthetics of the Reef as a means to understand how the region is constructed and understood and how this has changed over time.

Further to my critique of social value, I reviewed the way in which ‘aesthetics’ are defined and used in heritage assessments. Although many heritage definitions encompass non-visual experiences, the application of these criteria focuses predominantly on particular visual qualities. Consequently significance assessments are strongly biased towards assumptions about architectural aesthetics and natural beauty. These operate to the exclusion of other cultural groups and an everyday sense of place. In seeking to address the concern of social value in relation to aesthetics, I therefore adopted the term ‘sensuousness’. The use of a different term serves to break the nexus between ‘aesthetics’ in its traditional contexts of fine arts, architecture and landscape, and its application to heritage management. In doing so it is possible to consider a much broader range of corporeal knowledge and to consider its relationship to place and space.

The way in which places are constructed through a sensate and knowing ego is the central way in which I have sought to understand visitor experiences of space and their construction of place. The sensual experiences of the body are considered as interdependent, with sight, sound, smell, taste and touch informing one another through a kinetic, oriented and thinking body. These experiences produce a knowledge of place. This emplaced and embodied knowledge is culturally determined because both places and bodies are culturally informed. It is also a knowledge that is often taken for granted or second-nature and as such it constitutes the types of everyday cultural places that heritage practitioners seek to identify through social values.

These ideas have been applied to my study of the Great Barrier Reef and the principle aims of the project, to develop an understanding of how the physical space of the Great Barrier Reef has been perceived and constructed through visitor experiences. Two of the primary aims of this research were to develop methods through which to assess social values, and through these methods to identify insight into the social reproduction of the values and associated knowledge. These two aims are related. Social value is often taken to be synonymous with contemporary value and hence established methods do not account for change over time. An interest in temporal changes necessitates the use of alternative methods of inquiry.

I used a range of archival data sources to reconstruct the ways in which visitors have used and understood the Reef in the historic past. These include both private and public representations of the Reef. Visual qualities dominate the recognised aesthetics of the Reef, and both photography and visual quality are important to the Reef and contemporary tourism. I therefore used photographs and film in addition to written texts to reconstruct past visitor experiences of the Reef. Having used these sources in the historic context, it was appropriate to use analogous contemporary materials for the purpose of comparison. For this reason my research of contemporary experiences depended on texts that were equivalent to those in the archives, particularly diaries, travel journals and photograph albums available on the internet, and observation of the physical context of tourist activity. The sources were analysed in accordance with my research questions to identify the sensuous experiences that people have encountered at the Reef in different eras.

The methods are novel to heritage studies, particularly social value which has no methodological or disciplinary structure of its own. One of the outcomes of this research has therefore been the development and implementation of assessment methods that not only allow consideration of temporal change and continuity, but which also offer a more systematic method of analysis. The methods are also significant because the sources are not framed within heritage processes. Heritage assessments that involve community members in the identification of values usually elicit information through forms of direct questioning. Consequently the data gathered are strongly influenced by the heritage or development issue in question. The sources I used were not constructed in this way to the extent that they did not rely directly on conscious community

participation. This is important for two reasons. Firstly, it allows the identification of significant experiences that are not consciously constructed and which might be taken for granted by participants. Secondly, it provided scope to consider how people experienced the Reef in a particular historical context without the influence of contemporary issues, hindsight or nostalgia. My focus on sensuousness through the use of textual forms therefore allowed me to identify some of the values that are usually omitted from heritage assessments, and are thus neglected in management.

The results of these methods indicate that it is possible to identify significant social trends in how visitors experience the Reef in different times. The different source types have also been used to substantiate, support and further an understanding of any particular pattern. Furthermore, it has been possible to interpret these experiences to comprehend how multiple spaces and places are (re)constructed within a single geographic location through time.

In Part 2 of the thesis I identified a range of sensuous experiences that contribute to people's construction of the Reef. These include a sense of orientation and location as well as the senses of sight, sound, smell, taste and touch. This part of the thesis also considered the role of capture and the way in which constructions and knowledge of the Reef has been transmitted within and between generations.

A significant change in sensuous knowledge of the Reef is the awareness of Cartesian spaces of the Reef. In the early twentieth century, visitors were aware of their location at particular points or along routes of their journeys within the Reef. They were also aware of differences between particular locations. They made a strong distinction between the mainland islands and coral cays, and between the associated fringing reefs of these locations and of the Outer Reef itself. This sense of location was partly a re-enactment of navigational discovery and points to a heightened sense of place. This is conspicuously absent from contemporary Reef experiences, in which any one of the locations within the 348,700 square kilometres of reefs can be taken as synonymous with the Great Barrier Reef. This is enhanced by modern infrastructure particularly rapid transport in which the journey to particular parts of the Reef is no longer part of the experience of the place, but an inconvenience in reaching a final destination whether that is one of the island resorts or a pontoon.

These same changes to infrastructure also resulted in changes to other sensuous experiences. The construction of resorts with air-conditioned accommodation, swimming pools and landscaped gardens serves to dissociate visitors from the environments of the Reef location. Consequently many of the sensory experiences that contributed to early visitors' knowledge of the Reef have been removed from the spaces that tourists use. In a few instances particular sensuous qualities have a long and continuous association with particular locations, such as the sound of the pure silica sands at Whitehaven Beach in the Whitsundays. However, in many more instances senses have been diminished through changes to the landscape. This was notable in relation to the sound of she-oaks. Although present throughout the World Heritage Area, casuarinas are absent from tourist locations. Even when present, their subtle sighs are obliterated by modern infrastructure and even the competing sounds of a constructed 'nature' of the Pacific ideal. Many sensory experiences that can act as indicators of particular locations have been lost to visitors.

While some senses have been diminished in visitor experiences, new technologies have made others possible. This is particularly true of human access to the underwater living Reef and the reproduction and transmission of Reef experiences between and within generations. This history suggests that over time visitor experiences of the Reef have become increasingly dominated by isolated visual experiences. This emphasis comes from the interrelationship of several factors, including the importance of sight in human physiology, the ways in which technology both reflects and reinforces that bias, and the transmission of visual information via those technologies. The capacity to engage in a multi-sensuous way with various environments is also restricted by conservation ethics which prohibit particular activities that were once integral to Reef visits. In spite of these changes, and in contrast with Byrne *et al.*'s (2001) suggestion that social significance has little continuity from one generation to the next, my research suggests that such experiences are based in a continuity of knowledge that is transmitted in a range of texts. Without such social reproduction there could be no culture or continuity through which to recognise heritage. The sensuous engagement of people with the Great Barrier Reef indicates that the way in which space is experienced and through which places are constructed, is built from cultural continuity and disruption, as well as innovation.

Through these sources I identified change and continuity in how people construct and understand particular Cartesian spaces as social spaces and places. Part 3 of the thesis explores particular visitor constructions of the Reef. These include the idealised tropical islands which mimic and are mimicked by the colourful coral gardens of the underwater. These two simulacra are misconceived as part of nature and fused into a single Great Barrier Reef commodity. The singular Great Barrier Reef is also a simulacrum because it is only possible to conceive or visualise this single entity through (re)productive technologies of maps and photographs. Photography is able to simultaneously present and construct multiple views of the Reef which are not possible in person. Similarly, the substitution of any part of the Reef for the whole is made possible through the synecdoche of the coral garden which in turn is represented through aquaria. Hence the Reef is increasingly presented and communicated through simulacra in which visual experiences are not only dominant, but are also disembodied and dislocated.

The scale and danger of the Reef have precedence in the opinions and experiences of the navigators and this conception of the Reef has been reiterated throughout the twentieth century. Although technological changes have facilitated new ways of experiencing the Reef, its underlying danger continues as a threat. Even though new technologies allow the whole Reef to be conceptualised through a singular copy (the satellite image) and experienced through the elaborate simulacrum (ReefWorld), these are fragile constructs. Contagion between the carefully separated industry and nature, quickly transform the panorama or coral garden into a place of chaos and danger.

Reef simulacra promote limited and particular visual experiences. Although I sought to identify sensuousness beyond these, they are dominant in contemporary experiences of the Reef. Consequently, visitors and the 'universal' body of people who value the Reef can only understand and know it through this construction. This has not always been the case, and nor is it so for the individual experiences of people at the Reef. However, the management of heritage landscapes, and the way in which statements of significance determine that management, are constructed around a strategic view. This does not allow consideration of the everyday and sensuous knowledge of place. In relation to the Reef, this is epitomised in the view of the Reef as a singular, and therefore unique,

phenomenon. This strategic view is that of an outsider. It does not assist in knowing how the Reef is experienced at a local level, or what elements of a particular landscape are worthy of protection. A significant implication of this for management is the failure to identify embodied ways of knowing the Reef. The panoramic and strategic views of the Reef are therefore important to tourists and to managers, but there may be other ways of conceiving the Reef, and it is these values that are neglected.

The results of this research suggest that sensuous experiences are an integral part of people's construction of places. It is through an 'embodied cogito' that places are realised. The identification of a range of sensuous experiences at the Reef in different eras illustrates how knowledge of the region has changed and continued through time. The Reef was understood through sensuous experiences of particular locations in the past, and it is likely that locals continue to experience parts of the region in this way. However, sensuous knowledge of the Reef is significantly diminished in the modern era. Baudrillard (1983) has suggested that postmodern experiences are not based in the real. Instead of multi-sensuous engagement with the environment, experience is now based in visual amenity, particularly through simulacra. This is also the way in which heritage is constructed and experienced in the present. These limitations are compounded in relation to the Reef aesthetics which are assessed through a static and narrow definition of visual quality. These particular visual qualities are central to contemporary visitor experiences, and significantly are the means by which people who have never been there acquire knowledge of the place. The Reef is deemed to be of 'universal value', but the only way in which absent people can know the Reef is through simulacra which present a static visual panorama in which other senses are significantly diminished. Significantly, neither the strategic view nor any of the other dislocated and disembodied experiences of the Reef constitute the kind of local knowledge built from sensuous experience that constitutes space.

As a consequence of changes in technology, infrastructure and ideology, visitors to the Reef enjoy experiences that are displaced or part of space. They no longer appreciate the range of sensuous knowledge that characterises place. Tourists are not emplaced and their knowledge is only of visual aspects without the relationships that characterise place. In this sense the Reef can also be known as non-place characterised by a lack of history, relations and identity (Augé 1995).

The significance of heritage places is often linked to their role in establishing or maintaining a form of social identity. This is particularly the case in relation to social significance which is to some extent regarded as one and the same (Byrne, *et al.* 2001: 70-2). As with 'aesthetics' and other terms used by heritage practitioners, the application of identity is often taken as a fixed status and intrinsically significant. Identity, however, is relative to the role of the individual and their relationship to others (cf. Goffman 1961). In spite of the socio-economic and cultural stereotyping of tourists, they comprise diverse individuals and cultural identities. Their identity as a unified group is established through particular mechanisms, a significant aspect of which is the construction of a tourist gaze (cf. Urry 1990, 1992). In relation to the Reef, I have suggested that the tourist gaze of the region is one based in the creation of the tropical island fantasy; a simulacrum in which the palm is a powerful synecdoche. It is also established through the panoramic gaze that creates the region as a singular entity of unparalleled scale. And thirdly, the tourist gaze is established through the view of the coral gardens. To this extent the Reef is a significant tourist destination. The visual qualities of the region are integral to its heritage status and its tourist appeal, and hence it might be argued that the aesthetics of the Reef are important in establishing the identity of tourists.

This realisation raises the question of whether social identity is necessarily significant, or rather whether all identities are equally significant in heritage assessments or in the recognition of place. The significance of a tourist identity is questionable given that this is only ever a temporary one. It is also an identity created out of a lack of usual relations and defined only according to the act of gazing and other activities that define people in non-places (cf. Urry 1990; Augé 1995). The state of being a tourist is sometimes regarded as a liminal phase, and tourism is unquestionably a significant global phenomenon of the twentieth century. Tourism is therefore worthy of study. However, the connection between heritage and identity in this instance is not necessarily a significant aspect of the heritage value of the Reef or in the constitution of place. The identities are not emplaced and are therefore not integral to the place. Instead the identities are created through gazing on a familiar exotic or other. It is the act of gazing that is primarily significant rather than that which is gazed upon. Contemporary experiences of the Reef suggest that knowledge of the Reef is acquired in similar ways

by both visitors and people who have always been physically distant from it. Hence the way in which the Reef is understood is not dependent on an embodied or emplaced experience. This knowledge is not a local knowledge of place borne out of a sensuous engagement, but a simulacrum that bears no relation to the original. As such the relationship between identity and place is unsubstantiated.

In contrast with this way of knowing the Reef, early twentieth century visitors engaged with the landscapes of the region in a way that gave them a sensuous embodied knowledge of locations from which they drew a knowledge of place. Although they too were drawn by the idealised Pacific islands, the experience of being at the Reef combined both these imaginative ventures with tactile, olfactory, visual and auditory experiences of the region. Their knowledge of the Reef was thus understood to encompass elements of a particular location that are drawn from both the physical or material environment and their own perceptions and associations of that environment. This served to undermine or complement the generic and imagined space and early visitors constructed and valued particular places.

While it can be argued in relation to the tourist gaze that the Reef establishes a tourist identity, this seems only to confirm that World Heritage listing is at the cost of local identity and interests. The Reef is likely to be automatically included in the new Commonwealth register of nationally significant places because it is a World Heritage property. However, the national list might be expected to relate to national identity. In spite of this, the Reef is not experienced or known by visitors in relation to any of the known indicators of ‘Australianness’ – mythical or otherwise. Instead the Reef is known through simulacra that represent a generic and idealised ‘elsewhere’.

Future Research and Application

There has been very limited research undertaken in relation to the social histories of the Great Barrier Reef and the possibilities for further research appear almost endless. There are many more sources that could be explored both for tourism and in relation to other industries and social groups. The development of methods as well as some of the theoretical contributions of this research also have the capacity to be applied to other

regions. To a large extent this study has only been the beginning and the scope for further research is extensive. I have therefore only highlighted a few instances of where and how this might be pursued.

Methods

Even though my research redefines social value and is focused on sensuousness as aesthetics, the methods are relevant to those continuing to work with a social value criterion (see Pocock 2002b). The methods are particularly relevant to the identification of heritage constituted from everyday practices and in a variety of cultural contexts. This sense of the everyday is particularly neglected within current regimes. Neither the focus on particular visual characteristics in aesthetics assessments nor the forms of questioning that characterise social value assessments are able to facilitate the identification of this everyday knowledge of place.

The methods that are usually used to assess social values are limited to forms of direct questioning. In considering global significance I was interested in interrogating sources produced by non-locals, and many sources I identified were not used in this study. However, many remain potentially profitable avenues of research. One of the important aspects of the methods I have used for this study is the reliance on materials that have not been consciously constructed for use in heritage assessments. The particular sources used for this study are by no means exhaustive and there are others that could be used.

The internet has opened up many more opportunities to identify community views in a contemporary context. Internet forums or on-line discussions about a particular location could be used as a means of recording and gauging significance as it changes over time. Management agencies could even consider adopting such reflective means for recording significance in place of, or as complementary to, the static statements of significance that quickly become historical documents (cf. Byrne, *et al.* 2001: 62). Less directly, tourists (and other groups of interest) could be asked to share the images and text that they select for display on web pages. Although many are publicly available, not all can be found with search engines, and this would open up a rich source of contemporary views.

As suggested in Chapter 4, it would be possible to use contemporary photographs of particular locations by seeking permission to view and analyse images as they were printed at processing shop fronts. This would be a useful means of ascertaining those elements people think are significant and what they have chosen to transmit to future generations. Similarly, visitor books from resorts would be an informative source of information. I had wished to use postcards as a source in this project but did not find an established collection. However, these have the potential to show the popular images that tourists select of the Reef as well as the personal observation that might be reflected in the slightly public nature of messages they record.

The methods could be used further in relation to the Reef or applied to other areas of interest. They could be extended and substantiated further by being used in conjunction with established ways of gathering information. This would provide the means to cross-check different methodological approaches. In future this could contribute to the development of quantitative assessments to substantiate the qualitative observations. This should not seek to identify a singular ‘truth’. To the contrary, such multiple sources could facilitate the recognition of a truly multiple and diverse heritage and acknowledge the many different places that can be known in a single geographic space.

The methods I have used could also be extended to make a more deliberate attempt to gather materials from the recent past. There is a gap in public collections from the 1950s and later. While this is likely to be a reflection of ownership resting with the individuals and families who created them, my experience suggests that these types of ephemera are quite vulnerable to destruction and loss of context. Systematic collection of these materials is therefore something that could be coordinated by an appropriate institution through strategic advertising and public announcements.

Any of these materials, including the data gathered and interpreted for this research, could be compared, contrasted and reinterpreted in conjunction with oral histories and other verbal testament. These kinds of qualitative findings should also form the basis of any quantitative surveys to ensure that these are more representative.

Tourism Research

My thesis has built on a small but significant amount of historical research on tourism in the Whitsunday region of the Great Barrier Reef. I have included materials from other locations on the Reef, but these are largely unexplored. Many significant aspects of these histories could be explored. In particular, the far northern region of Queensland and the relationship between rainforest and Reef would be an interesting area of investigation. The vegetation of the northern parts of the Reef coastline is generally much more dense than that around the Whitsunday region. Early trips to the Reef in the Cairns vicinity commonly included exploration of the 'jungle' of the Kuranda area. Current PhD research at James Cook University by Justine Thorp will make a significant contribution to visitor understanding of North Queensland rainforest. From this research it will be possible to consider how the construction of the Reef as an idealised paradise is extended and complemented by the portrayal of the Queensland Rainforest as 'jungle'.

Local Knowledge

This study has focused on tourists and visitors, but the significance of the Reef to locals with an involvement in the tourism industry would be a complementary and useful study. Two industries or activities that stand out as being suitable for this kind of investigation are the commercial and recreational fishers, and the scientists who use the Reef. Both groups have a long history of association and continuity of practice in the region. Unlike contemporary tourists, and in different ways, each group is conscious of the particular locations in which they work. The extended periods for which they find themselves at sea or on islands or underwater exposes them to a range of physical sensations. They also have strong social networks and are governed by their own social rules. As such these groups might be expected to have a strong sense of place at the Reef, though the ways in which it is constructed in each instance will be significantly different.

The perspective of locals could also be explored from within tourism by focusing on the operators and employees. The historic material suggests a local resistance to tourism,

and it would be useful to investigate if, and how, the inconsistencies between tourism and Australian identity are reconciled in the contemporary era.

Indigeneity and the Pacific

The role of Aboriginal people in Reef tourism is particularly worthy of consideration. Aboriginal people are largely written out of tourism discourse at the Reef, but my analysis of photographs and other texts from the first part of the twentieth century suggests that not only were they present, but that they were actively involved in establishing the industry. I am keen to pursue this and have held initial discussions with Aboriginal representatives who have shown interest in research of this kind.

The construction of the Great Barrier Reef as an idealised Pacific destination (Pocock 2002a) has displaced the recognition of Aboriginal people who have rights and interests in the lands and seas of which the World Heritage Area is comprised. There is an extensive literature on the exploitation of local peoples on the islands of the South Seas (Grove 1995; Kahn 2000), but the equivalent research is absent from the literature in Australian Aboriginal and Torres Strait Islander studies. Aboriginal people are marginalised in the portrayal of the Reef, and at best are mentioned in passing by a few authors (e.g. Bowen and Bowen 2002). However, they played an extremely active role in the establishment of the industry. Aboriginal reserves at places like Palm Island and Yarrabah were popular tourist attractions in the early twentieth century and Aboriginal people staged a number of cultural performances for visitors. Aboriginal turtle-hunting, spear-fishing and turtle-egg gathering were also popular tourist activities that depended on Indigenous knowledge and cooperation. Evidence of these activities survives in film footage, archival sources and other ephemera (Pocock 2002b). Aboriginal people were not only the object of non-Aboriginal curiosity, but were active in the establishment of scientific research stations (Bowen and Bowen 2002: 258ff), and the development of the earliest resorts of the Whitsundays. They were employed to ferry passengers by row boat from cruise ships, carry gear from boats to shore, and cook meals for tourists. Research into these materials could therefore make an invaluable contribution to a poorly acknowledged aspect of Aboriginal history. In this regard it parallels the work of McGrath (1987) and shows the important contribution that Aboriginal people have

made to significant economic activities in Australia. The exclusion of Aboriginal people from popular conceptions of the Reef denies them proper recognition in terms of continuing associations and knowledge of the Reef. It also excludes them from a now highly profitable industry in which they played an essential role.

A Way Forward?

While other values are assessed within disciplines with methodological structures, social significance has developed in response to inadequacies in existing heritage regimes. My review suggests that we should move away from social value as a criterion to assess significance. This is based on my argument that all heritage is socially constructed and that unlike other analytic or thematic ways that significance is assessed, social value encompasses all values. Consequently managers have difficulty relying on this category of significance in making decisions about protection and use because it is neither systematic nor consistent. The recognition of the socially constructed nature of all heritage values does, however, allow us to consider that each social group will have particular ways of experiencing, understanding and constructing places. As such it is useful to consider whether the 'three in a line model' of aesthetic, historic, scientific values, is equally appropriate for the assessment of all places. The variety of ways in which different social groups may create particular places within the same geographic location or space suggests that not all groups will find this model equally useful. Byrne *et al.* (2001) have suggested that Aboriginal heritage places should be assessed in the same way as historic built heritage in Australia, and by implication should adopt this model of assessment. However, my research suggests that current assessments construct heritage as a sign. Such signs tend to be non-places rather than embodied places, and remain unrelated to the local places that may exist in the same location. This is an underlying conflict in management in that the values we create are the values that we can manage and do not necessarily constitute place. The application of the traditional model to Aboriginal heritage will not therefore bring us closer to understanding local knowledge and a sense of place.

Although the way in which senses are experienced and interpreted are themselves culturally constructed, the framework that this thesis uses to investigate visitor's

understanding of the Reef can serve as a common starting point for all social groups. This is not to say the experiences will be the same for each group. Rather, by recognising the importance of being *in* place and of acquiring knowledge through a sensate, encultured and thinking body, it is possible to recognise how different groups of people come to know and be in their place. A more precise and consistent use of terminology would therefore, in itself, facilitate more equitable access to the provisions heritage regimes.

The Great Barrier Reef is a large physical environment that comprises many local places and spaces. The way in which people have come to know it from their embodied experiences of being in any one of these locations allow people to appreciate and acknowledge the Reef for its distinctive qualities. It is only through such multi-sensuous, embodied experience of being in place that we can truly understand the complexity and diversity of the many environments and places that make the Reef unique. The end of the Reef will not necessarily signal the end of humanity, but the exclusion of people from these environments will signal the end of a complex and multiple knowledge, appreciation, respect and understanding of the region.

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APPENDIX 1: SCHEMATIC TIMELINE OF THEMES AND EVENTS RELEVANT TO THE TEXT

1770	1771	1772	1773	1774	1775	1776	1777	1778	1779		
Captain James Cook sails along Great Barrier Reef aboard HMS <i>Endeavour</i>	EUROPEAN NAVIGATION									1770s	
Sir Joseph Banks, botanist	SCIENTIFIC INVESTIGATION										
	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	
1780s	William Bligh and mutiny on <i>Bounty</i>	EUROPEAN NAVIGATION									
1800	1801	1802	1803	1804	1805	1806	1807	1808	1809		
	Matthew Flinders and <i>Investigator</i>		<i>Porpoise</i> and <i>Cato</i> wrecked under command of Flinders	EUROPEAN NAVIGATION							1800s
	Robert Brown, botanist, made marine collections	SCIENTIFIC INVESTIGATION									
1810s	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	
	Reef charts corrected during hydrographic survey of Australian coastline by Philip Parker King				Lieutenant Charles Jeffreys on the <i>Kangaroo</i> charts the full length of the Reef	EUROPEAN NAVIGATION					
	SCIENTIFIC INVESTIGATION										

1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1820s
EUROPEAN NAVIGATION										
SCIENTIFIC INVESTIGATION										
1830s	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830
	Beagle Survey			Wreck of <i>Stirling Castle</i> , Swain Reef - Eliza Fraser survives	EUROPEAN NAVIGATION					
	SCIENTIFIC INVESTIGATION									
1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	1840s
Beagle Survey			EUROPEAN NAVIGATION							
		Francis Price Blackwood, HMS <i>Fly</i>				Surveys of Reef by <i>Rattlesnake</i>				
		Joseph Beete Jukes, geologist, and John MacGillivray, botanist, recorded marine life of the Reef				John MacGillivray, official naturalist, and young Thomas Huxley led shift from botany to zoology				
1850s	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850
	Survey of Coral Sea including Outer Reef by Captain Henry Denham aboard the <i>Herald</i>									Surveys of Reef by <i>Rattlesnake</i>
	John MacGillivray, official naturalist assisted by William Milne							SCIENTIFIC INVESTIGATION		MacGillivray and Huxley
1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1860s
Survey of Outer Reef by Denham aboard the <i>Herald</i>	EUROPEAN NAVIGATION									
John MacGillivray, official naturalist assisted by William Milne	SCIENTIFIC INVESTIGATION									

1870s	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870		
	Thomas Cook Established in Australia	EMERGENCE OF AUSTRALIAN TOURISM										
1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1880s		
EMERGENCE OF CONSERVATION ISSUES						Pearl shell declines		Saville-Kent Appointed Queensland Inspector of Fisheries				
EMERGENCE OF AUSTRALIAN TOURISM								Centennial Exhibition in Melbourne				
1890s	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890		
	SCIENTIFIC INVESTIGATION						Publication of Saville-Kent's <i>The Great Barrier Reef of Australia</i>					
	CONSERVATION ISSUES							Saville-Kent Appointed Queensland Inspector of Fisheries in response to declining pearl shell				
	EMERGENCE OF AUSTRALIAN TOURISM						Thomas Cook Brisbane Office Established					
1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1890s		
CONSERVATION ISSUES						Edmund and Bertha Banfield move to Dunk Island						
1900s	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900		

1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1910s
Dene Barrett Fry visits NW Island with members of the Australian Museum										
SCIENTIFIC INVESTIGATION										
1920s	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920
	British Expedition to Low Isles led by Maurice Yonge		SCIENTIFIC INVESTIGATION					Great Barrier Reef Committee founded		
	CONSERVATION ISSUES			Australian Museum warns of declining turtles, North West Island			Edmund Banfield died on Dunk Island	CONSERVATION ISSUES		
	1st Embury Expedition. Based on Lindeman Island		E.F. Pollock Expedition to North West, Heron, Hoskyn and Fairfax Islands.		E.F. Pollock Expedition to North West Isle	REEF TOURISM				
	ANTA and QGTB established		Henry Lamond leases Molle Islands	REEF TOURISM						

1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1930s
		Collecting by visitors raised as issue for science	Some Reef islands proclaimed animal sanctuaries and taking of coral along foreshores prohibited.		All islands declared wildlife sanctuaries	CONSERVATION ISSUES				
	Whitsunday Tour of the <i>Symbol</i>	Last Embury Expedition to North West Isle and first to Hayman Island	Embury and Pollock Expeditions Visitor accommodation on Brampton Island.	Last and 14th Embury Expedition.	The Voyage of the <i>Cheerio</i> organised by Staff of Australian Museum	Heron island developed as tourist resort by Chris Poulson	Henry Lamond left South Molle after Ernie Bauer took up lease. Tourist facilities established			TOURISM INTERRUPTED BY THE WAR
REEF TOURISM		Hayman Leased to Embury. Paddie Lee Murray purchases lease of West Molle (Daydream)		Accommodation built at Long Island: Happy Bay Resort and Clear View Gardens	Hayman Lease sold to Bert and Bob Hallam	Zane Grey filmed <i>White death</i> at Hayman Island	REEF TOURISM			
1940s	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940
			ANTA reopens	QTDB criticise infrastructure and facilities at the Reef	Queensland Tourist Development Board (QTDB) established.	TOURISM INTERRUPTED BY THE WAR				
	Long Island: Happy Bay sold to Henry Mounteney; Clear View Gardens bought by Bill Thorogood, and renamed Palm Bay	Ansett purchases both Hayman and Daydream leases	Proserpine Tourist Association formed	Tom McLean begins operation of Roylen cruises		American service personnel visit the Reef during shore leave (eg 1943 at MacKay)			Captain P.M. Moody purchases lease of Daydream Island	

1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1950s	
		Fledgling Research Station established on Heron Island	SCIENTIFIC INVESTIGATION								
CONSERVATION ISSUES									Test drilling for oil on Wreck Island		
Royal Hayman Hotel Opens, includes jetty	Proserpine Aerodrome Opens		Daydream Is operation closed.	Underwater Observatory established at Green Island	Lindeman Is improved airstrip and runs Lindeman Air Services from Mackay.	New bungalows constructed on South Molle	Ansett takes control of Proserpine Aerodrome		Brampton Island purchased by Crapark Motels. Resort facilities built at Lindeman and South Molle.		
REEF TOURISM									Princess Alexandra of Kent visits Lindeman.		
1960	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	
1960s			Liege University, Belgium Expedition to the Reef	SCIENTIFIC INVESTIGATION							
	Australian Conservation Foundation (ACF) Symposium on Reef protection	High controversy surrounding oil drilling and other resource extraction. ACF lobby for Commonwealth control.	Wildlife Preservation Society and Littoral Society lodge appeal against Ellison Reef minning application.		Damage from Crown of Thorns visible off Cairns and Townsville	CONSERVATION ISSUES			Outbreak of Crown of Thorns Starfish observed from Green Island Underwater Observatory		
		Daydream Island Resort Rebuilt and Opens		Brampton jetty opens	Airstrip opens on Brampton Island	REEF TOURISM	Bruce Highway opened. Tom McLean purchases lease of Brampton Island.	Shute Harbour opens	Airle Beach emerges as accommodation centre		

1970	1971	1972	1973	1974	1975	1976	1977	1978	1979		
	Construction of One Tree Island Research Station		Lizard Island Research Station established.		Orpheus Island Research Station established under JCU	SCIENTIFIC INVESTIGATION					1970s
First oil disaster on Reef near Tuesday Island in the Torres Strait.		UNESCO Convention for Protection of World Heritage established.		Hope Report on national estate supports proposal for Reef marine park. Australia signatory to UNESCO Convention on World Heritage	<i>Great Barrier Reef Marine Park Act</i> and <i>Australian Heritage Commission Act</i> passed	CONSERVATION ISSUES					
					Marjorie Bradworth at Green Island		increasing number of hotels in Airlie Beach				
1980s	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	
	CONSERVATION ISSUES						<i>World Heritage Properties Conservation Act</i> passed by Commonwealth Government		Great Barrier Reef included in the World Heritage list.		
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1990s	
CONSERVATION ISSUES						Review of World Heritage values of the Reef by Lucas et. al					
REEF TOURISM					1.6 million tourists visit the Reef each year from the mid 1990s onwards						
2000s	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	
	EUROPEAN NAVIGATION								<i>Bunga Teratai Satu</i> ran aground on Sudbury Reef		
	SCIENTIFIC INVESTIGATION										
	CONSERVATION ISSUES										
	REEF TOURISM										

APPENDIX 2: GREAT BARRIER REEF WORLD HERITAGE VALUES

Values Table	
Natural criteria against which the Great Barrier Reef was inscribed on the World Heritage List in 1981.	Examples of World Heritage values of the Great Barrier Reef for which the property was inscribed on the World Heritage List in 1981.
<p>Criterion (i) an outstanding example representing a major stage of the earth's evolutionary history.</p>	<p>The Great Barrier Reef is by far the largest single collection of coral reefs in the world. The World Heritage values of the property include:</p> <ul style="list-style-type: none"> • 2904 coral reefs covering approximately 20 055km²; • 300 coral cays and 600 continental islands; • reef morphologies reflecting historical and on-going geomorphic and oceanographic processes; • processes of geological evolution linking islands, cays, reefs and changing sea levels, together with sand barriers, deltaic and associated sand dunes; • record of sea level changes and the complete history of the reef's evolution are recorded in the reef structure; • record of climate history, environmental conditions and processes extending back over several hundred years within old massive corals; • formations such as serpentine rocks of South Percy island, intact and active dune systems, undisturbed tidal sediments and "blue holes"; and • record of sea level changes reflected in distribution of continental island flora and fauna.
<p>Criterion (ii) an outstanding example representing significant ongoing geological processes, biological evolution and man's <i>[sic]</i> interaction with his natural environment.</p>	<p>Biologically the Great Barrier Reef supports the most diverse ecosystem known to man <i>[sic]</i> and its enormous diversity is thought to reflect the maturity of an ecosystem, which has evolved over millions of years on the northeast Continental Shelf of Australia. The World Heritage values include:</p> <ul style="list-style-type: none"> • the heterogeneity and interconnectivity of the reef assemblage; • size and morphological diversity (elevation ranging from the sea bed to 1142m at Mt. Bowen and a large cross-shelf extent encompass the fullest possible representation of marine environmental processes); • on going processes of accretion and erosion of coral reefs, sand banks and coral cays, erosion and deposition processes along the coastline, river deltas and estuaries and continental islands; • extensive <i>Halimeda</i> beds representing active calcification and sediment accretion for over 10 000 years; • evidence of the dispersion and evolution of hard corals and associated flora and fauna from the "Indo-West Pacific centre of diversity" along the north-south extent of the reef; • inter-connections with the Wet Tropics via the coastal interface and Lord Howe Island via the East Australia current; • indigenous temperate species derived from tropical species; • living coral colonies (including some of the world's oldest); • inshore coral communities of southern reefs; • five floristic regions identified for continental islands and two for coral cays; • the diversity of flora and fauna, including: <ul style="list-style-type: none"> • Macroalgae (estimated 400-500 species); • Porifera (estimated 1500 species, some endemic, mostly undescribed); • Cnidaria: Corals - part of the global centre of coral diversity and including: <ul style="list-style-type: none"> • hexacorals (70 genera and 350 species, including 10 endemic species); • octacorals (80 genera, number of species not yet estimated); • Tunicata: Ascidians (at least 330 species);

<p>Criterion (ii) an outstanding example representing significant ongoing geological processes, biological evolution and man's interaction with his natural environment.</p>	<ul style="list-style-type: none"> • Bryozoa (an estimated 300-500 species, many undescribed); • Crustacea (at least 1330 species from 3 subclasses); • Worms: <ul style="list-style-type: none"> • Polychaetes (estimated 500 species); • Platyhelminthes: include free-living Tubellaria (number of species not yet estimated), polyclad Tubellaria (up to 300 species) and parasitic helminthes (estimated 1000's of species, most undescribed); • Phytoplankton (a diverse group existing in two broad communities); • Mollusca (between 5000-8000 species); • Echinodermata (estimated 800 extant species, including many rare taxa and type specimens); • fishes (between 1200 and 2000 species from 130 families, with high species diversity and heterogeneity; includes the Whale Shark <i>Rhynchodon typus</i>); • seabirds (between 1.4 and 1.7 million seabirds breeding on islands); • marine reptiles (including 6 sea turtle species, 17 sea snake species, and 1 species of crocodile); • marine mammals (including 1 species of dugong (<i>Dugong dugon</i>), and 26 species of whales and dolphins); • terrestrial flora: see "Habitats: Islands" and; • terrestrial fauna, including: <ul style="list-style-type: none"> • invertebrates (pseudoscorpions, mites, ticks, spiders, centipedes, isopods, phalangids, millipedes, collembolans and 109 families of insects from 20 orders, and large over-wintering aggregations of butterflies); and • vertebrates (including seabirds (see above), reptiles: crocodiles and turtles, 9 snakes and 31 lizards, mammals); • the integrity of the inter-connections between reef and island networks in terms of dispersion, recruitment, and the subsequent gene flow of many taxa; • processes of dispersal, colonisation and establishment of plant communities within the context of island biogeography (e.g. dispersal of seeds by air, sea and vectors such as birds are examples of dispersion, colonisation and succession); • the isolation of certain island populations (e.g. recent speciation evident in two subspecies of the butterfly <i>Tirumala hamata</i> and the evolution of distinct races of the bird <i>Zosterops spp</i>); • remnant vegetation types (hoop pines) and relic species (sponges) on islands. • evidence of morphological and genetic changes in mangrove and seagrass flora across regional scales; and • feeding and/or breeding grounds for international migratory seabirds, cetaceans and sea turtles.
<p>Criterion (iii) contain unique, rare and superlative natural phenomena, formations and features and areas of exceptional natural beauty.</p>	<p>The Great Barrier Reef provides some of the most spectacular scenery on earth and is of exceptional natural beauty. The World Heritage values include:</p> <ul style="list-style-type: none"> • the vast extent of the reef and island systems which produces an unparalleled aerial vista; • islands ranging from towering forested continental islands complete with freshwater streams, to small coral cays with rainforest and unvegetated sand cays; • coastal and adjacent islands with mangrove systems of exceptional beauty; • the rich variety of landscapes and seascapes including rugged mountains with dense and diverse vegetation and adjacent fringing reefs; • the abundance and diversity of shape, size and colour of marine fauna and flora in the coral reefs; • spectacular breeding colonies of seabirds and great aggregations of over-wintering butterflies; and • migrating whales, dolphins, dugong, whale sharks, sea turtles, seabirds and concentrations of large fish.

<p>Criterion (iv) provide habitats where populations of rare and endangered species of plants and animals still survive.</p>	<p>The Great Barrier Reef contains many outstanding examples of important and significant natural habitats for <i>in situ</i> conservation of species of conservation significance, particularly resulting from the latitudinal and cross-shelf completeness of the region.</p> <p>The World Heritage values include:</p> <ul style="list-style-type: none"> • habitats for species of conservation significance within the 77 broadscale bioregional associations that have been identified for the property and which include: • over 2900 coral reefs (covering 20 055km²) which are structurally and ecologically complex; • large numbers of islands, including: <ul style="list-style-type: none"> • 600 continental islands supporting 2195 plant species in 5 distinct floristic regions; • 300 coral cays and sand cays; • seabird and sea turtle rookeries, including breeding populations of green sea turtles and Hawksbill turtles; and • coral cays with 300-350 plant species in 2 distinct floristic regions; • seagrass beds (over 5000km²) comprising 15 species, 2 endemic; • mangroves (over 2070km²) including 37 species; • <i>Halimeda</i> banks in the northern region and the unique deep water bed in the central region; and • large areas of ecologically complex inter-reefal and lagoonal benthos; and • species of plants and animals of conservation significance.
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(Environment Australia 2002)

APPENDIX 3: CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE¹

THE GENERAL CONFERENCE of the United Nations Educational, Scientific and Cultural Organization meeting in Paris from 17 October to 21 November 1972, at its seventeenth session,

Noting that the cultural heritage and the natural heritage are increasingly threatened with destruction not only by the traditional causes of decay, but also by changing social and economic conditions which aggravate the situation with even more formidable phenomena of damage or destruction,

Considering that deterioration or disappearance of any item of the cultural or natural heritage constitutes a harmful impoverishment of the heritage of all the nations of the world,

Considering that protection of this heritage at the national level often remains incomplete because of the scale of the resources which it requires and of the insufficient economic, scientific, and technological resources of the country where the property to be protected is situated,

Recalling that the Constitution of the Organization provides that it will maintain, increase, and diffuse knowledge, by assuring the conservation and protection of the world's heritage, and recommending to the nations concerned the necessary international conventions,

Considering that the existing international conventions, recommendations and resolutions concerning cultural and natural property demonstrate the importance, for all the peoples of the world, of safeguarding this unique and irreplaceable property, to whatever people it may belong,

Considering that parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole,

Considering that, in view of the magnitude and gravity of the new dangers threatening them, it is incumbent on the international community as a whole to participate in the protection of the cultural and natural heritage of outstanding universal value, by the granting of collective assistance which, although not taking the place of action by the State concerned, will serve as an efficient complement thereto,

Considering that it is essential for this purpose to adopt new provisions in the form of a convention establishing an effective system of collective protection of the cultural and natural heritage of outstanding universal value, organized on a permanent basis and in accordance with modern scientific methods,

Having decided, at its sixteenth session, that this question should be made the subject of an international convention,

Adopts this sixteenth day of November 1972 this Convention.

I. DEFINITION OF THE CULTURAL AND NATURAL HERITAGE

Article 1

For the purposes of this Convention, the following shall be considered as "cultural heritage":
monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;

groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;

¹ UNESCO. *Convention Concerning the Protection of the World Cultural and Natural Heritage* 1972 [cited 16 January 2003]. Available from <http://www.unesco.org/whc/nwhc/pages/doc/main.htm>.

sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.

Article 2

For the purposes of this Convention, the following shall be considered as "natural heritage": natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

Article 3

It is for each State Party to this Convention to identify and delineate the different properties situated on its territory mentioned in Articles 1 and 2 above.

II. NATIONAL PROTECTION AND INTERNATIONAL PROTECTION OF THE CULTURAL AND NATURAL HERITAGE

Article 4

Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and co-operation, in particular, financial, artistic, scientific and technical, which it may be able to obtain.

Article 5

To ensure that effective and active measures are taken for the protection, conservation and presentation of the cultural and natural heritage situated on its territory, each State Party to this Convention shall endeavor, in so far as possible, and as appropriate for each country: to adopt a general policy which aims to give the cultural and natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programmes; to set up within its territories, where such services do not exist, one or more services for the protection, conservation and presentation of the cultural and natural heritage with an appropriate staff and possessing the means to discharge their functions; to develop scientific and technical studies and research and to work out such operating methods as will make the State capable of counteracting the dangers that threaten its cultural or natural heritage; to take the appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of this heritage; and to foster the establishment or development of national or regional centres for training in the protection, conservation and presentation of the cultural and natural heritage and to encourage scientific research in this field.

Article 6

Whilst fully respecting the sovereignty of the States on whose territory the cultural and natural heritage mentioned in Articles 1 and 2 is situated, and without prejudice to property right provided by national legislation, the States Parties to this Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate.

The States Parties undertake, in accordance with the provisions of this Convention, to give their help in the identification, protection, conservation and presentation of the cultural and natural heritage referred to in paragraphs 2 and 4 of Article 11 if the States on whose territory it is situated so request.

Each State Party to this Convention undertakes not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage referred to in Articles 1 and 2 situated on the territory of other States Parties to this Convention.

Article 7

For the purpose of this Convention, international protection of the world cultural and natural heritage shall be understood to mean the establishment of a system of international co-operation and assistance designed to support States Parties to the Convention in their efforts to conserve and identify that heritage.

III. INTERGOVERNMENTAL COMMITTEE FOR THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE

Article 8

An Intergovernmental Committee for the Protection of the Cultural and Natural Heritage of Outstanding Universal Value, called "the World Heritage Committee", is hereby established within the United Nations Educational, Scientific and Cultural Organization. It shall be composed of 15 States Parties to the Convention, elected by States Parties to the Convention meeting in general assembly during the ordinary session of the General Conference of the United Nations Educational, Scientific and Cultural Organization. The number of States members of the Committee shall be increased to 21 as from the date of the ordinary session of the General Conference following the entry into force of this Convention for at least 40 States. Election of members of the Committee shall ensure an equitable representation of the different regions and cultures of the world.

A representative of the International Centre for the Study of the Preservation and Restoration of Cultural Property (Rome Centre), a representative of the International Council of Monuments and Sites (ICOMOS) and a representative of the International Union for Conservation of Nature and Natural Resources (IUCN), to whom may be added, at the request of States Parties to the Convention meeting in general assembly during the ordinary sessions of the General Conference of the United Nations Educational, Scientific and Cultural Organization, representatives of other intergovernmental or non-governmental organizations, with similar objectives, may attend the meetings of the Committee in an advisory capacity.

Article 9

The term of office of States members of the World Heritage Committee shall extend from the end of the ordinary session of the General Conference during which they are elected until the end of its third subsequent ordinary session.

The term of office of one-third of the members designated at the time of the first election shall, however, cease at the end of the first ordinary session of the General Conference following that at which they were elected; and the term of office of a further third of the members designated at the same time shall cease at the end of the second ordinary session of the General Conference following that at which they were elected. The names of these members shall be chosen by lot by the President of the General Conference of the United Nations Educational, Scientific and Cultural Organization after the first election.

States members of the Committee shall choose as their representatives persons qualified in the field of the cultural or natural heritage.

Article 10

The World Heritage Committee shall adopt its Rules of Procedure.

The Committee may at any time invite public or private organizations or individuals to participate in its meetings for consultation on particular problems.

The Committee may create such consultative bodies as it deems necessary for the performance of its functions.

Article 11

Every State Party to this Convention shall, in so far as possible, submit to the World Heritage Committee an inventory of property forming part of the cultural and natural heritage, situated in its territory and suitable for inclusion in the list provided for in paragraph 2 of this Article. This inventory, which shall not be considered exhaustive, shall include documentation about the location of the property in question and its significance.

On the basis of the inventories submitted by States in accordance with paragraph 1, the Committee shall establish, keep up to date and publish, under the title of "World Heritage List," a list of properties forming part of the cultural heritage and natural heritage, as defined in Articles 1 and 2 of this Convention, which it considers as having outstanding universal value in terms of such criteria as it shall have established. An updated list shall be distributed at least every two years.

The inclusion of a property in the World Heritage List requires the consent of the State concerned. The inclusion of a property situated in a territory, sovereignty or jurisdiction over which is claimed by more than one State shall in no way prejudice the rights of the parties to the dispute.

The Committee shall establish, keep up to date and publish, whenever circumstances shall so require, under the title of "List of World Heritage in Danger", a list of the property appearing in the World Heritage List for the conservation of which major operations are necessary and for which assistance has been requested under this Convention. This list shall contain an estimate of the cost of such operations. The list may include only such property forming part of the cultural and natural heritage as is threatened by serious and specific dangers, such as the threat of disappearance caused by accelerated deterioration, large-scale public or private projects or rapid urban or tourist development projects; destruction caused by changes in the use or ownership of the land; major alterations due to unknown causes; abandonment for any reason whatsoever; the outbreak or the threat of an armed conflict; calamities and cataclysms; serious fires, earthquakes, landslides; volcanic eruptions; changes in water level, floods and tidal waves. The Committee may at any time, in case of urgent need, make a new entry in the List of World Heritage in Danger and publicize such entry immediately.

The Committee shall define the criteria on the basis of which a property belonging to the cultural or natural heritage may be included in either of the lists mentioned in paragraphs 2 and 4 of this article.

Before refusing a request for inclusion in one of the two lists mentioned in paragraphs 2 and 4 of this article, the Committee shall consult the State Party in whose territory the cultural or natural property in question is situated.

The Committee shall, with the agreement of the States concerned, co-ordinate and encourage the studies and research needed for the drawing up of the lists referred to in paragraphs 2 and 4 of this article.

Article 12

The fact that a property belonging to the cultural or natural heritage has not been included in either of the two lists mentioned in paragraphs 2 and 4 of Article 11 shall in no way be construed to mean that it does not have an outstanding universal value for purposes other than those resulting from inclusion in these lists.

Article 13

The World Heritage Committee shall receive and study requests for international assistance formulated by States Parties to this Convention with respect to property forming part of the cultural or natural heritage, situated in their territories, and included or potentially suitable for inclusion in the lists mentioned referred to in paragraphs 2 and 4 of Article 11. The purpose of such requests may be to secure the protection, conservation, presentation or rehabilitation of such property.

Requests for international assistance under paragraph 1 of this article may also be concerned with identification of cultural or natural property defined in Articles 1 and 2, when preliminary investigations have shown that further inquiries would be justified.

The Committee shall decide on the action to be taken with regard to these requests, determine where appropriate, the nature and extent of its assistance, and authorize the conclusion, on its behalf, of the necessary arrangements with the government concerned.

The Committee shall determine an order of priorities for its operations. It shall in so doing bear in mind the respective importance for the world cultural and natural heritage of the property requiring protection, the need to give international assistance to the property most representative of a natural environment or of the genius and the history of the peoples of the world, the urgency of the work to be done, the resources available to the States on whose territory the

threatened property is situated and in particular the extent to which they are able to safeguard such property by their own means.

The Committee shall draw up, keep up to date and publicize a list of property for which international assistance has been granted.

The Committee shall decide on the use of the resources of the Fund established under Article 15 of this Convention. It shall seek ways of increasing these resources and shall take all useful steps to this end.

The Committee shall co-operate with international and national governmental and non-governmental organizations having objectives similar to those of this Convention. For the implementation of its programmes and projects, the Committee may call on such organizations, particularly the International Centre for the Study of the Preservation and Restoration of cultural Property (the Rome Centre), the International Council of Monuments and Sites (ICOMOS) and the International Union for Conservation of Nature and Natural Resources (IUCN), as well as on public and private bodies and individuals.

Decisions of the Committee shall be taken by a majority of two-thirds of its members present and voting. A majority of the members of the Committee shall constitute a quorum.

Article 14

The World Heritage Committee shall be assisted by a Secretariat appointed by the Director-General of the United Nations Educational, Scientific and Cultural Organization.

The Director-General of the United Nations Educational, Scientific and Cultural Organization, utilizing to the fullest extent possible the services of the International Centre for the Study of the Preservation and the Restoration of Cultural Property (the Rome Centre), the International Council of Monuments and Sites (ICOMOS) and the International Union for Conservation of Nature and Natural Resources (IUCN) in their respective areas of competence and capability, shall prepare the Committee's documentation and the agenda of its meetings and shall have the responsibility for the implementation of its decisions.

IV. FUND FOR THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE

Article 15

A Fund for the Protection of the World Cultural and Natural Heritage of Outstanding Universal Value, called "the World Heritage Fund", is hereby established.

The Fund shall constitute a trust fund, in conformity with the provisions of the Financial Regulations of the United Nations Educational, Scientific and Cultural Organization.

The resources of the Fund shall consist of:

compulsory and voluntary contributions made by States Parties to this Convention,

Contributions, gifts or bequests which may be made by:

other States;

the United Nations Educational, Scientific and Cultural Organization, other organizations of the United Nations system, particularly the United Nations Development Programme or other intergovernmental organizations;

public or private bodies or individuals;

any interest due on the resources of the Fund;

funds raised by collections and receipts from events organized for the benefit of the fund; and

all other resources authorized by the Fund's regulations, as drawn up by the World Heritage Committee.

Contributions to the Fund and other forms of assistance made available to the Committee may be used only for such purposes as the Committee shall define. The Committee may accept contributions to be used only for a certain programme or project, provided that the Committee shall have decided on the implementation of such programme or project. No political conditions may be attached to contributions made to the Fund.

Article 16

Without prejudice to any supplementary voluntary contribution, the States Parties to this Convention undertake to pay regularly, every two years, to the World Heritage Fund, contributions, the amount of which, in the form of a uniform percentage applicable to all States,

shall be determined by the General Assembly of States Parties to the Convention, meeting during the sessions of the General Conference of the United Nations Educational, Scientific and Cultural Organization. This decision of the General Assembly requires the majority of the States Parties present and voting, which have not made the declaration referred to in paragraph 2 of this Article. In no case shall the compulsory contribution of States Parties to the Convention exceed 1% of the contribution to the regular budget of the United Nations Educational, Scientific and Cultural Organization.

However, each State referred to in Article 31 or in Article 32 of this Convention may declare, at the time of the deposit of its instrument of ratification, acceptance or accession, that it shall not be bound by the provisions of paragraph 1 of this Article.

A State Party to the Convention which has made the declaration referred to in paragraph 2 of this Article may at any time withdraw the said declaration by notifying the Director-General of the United Nations Educational, Scientific and Cultural Organization. However, the withdrawal of the declaration shall not take effect in regard to the compulsory contribution due by the State until the date of the subsequent General Assembly of States parties to the Convention.

In order that the Committee may be able to plan its operations effectively, the contributions of States Parties to this Convention which have made the declaration referred to in paragraph 2 of this Article, shall be paid on a regular basis, at least every two years, and should not be less than the contributions which they should have paid if they had been bound by the provisions of paragraph 1 of this Article.

Any State Party to the Convention which is in arrears with the payment of its compulsory or voluntary contribution for the current year and the calendar year immediately preceding it shall not be eligible as a Member of the World Heritage Committee, although this provision shall not apply to the first election.

The terms of office of any such State which is already a member of the Committee shall terminate at the time of the elections provided for in Article 8, paragraph 1 of this Convention.

Article 17

The States Parties to this Convention shall consider or encourage the establishment of national public and private foundations or associations whose purpose is to invite donations for the protection of the cultural and natural heritage as defined in Articles 1 and 2 of this Convention.

Article 18

The States Parties to this Convention shall give their assistance to international fund-raising campaigns organized for the World Heritage Fund under the auspices of the United Nations Educational, Scientific and Cultural Organization. They shall facilitate collections made by the bodies mentioned in paragraph 3 of Article 15 for this purpose.

V. CONDITIONS AND ARRANGEMENTS FOR INTERNATIONAL ASSISTANCE

Article 19

Any State Party to this Convention may request international assistance for property forming part of the cultural or natural heritage of outstanding universal value situated within its territory. It shall submit with its request such information and documentation provided for in Article 21 as it has in its possession and as will enable the Committee to come to a decision.

Article 20

Subject to the provisions of paragraph 2 of Article 13, sub-paragraph (c) of Article 22 and Article 23, international assistance provided for by this Convention may be granted only to property forming part of the cultural and natural heritage which the World Heritage Committee has decided, or may decide, to enter in one of the lists mentioned in paragraphs 2 and 4 of Article 11.

Article 21

The World Heritage Committee shall define the procedure by which requests to it for international assistance shall be considered and shall specify the content of the request, which should define the operation contemplated, the work that is necessary, the expected cost thereof, the degree of urgency and the reasons why the resources of the State requesting assistance do not allow it to meet all the expenses. Such requests must be supported by experts' reports whenever possible.

Requests based upon disasters or natural calamities should, by reasons of the urgent work which they may involve, be given immediate, priority consideration by the Committee, which should have a reserve fund at its disposal against such contingencies.

Before coming to a decision, the Committee shall carry out such studies and consultations as it deems necessary.

Article 22

Assistance granted by the World Heritage Committee may take the following forms: studies concerning the artistic, scientific and technical problems raised by the protection, conservation, presentation and rehabilitation of the cultural and natural heritage, as defined in paragraphs 2 and 4 of Article 11 of this Convention;

provisions of experts, technicians and skilled labour to ensure that the approved work is correctly carried out;

training of staff and specialists at all levels in the field of identification, protection, conservation, presentation and rehabilitation of the cultural and natural heritage;

supply of equipment which the State concerned does not possess or is not in a position to acquire;

low-interest or interest-free loans which might be repayable on a long-term basis;

the granting, in exceptional cases and for special reasons, of non-repayable subsidies.

Article 23

The World Heritage Committee may also provide international assistance to national or regional centres for the training of staff and specialists at all levels in the field of identification, protection, conservation, presentation and rehabilitation of the cultural and natural heritage.

Article 24

International assistance on a large scale shall be preceded by detailed scientific, economic and technical studies. These studies shall draw upon the most advanced techniques for the protection, conservation, presentation and rehabilitation of the natural and cultural heritage and shall be consistent with the objectives of this Convention. The studies shall also seek means of making rational use of the resources available in the State concerned.

Article 25

As a general rule, only part of the cost of work necessary shall be borne by the international community. The contribution of the State benefiting from international assistance shall constitute a substantial share of the resources devoted to each programme or project, unless its resources do not permit this.

Article 26

The World Heritage Committee and the recipient State shall define in the agreement they conclude the conditions in which a programme or project for which international assistance under the terms of this Convention is provided, shall be carried out. It shall be the responsibility of the State receiving such international assistance to continue to protect, conserve and present the property so safeguarded, in observance of the conditions laid down by the agreement.

VI. EDUCATIONAL PROGRAMMES

Article 27

The States Parties to this Convention shall endeavor by all appropriate means, and in particular by educational and information programmes, to strengthen appreciation and respect by their peoples of the cultural and natural heritage defined in Articles 1 and 2 of the Convention.

They shall undertake to keep the public broadly informed of the dangers threatening this heritage and of the activities carried on in pursuance of this Convention.

Article 28

States Parties to this Convention which receive international assistance under the Convention shall take appropriate measures to make known the importance of the property for which assistance has been received and the role played by such assistance.

VII. REPORTS

Article 29

The States Parties to this Convention shall, in the reports which they submit to the General Conference of the United Nations Educational, Scientific and Cultural Organization on dates and in a manner to be determined by it, give information on the legislative and administrative provisions which they have adopted and other action which they have taken for the application of this Convention, together with details of the experience acquired in this field.

These reports shall be brought to the attention of the World Heritage Committee.

The Committee shall submit a report on its activities at each of the ordinary sessions of the General Conference of the United Nations Educational, Scientific and Cultural Organization.

VIII. FINAL CLAUSES

Article 30

This Convention is drawn up in Arabic, English, French, Russian and Spanish, the five texts being equally authoritative.

Article 31

This Convention shall be subject to ratification or acceptance by States members of the United Nations Educational, Scientific and Cultural Organization in accordance with their respective constitutional procedures.

The instruments of ratification or acceptance shall be deposited with the Director-General of the United Nations Educational, Scientific and Cultural Organization.

Article 32

This Convention shall be open to accession by all States not members of the United Nations Educational, Scientific and Cultural Organization which are invited by the General Conference of the Organization to accede to it.

Accession shall be effected by the deposit of an instrument of accession with the Director-General of the United Nations Educational, Scientific and Cultural Organization.

Article 33

This Convention shall enter into force three months after the date of the deposit of the twentieth instrument of ratification, acceptance or accession, but only with respect to those States which have deposited their respective instruments of ratification, acceptance or accession on or before that date. It shall enter into force with respect to any other State three months after the deposit of its instrument of ratification, acceptance or accession.

Article 34

The following provisions shall apply to those States Parties to this Convention which have a federal or non-unitary constitutional system:

with regard to the provisions of this Convention, the implementation of which comes under the legal jurisdiction of the federal or central legislative power, the obligations of the federal or central government shall be the same as for those States parties which are not federal States;

with regard to the provisions of this Convention, the implementation of which comes under the legal jurisdiction of individual constituent States, countries, provinces or cantons that are not obliged by the constitutional system of the federation to take legislative measures, the federal government shall inform the competent authorities of such States, countries, provinces or cantons of the said provisions, with its recommendation for their adoption.

Article 35

Each State Party to this Convention may denounce the Convention.

The denunciation shall be notified by an instrument in writing, deposited with the Director-General of the United Nations Educational, Scientific and Cultural Organization.

The denunciation shall take effect twelve months after the receipt of the instrument of denunciation. It shall not affect the financial obligations of the denouncing State until the date on which the withdrawal takes effect.

Article 36

The Director-General of the United Nations Educational, Scientific and Cultural Organization shall inform the States members of the Organization, the States not members of the Organization which are referred to in Article 32, as well as the United Nations, of the deposit of

all the instruments of ratification, acceptance, or accession provided for in Articles 31 and 32, and of the denunciations provided for in Article 35.

Article 37

This Convention may be revised by the General Conference of the United Nations Educational, Scientific and Cultural Organization. Any such revision shall, however, bind only the States which shall become Parties to the revising convention.

If the General Conference should adopt a new convention revising this Convention in whole or in part, then, unless the new convention otherwise provides, this Convention shall cease to be open to ratification, acceptance or accession, as from the date on which the new revising convention enters into force.

Article 38

In conformity with Article 102 of the Charter of the United Nations, this Convention shall be registered with the Secretariat of the United Nations at the request of the Director-General of the United Nations Educational, Scientific and Cultural Organization.

Done in Paris, this twenty-third day of November 1972, in two authentic copies bearing the signature of the President of the seventeenth session of the General Conference and of the Director-General of the United Nations Educational, Scientific and Cultural Organization, which shall be deposited in the archives of the United Nations Educational, Scientific and Cultural Organization, and certified true copies of which shall be delivered to all the States referred to in Articles 31 and 32 as well as to the United Nations.

APPENDIX 4

CRITERIA FOR THE INCLUSION OF CULTURAL PROPERTIES IN THE WORLD HERITAGE LIST²

23. The criteria for the inclusion of cultural properties in the World Heritage List should always be seen in relation to one another and should be considered in the context of the definition set out in Article 1 of the Convention which is reproduced below:

"monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;

groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;

sites: works of man or the combined works of nature and of man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological points of view."

24. A monument, group of buildings or site - as defined above - which is nominated for inclusion in the World Heritage List will be considered to be of outstanding universal value for the purposes of the Convention when the Committee finds that it meets one or more of the following criteria and the test of authenticity. Each property nominated should therefore:

- a.
 - i. represent a masterpiece of human creative genius; or
 - ii. exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design; or
 - iii. bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared; or
 - iv. be an outstanding example of a type of building or architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history; or
 - v. be an outstanding example of a traditional human settlement or land-use which is representative of a culture (or cultures), especially when it has become vulnerable under the impact of irreversible change; or
 - vi. be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance (the Committee considers that this criterion should justify inclusion in the List only in exceptional circumstances and in conjunction with other criteria cultural or natural);

and

² Section C, Operational Guidelines World Heritage Convention (UNESCO 1999)

- b.
 - i. meet the test of authenticity in design, material, workmanship or setting and in the case of cultural landscapes their distinctive character and components (the Committee stressed that reconstruction is only acceptable if it is carried out on the basis of complete and detailed documentation on the original and to no extent on conjecture).
 - ii. have adequate legal and/or traditional protection and management mechanisms to ensure the conservation of the nominated cultural properties or cultural landscapes. The existence of protective legislation at the national, provincial or municipal level and/or a well-established contractual or traditional protection as well as of adequate management and/or planning control mechanisms is therefore essential and, as is clearly indicated in the following paragraph, must be stated clearly on the nomination form. Assurances of the effective implementation of these laws and/or contractual and/or traditional protection as well as of these management mechanisms are also expected. Furthermore, in order to preserve the integrity of cultural sites, particularly those open to large numbers of visitors, the State Party concerned should be able to provide evidence of suitable administrative arrangements to cover the management of the property, its conservation and its accessibility to the public.

APPENDIX 5

CRITERIA FOR THE INCLUSION OF NATURAL PROPERTIES IN THE WORLD HERITAGE LIST³

43. In accordance with Article 2 of the Convention, the following is considered as "natural heritage":

"natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;

geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;

natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty."

44. A natural heritage property - as defined above - which is submitted for inclusion in the World Heritage List will be considered to be of outstanding universal value for the purposes of the Convention when the Committee finds that it meets one or more of the following criteria and fulfils the conditions of integrity set out below. Sites nominated should therefore:

- a.
 - i. be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features; or
 - ii. be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals; or
 - iii. contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance; or
 - iv. contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation;

and

- b. *also fulfil the following conditions of integrity:*
 - i. The sites described in 44(a)(i) should contain all or most of the key interrelated and interdependent elements in their natural relationships; for example, an "ice age" area should include the snow field, the glacier itself and samples of cutting patterns, deposition and colonization (e.g. striations, moraines, pioneer stages of plant succession, etc.); in the case of volcanoes, the magmatic series should be complete and all or most of the varieties of effusive rocks and types of eruptions be represented.

³ Section D, Operational Guidelines World Heritage Convention {UNESCO, #499}

- ii. The sites described in 44(a)(ii) should have sufficient size and contain the necessary elements to demonstrate the key aspects of processes that are essential for the long-term conservation of the ecosystems and the biological diversity they contain; for example, an area of tropical rain forest should include a certain amount of variation in elevation above sea-level, changes in topography and soil types, patch systems and naturally regenerating patches; similarly a coral reef should include, for example, seagrass, mangrove or other adjacent ecosystems that regulate nutrient and sediment inputs into the reef.
- iii. The sites described in 44(a)(iii) should be of outstanding aesthetic value and include areas that are essential for maintaining the beauty of the site; for example, a site whose scenic values depend on a waterfall, should include adjacent catchment and downstream areas that are integrally linked to the maintenance of the aesthetic qualities of the site.
- iv. The sites described in paragraph 44(a)(iv) should contain habitats for maintaining the most diverse fauna and flora characteristic of the biographic province and ecosystems under consideration; for example, a tropical savannah should include a complete assemblage of co-evolved herbivores and plants; an island ecosystem should include habitats for maintaining endemic biota; a site containing wide-ranging species should be large enough to include the most critical habitats essential to ensure the survival of viable populations of those species; for an area containing migratory species, seasonal breeding and nesting sites, and migratory routes, wherever they are located, should be adequately protected; international conventions, e.g. the Convention of Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention), for ensuring the protection of habitats of migratory species of waterfowl, and other multi- and bilateral agreements could provide this assurance.
- v. The sites described in paragraph 44(a) should have a management plan. When a site does not have a management plan at the time when it is nominated for the consideration of the World Heritage Committee, the State Party concerned should indicate when such a plan will become available and how it proposes to mobilize the resources required for the preparation and implementation of the plan. The State Party should also provide other document(s) (e.g. operational plans) which will guide the management of the site until such time when a management plan is finalized.
- vi. A site described in paragraph 44(a) should have adequate long-term legislative, regulatory, institutional or traditional protection. The boundaries of that site should reflect the spatial requirements of habitats, species, processes or phenomena that provide the basis for its nomination for inscription on the World Heritage List. The boundaries should include sufficient areas immediately adjacent to the area of outstanding universal value in order to protect the site's heritage values from direct effects of human encroachment and impacts of resource use outside of the nominated area. The boundaries of the nominated site may coincide

with one or more existing or proposed protected areas, such as national parks or biosphere reserves. While an existing or proposed protected area may contain several management zones, only some of those zones may satisfy criteria described in paragraph 44(a); other zones, although they may not meet the criteria set out in paragraph 44(a), may be essential for the management to ensure the integrity of the nominated site; for example, in the case of a biosphere reserve, only the core zone may meet the criteria and the conditions of integrity, although other zones, i.e. buffer and transitional zones, would be important for the conservation of the biosphere reserve in its totality.

- vii. Sites described in paragraph 44(a) should be the most important sites for the conservation of biological diversity. Biological diversity, according to the new global Convention on Biological Diversity, means the variability among living organisms in terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part and includes diversity within species, between species and of ecosystems. Only those sites which are the most biologically diverse are likely to meet criterion (iv) of paragraph 44(a).

APPENDIX 6

CRITERIA FOR THE REGISTER OF THE NATIONAL ESTATE⁴

CRITERION A:

ITS IMPORTANCE IN THE COURSE, OR PATTERN, OF AUSTRALIA'S NATURAL OR CULTURAL HISTORY

A.1 Importance in the evolution of Australian flora, fauna, landscapes or climate.

A.2 Importance in maintaining existing processes or natural systems at the regional or national scale.

A.3 Importance in exhibiting unusual richness or diversity of flora, fauna, landscapes or cultural features.

A.4 Importance for association with events, developments or cultural phases which have had a significant role in the human occupation and evolution of the nation, State, region or community.

CRITERION B:

ITS POSSESSION OF UNCOMMON, RARE OR ENDANGERED ASPECTS OF AUSTRALIA'S NATURAL OR CULTURAL HISTORY

B.1 Importance for rare, endangered or uncommon flora, fauna, communities, ecosystems, natural landscapes or phenomena, or as a wilderness.

B.2 Importance in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practised, in danger of being lost, or of exceptional interest

CRITERION C:

ITS POTENTIAL TO YIELD INFORMATION THAT WILL CONTRIBUTE TO AN UNDERSTANDING OF AUSTRALIA'S NATURAL OR CULTURAL HISTORY

C.1 Importance for information contributing to a wider understanding of Australian natural history, by virtue of its use as a research site, teaching site, type locality, reference or benchmark site.

C.2 Importance for information contributing to a wider understanding of the history of human occupation of Australia.

⁴ Available from <http://www.ahc.gov.au/register/furtherinfo/criteria.html>

CRITERION D:**ITS IMPORTANCE IN DEMONSTRATING THE PRINCIPAL CHARACTERISTICS OF: (I) A CLASS OF AUSTRALIA'S NATURAL OR CULTURAL PLACES; OR (II) A CLASS OF AUSTRALIA'S NATURAL OR CULTURAL ENVIRONMENTS**

D.1 Importance in demonstrating the principal characteristics of the range of landscapes, environments or ecosystems, the attributes of which identify them as being characteristic of their class.

D.2 Importance in demonstrating the principal characteristics of the range of human activities in the Australian environment (including way of life, philosophy, custom, process, land use, function, design or technique).

CRITERION E:**ITS IMPORTANCE IN EXHIBITING PARTICULAR AESTHETIC CHARACTERISTICS VALUED BY A COMMUNITY OR CULTURAL GROUP**

E.1 Importance for a community for aesthetic characteristics held in high esteem or otherwise valued by the community.

CRITERION F:**ITS IMPORTANCE IN DEMONSTRATING A HIGH DEGREE OF CREATIVE OR TECHNICAL ACHIEVEMENT AT A PARTICULAR PERIOD**

F.1 Importance for its technical, creative, design or artistic excellence, innovation or achievement.

CRITERION G:**ITS STRONG OR SPECIAL ASSOCIATIONS WITH A PARTICULAR COMMUNITY OR CULTURAL GROUP FOR SOCIAL, CULTURAL OR SPIRITUAL REASONS**

G.1 Importance as a place highly valued by a community for reasons of religious, spiritual, symbolic, cultural, educational, or social associations.

CRITERION H:**ITS SPECIAL ASSOCIATION WITH THE LIFE OR WORKS OF A PERSON, OR GROUP OF PERSONS, OF IMPORTANCE IN AUSTRALIA'S NATURAL OR CULTURAL HISTORY**

H.1 Importance for close associations with individuals whose activities have been significant within the history of the nation, State or region.

APPENDIX 7

THE BURRA CHARTER (THE AUSTRALIA ICOMOS CHARTER FOR THE CONSERVATION OF PLACES OF CULTURAL SIGNIFICANCE)

Preamble

Considering the International Charter for the Conservation and Restoration of Monuments and Sites (Venice 1964), and the Resolutions of the 5th General Assembly of the International Council on Monuments and Sites (ICOMOS) (Moscow 1978), the Burra Charter was adopted by Australia ICOMOS (the Australian National Committee of ICOMOS) on 19 August 1979 at Burra, South Australia. Revisions were adopted on 23 February 1981, 23 April 1988 and 26 November 1999.

The Burra Charter provides guidance for the conservation and management of places of cultural significance (cultural heritage places), and is based on the knowledge and experience of Australia ICOMOS members.

Conservation is an integral part of the management of places of cultural significance and is an ongoing responsibility.

Who is the Charter for?

The Charter sets a standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians.

Using the Charter

The Charter should be read as a whole. Many articles are interdependent. Articles in the Conservation Principles section are often further developed in the Conservation Processes and Conservation Practice sections. Headings have been included for ease of reading but do not form part of the Charter.

The Charter is self-contained, but aspects of its use and application are further explained in the following Australia ICOMOS documents:

- Guidelines to the Burra Charter: Cultural Significance;
- Guidelines to the Burra Charter: Conservation Policy;
- Guidelines to the Burra Charter: Procedures for Undertaking Studies and Reports;
- Code on the Ethics of Coexistence in Conserving Significant Places.

What places does the Charter apply to?

The Charter can be applied to all types of places of cultural significance including natural, indigenous and historic places with cultural values.

The standards of other organisations may also be relevant. These include the Australian Natural Heritage Charter and the Draft Guidelines for the Protection, Management and Use of Aboriginal and Torres Strait Islander Cultural Heritage Places.

Why conserve?

Places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences. They are historical records, that are important as tangible expressions of Australian identity and experience. Places of cultural significance reflect the diversity of our communities, telling us about who we are and the past that has formed us and the Australian landscape. They are irreplaceable and precious.

These places of cultural significance must be conserved for present and future generations.

The Burra Charter advocates a cautious approach to change: do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained.

Article 1 Definitions

For the purpose of this Charter:

- 1.1 *Place* means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.
- 1.2 *Cultural significance* means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Cultural significance is embodied in the place itself, its fabric, setting, *use*, *associations*, *meanings*, records, *related places* and *related objects*.

Places may have a range of values for different individuals or groups.
- 1.3 *Fabric* means all the physical material of the *place* including components, fixtures, contents, and objects.
- 1.4 *Conservation* means all the processes of looking after a *place* so as to retain its *cultural significance*.
- 1.5 *Maintenance* means the continuous protective care of the *fabric* and *setting* of a *place*, and is to be distinguished from repair. Repair involves *restoration* or *reconstruction*.
- 1.6 *Preservation* means maintaining the *fabric* of a *place* in its existing state and retarding deterioration.
- 1.7 *Restoration* means returning the existing *fabric* of a *place* to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.
- 1.8 *Reconstruction* means returning a *place* to a known earlier state and is distinguished from *restoration* by the introduction of new material into the *fabric*.
- 1.9 *Adaptation* means modifying a *place* to suit the existing *use* or a proposed use.

- 1.10 *Use* means the functions of a place, as well as the activities and practices that may occur at the place.
- 1.11 *Compatible use* means a *use* which respects the *cultural significance* of a *place*. Such a use involves no, or minimal, impact on cultural significance.
- 1.12 *Setting* means the area around a *place*, which may include the visual catchment.
- 1.13 *Related place* means a *place* that contributes to the *cultural significance* of another place.
- 1.14 *Related object* means an object that contributes to the *cultural significance* of a *place* but is not at the place.
- 1.15 *Associations* mean the special connections that exist between people and a *place*.
- 1.16 *Meanings* denote what a *place* signifies, indicates, evokes or expresses.
- 1.17 *Interpretation* means all the ways of presenting the *cultural significance* of a *place*.

Conservation Principles

Article 2 Conservation and management

- 2.1 *Places of cultural significance* should be conserved.
- 2.2 The aim of *conservation* is to retain the *cultural significance* of a *place*.
- 2.3 *Conservation* is an integral part of good management of *places of cultural significance*.
- 2.4 *Places of cultural significance* should be safeguarded and not put at risk or left in a vulnerable state.

Article 3 Cautious approach

- 3.1 *Conservation* is based on a respect for the existing *fabric, use, associations and meanings*. It requires a cautious approach of changing as much as necessary but as little as possible.
- 3.2 Changes to a *place* should not distort the physical or other evidence it provides, nor be based on conjecture.

Article 4 Knowledge, skills and techniques

- 4.1 *Conservation* should make use of all the knowledge, skills and disciplines which can contribute to the study and care of the *place*.
- 4.2 Traditional techniques and materials are preferred for the *conservation* of significant *fabric*. In some circumstances modern techniques and materials which offer substantial conservation benefits may be appropriate.

Article 5 Values

- 5.1 *Conservation* of a *place* should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others.
- 5.2 Relative degrees of *cultural significance* may lead to different *conservation* actions at a place.

Article 6 Burra Charter Process

- 6.1 The *cultural significance* of a *place* and other issues affecting its future are best understood by a sequence of collecting and analysing information before making decisions. Understanding cultural significance comes first, then development of policy and finally management of the place in accordance with the policy.
- 6.2 The policy for managing a *place* must be based on an understanding of its *cultural significance*.
- 6.3 Policy development should also include consideration of other factors affecting the future of a *place* such as the owner's needs, resources, external constraints and its physical condition.

Article 7 Use

- 7.1 Where the *use* of a *place* is of *cultural significance* it should be retained.
- 7.2 A *place* should have a *compatible use*.

Article 8 Setting

Conservation requires the retention of an appropriate visual *setting* and other relationships that contribute to the *cultural significance* of the *place*.

New construction, demolition, intrusions or other changes which would adversely affect the setting or relationships are not appropriate.

Article 9 Location

- 9.1 The physical location of a *place* is part of its *cultural significance*. A building, work or other component of a place should remain in its historical location. Relocation is generally unacceptable unless this is the sole practical means of ensuring its survival.
- 9.2 Some buildings, works or other components of *places* were designed to be readily removable or already have a history of relocation. Provided such buildings, works or other components do not have significant links with their present location, removal may be appropriate.
- 9.3 If any building, work or other component is moved, it should be moved to an appropriate location and given an appropriate *use*. Such action should not be to the detriment of any *place* of *cultural significance*.

Article 10 Contents

Contents, fixtures and objects which contribute to the *cultural significance* of a *place* should be retained at that place. Their removal is unacceptable unless it is: the sole means of ensuring their security and *preservation*; on a temporary basis for treatment or exhibition; for cultural reasons; for health and safety; or to protect the place. Such contents, fixtures and objects should be returned where circumstances permit and it is culturally appropriate.

Article 11 Related places and objects

The contribution which *related places* and *related objects* make to the *cultural significance* of the *place* should be retained.

Article 12 Participation

Conservation, interpretation and management of a place should provide for the participation of people for whom the place has special associations and meanings, or who have social, spiritual or other cultural responsibilities for the place.

Article 13 Co-existence of cultural values

Co-existence of cultural values should be recognised, respected and encouraged, especially in cases where they conflict.

Conservation Processes

Article 14 Conservation processes

Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these.

Article 15 Change

- 15.1 Change may be necessary to retain *cultural significance*, but is undesirable where it reduces cultural significance. The amount of change to a *place* should be guided by the *cultural significance* of the place and its appropriate *interpretation*.
- 15.2 Changes which reduce *cultural significance* should be reversible, and be reversed when circumstances permit.
- 15.3 Demolition of significant *fabric* of a *place* is generally not acceptable. However, in some cases minor demolition may be appropriate as part of *conservation*. Removed significant fabric should be reinstated when circumstances permit.
- 15.4 The contributions of all aspects of *cultural significance* of a *place* should be respected. If a place includes *fabric, uses, associations or meanings* of different periods, or different aspects of cultural significance, emphasising or interpreting one period or aspect at the expense of another can only be justified when what is left out, removed or diminished is of slight cultural significance and that which is emphasised or interpreted is of much greater cultural significance.

Article 16 Maintenance

Maintenance is fundamental to conservation and should be undertaken where fabric is of cultural significance and its maintenance is necessary to retain that cultural significance.

Article 17 Preservation

Preservation is appropriate where the existing fabric or its condition constitutes evidence of cultural significance, or where insufficient evidence is available to allow other conservation processes to be carried out.

Article 18 Restoration and reconstruction

Restoration and reconstruction should reveal culturally significant aspects of the place.

Article 19 Restoration

Restoration is appropriate only if there is sufficient evidence of an earlier state of the *fabric*.

Article 20 Reconstruction

20.1 *Reconstruction* is appropriate only where a *place* is incomplete through damage or alteration, and only where there is sufficient evidence to reproduce an earlier state of the *fabric*. In rare cases, reconstruction may also be appropriate as part of a *use* or practice that retains the *cultural significance* of the place.

20.2 *Reconstruction* should be identifiable on close inspection or through additional *interpretation*.

Article 21 *Adaptation* must be limited to that which is essential to a use for the *place* determined in accordance with Articles 6 and 7.

21.1 *Adaptation* is acceptable only where the adaptation has minimal impact on the *cultural significance* of the *place*.

21.2 *Adaptation* should involve minimal change to significant fabric, achieved only after considering alternatives.

Article 22 New work

22.1 New work such as additions to the *place* may be acceptable where it does not distort or obscure the *cultural significance* of the place, or detract from its *interpretation* and appreciation.

22.2 New work should be readily identifiable as such.

Article 23 Conserving use

Continuing, modifying or reinstating a significant *use* may be appropriate and preferred forms of *conservation*.

Article 24 Retaining associations and meanings

24.1 Significant *associations* between people and a *place* should be respected, retained and not obscured. Opportunities for the *interpretation*, commemoration and celebration of these associations should be investigated and implemented.

24.2 Significant *meanings*, including spiritual values, of a *place* should be respected. Opportunities for the continuation or revival of these meanings should be investigated and implemented.

Article 25 Interpretation

The *cultural significance* of many *places* is not readily apparent, and should be explained by *interpretation*. Interpretation should enhance understanding and enjoyment, and be culturally appropriate.

Article 26 Applying the Burra Charter process

26.1 Work on a *place* should be preceded by studies to understand the place which should include analysis of physical, documentary, oral and other evidence, drawing on appropriate knowledge, skills and disciplines.

- 26.2 Written statements of *cultural significance* and policy for the *place* should be prepared, justified and accompanied by supporting evidence. The statements of significance and policy should be incorporated into a management plan for the place.
- 26.3 Groups and individuals with *associations* with a *place* as well as those involved in its management should be provided with opportunities to contribute to and participate in understanding the *cultural significance* of the place. Where appropriate they should also have opportunities to participate in its *conservation* and management.

Article 27 Managing change

- 27.1 The impact of proposed changes on the *cultural significance* of a *place* should be analysed with reference to the statement of significance and the policy for managing the place. It may be necessary to modify proposed changes following analysis to better retain cultural significance.
- 27.2 Existing *fabric, use, associations* and *meanings* should be adequately recorded before any changes are made to the *place*.

Article 28 Disturbance of fabric

Disturbance of significant *fabric* for study, or to obtain evidence, should be minimised. Study of a *place* by any disturbance of the fabric, including archaeological excavation, should only be undertaken to provide data essential for decisions on the *conservation* of the place, or to obtain important evidence about to be lost or made inaccessible.

Investigation of a *place* which requires disturbance of the *fabric*, apart from that necessary to make decisions, may be appropriate provided that it is consistent with the policy for the place. Such investigation should be based on important research questions which have potential to substantially add to knowledge, which cannot be answered in other ways and which minimises disturbance of significant fabric.

Article 29 Responsibility for decisions

The organisations and individuals responsible for management decisions should be named and specific responsibility taken for each such decision.

Article 30 Direction, supervision and implementation

Competent direction and supervision should be maintained at all stages, and any changes should be implemented by people with appropriate knowledge and skills.

Article 31 Documenting evidence and decisions

A log of new evidence and additional decisions should be kept.

Article 32 Records

- 32.1 The records associated with the *conservation* of a *place* should be placed in a permanent archive and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate.
- 32.2 Records about the history of a *place* should be protected and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate.

Article 33 Removed fabric

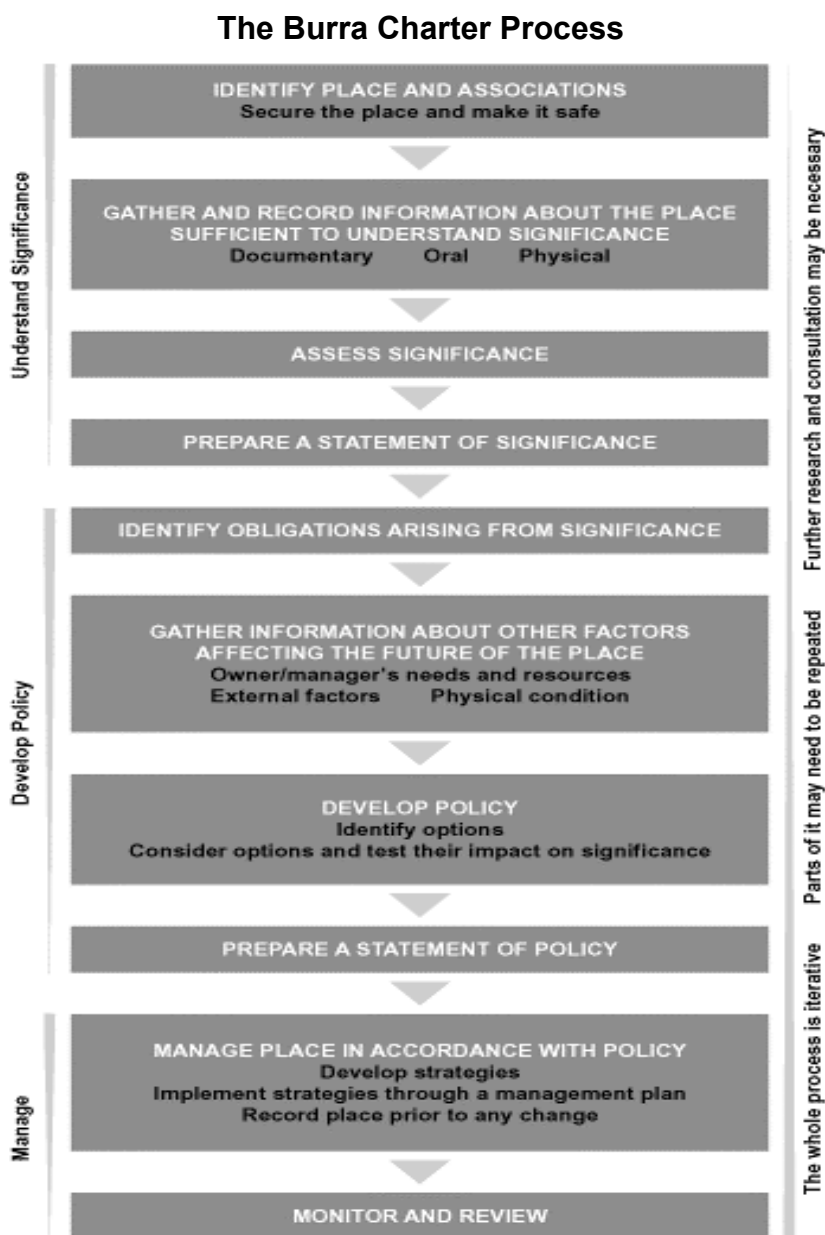
Significant *fabric* which has been removed from a *place* including contents, fixtures and objects, should be catalogued, and protected in accordance with its *cultural significance*.

Where possible and culturally appropriate, removed significant fabric including contents, fixtures and objects, should be kept at the place.

Article 34 Resources

Adequate resources should be provided for *conservation*.

Words in italics are defined in Article 1.



APPENDIX 8

REEF TOURISM LOCALITIES AND FACILITIES OBSERVED DURING RESEARCH PERIOD (2000-2003)

FACILITY	NAME	LOCATION(S)
Tourism Centres	Airlie Beach, including Airlie Beach markets	Mainland adjacent Whitsundays, Central Queensland
	Cairns*	Australian Mainland, Far North Queensland
Day Tours	Captain Cook Great Barrier Reef Cruises	Town of 1770, Lady Musgrave Island
	FantaSea Whitehaven Cruise	Whitehaven Beach
	Ocean Rafting	Whitehaven Bay, Whitsunday Island; Nara Inlet, Hook Island; Pittstop Bay, Border Island.
	Proserpine River EcoTour	Proserpine, Australian mainland adjacent Whitsundays
	Pure Pleasure Cruise*	Orpheus Island
	Flames of Polynesia	South Molle Island
Offshore Pontoons	ReefWorld	Hardy Reef, Outer Great Barrier Reef
	Pure Pleasure Cruise*	Kelso Reef
Island Resorts	Club Crocodile	Long Island
	Hamilton Island Resort	Hamilton Island
	Palm Bay Hideaway	Long Island
	South Molle Resort	South Molle
Unguided bushwalks	Long Island	Happy Bay, Fish Bay, Pandanus Bay, Humpty Point, Palm Bay
	Magnetic Island*	Florence Bay, Arthur Bay, Horseshoe Bay
	South Molle Island	Paddle Bay

* Informal observation of cruises and activities outside fieldwork observation in the Whitsundays.

APPENDIX 9

DATABASE CHECKLISTS USED IN ANALYSIS

Image Analysis

Creator Embury Bros., Ballina.....	Date 1930.....
Caption Looking for species. Taken through 15 ft water. Mel Ward. Sample of Arch Embury's Underwater Camera Invention 1930.....	
Brief description Shows Mel Ward diving in gaiters, belted shoes and small goggles. He is holding on to coral with left hand and carrying geopick in right. Fish swims near his head. Picture clearer to top right fading to lower left (this is the picture from the newspaper).....	
Series Embury scientific and holiday expeditions on the Great Barrier Reef.....	
Medium Black and White Photograph.....	Size
Location	
<hr/>	
Availability Mitchell Library.....	call number PXA.642 (102).....
Copyright	
<hr/>	
Image quality legs bit blurry - technology is new.....	
Copy	Reproduce <input checked="" type="radio"/> yes <input type="radio"/> no <input type="radio"/> unsure
creation date ?	

Perspective	
<input type="checkbox"/> landscape	<input type="checkbox"/> from water
<input type="checkbox"/> seascape	<input type="checkbox"/> from land
<input type="checkbox"/> above water	<input checked="" type="checkbox"/> below water
<input type="checkbox"/> aerial view	<input type="checkbox"/> raised view
<input type="checkbox"/> horizontal view	<input type="checkbox"/> upward view
<input type="checkbox"/> large scale (distant)	<input type="checkbox"/> small scale (close up)
<input type="checkbox"/> Other...	
Landscape features	
<input type="checkbox"/> day	<input type="checkbox"/> cloudy
<input type="checkbox"/> night	<input type="checkbox"/> raining
<input type="checkbox"/> clear sea	<input type="checkbox"/> windy
<input type="checkbox"/> stormy sea	<input type="checkbox"/> cyclone
<input type="checkbox"/> sunny	<input type="checkbox"/> sunset/rise
<input type="checkbox"/> sun	<input type="checkbox"/> stars
<input type="checkbox"/> islands	<input type="checkbox"/> reef
<input type="checkbox"/> palm trees	<input type="checkbox"/> coral island
<input type="checkbox"/> other vegetation	<input type="checkbox"/> pandanus
<input type="checkbox"/> nightclub	<input type="checkbox"/> Norfolk Is Pine
<input type="checkbox"/> tents	<input type="checkbox"/> mangroves
<input type="checkbox"/> huts	<input type="checkbox"/> swimming pool
<input type="checkbox"/> Other...	<input type="checkbox"/> aquarium
<input type="checkbox"/> restaurant	
sea creatures	
<input checked="" type="checkbox"/> coral fishes	<input type="checkbox"/> game fishes
<input checked="" type="checkbox"/> corals	<input type="checkbox"/> turtles
<input type="checkbox"/> turtle eggs	<input type="checkbox"/> dugongs
<input type="checkbox"/> dolphins	<input type="checkbox"/> whales
<input type="checkbox"/> clams	<input type="checkbox"/> stonefish
<input type="checkbox"/> gropers	<input type="checkbox"/> slugs
<input type="checkbox"/> shells	<input type="checkbox"/> crab
<input type="checkbox"/> Other...	
Total people	
<hr/>	
Women	active
_____	_____
	<input type="checkbox"/> formal <input type="checkbox"/> casual <input type="checkbox"/> fully clothed <input type="checkbox"/> semi clothed <input type="checkbox"/> bathers <input type="checkbox"/> naked <input type="checkbox"/> Other...
Men	
1	_____
	<input type="checkbox"/> formal <input type="checkbox"/> casual <input type="checkbox"/> fully clothed <input type="checkbox"/> semi clothed <input type="checkbox"/> bathers <input type="checkbox"/> naked <input type="checkbox"/> Other...
Children	
_____	_____
	<input type="checkbox"/> formal <input type="checkbox"/> casual <input type="checkbox"/> fully clothed <input type="checkbox"/> semi clothed <input type="checkbox"/> bathers <input type="checkbox"/> naked <input type="checkbox"/> Other...
Ethnicity <input type="checkbox"/> Aboriginal <input type="checkbox"/> TSI <input type="checkbox"/> South sea islander <input type="checkbox"/> European <input type="checkbox"/> Asian <input type="checkbox"/> Other...	
<hr/>	
Activities	
<input type="checkbox"/> water transport	<input type="checkbox"/> glass-bottom boat
<input type="checkbox"/> swimming- sea	<input type="checkbox"/> collecting
<input type="checkbox"/> swimming pool	<input type="checkbox"/> reef walking
<input type="checkbox"/> coral viewing	<input type="checkbox"/> fossicking
<input type="checkbox"/> turtle riding	<input type="checkbox"/> snorkelling
<input type="checkbox"/> line fishing	<input type="checkbox"/> diving
<input type="checkbox"/> bush walking	<input type="checkbox"/> spear fishing
<input type="checkbox"/> sunbathing	<input type="checkbox"/> relaxation
<input type="checkbox"/> dancing	<input type="checkbox"/> socialising
<input type="checkbox"/> jetski	<input type="checkbox"/> Other...
<input type="checkbox"/> game fishing	<input type="checkbox"/> romance
<input type="checkbox"/> camping	<input type="checkbox"/> clubbing
<input type="checkbox"/> shopping	
<input type="checkbox"/> parachuting	
<input type="checkbox"/> hunting	

Summary Fields

Analysis Summary		details
summary purpose	<input type="checkbox"/> Government/Promotion <input type="checkbox"/> Private	
summary orientation	<input type="checkbox"/> orientation <input type="checkbox"/> scenic <input type="checkbox"/> portrait <input type="checkbox"/> group/activity	
exotic signifier	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> palm <input type="checkbox"/> other veg <input type="checkbox"/> pacific 'culture'	
Australian signifier	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> vegetation <input type="checkbox"/> Aboriginal people/culture	
sensation	<input type="checkbox"/> sound <input type="checkbox"/> visual <input type="checkbox"/> smell <input type="checkbox"/> taste <input type="checkbox"/> touch	
weather	<input type="checkbox"/> fine/pleasant <input type="checkbox"/> storm/unpleasant	
summary landscape	<input type="checkbox"/> islands <input type="checkbox"/> water surface <input type="checkbox"/> underwater <input type="checkbox"/> land	
date summary	<input type="radio"/> pre 1900 <input type="radio"/> 1920-1930s <input type="radio"/> 1960s-1970s <input type="radio"/> 1900-1910 <input type="radio"/> 1940-1950s <input type="radio"/> contemporary	
capture	<input type="checkbox"/> photography <input type="checkbox"/> aquarium <input type="checkbox"/> collections <input type="checkbox"/> film	
human presence	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> people <input type="checkbox"/> industry <input type="checkbox"/> buildings <input type="checkbox"/> towns	
way of life	<input type="checkbox"/> accommodation <input type="checkbox"/> boats <input type="checkbox"/> domestic duties	

Film Compilation

Access and Activities at the Reef

The enclosed CD contains samples of footage from a selection of home movies, documentaries and advertisements for the Great Barrier Reef.

The CD can be viewed in a CD-Rom Drive on a personal computer using Microsoft Media or other free software.

Users of the electronic version of this thesis,
can [click here](#) to open Film Compilation File.