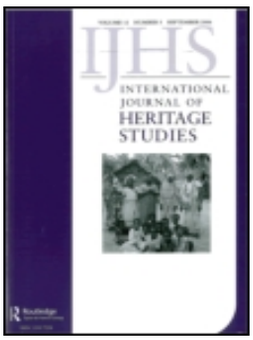

International Journal of Heritage Studies

ISSN: 1352-7258 (Print) 1470-3610 (Online) Journal homepage: http://www.tandfonline.com/loi/rjhs20

Sense Matters: aesthetic values of the Great Barrier Reef

Celmara Pocock

To cite this article: Celmara Pocock (2002) Sense Matters: aesthetic values of the Great Barrier Reef, International Journal of Heritage Studies, 8:4, 365-381, DOI: 10.1080/1352725022000037191g

To link to this article: https://doi.org/10.1080/1352725022000037191g

Published online: 09 Dec 2010.

International Journal of Heritage Studies,
Vol. 8, No. 4, 2002, pp. 365–381

Sense Matters: aesthetic values of the Great Barrier Reef

Celmara Pocock

Abstract

This paper investigates the use of aesthetic value as a criterion by which the significance of heritage places is assessed. It is argued that current heritage management practice has not engaged with the extensive discourse relating to aesthetics, and therefore confines aesthetics to a particular class and culture, and an inert view of only one of our sensory experiences. Historical records relating to the Great Barrier Reef are used to show how aesthetic appreciation of the area has changed over time. The data suggest that the failure to recognise an aesthetic that is primarily non-visual can lead to changes in landscape and loss of associated value. It also suggests that aesthetic values change rapidly and are influenced by social and technological factors.

Key Words: Australia; Great Barrier Reef; Landscape; Aesthetics; Heritage Management; World Heritage List; Casuarinas

Heritage Assessments and Aesthetics

The earliest legislation and administration governing the identification and protection of cultural heritage places was developed within Old World countries, and exported to the New World in colonial contexts. The way in which heritage places are identified and assessed around the world continues to share many features of this colonial legacy, in spite of the diversity of cultural and social contexts in which they operate.[1] Many of the conservation frameworks developed under these regimes include a series of criteria by which the significance of heritage places can be assessed.

1. H. Cleere, 'World cultural resource management: problems and perspectives', in H. Cleere (ed.) *Approaches to the archaeological heritage: a comparative study of world cultural resource management systems*, New Directions in Archaeology, Cambridge and New York: Cambridge University Press, 1984; Henry Cleere, 'Introduction: the rationale of archaeological heritage management', in Henry Cleere (ed.) *Archaeological heritage management in the modern world*, One World Archaeology, London: Unwin Hyman, 1989; F.P. McManamon & A. Hatton, 'Introduction: considering cultural resource management in modern society', in F.P. McManamon & A. Hatton (eds) *Cultural resource management in contemporary society: perspectives on managing and presenting the past*, One World Archaeology, London and New York: Routledge, 2000.

ISSN 1352-7258 print; ISSN 1470-3610 online/02/040365-17 © 2002 Taylor & Francis Ltd
DOI: 10.1080/1352725022000037191

Although there have been some shifts in how criteria are interpreted and defined, the underlying premises on which they are based have remained unchanged. This is clearly illustrated by criteria used to assess aesthetics of heritage places.

Many heritage-management systems make provision for the aesthetics of natural- and cultural-heritage places to be considered in deciding significance and conservation measures. Like the heritage-conservation regimes, the philosophy and judgement of aesthetics emerged within the Old World, and is most commonly associated with the visual arts of Europe. However, the study of aesthetics is controversial and complex. There is a broad and elaborate literature on aesthetics in the areas of philosophy, psychology, music, art history, architecture and an increasing number of studies relating to the aesthetics of the environment and the everyday.[2] A significant portion of the debate stems back to Kant's *Critique of judgement* in 1790, and the arguments are, to some extent, exhausted.[3] However, they are in no way conclusive and the concept is constantly challenged and expanded, contracted and reinstated.

In contrast, the issue of aesthetics is barely debated within heritage management, even though decisions about aesthetic value continue to be made on a daily basis by practitioners. It is not the intention of this paper to review or summarise the extensive body of literature on the subject or to provide an overview of philosophical or psychological cognition of aesthetics. Rather, its purpose is to demonstrate that the failure of heritage-management practice to engage with theoretical discourse has produced inadequate assessment methods and processes. Through the consideration of a case study, the paper illustrates how professional use of aesthetics, as a criterion to assess heritage significance, is simplistic and subject to misrepresentation. The example of the Great Barrier Reef is used to demonstrate how a lack of engagement with philosophies and theories can result in naïve assessments and the loss of value.

---

2. See, for example, D. Inglis & J. Hughson, 'The beautiful game and the proto-aesthetics of the everyday', *Cultural Values*, Vol. 4, No. 3, 2000; H. Grace, 'Introduction: aesthesia and the economy of the senses', in H. Grace Kingswood (ed.) *Aesthesia and the economy of the senses*, Sydney: Faculty of Visual and Performing Arts, University of Western Sydney, Nepean, 1996; A. Berleant, 'Toward a phenomenological aesthetics of environment', in D. Ihde & H.J. Silverman (eds) *Descriptions*, Selected Studies in Phenomenology and Existential Philosophy, Albany: State University of New York Press, 1985; A. Berleant, *The aesthetics of environment*, Philadelphia: Temple University Press, 1992; S.C. Bourassa, *The aesthetics of landscape*, London and New York: Belhaven Press, 1991; P. Bourdieu, *Distinction: a social critique of the judgement of taste*, London: Routledge & Kegan Paul, 1984; T. Eagleton, *The ideology of the aesthetic*, Oxford and Cambridge, MA: Blackwell, 1990; R. Lamb, 'Advancing arguments for the conservation of valued landscapes', Barton, ACT: Australian Heritage Commission, 1994; R. Burton Litton, Jr, 'Visual assessment of natural landscapes', in B. Sadler & A. Carlson (eds) *Environmental aesthetics: essays in interpretation*, Victoria, BC: University of Victoria, 1982; R.B. Riley, 'The visible, the visual, and the vicarious: questions about vision, landscape and experience', in P. Groth & T.W. Bressi (eds) *Understanding ordinary landscapes*, New Haven and London: Yale University Press, 1997; J.D. Porteous, *Environmental aesthetics: ideas, politics and planning*, New York: Routledge, 1996.

3. Grace, op. cit.

Great Barrier Reef Heritage Listing

The Great Barrier Reef, off the northeast coast of Australia, is regarded by many as one of the wonders of the world. It is a place deemed to have superlative natural attributes and is included in the World Heritage List. The Reef is also recognised by the Commonwealth Government of Australia through its inclusion in the Register of the National Estate. World Heritage and National Estate processes share characteristics with other heritage-listing regimes in the world, including their capacity to assess aesthetic qualities in making decisions about significance. The aesthetics of the Reef are considered to be an important contributor to the current heritage status of the Reef under both the Australian and the World Heritage systems.

World Heritage Listing

The Great Barrier Reef has been included on the World Heritage List since 1981. It is listed, among other things, for its aesthetic qualities. At the time of listing, the criterion used to assess aesthetic values stated that World Heritage places should 'contain unique, rare and superlative natural phenomena, formations and features and areas of exceptional natural beauty'. The Reef was hence recognised for its natural beauty, including its 'unparalleled aerial vista' and an 'abundance and diversity of shape, size and colour of marine fauna and flora in the coral reefs'.[4]

The criteria for assessing places for World Heritage listing have since changed. A report by Lucas et al., to expand and clarify the basis on which the Reef can be included on the World Heritage List, found that natural heritage attributes contributing to natural beauty and aesthetics 'were the poorest documented and least known set of attributes'.[5] This is a problem that continues to plague the assessment of aesthetic values, and to some extent is a result of the criteria themselves. The World Heritage Convention[6] articulates separate criteria for natural and cultural values, and both are defined to include aesthetic perspectives. The way in which aesthetics are incorporated into each definition is quite different. 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 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, natural heritage is defined in a

---

4. Environment Australia, 'Great Barrier Reef World Heritage values', available from <http://www.environment.gov.au/heritage/awhg/worldheritage/sites/gbr/gbr.html>, accessed 25 April 2001.

5. P.H.C. Lucas, T. Webb, P.S. Valentine & H. Marsh, *The outstanding universal value of the Great Barrier Reef World Heritage Area*, Townsville: Great Barrier Reef Marine Park Authority, 1997.

6. UNESCO, 'Convention Concerning the Protection of the World Cultural and Natural Heritage', available from <http://www.unesco.org/whc/nwhc/pages/doc/main.htm>, accessed 25 April 2001.

way that is more generally inclusive of scientific and aesthetic values and 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 fine 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 assessment is clearly focused on the arts, citing monumental arts and architecture. The word 'aesthetic' is absent altogether. On the other hand, the natural assessment retains its inclusiveness and requires that sites 'contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance'.[7] The first indicates that cultural assessment is about established concepts of Western art; the second that natural aesthetics are presumed to be independent of cultural influence. Both clearly indicate that UNESCO regards aesthetic values as existing without a cultural context and that they are assessable objectively. This can be attributed to the emphasis given to monuments in early legislative regimes,[8] and reflects the lag between cultural heritage practice and academic debate.

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'.[9] However, in the World Heritage operational guidelines this phrase is included only in the context of natural heritage values. The interpretation given to it by Lucas et al. highlights the nexus between cultural and natural heritage values[10] by recognising that communities may in fact attribute these values. Within the current World Heritage framework, however, there is no scope to allow for the intersection of cultural and natural values. The criteria lead directly to the problems that the Lucas et al. report warns against, 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.[11]

The problems of assessment and documentation of aesthetics highlighted by Lucas et al. result from a failure to regard aesthetics in a social context. Under some legislative and management regimes in Australia, heritage places may be assessed

---

7. UNESCO, 'Operational Guidelines for the Implementation of the World Heritage Convention', available from <http://www.unesco.org/whc/nwhc/pages/doc/main.htm>, accessed 25 April 2001.

8. H. Cleere, 'The World Heritage Convention in the Third World', in McManamon & Hatton, op. cit.

9. Lucas et al., op. cit., pp. 52–53.

10. D. Lowenthal, 'Environment as heritage', in K. Flint & H. Morphy (eds) *Culture, landscape and the environment; the Linacre lectures 1997*, Oxford: Oxford University Press, 2000.

11. Lucas et al., op. cit., p. 39.

and listed for their social values. These are very broadly understood to be the values attributed to places by communities and are much like the values Lucas et al. have seen as arising out of aesthetic value. In some instances, social value is defined to include aesthetics, and in others social and aesthetic values are assessed through separate criteria.

Australian Heritage Commission Listing

The Australian Heritage Commission is an Australian 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. 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 places for inclusion in the Register of the National Estate, and defines separate criteria for social and aesthetic values. However, the Commission criterion used to assess aesthetics has some social context, and is less general than the World Heritage criterion. 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 recognising 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.[12] While a diversity of aesthetic appreciation may be recognised through factors like class, gender, ethnicity and Aboriginality, 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:

> aspects 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.[13]

---

12. I. Hunter, 'Aesthetics and the arts of life', in Grace op. cit. (note 2); Bourdieu, op. cit.; Eagleton, op. cit.; W.D. Lipe, 'Value and meaning in cultural resources', in Cleere, 1984, op. cit.; J.F. Weiner et al., '1993 debate: aesthetics is a cross-cultural category', in T. Ingold (ed.) *Key debates in anthropology*, New York: Routledge, 1996; J. Coote & A. Shelton, *Anthropology, art, and aesthetics*, Oxford: Clarendon Press, 1992.

13. Australian Heritage Commission, 'Glossary of heritage terms', available from <http://www.ea.gov.au/heritage/infores/glossary.html>, accessed 25 April 2001.

The definitions provided by the Australian Heritage Commission are inclusive of cultural difference and a range of sensory experiences that may contribute to a sense of place. However, the recognition of these experiences does not translate into practice in the assessment of heritage places. In the case of the Great Barrier Reef, the Australian Heritage Commission's statement of significance includes only visual aesthetics in recognising that '[t]he reef is an area of exceptional natural beauty with some of the most spectacular scenery on earth'.[14]

Aesthetic assessment has remained the primary domain of non-Indigenous, historic built heritage and scenic landscapes. Only the most cursory attention is given to aesthetics in other contexts. For example, it can be argued that aesthetic qualities may manifest themselves as very different concepts within Aboriginal society,[15] but Aboriginal paintings and engravings are often superficially judged to be of aesthetic importance by non-Aboriginal experts. The focus on built heritage may partly be attributed to the appropriation of this aspect of heritage by conservation architects,[16] and the strong association of aesthetics with Western art and particular social strata. Similarly, appreciation of landscapes is linked strongly with Western landscape painting.[17]

The focus on the physical aspects of heritage places poses problems for heritage management in Australia and elsewhere in the world,[18] and the assessment and management of aesthetic value is similarly restricted by this bias. 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. Although seeing can be a tactile experience,[19] the physical and emotional distance required by the objectivity of heritage assessments restricts the consideration of aesthetics to visual characteristics that are less 'grossly sensuous'[20] than other aesthetic experiences.

---

14. Australian Heritage Commission, 'Register of the National Estate', available from <http://www.ahc.gov.au/cgi-bin/register/site.pl?008320>, accessed 21 January 2002.

15. See, for example, L. Taylor, *The aesthetics of a Kunwinjku site*, Barton, ACT: Australian Heritage Commission, 1994; H. Morphy, 'From dull to brilliant: the aesthetics of spiritual power among the Yolngu', in Coote & Shelton, op. cit. (note 12).

16. D. Byrne, H. Brayshaw & T. Ireland, *Social significance: a discussion paper*, Sydney: Research Unit, Cultural Heritage Division, NSW National Parks and Wildlife Service, 2001.

17. Bourassa, op. cit. (note 2).

18. Byrne, Brayshaw & Ireland, op. cit. (note 16); Cleere, 'Introduction: the rationale of archaeological heritage management'; Lipe, op. cit.

19. Berleant, 1985, op. cit. (note 1); M. Taussig, *Mimesis and alterity: a particular history of the senses*, New York and London: Routledge, 1993.

20. Eagleton, op. cit., p. 3.

The assessment of aesthetic values, as with other characteristics of heritage places, is therefore reduced to fabric and material evidence significant to a restricted number of individuals. This objectifying process displaces the consideration of emotional and sensory experience and knowledge that underpins other people's attachment to place.[21] 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 of expressing attachment that is not reflected in standard identification of natural attributes.

So in spite of the inclusive definitions of aesthetic value, which go some way to recognising that aesthetics are culturally constructed and that smell, taste, touch, and sound can all be strongly evocative of place, the predominant interpretation of aesthetics is a visual one, constituted by a particular social construction.

The implications of this bias are that experiences of place go unrecognised and unassessed. According to established processes of Article 6 of the Burra Charter, management of a heritage place 'must be based on an understanding of its cultural significance'.[22] In other words, the values must be assessed before they can be managed. This principle is generally regarded as standard, if not best, practice in Australian heritage conservation. 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 marginalised.

In this paper, the preliminary results of research into changes in social values associated with the Great Barrier Reef are used to show how aesthetic appreciation of the Reef has changed over time. It also explores how the failure to recognise non-visual aesthetics has resulted in the loss of significant values.

Aesthetic Experiences of the Great Barrier Reef

Representations of the Great Barrier Reef enter people's lives through advertisements, documentary films, television, advertising, posters, books, magazines and postcards. This material is overwhelmingly colourful, and images abound of blue seas, green islands, white beaches and kaleidoscopic underwater life. These vivid

---

21. See, for example, J. Carles, F. Bernáldez & J. de Lucio, 'Audio-visual interactions and soundscape preferences', *Landscape Research*, Vol. 17, No. 2, 1992; S. Feld, 'Waterfalls of song: an acoustemology of place resounding in Bosavi, Papua New Guinea', in S. Feld & K.H. Basso (eds) *Senses of place*, Santa Fe: School of American Research Press, 1996.

22. Australia ICOMOS, 'Burra Charter', available from <http://www.icomos.org/australia/>, accessed 1 May 2001.

visual images are readily accepted as representing an important aesthetic experience of the Great Barrier Reef. As discussed above, these scenic visual aesthetics are recognised as contributing to the heritage values of the Reef.

There are, however, a number of different aesthetic and sensory experiences associated with the Great Barrier Reef that hold significance. In her book *Reefscape*, Rosaleen Love[23] explores a variety of spiritual and sensory experiences of the Reef, both beneath and above the surface of the sea, and in that intermediate zone between the two worlds. A particularly memorable description by Love is of the unmistakable smell of a coral cay. Her description may be conspicuous because it seems unconventional among the more common experiences portrayed in Reef advertising. It seems unlikely that the 'distinctive fertiliser smell of the true coral cay'[24] would be used in contemporary promotion of the Great Barrier Reef.

The accounts of several people who spent a number of months camping on small islands during Reef excursions in the 1920s and 1930s disclose distinctive elements of the environment. Their encounters with the region are more holistic—evocative of smell and tastes of food, water and air; skin sensations of heat, moisture, insects, and sand; and of sounds of birds, insects and trees.

At the beginning of the last century, one of the Great Barrier Reef's most renowned long-term residents, 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 the experience of this place:

> 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.[25]

A contemporary Reef experience is regarded as incomplete without a venture into the underwater world. For many people the associated aesthetics are quite thrilling and unique. This is sometimes the first and only time they will dare to immerse themselves in the ocean. They float, taste salt and hear underwater sounds as completely new experiences. However, even these sensations are frequently reduced to the two-dimensional visual reproductions found in the mass of popular colour images of the Reef.

In early 20th-century Reef tourism, underwater experiences were not only impracticable but also undesirable.[26] It was a long time before large groups of

---

23. R. Love, *Reefscape: reflections on the Great Barrier Reef*, St Leonards: Allen & Unwin, 2000.

24. Ibid., p. 20.

25. E. Banfield, *The confessions of a beachcomber*, Sydney: Angus & Robertson, 1908, p. 14.

26. P. Harvey & G. Borschmann, 'Interview with Perry Harvey, Great Barrier Reef tourist operator', Canberra: National Library of Australia, 1994.

Figure 1. Before the advent of underwater and colour photography, bleached coral specimens were arranged to illustrate the diversity of shape, texture and size of corals. [Dene Fry, 1910, © State Library of New South Wales.]

people snorkelled and dived on coral reefs. Although the 1930s were an important period of expansion of Reef tourism,[27] personal immersion in an underwater world was not an important aspect of Reef experiences. Instead, the Reef was peeked at through a waterscope or glass-bottomed boat. The experience was more voyeuristic than participatory.

The brilliant colours for which the Reef is known are now taken as synonymous with Reef images. However, in the historic past 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 writing of the living corals in the 1930s, Mel Ward says that the 'colours are elusive and frequently indefinable'.[28] Similarly, in her reminiscence of a Reef holiday, Hilda Marks says, 'No words can describe what we

27. T. Barr, *No swank here? The development of the Whitsundays as a tourist destination to the early 1970s*, Department of History and Politics in conjunction with Department of Tourism (ed.) Studies in North Queensland History, Townsville: James Cook University, 1990.

28. C. Melbourne (Mel) Ward, 'Papers of Mel (Charles Melbourne) Ward Lindeman Island', Australian Museum AMS 358 Box 4, Item 60, Sydney: n.d.

saw.'[29] Early colour reproductions in the form of hand-tinted photographs and postcards are pale and subtle in comparison with the photographic images of today. Even in the 1960s it was difficult to re-create the colours of the underwater world, and coral displays were a poor substitute. Coral samples quickly died out of water and subsequently lost their colour. Bleached white specimens were hand painted to re-create the colours visible underwater. In writing to the Commonwealth Government in support of her own skill in re-creating the colours of living corals, coral artist Shirley Keong 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). Shirley Keong, 20 December 1965[30]

Only those who had visited and viewed the Reef beneath the sea would have realised and remembered the colours. Brilliant colour was therefore regarded more clearly as only one aspect of a broader visual aesthetic experience, and the textures and diversity of coral shapes were prominent. Without the emphasis on underwater ventures, activities on the Reef more readily included a range of land-based aesthetic experiences. Forms of trees and silhouetted shapes of people, mountains, islands and boats were important visual images. But beyond this, people's experiences of sounds, smells and tastes were also given greater emphasis.

Sighing She-oaks

One example of non-visual aesthetics that stands out in the historic texts is the sound of *Casuarina equisetifolia*, also known as casuarinas or she-oaks, on islands of the Great Barrier Reef. Elsewhere I have presented an argument about the transformation of Reef landscapes from Australian bush to generic ideal.[31] Prior to the transformation of environments around island resorts, many native species of trees and bushes were present in areas frequented by visitors. Casuarinas are only one such species. However, the prominence of these trees is notable in that they were identified primarily through a non-visual aesthetic experience.

Casuarinas are a colonising tree of coral cays, and fringe the beaches of Great Barrier Reef islands. Although they are found and are valued elsewhere in the world, she-oaks are distinctively Australian and bring with them a characteristic audible aesthetic. In the experiences of early Reef visitors, casuarinas were not regarded as particularly beautiful to look at, but they were frequently recalled for their sound. In

---

29. H.V. Marks, *A Christmas holiday on the Great Barrier Reef, 1932–1933*, Sydney: Harris & Sons, 1933, p. 14.

30. Prime Minister's Department, 'Expo 67-Great Barrier Reef Exhibit', National Archives of Australia (National Office): A463/50; 1965/4559, Canberra: 1965–1966.

31. C. Pocock, 'Australian landscape to tropical fantasy: Great Barrier Reef' (in preparation).

Figure 2. Casuarinas surround the ornithologists' camp on Masthead Island, Great Barrier Reef, 1910. The sound of she-oaks 'sighing' in the wind was an important auditory experience for those who camped on the Reef islands. [Dene Fry, 1910, © State Library of New South Wales.]

writing of Dunk Island, Banfield describes these trees as 'ever-sighing beech oaks'.[32]

The sound of the she-oaks on the Reef islands is one that is deeply impressive, and is an important aesthetic experience of early Reef visitors. Mel Ward, a naturalist who spent many months living on Reef islands, writes of being '[l]ulled by the music of the sea and the sighing trees' on Lindeman Island.[33] The trees are part of an experience of being on the Reef. In a newspaper article, Mel Ward recalls she-oaks as 'haunted trees'.[34] The spiritual quality he ascribed to the trees is also prominent in his other writing:

> 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 imbude [*sic*] with

32. Banfield, op. cit. (note 25), p. 9.

33. Charles Melbourne (Mel) Ward, op. cit., Box 3, Notebook 31, Sydney: 1939.

34. Mel Ward, 'The grinding trees', *The Sunday Sun and Guardian*, 10 February 1935.

Figure 3. A group of tourists from the SS Katoomba picnic beneath casuarinas on Scawfell Island, Great Barrier Reef, 1933. Abundant casuarinas provided shade and shelter to early tourists and contributed to a sense of place. [R.M. Berryman, 1933, © National Library of Australia.]

> some mystical spirit at first scarcely definable but as the inevitable nights followed each other, this nameless presence claimed the imagination.[35]

The presence of casuarinas is visually testified in numerous newspaper and personal photographs in the early part of the 20th century. In terms of visual qualities, the casuarinas are not given particular attention, but their abundance on Reef sands assures them a place at the edges and in the background of many photographs of the period.

In contrast, contemporary promotion rarely includes casuarinas as part of Great Barrier Reef depictions. Casuarinas are still found in significant numbers on the islands and along the coastline of the Great Barrier Reef. However, in hundreds of Reef-related tourism brochures gathered at the 2001 Townsville Travel Show, only two include glimpses of these trees. In one photograph, small casuarina saplings peek out of the sand, and in the other the casuarina is mostly obscured by a superimposed image. The vegetative framing of photographs has given way overwhelmingly to the palm.[36]

35. Ward, op. cit.

36. Pocock, op. cit.

Figure 4. Casuarina branches frame this image, part of a series, used by the Australian government to promote Heron Island, Great Barrier Reef. [© National Archives of Australia ca 1950.]

And yet for Captain Tom McLean, a long-time tourism operator in the Whitsundays from the mid-1940s to the 1980s, casuarinas were 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.[37]

This contrasts strongly with the permit provisions for tourist operators in the late 1980s, who were prohibited from allowing their patrons to sit in the shade of the

37. G.T. McLean, *Captain Tom*, Mackay: Boolarong Publications, 1986, p. 2.

sole remaining casuarina on Lizard Island.[38] The heavy planting of palms around tourist areas has removed casuarinas from the environments that people visit. Although present on many beaches of the Reef, they have disappeared from the dominant discourse that frames Reef experiences.

Discussion

For Reef visitors in the early 20th century, casuarinas imparted a real sense of place and are entwined with their knowledge of the region. Unlike many elements of contemporary Reef experiences, she-oaks were valued through sound rather than for their visual attributes. Although casuarinas persist on Reef islands and cays today, they are no longer a central conception of the Reefscape for visitors.

The Great Barrier Reef is renowned for its brightly coloured visual aesthetics, and in this context casuarinas may not be particularly conspicuous. However, the sound of these trees was an integral and evocative element in early Reef experiences. Sound is at least as important as visual quality in the experience and appreciation of place,[39] but in the case of the Reef these values have been diminished. This can be attributed, in part, to the way in which aesthetics are assessed and managed. Without the recognition of the value of the sound in aesthetic experiences of place, palms have displaced casuarinas[40] and the continuity of visitor experiences has been broken. It is possible that if a full range of aesthetic values were identified, casuarinas may have been more carefully managed and maintained within and around the resorts of the Great Barrier Reef that are inundated with exotic palms today. This may have maintained the value of the she-oak as an important aspect of visiting the Reef.

While the Reef is managed and conserved primarily for natural attributes, the failure to identify social aesthetic values has led to the loss of some natural attributes. The contemporary management regime, with its focus on scientific values, highlights the conservation needs of vegetation such as *Pisonia* trees that are recognised as being at risk.[41] The casuarina is not regarded as endangered or under threat and is therefore overlooked in the management regime. Although the trees are abundant generally, they have lost their place in the environmental and social contexts in which they were valued. In some instances this has in fact led to a loss of natural attributes, as seen in the case of Lizard Island.

The data suggest not only that aesthetic values have been lost, but also they are historically constituted through both social and technological factors. Visual

38. Personal communication with staff at the Great Barrier Reef Marine Park Authority, Townsville.

39. Carles, Bernáldez & de Lucio, op. cit. (note 21); Feld, op. cit. (note 21).

40. Pocock, op. cit.

41. D.R. Wachenfeld, J.K. Oliver & J.I. Morrissey, *State of the Great Barrier Reef World Heritage Area 1998*, Townsville: Great Barrier Reef Marine Park Authority, 1998, p. 29.

appreciation is strongly tied with tourists' experiences of places,[42] and the 'taking of photographs seems almost obligatory to those who travel about'.[43] Photography is a predominant force in contemporary capitalist societies[44] and provides a literal framing mechanism of contemporary Reef experience.

The Great Barrier Reef and its highly regarded 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.[45] The development of new types of technology made new forms of knowledge available and shaped people's aesthetic experiences of the Reef. In the early 20th century, photographs were black and white still 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 aesthetics 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 to particular visual qualities. This has come at the expense of other sensory experiences that contribute to a sense of place.

The realisation that the way in which aesthetics are valued changes over time raises some interesting questions for cultural heritage managers. Heritage vision statements and definitions inevitably consider the value of places in an intergenerational context.[46] The aim of heritage management is to conserve and maintain heritage in respect of the past, and for appreciation and use in both the present and the future. The implication of historic change is that aesthetics, as a criterion to assess significance, require constant reassessment and re-evaluation. The values are constantly changing and subject to the influence of technology, society and management. It is therefore worth considering, in a contemporary heritage context, how these values might best be assessed so as to allow aesthetic values of the past, present and future to be included in a management regime.

Conclusions

People construct places through sensual experience that is mediated by technology and structured by society. There is a body of literature dealing with space and place in which the first is thought to exist without reference to people, the latter constructed through human knowledge. Similar arguments have been made in

---

42. J. Urry, *The tourist gaze: leisure and travel in contemporary societies*, London: Sage, 1990.

43. S. Sontag, *On photography*, New York: Farrar, Straus and Giroux, 1973, p. 162.

44. Ibid.

45. Ibid., pp. 155–156.

46. Cleere, op. cit. (note 1), p. 126; Lipe, op. cit., p. 10.

relation to environment and landscape.[47] However, in considering non-visual aesthetics, heritage professionals seek to identify sensations that are evocative of place, rather than recognising that these sensations may in fact constitute the place. While technology and society effect temporal changes in aesthetic appreciation, the way in which heritage practitioners assess these values has remained static. This is particularly problematic in heritage contexts that are multicultural and conflicting.

Some regimes have attempted to broaden definitions and adjust criteria to account for the greater diversity of situations in which they operate. For instance, the strong emphasis given to monuments in very early legislation has been balanced by broader definitions that include other types of sites and landscapes.[48] However, the colonial history of heritage legislation, and the association of aesthetics with a Western tradition of fine art and architecture has left a strong bias in the types of places listed for their aesthetic qualities. There is a further bias towards the visual aspect of aesthetics that stems from the dominance of the visual in Western philosophy, and the objective scientific paradigm in which cultural heritage management operates.

The contentious issue is that, within heritage practice, assessment continues to reinforce Western notions of natural and cultural aesthetics, and its bias towards the visual. Heritage practitioners' assessments of significance are undertaken uncritically, based on cultural prejudice and assumption. While aesthetics are regarded as an important element in significance assessment, the individuals making these judgements operate in isolation from the debates on aesthetics.[49] Aesthetics are assumed to be understood and unambiguous by heritage practitioners, whereas the theoretical literature on the subject suggests this is anything but the case. The criterion is therefore poorly understood and used by most practitioners, particularly in newer contexts of landscape and social assessment.

In many parts of the world, there is an increasing recognition of the nexus between cultural and natural heritage values. In response to this, the criteria for World Heritage listing are currently under review. It would also be timely to disentangle aesthetics criteria from their colonial origin, and to reconsider the elements that contribute to aesthetic values in a range of heritage contexts. This may require the use of different terminology to clarify the role of sensuousness in the experience of place. It may only be once the term is understood within particular

---

47. B. Cunliffe, 'Landscapes with people', in K. Flint & H. Morphy (eds) *Culture, landscape and the environment; the Linacre lectures 1997*, Oxford: Oxford University Press, 2000.

48. H. Cleere, 'Cultural landscapes as world heritage', *Conservation and Management of Archaeological Sites*, Vol. 1, No. 1, 1995; Cleere, 'The World Heritage Convention in the Third World'; Lipe, op. cit.

49. Many heritage practitioners have disciplinary backgrounds in archaeology, which similarly uses aesthetics without theoretical context. See C. Gosden, 'Making sense: archaeology and aesthetics', *World Archaeology*, Vol. 33, No. 2, 2001.

heritage conservation regimes that it will be possible systematically to assess and conserve these elements of heritage places.

Acknowledgements
This research is made possible through the support of the Cooperative Research Centre for the Great Barrier Reef World Heritage Area. I would like to thank Drs David Collett, Shelley Greer, David Roe and Marion Stell for commenting on earlier versions of this paper.