

Harriet Ketley *

CULTURAL DIVERSITY VERSUS BIODIVERSITY

INTRODUCTION

Reconciliation requires recognition of the *divergence* in the philosophical differences between Aboriginal and non-Aboriginal people as much as it requires *agreements* in the political, economic and legal areas.¹

THE use of wildlife by indigenous people and the conservation of species have, in the past, been viewed not in terms of a divergence in values, but as topics of mutual interest. This view finds recent expression in the assertion by Brennan J in the Mabo decision that

native title continues where the waste lands of the Crown have not been so appropriated or used or where the appropriation and use is consistent with the continuing concurrent enjoyment of native title over the land (eg, *land set aside as a national park*).²

This article is based on the contrary assumption that the maintenance of biodiversity (the variety of species and their ecosystems) and cultural diversity (in the context of the Aboriginal hunting and gathering) form potential points of conflict.

It is not proposed to examine the relative merits of both sides of this conflict; it is assumed that each constitutes part of the Australian

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1 Aust, Royal Commission into Aboriginal Deaths in Custody (Johnston, Commissioner) *National Report: Overview and Recommendations* (AGPS, Canberra 1991) para 19.1.3

2 *Mabo v Queensland* (1992) 175 CLR 1 at 70 (emphasis added).

environment (physical and social) worthy of protection. Rather, this article will explore the source of that conflict, highlight its manifestation in legislation with respect to Aboriginal species use in protected areas, and will suggest reasons for the failure of more innovative protected area management models to resolve the assumed conflict.

In doing so, a unique aspect of the conservation versus development debate is canvassed. It is one where the opposing sides are not easily discerned, where the law stands ambivalently at the edge of attempting to conserve that which, through the own inevitable process of change, itself constitutes development. It is an area where it is impossible to compartmentalise social and ecological issues, yet whose very debate is dominated by a set of absolute dichotomies and assumptions. It is a conflict whose resolution, if any, will come about through a recognition not only of the *philosophical* differences between Aboriginal and non-Aboriginal people but of the divergence in each group's *actual* reactions and adaptations to environmental change: change in their internal social environment and change in the surrounding "natural" environment.

The vehicle chosen to establish the source of the conflict between biodiversity and cultural diversity is the protected area. In particular, three categories of land set aside for conservation purposes will be discussed: wilderness areas, national parks and the jointly-managed national park. Aboriginal use of wildlife will be examined in each of these areas. This "use" encompasses both the direct taking of species by Aborigines, as well as indirect taking through habitat management measures such as controlled burning. The term "wildlife" is used to include not only native Australian fauna and flora, but those introduced species such as rabbit which are an accepted part of the contemporary Aboriginal diet.

An analysis of the founding set of those assumptions concerning Aboriginal interactions with the environment before 1788 and which persist today in the guise of the wilderness ideal forms the opening theme of this article. The second section will follow those assumptions in legislation with respect to the indigenous use of wildlife in national parks. The final section argues that even that model of the protected area which claims to reconcile conservation and Aboriginal objectives - that of joint management - has failed to bury the "paradigms of sentiment"³ with respect to Aboriginal culture implicit in its predecessors.

3 Stanner, *White Man Got No Dreaming: Essays 1938-1973* (ANU Press, Canberra 1979) p49.

ABORIGINAL USE OF WILDLIFE IN WILDERNESS AREAS

Introduction

It was a paysage humanisé and moralisé which the Aborigines had maintained for untold centuries; the wilderness we now value and try to protect came with us, the invaders. It came in our heads, and it gradually rose out of the ground to meet us.⁴

The declaration of Australia as terra nullius in 1788 carried with it the assumption that its inhabitants lived in a State of Nature lacking any permanent or productive attachment to the land.⁵ Moreover, it was a declaration which immediately classified Australia as an untouched wilderness. The ramifications of this classification persist today, despite the removal of its legal foundations in the Mabo decision.⁶

Wilderness and the Eurocentric Mind: Exclusion by Definition⁷

By its very definition as "a wild region, as of forest or desert; a waste, a tract of land inhabited only by wild animals",⁸ the concept of wilderness is incompatible with both the historical reality of at least 50,000 years of indigenous occupation and the continued pursuit of those activities which sustained it.

Any examination of the source of these incompatibilities must have as its starting point the Yellowstone model of wilderness preservation of 1872,⁹ which emphasised the absence of any sign of human occupation in favour of the preservation of the natural features of that park. American developments of the wilderness concept, with the inclusion of tourist access

4 Les Murray, quoted in Griffiths, "History and Natural History: Conservation Movements in Conflict?" in Mulvaney (ed), *The Humanities and the Australian Environment* (Highland Press, Canberra 1991) p94.

5 Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* (Environmental Defender's Office Ltd, Sydney 1992) p6.

6 *Mabo v Queensland* (1992) 175 CLR 1.

7 As adapted from Nash, *Wilderness and the American Mind* (Yale University Press, Connecticut, 3rd ed 1982).

8 *The Macquarie Dictionary* (Macquarie Library, Sydney, 2nd ed 1982) p1987.

9 Stevens, *Inhabited National Parks: Indigenous Peoples in Protected Landscapes*, East Kimberley Working Paper No 10 (CRES, ANU, Canberra 1986) p4.

and the exclusion of indigenous use or residence,¹⁰ were influenced both by a history of native tribal displacement as well as the "frontier mentality" promoted by Turner.¹¹ According to that writer, the frontier, and more importantly the wilderness beyond it, helped to mould the American self-image of individuality and resourcefulness. A similar pioneer ethic in Australia owed much to the perception of the early settlers as conquerors of an alien and unmodified landscape in the name of progress.¹² Remnants of the pioneer environment in both countries were later to become a source of cultural pride in the face of an industrialised Europe.¹³

Early definitions of wilderness focussed on, inter alia, a lack of evidence of human occupation. Yet some American writers recognised even at this stage that it is perhaps only evidence of one's *own* kind that is inconsistent with wilderness values.¹⁴ As early as 1859 Henry Thoreau stated "what we call wilderness is a civilisation other than our own".¹⁵

It is thus surprising that the first *legal* definition of wilderness a century later, in the form of the United States *Wilderness Act* 1964 (US) failed to incorporate any recognition of indigenous residence and use of what were to become wilderness areas. That definition instead contrasts areas "where man and his works dominate the landscape" with wilderness areas "where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain". The exclusion of indigenous residence and use from wilderness areas was a goal similarly adopted by international park planning agencies: the IUCN in 1972 referred to the presence of indigenous inhabitants in reserve areas as "tolerated only because they constitute inescapable obligations", whose progressive elimination was to be encouraged by every possible means.¹⁶

10 At p7. Stevens adds that while exclusion of indigenous use may not have been intended, it was often the result.

11 At p6.

12 Sullivan, "Aboriginal Site Management in National Parks and Protected Areas" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* (Aboriginal Studies Press, Canberra 1992) pp169ff.

13 Stevens, *Inhabited National Parks: Indigenous Peoples in Protected Landscapes*.

14 Yapp, "Wilderness in Kakadu National Park: Aboriginal and Other Interests" (1989) 29 *Nat Res J* 178.

15 Quoted in Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p25.

16 Stevens, *Inhabited National Parks: Indigenous Peoples in Protected Landscapes* p3.

The Development of Alternative Wilderness Models

Such stringent definitions of wilderness leave little room for the presence, let alone practice of cultural activities by, indigenous people. Aldo Leopold in 1921 thus preferred to define wilderness as "a continuous stretch of country preserved in its natural state, open to lawful hunting and fishing ... and kept devoid of roads, artificial tracks, cottages or other works of man".¹⁷ Reflecting this approach are the more flexible models of wilderness protection found in Canada, New Zealand and, more recently, New South Wales and South Australia.

The criteria for the selection of wilderness areas in New Zealand, for example, emphasise the *absence* of "introduced animals, buildings, ski-tows and other structures"¹⁸ rather than the *presence* of an environment untrammelled by man. Similarly, the British Columbian Special Advisory Committee on Wilderness, whilst maintaining an emphasis on the "natural character" of wilderness areas, has qualified this requirement with the words "with the imprint of man *substantially* unnoticeable".¹⁹ New South Wales and South Australian wilderness legislation similarly qualify change with respect to the natural environment with the terms "seriously affected"²⁰ and "substantially modified".²¹ On the international level, Eidsvek has proposed that the IUCN adopt as its definition of wilderness "an area where natural processes dominate and people may coexist as long as their technology and impacts do not endure".²²

Motivations for the Development of Alternative Wilderness Models

The adoption of a more flexible selection criteria of wilderness areas owes less to a growing awareness of past and present indigenous cultural practices than it does to a shift in the perceived benefits of wilderness to non-Aboriginal society. Indeed, as definitions of wilderness appear to become more flexible, and the images of "wilderness country" shift from

17 Quoted in Griffiths in Mulvaney (ed), *The Humanities and the Australian Environment* p90.

18 *National Parks Act* 1952 (NZ) s34.

19 Fuller, *A Proposal for Wilderness Legislation in South Australia* (Centre for Environmental Studies, University of Adelaide, Adelaide 1987) p15.

20 *Wilderness Protection Act* 1992 (SA) s3(2)(b).

21 *Wilderness Act* 1987 (NSW) s6(1)(a).

22 Quoted in Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p39.

the temperate and tropical rainforests to the arid and semi-arid zones of Australia,²³ the potential for wilderness legislation to compromise indigenous hunting and gathering activities grows.

More recent definitions of wilderness reflect a movement away from the primary objective of self-reliant recreation of early United States legislation towards a recognition of the high value of wilderness areas for nature conservation and the maintenance of biodiversity. This development is often referred to as the anthropocentric/biocentric distinction in the motivations of wilderness protection. It is proposed by some that future arguments for the preservation of wilderness will found their validity solely on biophysical rather than on aesthetic or psychological grounds.²⁴ The biocentric approach recognises both the role that "natural" areas play in regulating life processes and in acting as genetic reservoirs, as well as acknowledging the intrinsic value of nature and the moral obligation on human beings to protect it.²⁵

It thus accords more closely with Aboriginal attitudes to the physical environment and that culture's notion of inherited responsibilities towards the land. However, the evolution of wilderness philosophy has not been for the particular benefit of indigenous peoples; any incorporation of indigenous perspectives on land use which has resulted from the use of more flexible definitions and selection criteria of wilderness areas is a by-product rather than the deliberate objective of changing motivations behind wilderness protection.

The Concept of Naturalness

Central to the wilderness ideal and of significant relevance to the compatibility of Aboriginal interests with conservation objectives is the relativity of terms used to describe areas of perceived wilderness quality. In particular, the oft-cited qualities of "naturalness" and "primitiveness" are themselves left undefined and open to ambiguous interpretation. Examples of such ambiguity include the *National Parks and Wildlife Conservation Act 1975* (Cth) and Northern Territory park legislation, both of which state that

23 Fuller, *A Proposal for Wilderness legislation in South Australia* p25.

24 For example Dearden, "Wilderness and Our Common Future" (1989) 29 *Nat Res J* 208.

25 For a detailed analysis on the latter argument for wilderness protection see Nash, *The Rights of Nature: A History of Environmental Ethics* (Primavera Press, Leichhardt 1990).

a wilderness zone is to be "maintained in its natural state",²⁶ whilst CONCOM has described wilderness as consisting of tracts of land "in their complete and natural condition".²⁷ Even those supporters of more flexible identification criteria²⁸ talk of the potential for land to be restored to its "original condition" without further explanation of what exactly is meant by the term "original". What are the essential characteristics of "naturalness", particularly in light of indigenous impacts on the environment, and what does the objective of naturalness *per se* say about non-Aboriginal attitudes to environmental change?

One interpretation of wilderness protection is that of a process of restoration and rescue of an earlier ideal time, where the wilderness movement seeks to strip back layers of history in order to discover, or at least to replicate, fragments of the original design of Creation.²⁹ In contrast, Aboriginal cosmology does not concern itself so much with the "wistfulness that is the past".³⁰ Aborigines, notes Stanner "do not, in aversion from present or future, look back on it with yearning or nostalgia".³¹ The difference in this attitude to the past lies in the Aboriginal theory of Creation - the Dreaming - which at one level is perceived as having occurred in the past, yet at another continues unchanged into the present and can be recreated through the medium of ritual.³²

An alternative approach to the concept of naturalness is that outlined by Taylor,³³ who argues that naturalness is implicit in all attempts to assess humanity's role in landscape *change*.³⁴ In particular, he sees the development of these attempts as chiefly concerned with identifying *agents*

26 *National Parks and Wildlife Conservation Act 1975* (Cth) s10.

27 CONCOM, *Identification and Management of Wilderness Areas in Australia* (AGPS, Canberra 1985) p10.

28 For example, Fuller, *A Proposal for Wilderness Legislation in South Australia* p17.

29 Les Murray, quoted in Griffiths, "History and Natural History: Conservation Movements in Conflict?" in Mulvaney (ed), *The Humanities and the Australian Environment* p94.

30 Stanner, *White Man Got No Dreaming* p24.

31 As above.

32 Jones, "Landscapes of the Mind: Aboriginal Perceptions of the Environment" in Mulvaney (ed), *The Humanities and the Australian Environment* pp35ff.

33 Taylor, "Naturalness: the concept and its applicaiton to Australian Ecosystems" in Saunders, Hopkins & How (eds), *Australian Ecosystems: 200 Years of Utilization, Degradation and Reconstruction* (Proceedings of the Ecological Society of Australia 16, 1990) pp411ff.

34 As above.

of change. This development can be traced to the German school of landscape geography of the nineteenth century, which made an explicit distinction between natural and cultural landscapes. It was assumed that the latter could only be created by a "civilised" and technologically developed society that had the skill and knowledge to actively dominate nature. "Pre-technological" people, on the other hand, were perceived as passively responding to their physical environment and therefore incapable of creating a cultural landscape.

Several themes are common to both approaches to the naturalness concept. First, with specific reference to the Australian environment, an inherent element of the concept is a nominated time in which it is believed that a state of nature existed unmodified by human influence. That "symbolic time" in Australia is 1788.³⁵ However, if naturalness is a means of assessing *humanity's* role in landscape change, that time could validly be the period between four and six thousand years ago, when it is believed that Asian visitors introduced the dingo to Australia, an act which led to the depletion of native fauna and to numerous extinctions.³⁶ Alternatively, the time chosen could be the beginning of Aboriginal immigrations to the continent, with the late Pleistocene period thus representing the last of Australia's "natural" landscapes.³⁷ Yet, 1788 persists as the benchmark against which the twin objectives of naturalness and wilderness are measured today.

This can be explained by reference to those assumptions made with respect to the Australian landscape by its European discoverers.³⁸ These assumptions owe much to the relativity of a concept which nevertheless attempts to create a set of absolutes. That is: "naturalness is a culturally constructed concept expressing the perception of Western technological societies that the world consists of binary opposites, humanity and nature, and that humanity has dominion over nature".³⁹ Furthermore, the naturalness concept is both anthropocentric and technocentric. It is also a

35 Les Murray, quoted in Griffiths, "History and Natural History: Conservation Movements in Conflict?" in Mulvaney (ed), *The Humanities and the Australian Environment* p94.

36 Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p7.

37 Taylor, "Naturalness: the concept and its application to Australian Ecosystems" in Saunders, Hopkins & How (eds), *Australian Ecosystems: 200 Years of Utilization, Degradation and Reconstruction* pp411ff.

38 See section "Unnatural Allies: Wilderness Values and the Aboriginal Use of Wildlife" at pp108-115 below.

39 As above.

Eurocentric one, based on such absolutes as savagery and civilisation,⁴⁰ technology and primitivity, use and non-use, change and stability. Where it does not categorise indigenous people as primitive savages, it defines them as "Ecological Beings".⁴¹

Naturalness, however, like the wilderness ideal of which it forms an essential part, has been the subject of an evolution in thought which overcomes to some extent both the problem of the "symbolic time" of 1788 and the set of binary opposites outlined above. This evolution has culminated in a focus not on the value of change itself, but on the *intensity and degree* of human modification of the environment. As early as 1933, Aldo Leopold drew attention to the distinction between human actions which cause deterioration of the environment and those which modify yet "preserve the integrity, stability and beauty of the biotic community".⁴²

Rather than distinguishing between human modification and human degradation of the environment as a measure of naturalness, others prefer to emphasise a distinction between different forms of human societies: one in which people live broadly in harmony with nature and one which attempts to impose upon and tyrannize nature.⁴³ This approach, assuming as it does that all humanity is a part of the natural process, concludes that "what is at issue is not the naturalness of (society's) creation, since humanity is part of nature and its creations are therefore natural too. What is at issue is the *modesty* of the creation."⁴⁴

Legislative Reactions to the Evolution of the Naturalness Concept

The evolution in the philosophy of human impact on nature from one based in a nature-versus-man dichotomy to one which assesses either the intensity of change or the agents responsible for it has been reflected in more recent legislative definitions of wilderness. The British Columbian Special Advisory Committee on Wilderness, for example, has stated that the main

40 Mulvaney, "Visions of Environment: an Afterview" in Mulvaney (ed), *The Humanities and the Australian Environment* p119.

41 Aust, Royal Commission into Aboriginal Deaths in Custody (Johnston, Commissioner) *National Report: Overview and Recommendations* (AGPS, Canberra 1991) para 19.1.3.

42 Quoted in Nash, *The Rights of Nature: A History of Environmental Ethics* p71.

43 Goodin, "A Green Theory of Value" in Mulvaney (ed), *The Humanities and the Australian Environment* pp61, 77ff.

44 As above.

objective of wilderness protection is the maintenance of intact ecosystems,⁴⁵ whilst the South Australian *Wilderness Protection Act* 1992 avoids the use of relative terms such as naturalness in two ways: first, by drawing a clear distinction between the condition of the land before and after European civilisation⁴⁶ (thereby limiting undesirable modification of the environment to a particular time- frame); and secondly, by defining effects to the land in terms of particular agents of change, namely, modern technology and introduced species.⁴⁷

Unnatural Allies: Wilderness Values and the Aboriginal Use of Wildlife

The prevalence of the objective of the restoration and preservation of landscapes in their "natural" state leads to the inevitable conclusion that the wilderness model of conservation management is based chiefly on how past human interactions with the environment are perceived today. Wilderness protection can thus be seen as a reactive, perhaps belated,⁴⁸ effort of "civilised" societies to preserve remnants of undegraded landscapes. Not only can this approach be contrasted with that of Aborigines, whose use of the land is based on the notion of a proactive guardianship practised through a system of inherited knowledge and ritual, but inherent in this effort is the danger that false assumptions as to the state of the Australian environment in 1788 will give rise to management practices based on historical fictions.

Assumption One: Australia in the State of Nature

The deprivation of the country's original inhabitants of any form of pre-existing legal title carried with it two false assumptions in particular which remain evident in efforts to preserve wilderness today: that Aboriginal occupation of the Australian environment was without impact and that the protection of wilderness values today and the pursuit of Aboriginal cultural activities are twin objectives, that conservationists and Aboriginal groups are "natural allies".

45 Quoted in Griffiths, "History and Natural History: Conservation Movements in Conflict" in Mulvaney (ed), *The Humanities and the Australian Environment* p90.

46 *Wilderness Protection Act* 1992 (SA) s3.

47 Sections 312(a) and 312(b).

48 Stevens, *Inhabited National Parks: Indigenous Peoples in Protected Landscapes* p1.

The first of these assumptions finds expression both in the notion of the Noble Savage of the eighteenth century Romantics as well as in the view, maintained by some today, of Aborigines as the "original conservationists".⁴⁹ Aboriginal relationships to the land were supported by a depth of accumulated experience and knowledge expressed as Dreaming or Law.⁵⁰ However, their land use was by no means without lasting impact. Flannery⁵¹ and Head⁵² both cite examples to support the proposition that the beginning of Aboriginal occupation of Australia between 60 and 100,000 years ago was correlated with significant ecological change. By 1788 the Australian environment was subject to an organised land management programme based on the widespread use of fire, particularly in central and northern Australia,⁵³ as well as on more direct practices relating to hunting and gathering.⁵⁴ As a result of Aboriginal use, then, the "pure State of Nature" which greeted Cook and others consisted in actual reality of landscapes that were themselves "human artefacts"⁵⁵ and which indeed *required* human management to endure.

Later definitions of wilderness do, however, encompass Aboriginal modifications to the landscape, through a reliance on the degree of modification and the agent of change rather than the exclusion of change itself as "unnatural".⁵⁶ Accordingly, Aboriginal impacts on the environment can be perceived in one of three ways: as themselves constituting natural processes,⁵⁷ as not threatening the integrity, balance or

49 Yapp, "Wilderness in Kakadu National Park: Aboriginal and Other Interests" (1989) 29 *Nat Res J* 179.

50 Rose, "Exploring an Aboriginal Land Ethic" (1988) 47(3) *Meanjin* 384.

51 Flannery, "Who killed Kirlilpi?" (1989-90) 23(3) *Aust Nat Hist* 234.

52 Head "Conservation and Aboriginal Land Rights: when Green is not Black" (1990) 23(6) *Aust Nat Hist* 448; Head "Australian Aborigines and a changing environment - views of the past and implications for the future" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p47.

53 Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* (Environmental Defender's Office Ltd, Sydney 1992) p6.

54 Brown cites evidence of Aboriginal practice of river control including the building of dams and dykes to create marshlands for fish, plant and birdlife: Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p7.

55 Stevens, *Inhabited National Parks: Indigenous Peoples in Protected Landscapes* p14.

56 Flannery, "Who killed Kirlilpi?" (1989-90) 23(3) *Aust Nat Hist* 234.

57 As proposed by Lesslie & Taylor in *An Inventory of Wilderness in South Australia* (Centre for Environmental Studies, University of Adelaide, Adelaide, 1983) p15.

beauty of ecosystems, or as impacts of a society lacking the primary instruments of modification (fire and primitive tools) capable of creating "human-dominated ecosystems".

Despite such avenues by which Aboriginal species management practices can be seen to maintain wilderness qualities, one of the clearest areas of conflict between wilderness preservation and Aboriginal use remains that of mosaic burning,⁵⁸ used to maintain species habitat and to aid hunting. Deliberate and regular burning of the landscape sustained a high level of plant diversity and enhanced the availability of food and shelter. Controlled burning enabled fauna to better withstand the effects of drought, predation and the competition for resources, whilst avoiding the threat of large-scale uncontrolled fires destroying species habitat. Particular areas of religious or totemic significance were never deliberately burned and thus served as sanctuaries for wildlife,⁵⁹ whilst fire circles were used as an effective tool for hunting.

The use of fire both as a vital part of habitat management generally and on specific hunting expeditions sits uneasily with even the more flexible models of wilderness protection. For example, the widening of more recent wilderness definitions to include the rehabilitative potential of degraded areas includes within the scope of "past errors" now to be rectified the burning of vegetation.⁶⁰ Similar incompatibility arises from the IUCN's view that "in situ resource resource utilisation is incompatible with wilderness when it disturbs the functioning of ecosystems".⁶¹ In contrast, however, are the objectives of Canadian legislation, which emphasises the *maintenance* of intact ecosystems.⁶² Arguably, the objective so phrased could encompass Aboriginal fire management regimes.

58 See generally Flannery, "Who killed Kirlilpi?" (1989-90) 23(3) *Aust Nat Hist* 234; Lewis, "The Technology and Ecology of Nature's Custodians: Anthropological Perspectives on Aborigines and National Parks" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p15.

59 Flannery, "Who killed Kirlilpi?" (1989-90) 23(3) *Aust Nat Hist* 234.

60 Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* (ANPWS, Canberra 1991) p140.

61 Baird Lambert, *The Need for Legislative Protection of Wilderness in Australia* (unpublished, Bathurst 1988) p6.

62 Quoted in Griffiths in Mulvaney (ed), *The Humanities and the Australian Environment* p90.

The results of former disruption of fire management regimes by European settlement has considerable implications for modern wilderness management. It is argued (though by no means accepted unanimously) that the encroachment by pastoralism on both tropical and arid regions of Australia upset the balance between deliberate burning at selected times and uncontrolled wildfires.⁶³ The high intensity fires which followed affected the structure and distribution of vegetation and wildlife habitat which had developed over forty thousand years. This in turn has led to a loss of species diversity, such as the extinction of the banded hair wallaby in the Tanamei Desert⁶⁴ and of the desert bandicoot.⁶⁵

The consequences of the abandonment of traditional burning practices are particularly ironic in light of the increasing emphasis placed on biocentric as opposed to aesthetic justifications for wilderness protection. The recognition that wilderness provides "an ideal opportunity for maintaining biological and ecological diversity, especially where species are dependent on minimal disturbance for their survival"⁶⁶ ignores the possibility that for some species, in particular medium-sized mammals, survival was *dependent upon* habitat disturbance through human modification. Consequently, modern fire management strategies should recognise that if wilderness is chiefly concerned with the return to a supposed state of naturalness as existed prior to 1788, then current management policies should be concerned with mimicking Aboriginal fire regimes of that time.

Assumption Two: The Natural Alliance between Aborigines and Conservationists

Species management through mosaic burning is not the only instance of conflict to which the assumption that Australia in 1788 was in the State of Nature gives rise. More direct hunting methods and the evolution of those methods used by Aborigines since 1788 may be inconsistent with

63 Flannery, "Who killed Kirlilpi?" (1989-90) 23(3) *Aust Nat Hist* 234; Wright cites the Annual Report of 1891 for Queensland which suggests that if a fire management programme were reinstated, grazed out species may regenerate: Wright, "Wilderness and Wasteland" (1990) 42 *Island Magazine* 3; see also Wright, *The Cry for the Dead* (OUP, Melbourne 1981) p175.

64 Personal communication, Garry Richardson.

65 Flannery cites this as one of at least 20 mammals to become extinct since European settlement, arguably as a result of the sudden cessation of fire-stick farming: Flannery, "Who killed Kirlilpi?" (1989-90) 23(3) *Aust Nat Hist* 234.

66 SA, Department of Environment and Planning, Interim Wilderness Committee, *Discussion Paper for the Proposed Wilderness Protection Act* (1990) para 1.2.2.

arguments for wilderness protection. Whilst this evolution will be discussed in greater detail in the analysis contained in the second section of the traditional/non-traditional dichotomy ascribed to Aboriginal use of species, this very dichotomy owes much to the second assumption implicit in the application of the wilderness ideal to Australia: that Aborigines have retained a natural alliance with modern conservationists.

Despite the recognition by many anthropologists that Aborigines "were just as prone to non-conservative action as anyone else",⁶⁷ this assumption is perpetuated by both State and Federal Government policy submissions which treat Aboriginal groups and wilderness supporters as natural allies with reinforcing interests. CONCOM, for example, though acknowledging that in relation to arid and semi-arid regions "Aborigines may not have the same concept of wilderness as Europeans and may not be agreeable to formal wilderness areas being declared"⁶⁸ goes on to conclude that "there is no need for special requirements for the establishment and management of wilderness areas in these regions".⁶⁹ The South Australian Interim Wilderness Committee reaches a similar conclusion that

remote areas which retain a high degree of environmental integrity are likely to be coincident with areas of significance for Aboriginal people. Hence protection of the wilderness character of such places ... may assist in the maintenance of traditional Aboriginal cultural and land management practices.⁷⁰

The Committee then describes the impacts of white settlement as the common enemy of traditional Aboriginal culture and of wilderness areas, concluding that it is important that Aboriginal people are given the opportunity to seek the environmental protection that wilderness legislation will provide.⁷¹

67 For example, Strehlow's work amongst the Aranda described by Yapp, "Wilderness in Kakadu National Park: Aboriginal and Other Interests" (1989) 29 *Nat Res J* 179.

68 CONCOM, *Identification and Management of Wilderness Areas in Australia* (AGPS, Canberra 1985) p10.

69 As above.

70 SA, Department of Environment and Planning, Interim Wilderness Committee, *Discussion Paper for the Proposed Wilderness Protection Act* (1990) 1.2.3.

71 Para 6.2. Note, however, that the enforcement provisions of the Act place Aborigines in no different position than any other party wishing to bring an action to enforce the Act.

Perhaps the clearest example, however, of Aboriginal use and wilderness values which defeats the assumption that Aborigines remain the natural allies of wilderness supporters arises from one of the main features of the wilderness model: the minimisation or exclusion of access and transport via mechanised means except where necessary for safety, scientific or essential management purposes.

Early Australian definitions of wilderness focused not upon the absence of *humanity*, but upon the absence of the vehicular road; wilderness was somewhere "that one may be able to travel on foot in any direction for at least a full day without meeting road or highway".⁷² This definition finds support in current prescriptions for wilderness management. Section 10 of the *National Parks and Wildlife Conservation Act 1975* (Cth), in specifying prohibited activities in wilderness zones, states that "no roads or tracks are to be created or any motorised vehicle used except as specified in the Management Plan". Similar provisions for primitive (that is, unmechanised) recreational use are made in British Columbian and New Zealand wilderness legislation.⁷³ It is clear that the construction of roads or tracks and the use of motor-powered vehicles and equipment are seen to be unacceptable in wilderness areas.

It is equally clear, however, that vehicles, in particular four-wheel-drives, and modern boats with outboard motors, are seen as vital necessities by contemporary Aboriginal communities and are ubiquitous in modern hunting expeditions.⁷⁴ Modern vehicles are used to travel from centralised settlements to traditional hunting country, where ecological knowledge may be greater, and subsistence rights amongst Aboriginal groups clearly recognised. The use of vehicles over undeveloped land also provides easier access to alternative hunting areas to the often depleted food sources near large population centres. Such examples of Aboriginal hunting methods, which pose a substantial threat to habitat integrity through erosion, not only highlight the fallacy of the "natural allies" assumption, but throw doubt upon the generosity of concessions to Aboriginal species use found in parks' legislation where vehicle use remains prohibited.

72 Miles Dunphy, quoted in Griffiths, "History and Natural History: Conservation Movements in Conflict?" in Mulvaney (ed), *The Humanities and the Australian Environment* p90.

73 Fuller, *A Proposal for Wilderness Legislation in South Australia* p90.

74 Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* pp111ff.

The implications of this assumption should be examined in a broader context. The preconception of a certain conservationist stance of the Aboriginal people at 1788 evidences the same attitude to change of the conquering colonizers as the assumption of the "naturalness" of the Australian environment upon their arrival. Both result from an attitude which relies for the most upon the *image* of a hunter-gatherer society rather than the *reality* of the impacts of change in methods and intensity of subsistence activities which have taken place in the last two hundred years.⁷⁵ The maintenance of the image of a static lifestyle reflects the same naive and paternalistic attitudes to Aboriginal culture as does the notion of the Noble Savage. At their worst, such misconceptions can lead to policies of "enforced primitiveness" used to promote tourism;⁷⁶ at best, they reinforce the view of Aboriginal society as an historic commodity rather than as a dynamic and developing culture.

A brief examination of the Aboriginal relationship to the land reveals the very incongruity underpinning both assumptions discussed above. Conventional definitions of wilderness are based on an *exclusive* view of the role of humans in protected areas: a human is a visitor who does not remain. The environmental ethic of Aboriginal people is, by contrast, based on a perception of themselves and their activities as *part of* rather than *separate from* the natural environment. Furthermore, insofar as the concept of wilderness implies land *without* use, anthropologists testify to the occupancy and exploitation of even the most inhospitable parts of the Australian landscape by Aboriginal bands:⁷⁷ "for Aborigines, every part of the country they occupied, every mark and feature, was numinous in meaning".⁷⁸ The very dichotomy between use and non-use presented by the wilderness concept is thus alien to Aboriginal thought. Bird, in documenting the environmental philosophy of the Ngarinmian,⁷⁹ examines the distinction drawn by that group between "quiet" and "wild" country. Quiet country consists of those areas which are managed according to generations of specific practices; wild country, on the other hand, is not accorded the same image of pristineness which leaps readily to the non-Aboriginal mind. Rather, it is an area "where life is absent, where all the

75 Fuller, *A Proposal for Wilderness Legislation in South Australia* p39.

76 Clad, "Conservation and indigenous peoples: a study of convergent interests: in McNeely & Pitts (eds), *Culture and Conservation* (Croom Helm, London, 1985) p52.

77 Wright, "Wilderness and Wasteland" (1990) 42 *Island Magazine* 6.

78 As above.

79 Bird, "Exploring an Aboriginal Land Ethic" (1988) 47(3) *Meanjin* 378.

care, intelligence and respect that generations of Aboriginal people have put into the countryside have been eradicated".⁸⁰ Thus, if land is to be *categorised* at all from the Aboriginal perspective, it may not mirror the same hierarchies of values nor set of dichotomies drawn by wilderness models. It remains to be seen how the most recent piece of wilderness legislation attempts to reconcile wilderness protection with Aboriginal wildlife use in the light of the two assumptions that have formed the basis of this section's discussion.

The *Wilderness Protection Act 1992* (SA)

Before examining the South Australian Government's response to the demand for wilderness protection, brief mention should be made of other relevant legislative provisions for Aboriginal use in areas reserved specifically for wilderness preservation. Section 10 of the *National Parks and Wildlife Conservation Act 1975* (Cth), whilst not overtly specifying concessions to Aboriginal interests, does so by implication via s70 of the Act. That is, although wilderness zones are to be maintained in their "natural state" and used primarily for scientific or other purposes in accordance with a management plan, this requirement must be read in conjunction with s70. That section expressly states that Aborigines may continue their *traditional* use of land or water. This implication can only be taken so far, however: the Federal Act fails to resolve the conflict between the s10 prohibition on the use of motor vehicles in wilderness zones with the undefined provision as to *traditional* use, where use today may be by means of a four wheel drive.

With respect to the *Wilderness Act 1987* (NSW): some scope may exist for indigenous hunting and gathering in wilderness areas. This results *either* from a definition of wilderness tempered by the concept of the "substantial modification"⁸¹ of an area of land rather than by the illusive quality of naturalness, *or* by the lack of reference to the taking of wildlife in the definition of *development* contained in s2 of the Act. Furthermore, a close examination of the key element of the Act's protection mechanisms, wilderness protection agreements under s10, suggests that, whilst binding upon the parties who enter them voluntarily (the Minister, statutory authority and the landowner), they are presumably without legal effect on any third party not privy to the agreement. In theory, therefore, Aboriginal species use could take place in areas the subject of wilderness protection

80 As above at 386.

81 *Wilderness Protection Act* s6(1).

agreements (such as parts of pastoral leases) and would remain immune from the management principles usually applicable to such areas.⁸²

A similar argument cannot be made with respect to the South Australian wilderness legislation, based as it is not upon the preparation of voluntary agreements, but upon the establishment of wilderness protection areas and zones following recommendation of a Wilderness Advisory Committee.⁸³ However, through unique definitions of the key terms of both *wilderness*⁸⁴ and *Aboriginal tradition*⁸⁵ it appears that indigenous species use in wilderness areas is not only envisaged by the Act, but encouraged. Moreover, the emphasis given in the preamble to the Act to the restoration of land to its condition *before European colonization* rather than the familiar "to its natural state" or to a substantially unmodified state, as well as the Act's focus on the *agents* of change (exotic species and modern technology),⁸⁶ clearly acknowledges past Aboriginal land uses as compatible with wilderness values.

As for changes to those uses, the Act defines "Aboriginal tradition" widely so as to include "traditions, customs and beliefs that have evolved or developed...since European colonization".⁸⁷ Further, "modern technology" is defined specifically to exclude "Aboriginal technology". If this exclusion can be interpreted to mean "all means of technology *employed by* Aborigines", then it is arguable that, reading the two definitions together, the Act views contemporary forms of Aboriginal wildlife use as not compromising wilderness values: the identity of the user, rather than the means by which wildlife is taken or the impact of the taking, is the key to whether wilderness values are threatened.

It is anticipated that some conflict between wilderness preservation and Aboriginal interests may nonetheless arise (for example, in the proposed declaration of wilderness areas over parts of the Unnamed Conservation Park and the Gammon Ranges): s12 requires the Code of Management prepared by the Advisory Committee to set out general policies with respect to a specified list of objectives, including both the preservation of wildlife and hunting by Aborigines.⁸⁸ Furthermore, regulations under s41 may

82 As found in section 9.

83 Section 8.

84 Section 3(2)(a).

85 Section 3.

86 Sections 3(2)(a) and (b).

87 Section 3.

88 Section 12(2)(a) and (n).

exempt, conditionally or unconditionally, Aboriginal people generally or of a specified class from all or any of the provisions of the Act. Such exemptions could presumably apply to prohibited areas established under s33 by public notice "for the purpose of protecting human life or conserving wildlife". Alternatively, they could apply to exempt Aboriginal people from those provisions of s27 which make it an offence to destroy or damage native plants in a wilderness protection area or zone.

Despite an obvious recognition of the relativity of the naturalness concept in the South Australian Act, the false assumptions referred to in the preceding section remain evident. In particular, concessions to Aboriginal hunting may be meaningless in the face of the s26 prohibition on the construction of roads and tracks in wilderness protection areas and zones, whilst no mention is made of the use of Aboriginal knowledge or skill in the implementation of fire management schemes. By *addressing* in various sections and definitions Aboriginal use of wildlife, the Act is as far from *resolving* the biodiversity versus cultural diversity dilemma as it is from burying the "myth of the pristine"⁸⁹ and the assumptions to which that gives rise.

ABORIGINAL USE OF WILDLIFE IN NATIONAL PARKS

National Parks: Objectives and Perceived Values

A national park is an area of great beauty or special scientific, educative or recreative interest which is managed to allow such *recreational use* by the *public* as is consistent with the proper maintenance, restoration and protection of the environment.⁹⁰

Conventional definitions of national parks have, like those concepts of wilderness discussed previously, been based on the Yellowstone model of the United States and on the objective, as proposed by the IUCN in 1970, of "the elimination as soon as possible (of) exploitation or occupation in the whole area".⁹¹ However, environmental protection in the establishment of

89 Stevens, *Inhabited National Parks: Indigenous Peoples in Protected Landscapes* East Kimberley Working Paper No 10 (CRES, ANU, Canberra 1986) p7.

90 WA, Department of Conservation and Land Management (CALM), *Purnululu (Bungle Bungle) National Park and Conservation Reserve Draft Management Plan* (1989) p8.

91 International Union for the Conservation of Nature and Natural Resources (IUCN) "Resolution Number One: Definition of a Park", *Proceedings of the*

national parks constitutes only part of a dual criteria of conservation *and* public use. These are evident in both State and Federal legislative directions with respect to the preparation of management plans for national parks. Both South Australian and Commonwealth national parks legislation⁹² cite as management objectives, inter alia, the preservation and management of wildlife and the encouragement of public use and enjoyment of parks.⁹³

Yet what users are encompassed by the term "public"? In particular, does the formation of national parks take into account the Aboriginal use of species within their boundaries? A political response to these questions was evident in the Western Australian Government's rejection of the granting of freehold title to the traditional owners of Purnululu National Park on the grounds that "while recognizing the Aboriginal traditional owners' strong ties to the area and their desire to return to their traditional lands ... the area is an important part of the heritage of West Australia and Australia *as a whole*".⁹⁴ A legislative response is to be found in the Commonwealth *National Parks and Wildlife Conservation Act 1975*, which not only includes members of each state within the class of beneficiaries of parks' benefits, but extends the concept of "public" to include, via s6(1)(f), *international* users of Australian parks.

More recently, another dimension has been introduced into the establishment and management of national parks in Australia, a dimension which may redefine the concept of "public" to encompass more directly Aboriginal use: the Aboriginal significance (past and present) of the area to be reserved. Even where legal title to land remains in the Crown, Aboriginal interests have played a significant role in the formation of management plans in Western Australia (the Purnululu National Park), South Australia (the Unnamed Conservation Park and the Gammon Ranges National Park) and in current discussions as to the future management of the Cape York area. They have, of course, been instrumental in the planning of Uluru, Kakadu and Gurig National Parks in the Northern Territory. On the international level, the acceptance of this further dimension to national parks

Tenth General Assembly, New Delhi, India (IUCN Publications, Gland, Switzerland, 1969).

92 *National Parks and Wildlife Act 1972* (SA); *National Parks and Wildlife Conservation Act 1975* (Cth).

93 *National Parks and Wildlife Act* (SA) s37; *National Parks and Wildlife Conservation Act* (Cth) s11(8).

94 Cth, House of Representatives Standing Committee on Environment and Conservation, *Protection of the Bungle Bungle* (AGPS, Canberra 1985) p6 (emphasis added).

has been achieved through the development and recognition of the concept of the inhabited national park by the IUCN.⁹⁵

However, it is arguable that indigenous interest in the creation of national parks, be it with respect to residence, resource use or actual management, is yet to be recognized as constituting an objective in itself. Rather, Aboriginal culture is often seen as merely supplementing the conventional values of a national park.⁹⁶ A practical example of this attitude is provided by the comment of a park ranger that Ayers Rock without its Aboriginal cultural significance would lose much of its attraction to tourists.⁹⁷ Similarly, park management plans which seek to incorporate Aboriginal interests often do so by focussing on cultural heritage aspects rather than on the preservation of subsistence practices: it is easier, and perhaps more appropriate to conventional notions of Aboriginal culture, to legislate to protect rock paintings than systems of wildlife use and land management.⁹⁸ "Giving back *the past* is easy",⁹⁹ particularly when doing so promotes or coincides with national park objectives (for example, tourism). What remains at issue, however, is the relative *difficulty* in recognising and legislating for current and future species use by Aborigines in national parks.

Subsistence Use of Species by Aborigines

Use of Wildlife Before 1788

This difficulty arises from non-Aboriginal perceptions and measurement of the value of subsistence practices, both in the past and amongst contemporary Aboriginal communities. To assess the significance of subsistence production as the primary form of land use in the "traditional" hunter/gatherer Aboriginal society is an inherently difficult task. Classification of the objectives of foraging in terms of economics, culture,

95 See, generally, Stevens, *Inhabited National Parks: Indigenous Peoples in Protected Landscapes*.

96 For example, see: WA, Department of Conservation and Land Management (CALM), *Purnululu (Bungle Bungle) National Park and Conservation Reserve Draft Management Plan* (1989) p9.

97 Personal communication, Garry Richardson.

98 Head, "Australian Aborigines and a changing environment - views of the past and implications for the future" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas*.

99 Jones, "Landscapes of the Mind: Aboriginal perceptions of the environment" in Mulvaney (ed), *The Humanities and the Australian Environment* (Highland Press, Canberra 1991) p43.

recreation and conservation itself is alien to Aboriginal society, which did not draw any distinction between economic and other forms of activity.¹⁰⁰ As explained by Blainey,

the social and economic were lock and key. Without social bonds the trade would have been difficult to carry out and the incentive to trade would have been smaller. Without the economic relationships, the social bonds could not have been expressed so satisfactorily nor maintained so firmly.¹⁰¹

Hunting and gathering activities played a vital cultural role within each Aboriginal group, both as a means of expression of beliefs and as a practical way to transmit these beliefs to the next generation. In this way, hunting supplemented story, dance, art and song in the preparation of children for their roles as food collectors.¹⁰² The recreational values associated with hunting are equally difficult to quantify, as foraging was often opportunistic rather than purposive. It is significant that some Aboriginal languages did not possess words to distinguish work from play.¹⁰³

Of particular relevance to contemporary conflicts over wildlife use is the *indirect* role which traditional subsistence played in the conservation of species. Hunting itself contributed to the survival of species diversity, by providing an alternative to natural predation and keeping some species at low, but sustainable, population levels. For example,¹⁰⁴ the spread of disease and malnutrition amongst the koala population has been directly attributed to the cessation of low-level Aboriginal hunting of that species upon European settlement: because of the sudden lack of predation, koalas became overcrowded and the availability of food sources more scarce. The taking of koalas as part of a traditional subsistence economy on the other hand had kept population levels low, yet food sources healthy.

At the same time, the Aboriginal totemic belief system provided a broader basis for the sustainable use of natural resources. In "traditional" Aboriginal society the environment was intrinsically related to the ethical system through the creative period of the Dreaming, when the ancestral

100 Dingle, *Aboriginal Economy* (Penguin, Fitzroy 1988) p4.

101 Quoted in Dingle p20.

102 As above p16.

103 At p30.

104 Flannery, "Traditional Practice, Environmental law, and the Biological Crisis: A Study from Australia and Melanesia", Paper presented at *International Conference on Environmental Law* (unpublished, Sydney 1989).

beings not only gave the world shape, but provided a continuing moral system based on the performance of ritual and "caring for country".¹⁰⁵ According to the same mythology, humans and animals were created simultaneously of one matter by the creative ancestors (who were themselves capable of shifting between human and non-human form). This shared life-force stands in contrast to that Christian belief that humans and animals were separately created.

The consequences on the use and management of species of this totemic belief system are significant: the activities of the present are seen as an affirmation of the values set during the Dreaming period; the use of the land and its resources is both an expression of spiritual value and the fulfillment of moral obligation: "lack of human ritual participation lead to the deterioration of the status quo ... the species were dependent on human ritual for survival".¹⁰⁶ Not only does this contrast with dominant Western tradition, where species sustainability is thought to be enhanced by the *elimination* of human intervention,¹⁰⁷ but the Aboriginal totemic belief system granted species *intrinsic*, as opposed to mere *instrumental*, value.

By ascribing totemic value to all flora and fauna of economic value, sound conservation principles were incorporated into a subsistence lifestyle. For example, the belief that sites existed where the spirits of ancestral beings continued to reside in the form of their totem resulted in the practice of not killing or harming that animal near the site; to do so would be as catastrophic as killing an ancestor, inviting harm upon members of the entire group.¹⁰⁸ Totemic centres thus constituted sanctuaries for wildlife. Significantly, the areas considered taboo for hunting were often the species' breeding grounds or areas of prime habitat. Furthermore, the prohibition would often extend to the interference with plants in the site's immediate vicinity.¹⁰⁹ Finally, taboos such as the eating of one's own totem or

105 Bennett, "Some Aspects of Aboriginal and non-Aboriginal notions of responsibility to non-human animals" (1983) 2 *Aust Ab Stud* 19.

106 As above at 21.

107 As above.

108 As above.

109 Strehlow's research into Aranda traditions found, for example, that a sacred cave on the Finke River and its surrounding two-mile radius constituting a wildlife sanctuary also supported the largest permanent waterholes in the area and encompassed a wide variety of habitats: Latz & Johnson, "Nature Conservation on Aboriginal Land" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia* p1.

temporal and age restrictions served to supplement direct limits on hunting itself.

Particularly relevant to non-Aboriginal attempts to maintain biodiversity today were the consequences of the attribution of totemic value to fauna lacking in obvious economic value. For example, the Wik-Mandkan group included flies and leeches within its totemic complex. Whilst this has been described by anthropologists as the desire to maintain the social order of the universe, it served at the same time as a means of maintaining the interconnected aspects of a complex physical environment. The effect of the totemic complex as a whole was thus "to parcel out, on a kind of distributive plan, all the non-human entities made or recognized by the ancestors, and given relevance one to another".¹¹⁰ This system, in acknowledging the importance of even the smallest of creatures to the functioning of the productive base as a whole, and including restrictions on certain areas and their surrounding habitat for hunting purposes, thereby preempted two vital aspects of current strategies in the maintenance of biodiversity: the recognition of *habitat modification* as the greatest threat to biodiversity and the increasing emphasis placed on the significance of lower plants, invertebrates and microorganisms with respect to the survival of larger and often *obviously* endangered vertebrates.¹¹¹

Use of Wildlife after 1788

Modifications to the "traditional" subsistence lifestyle of Aborigines following European settlement, and the significantly changed impact on the environment they have entailed, cannot be attributed solely to a breakdown of spiritual beliefs and values following upon European settlement. Latz and Johnson have summarised the major factors which have affected hunting and gathering practices since 1788.¹¹² These include the limitation of areas available for hunting, the increase of Aboriginal populations and their more sedentary nature, the increase in the number of settlements and the introduction of exotic animals, leading to a reduction in traditional food sources.

110 Stanner, quoted in Bennett, "Some Aspects of Aboriginal and non-Aboriginal notions of responsibility to non-human animals" (1983) 2 *Aust Ab Stud* 19 at 22.

111 Aust, The Biological Diversity Advisory Committee, *A National Strategy for the Conservation of Australia's Biodiversity* (1992) p20.

112 Latz & Johnson, "Nature Conservation on Aboriginal Land" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia* pl.

Of particular importance in more recent years have been the outstation movement and the introduction of more effective hunting methods and access to hunting areas. With respect to the former, a return to bush resources as part of the economic base of Aborigines living on outstations has been perceived.¹¹³ This has led to concern voiced by conservation groups that some threatened species such as the bilby will be used as a food source once more.¹¹⁴ On the other hand, where settlements have remained sedentary, population pressure has led to the increased depletion of food sources near living areas.¹¹⁵

The consequences of a less nomadic lifestyle since 1788 have been exacerbated by the availability of more efficient technology such as firearms and vehicles used in hunting expeditions. The comment of one Pitjantjatjara man that "people do not walk around anymore"¹¹⁶ can be explained on the basis that game can be effectively hunted from the seat of a four-wheel drive, whilst Young has notes that "it would be rare today to find Aboriginal women using modern digging sticks if crowbars were available".¹¹⁷

However, this is not to say that the hunting of wildlife per se, albeit via different methods and with different impacts, is not without value or benefit to contemporary Aboriginal communities. The underlying cultural significance of hunting has not been destroyed. For example, Palmer and Brady's research into the diet of the Maralinga people emphasises the Dreaming or mythological associations of the red kangaroo.¹¹⁸ While this animal is now hunted by groups travelling in a vehicle and equipped with 22 calibre rifles, the subsequent gutting and cooking of the kangaroo is still carried out meticulously according to complex ritual.¹¹⁹

113 Cane, "Bush Tucker - intensified use of traditional resources in Aboriginal outstations" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia* p3.

114 Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* p110.

115 Young et al cite the competition for access to waterholes for fishing in the East Kimberley as an example of increased population pressure leading to anti-conservation practices: as above p11.

116 Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* p110.

117 As above.

118 Palmer & Brady, *Diet and Dust in the Desert* (Aboriginal Studies Press, Canberra 1991).

119 As above p35.

To the constant underlying cultural value of subsistence activities must be added the economic significance of hunting and gathering in contemporary Aboriginal communities. Just as the quantification of pre-1788 subsistence production is difficult, similar obstacles exist in determining the relationship of Aboriginal use of natural resources and their economic situation today; there have been few studies concentrating on this relationship.¹²⁰ Those studies which exist¹²¹ have attempted to equate the amount of wildlife obtained with the amount of cash required to obtain similar foods from retail stores. In particular, Cane and Stanley's study of desert outstations concluded that "it would be difficult to match the economic benefits of bush production with any alternative European enterprise such as horticulture, grazing or artefact sales".¹²² Altman and Taylor, noting the increased income derived from subsistence activities, also advocate their value as alternative forms of employment.¹²³ The value of subsistence in these two respects is even more significant when considered in light of the economic status of Aboriginal communities in comparison to the non-Aboriginal population. This status may be further enhanced by the commercial exploitation of wildlife such as the harvesting of kangaroos and emus.¹²⁴

The benefits of subsistence can also be perceived in terms of nutritional, educative and conservation values. Increasing concern over the "third world diet"¹²⁵ of Aborigines has been accompanied by a recognition of the high nutritional value of bush foods. Once again, this aspect of subsistence has been measured in terms of the relative nutritional contribution of bush foods as opposed to bought European foods.¹²⁶ For example, O'Dea et al concluded that Aboriginal people who lived traditionally-oriented lifestyles in outstation communities were in better health than those living in larger

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- 120 Young, "Land Use and Resources: A Black and White Dichotomy" in Heathcote & Mabbutt (eds), *Land, Water and People: Geographical Essays in Australian Resource Management* (Allen & Unwin, Sydney 1988) p103
- 121 For example, Palmer & Brady at Oak Valley (1991), Altman & Taylor at Momega outstation (1989), Meehan at Kopaya (1982) and Walsh in Western Desert and the Martu (1991).
- 122 Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* p110.
- 123 Altman & Taylor, *The Economic Viability of Aboriginal Outstations and Homelands* (AGPS, Canberra 1989).
- 124 See "Joint Management versus Self Management and the Commercial Use of Wildlife by Aborigines" at pp153ff below.
- 125 Title of article "Aborigines Suffer Third World Diet" in *The Advertiser*, May 11th, 1992 p10.
- 126 Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* p110.

settlements and towns.¹²⁷ At the same time, elders have expressed the important role of hunting expeditions in the passing on of cultural knowledge and practical habitat management information. Such knowledge is vital if it is to be incorporated into European park management strategies. The educative value of subsistence is in this way not confined to the maintenance of Aboriginal culture, but may contribute to non-Aboriginal conservation values as well.

Indeed, there are several ways in which the benefits and values of subsistence today may coincide with conservation park objectives. Hunting and gathering excursions may add another dimension to the recreational values of parks, subsistence itself becoming a tourist attraction.¹²⁸ More importantly, land under subsistence production is land which may be *regenerated* from past non-Aboriginal usage and land *protected* from further degradation (for example, through grazing).¹²⁹ One example of the rehabilitative benefits of use of the land for foraging and hunting purposes is the Utopia pastoral property, where a reduction in stock and reemphasis on subsistence practices since the early 1980s has lead, inter alia, to a noticeable reduction in soil erosion.¹³⁰

Aboriginal Reactions to Environmental Change

The adaption to changes in subsistence activities brought about by European settlement reflects the adaptability of a culture in the broader period of its occupation of the Australian continent. Indeed, non-Aboriginal perceptions of changes in wildlife use by Aborigines in the past two hundred years often ignore their reactions to environmental modification in the more distant past, both with respect to the extinction of particular species or to global climate change following the retreat of the Ice Age. For, during 40,000 years of Aboriginal presence in Australia, the landscape has undergone not only seasonal fluctuations (drought and rainfall), but changes to the coastline and

127 Quoted in Walsh, "The relevance of some aspects of Aboriginal subsistence activities to the management of national parks: with reference to the Martu people of the Western Desert" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p76.

128 As the conduct of "bush food walks" by the Wreck Bay community has revealed: documented by Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* p146.

129 As above p113.

130 At p117.

vegetation.¹³¹ Moreover, Aboriginal activities such as hunting and the use of fire have contributed to these changes. However, not only has Aboriginal society adapted to its changing environment through resettlement or the transformation of eating habits,¹³² but in some cases has incorporated these changes into its mythology¹³³.

Reactions to more sudden and intense modifications to the environment brought about by European settlement have, in some respects, been similar: resettlement of the Pitjanjatjara people to land which traditionally belonged to coastal tribes, for example, has led to the adoption of coastal subsistence practices,¹³⁴ whilst some feral animals have already become incorporated into the cultures of several communities as "traditional bush tucker".¹³⁵ As summarised by Coombs:

Aborigines are aware of these changes and their involvement in them. They do not see such awareness as a contradiction of their view of the landscape as immutable. They interpret these large, long-term changes as part of the "working-out" of the original intentions of the spiritual and ancestral creators.¹³⁶

An example of this attitude is found by reference to some of the traditional owners of Purnululu National Park, who see local extinctions as a result of the Dreaming "taking the plants and animals away" as a form of retribution for their failure to "look after the country".¹³⁷ Thus, the observation of loss

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- 131 Coombs, McCann, Ross & Williams (eds), *Land of Promises: Aborigines and Development in the East Kimberley* (CRES ANU, Aboriginal Studies Press, Canberra 1988) p7.
- 132 Dingle in *Aboriginal Economy* p40, cites as an example of this adaption the drying up of the Willandra Lakes 3000 years ago, after which time seeds replaced fish as the main source of sustenance of local Aborigines.
- 133 As above p44.
- 134 Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* p111.
- 135 Birckhead, "Traditional Aboriginal Land Management Practices at Charles Sturt University' - the cultural politics of a curriculum innovation" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p303.
- 136 Coombs Dargavel, Kesteven, Ross, Smith & Young (eds), *Land of Promises: Aborigines and Development in the East Kimberley* p8.
- 137 WA, Department of Conservation and Land Management (CALM), *Purnululu (Bungle Bungle) National Park and Conservation Reserve Draft Management Plan* (1989) p44.

of native species or of habitat degradation may not be accompanied by the same negative response to feral animals as expressed by non-Aboriginal land managers.

Non-Aboriginal Perceptions of Subsistence - Its Measurement and Its Changes

The cynical attitude of early European settlers towards the sustainability of Aboriginal subsistence practices in the face of "legitimate" land-uses such as agriculture and pastoralism are echoed today. Scant consideration has been given by economists to the value of modern subsistence, due to its independence of the market economy,¹³⁸ whilst it has been found that state land management agencies generally do not target Aboriginal groups in provision of services because of the perception that they are "not really using the land", or creating a serious impact.¹³⁹

The lack of any perception of subsistence as a form of land use means that any evaluation of the actual and potential impact of the taking of wildlife in national parks is impossible. Perhaps this is one reason why research into the impact of Aboriginal activities on the conservation status of certain species is so obviously lacking. This absence is particularly surprising in light of evidence which suggests that a combination of land rights and resource rights can operate as a catalyst to resurrect apparently defunct foraging economies.¹⁴⁰ To see changes to methods of "traditional" hunting as the creativity and flexibility of a dynamic culture rather than the decay of a pristine one¹⁴¹ would go some way to a more realistic perception of the potential impact of these methods on previously sustainable resources, and could thus provide a more equitable response to that impact.

138 Quoted in Walsh, "The relevance of some aspects of Aboriginal subsistence activities to the management of national parks: with reference to the Martu people of the Western Desert" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas*.

139 Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* p85.

140 Quoted in Walsh, "The relevance of some aspects of Aboriginal subsistence activities to the management of national parks: with reference to the Martu people of the Western Desert" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p76.

141 Head, "Australian Aborigines and a changing environment - visions of the past and implications for the future" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p49.

Yet once again, the set of dichotomies evident in the concept of wilderness provides the main obstacle to a more realistic appraisal of changes to the methods and purposes of Aboriginal use of species. Most significant in this set is the traditional versus non-traditional dichotomy, whereby the "traditional" use of species is assumed to be in harmony with nature and where "non-traditional" forms of hunting require external regulation to prevent species depletion. However, a distinct point of contrast between traditional and non-traditional subsistence practices does not exist, and never has existed. As has already been demonstrated, Aboriginal culture has always been capable of responding to change by incorporating new elements into its daily life and belief system.¹⁴² Indeed, some anthropologists argue that, although there was no agricultural revolution in Aboriginal Australia, there was a gradual evolution towards greater complexity and variety in subsistence activities and methods used for hunting.¹⁴³ More importantly, the Aboriginal cyclic concept of time (as opposed to European linear notions), where "the present very rapidly merges with the past, and the past fades into uniformity beyond living memory",¹⁴⁴ makes a distinction based on "traditionality" even more meaningless.

Yet not only has such a distinction been used as the main means of restricting the Aboriginal use of wildlife in conservation areas by Australian legislatures, but it has been *Europeans* who have defined the elements of "traditional". Once again, this represents terra nullius in another form: "one of the spoils of conquest and a necessary aspect of maintaining political and social control over the vanquished is the *power of definition* - not only over personal identity but also over cultural identity."¹⁴⁵ European notions of traditional remain an implicit measurement of the environmental impact of Aboriginal hunting activities.

142 Birkhead, "'Traditional Aboriginal Land Management Practices at Charles Sturt University' - the cultural politics of a curriculum innovation" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p302.

143 Dingle, *Aboriginal Economy* p55.

144 Stanner, quoted in Bennett, "Some Aspects of Aboriginal and non-Aboriginal notions of responsibility to non-human animals" (1983) 2 *Aust Ab Stud* 19 at 22.

145 Fourmile, quoted in Birkhead, "'Traditional Aboriginal Land Management Practices at Charles Sturt University' - the cultural politics of a curriculum innovation" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p301.

Instances of the Conflict

It remains to be seen, first, how changes in the Australian environment and in Aboriginal culture have manifested themselves in instances of conflict between cultural diversity and conservation objectives and, secondly, how subsequent legislative reactions are based on those non-Aboriginal assumptions and perceptions discussed in the preceding paragraphs.

Whilst conservation is by no means a new concept to Aboriginal communities, it might be perceived under a different frame of reference than that of non-Aboriginal land managers.¹⁴⁶ Yet it is precisely this alternate frame of reference, entailing as it does different reactions to change and different time-frames in relation to conservation, which results in conflict. The Aboriginal response to the eradication of feral animals, recognised as a major factor in the decline and extinction of smaller mammals in Australia,¹⁴⁷ demonstrates such differences. Whilst there is no doubt that Aborigines have observed this decline, feral species have themselves replaced native animals in the Aboriginal diet. Indeed, some are regarded as delicacies, whose eradication could entail not only the disappearance of a recognised economic resource, but the exploitation of indigenous fauna as a replacement. The priority given to the *conservational* significance of some feral species is revealed in the comment that "Aborigines can't understand why we happily shoot rabbits and feral cats but would never consider shooting a bustard, which they regard as by far the tastiest of all three".¹⁴⁸

The lack of recognition of feral cats and rabbits as a threat to the bustard (as well as to other native species through both predation and competition over food sources) poses a further problem in arguments for the maintenance of biodiversity: if Aboriginal reactions to change are indeed "innovative, flexible and pragmatic",¹⁴⁹ incorporating into their culture changes in food

146 Stanner, quoted in Bennett, "Some Aspects of Aboriginal and non-Aboriginal notions of responsibility to non-human animals" (1983) 2 *Aust Ab Stud* 19 at 22.

147 Young, Ross, Johnson & Kesteven, *Caring for Country: Aborigines and Land Management* p45.

148 Stanner, quoted in Bennett, "Some Aspects of Aboriginal and non-Aboriginal notions of responsibility to non-human animals" (1983) 2 *Aust Ab Stud* 19 at 22.

149 Coombs, McCann, Ross & Williams (eds), *Land of Promises: Aborigines and Development in the East Kimberley* p9.

sources as a part of the "working out" of the Dreamtime plan, then where is the motivation to prevent further species depletion?¹⁵⁰

Another example of the ramifications of differing attitudes to change and differing "conservation time-frames" can be found in the reintroduction schemes of the Rufous Hare-wallaby (mala) and the bilby in the Tanamei Desert Wildlife Sanctuary, run cooperatively by the Conservation Commission of the Northern Territory and the Warlpiri people.¹⁵¹ Two aspects of these schemes may give rise to conflict between Aborigines and park managers: first, the success of the mala rehabilitation programme has been hampered by the predation of feral cats, the very creature prized as bush tucker in contemporary Aboriginal communities. Secondly, enthusiasm over the success of the reintroduction of the bilby has been tempered by the concern that, once the species population levels rise, it will be open to exploitation as a food source by Aborigines.

What remains to be addressed is the manner in which Australian legislatures have responded to these concerns which, it is argued, arise not from change itself but, more fundamentally, from the diversity in response to change.

Legislative Responses to the Conflict

The strategies used by Australian legislation to respond to those conflicts discussed in the preceding paragraphs can be divided broadly into four categories: the traditionality restriction, the prohibition on the sale of wildlife, the use of zoning, and the requirement of permission to hunt in national parks. Before examining these strategies, it is worth noting that it is only in the ACT, Northern Territory, West Australia (excluding nature reserves) and South Australia (with proclamation) that rights for Aborigines to forage in national parks are legislatively guaranteed.

Section 23 of the *Wildlife Conservation Act* 1950 (WA) states that

150 Altman & Allen, "Living Off the Land in National Parks: Issues for Aboriginal Australians" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p115.

151 See, generally, Williams, "Aboriginal Customary Resource Management and Conservation Agencies in Australia" in Fowler (ed), *Proceedings of the International Conference on Environmental Law* (National Environmental Law Association, Environmental Law and Policy Unit, University of Adelaide 1989) pp9ff.

a person of Aboriginal descent...may take fauna or flora upon Crown land or any other land, not being a nature reserve or wildlife sanctuary, but where occupied, with the consent of the occupier of that land, sufficient only for food for himself and his family.

If the numbers of any particular species are "unduly reduced" by Aboriginal foraging, these concessions may be restricted or suspended. The "occupier" of national parks is deemed to be the Department of Conservation and Land Management (CALM), from which consent in writing to take species in national parks is required.¹⁵²

A 1987 amendment to s68 of the *National Parks and Wildlife Act 1972 (SA)* provides that it is no longer illegal for an Aboriginal person to take a native plant or a protected animal on a reserve for "food for dependents" or "solely for cultural purposes of Aboriginal origin".¹⁵³ The latter qualification is not defined. However, before foraging in national parks in South Australia can take place, a proclamation allowing this must have been made. This proclamation may specify particular hunting zones or restrictions on what species can be taken.¹⁵⁴ Finally, both s70 and s122 of the Commonwealth and Northern Territory national parks legislation respectively grant *traditional* hunting rights to Aboriginal people except for the purpose of sale or where restrictions are imposed by express regulation.¹⁵⁵

The Requirement of Traditionality

The perception of a traditional versus non-traditional distinction in Aboriginal lifestyles which underlies attitudes to cultural change since 1788 has been discussed above under the heading "Non-Aboriginal Perceptions of Subsistence". The more blatant manifestations of this dichotomy in the form of s14 of the South Australian Hunting Regulations was removed in 1987 and replaced with the provision that wildlife be taken "solely for cultural purposes".¹⁵⁶ Nevertheless, the use of the term "traditional" is

152 WA, Department of Conservation and Land Management (CALM), *Aboriginal Activities and Nature Conservation in the South-West of Western Australia* (1991) p19.

153 *National Parks and Wildlife Act 1972 (SA)* s68e.

154 To date, hunting has only been authorised in the Unnamed Conservation Park (approved by State Cabinet in November 1990).

155 There are as yet no such regulations under either Federal or Territory law.

156 This provision required that hunting be undertaken by means of a *traditional weapon*.

implicit in West Australian restrictions on species use in national parks, in that park management plans may set aside areas designated for use by Aboriginal people for "traditional activities".¹⁵⁷ The Commonwealth and Northern Territory parks legislation also retain an express requirement that use be traditional.¹⁵⁸

The insistence upon the incorporation of a traditionality requirement ignores both the inherently fluid nature of Aboriginal subsistence land use as well as the relevance to Aborigines of the concept of the Dreaming, encompassing as it does a distant time of creation as well as the dimension of present reality,¹⁵⁹ and where particular aspects of that reality, including hunting and gathering rituals, cannot be expressed in terms of European linear time. Moreover, such insistence, in the absence of definition or any indication as to the activities which are encompassed, is particularly surprising in light of numerous judicial pronouncements (in the context of the existence of "traditional" native title) concerning the very fluidity of indigenous land use.

The most significant of these comments is to be found in the judgements of Mahoney J in the *Hamlet of Baker Lake* decision,¹⁶⁰ and in the more recent judgements of the High Court in *Mabo*.¹⁶¹ Both decisions stress the temporal difficulties inherent in the notion of tradition, stating that *indigenous* tradition is not to be perceived as frozen at the moment of European colonisation.¹⁶² They accept as inevitable the changes in indigenous laws and customs that have resulted since that time,¹⁶³ stating that these are irrelevant "provided that the general nature of the connection between the indigenous people and the land remains".¹⁶⁴ However, just as the naturalness concept implicit in the wilderness ideal can be more

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- 157 For example, as planning for the Purnululu National Park demonstrates: WA, Department of Conservation and Land Management (CALM), *Aboriginal Activities and Nature Conservation in the South-West of Western Australia* (1991) p40.
- 158 *National Parks and Wildlife Conservation Act 1975* (Cth) section 70(1); *Territory Parks and Wildlife Conservation Act 1976* (NT) section 122.
- 159 Head, "Australian Aborigines and a changing environment - visions of the past and implications for the future" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p47.
- 160 As above.
- 161 *Mabo v Queensland* (1992) 175 CLR 1. Compare both *Mabo* and *Hamlet of Baker Lake* with the decision of Steel J in *Attorney-General (Ontario) v Bear Island Foundation* (1985) 15 DLR (4th) 321.
- 162 *Mabo* at 110 per Deane and Gaudron JJ.
- 163 At 192 per Toohey J.
- 164 At 70 per Brennan J.

accurately expressed in terms of European tolerance of the rapidity and intensity of *environmental* change, so too can it be argued that there must be a point at which there is so little similarity between past and present Aboriginal activities with respect to wildlife that arguments for their unrestricted use can no longer be justified by the "general nature of the connection" with underlying cultural purposes.¹⁶⁵ Perhaps it is where species are sought to be used today for commercial purposes that this point is reached.

The Commercial Use of Species

Despite the Canadian and Australian courts' confirmation of the fluid, if not illusionary, quality of tradition, as well as the Australian Law Reform Commission's specific rejection of a definition of tradition based on the methods of subsistence activities,¹⁶⁶ only the South Australian Act has removed altogether the concept of traditional. It has qualified use of wildlife instead through reference to "cultural purposes", thereby placing an implicit prohibition on commercial purposes. Yet such qualifications, as those in West Australian, Commonwealth and Northern Territory restrictions on the taking of species for sale, fall foul of the same reasoning at the heart of the traditional/non-traditional dichotomy. Indeed, Altman and Allen argue that one of the bases for such restrictions is that commercial exploitation of species cannot be justified as "traditional".¹⁶⁷ As previously emphasised, however, Aboriginal society before European settlement did not differentiate between commercial, recreational and subsistence forms of land use. Still today, wildlife may be taken for local consumption, exchange between communities, or for the production of artefacts for sale, without a clear line being drawn as to where "cultural" aspects end and "non-Aboriginal" purposes begin. It follows that the commercial harvesting of native species such as kangaroo and emus could be seen as merely another form of the land supporting Aboriginal communities, just as it did the subsistence economies of their ancestors.

Further difficulties arise over the definition of "commercial" use itself. The South Australian Act, for example, whilst limiting the taking of species

165 McCrae, Nettheim & Beacroft, *Aboriginal Legal Issues: Commentary and Materials* (Law Book Company, Sydney 1991) p127.

166 ALRC, *The Recognition of Aboriginal Customary Laws* (Report No 31, 1986) para 130.

167 Altman & Allen, "Living Off the Land in National Parks: Issues for Aboriginal Australians" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p124.

either to sustenance for the hunter and their dependents or to "cultural purposes", does not clarify the scope of these purposes. Do they include reciprocal exchanges which may take place not as a form of commercial use, but as a means of reinforcing kin-links and strengthening community cohesion?¹⁶⁸ Or is the interpretation of this phrase to be restricted by early anthropological perceptions of patterns of exchange in terms of European commercial trading habits rather than as social and ceremonial behaviour?¹⁶⁹

Zoning of Aboriginal Use of Species

The previous criticisms of the restrictions placed on the Aboriginal use of wildlife in national parks arise from those dichotomies set up by the notion of tradition as a *temporal* concept. Yet two further strategies used in legislation are founded in *spatial* dichotomies inherent in the zoning of hunting and gathering within park boundaries. The incompatibility with Aboriginal use of both the zoning strategy and the requirement that Aboriginal users seek permission in order to hunt is borne out by a brief examination of the distinction found in Aboriginal society between estate and range.

According to this distinction, larger groups identified with geographical regions or estates, which were then loosely divided into a series of sub-regions (ranges), each associated with specific kinship groups.¹⁷⁰ Together, estate and range constituted an "ecological life-space".¹⁷¹ That is, kinship groups combined in their use of resources and could range in search of food over the entire estate. To hunt beyond the estate would require permission from the neighboring tribe to do so. Thus, hunting could take place both beyond the group's range and estate, being restricted only by taboos associated with areas of spiritual significance. The lack of rigid inter-boundary definitions between sub-groups' ranges in particular meant that the establishment of fixed rights to and restrictions on areas defined by man-made boundaries was an alien concept: seasonal and

168 Walsh, "The Relevance of some aspects of Aboriginal subsistence activities to the management of national parks: with reference to Martu people of the Western Desert" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p94.

169 Dingle, *Aboriginal Economy* p19

170 As above p11.

171 At pp9-11

climatic changes characteristic of the Australian landscape also meant that flexibility in access to areas for hunting was essential.¹⁷²

The rigidity imposed by the use of zones for hunting in national parks, however, may be incompatible with the "ecological life-space" of Aboriginal groups today who maintain established kinship ties. Doubt also exists as to whether boundaries of zones (and indeed of parks themselves) are acknowledged in hunting expeditions. Walsh's research into the subsistence practices of the Martu in the Rudall River National Park, for example, found that members of that community did not recognise or were unaware of park boundaries,¹⁷³ whilst Williams makes a similar conclusion that "a park boundary is to cross".¹⁷⁴ If *park* boundaries are being ignored, it is unlikely that more specific restrictions within those parks are being adhered to. It must be recognized by conservation authorities that Aboriginal groups may view the region of their occupation as contiguous and seek to use its resources accordingly and without regard to boundaries.¹⁷⁵

Further difficulties may exist where zones delineated by park managers do not coincide with favoured hunting grounds, which, furthermore, may occur in unpredictable locations depending on seasonal and yearly variations.¹⁷⁶ Moreover, the concept of zoning implies the *localisation* of the impacts of hunting and gathering. Whilst this may avoid the localised depletion of species and vegetation around living areas and along roads used on hunting trips, it may be inappropriate in some communities, where zoning could result in the overuse of other areas. Both Walsh and Cane suggest that the impact of hunting should be dispersed across the landscape.¹⁷⁷ Not only would this be more compatible with the traditional

172 Young, "Land Use and Resources: A Black and White Dichotomy" in Heathcote & Mabbutt (eds), *Land, Water and People: Geographical Essays in Australian Resource Management* p105.

173 As above p105.

174 This is demonstrated by the planning for the Purnululu National Park: WA, Department of Conservation and Land Management (CALM), *Aboriginal Activities and Nature Conservation in the South-West of Western Australia* (1991) p40

175 Walsh, "The Relevance of some aspects of Aboriginal subsistence activities to the management of national parks: with reference to Martu people of the Western Desert" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p94.

176 As above.

177 Walsh, "The Relevance of some aspects of Aboriginal subsistence activities to the management of national parks: with reference to Martu people of the Western

use of resources, but would remove the impact of hunting from particular zones.

The Requirement of Permission to Hunt

The Aboriginal concept of estate and range provides some basis for the fourth major strategy used in restrictions on Aboriginal hunting, that is, the requirement that permission be sought before hunting can legally take place in national parks; in South Australia via a proclamation under s68(a) and in Western Australia via written authority from CALM. As mentioned earlier, the seeking of permission for resource use is not a concept foreign to Aboriginal society, where "to control land is not to enjoy it exclusively, but rather to exercise the right, which is at the same time an obligation, to allocate rights in its resources to others".¹⁷⁸

Indeed, the Aboriginal system of land tenure had as one of its main objectives the control of access to resources.¹⁷⁹ However, such control was retained by the group itself rather than an external authority. The seeking of permission to hunt and gather over another group's territory served to maintain a sustainable level of species populations. A strategy which replaced the power to grant permission to hunt in the hands of Aboriginal communities' leaders would seem to adhere more closely to Aboriginal systems of wildlife management.

What is clear from the preceding discussion is that no piece of legislation seeks to relate contemporary hunting to its actual impact on the sustainability levels of native species. Rather, the approach of current legislation remains one based implicitly, where not overtly, on an image of a traditional versus non-traditional society. This approach has several consequences. First, it underestimates the value in economic, cultural and spiritual terms of hunting and gathering activities today and thus fails to give these activities recognition as a legitimate form of land use. Secondly, it fails to address Aboriginal perceptions of and reactions to changes in the environment,

Desert" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p94; Cane, "Bush Tucker - intensified use of traditional resources in Aboriginal outstations" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia* p3.

178 Dingle, *Aboriginal Economy* p10.

179 See, for example, the planning for the Purnululu National Park: WA, Department of Conservation and Land Management (CALM), *Aboriginal Activities and Nature Conservation in the South-West of Western Australia* (1991) p40.

particularly those instances where their attitudes do not coincide with those of Western-trained land managers. Thirdly, as a result of the lack of information regarding the actual impact of contemporary hunting, it may be that Aborigines are penalised for relatively low levels of hunting of resources that actually face a greater threat through European land use than anything else.¹⁸⁰ Finally, this approach remains chiefly concerned with placing prohibitions on Aboriginal use of wildlife rather than with seeking positive measures to secure those practices and the knowledge base of Aborigines that at one time supported sustainable species management.

ABORIGINAL USE OF WILDLIFE AND JOINTLY MANAGED NATIONAL PARKS

The Assumption of Commonality of Interest

The very foundation of the joint management concept, originating in the proposals of the Ranger Uranium Environmental Enquiry, is an "assumed commonality" of conservation and Aboriginal interests.¹⁸¹ The Inquiry's Report, by concluding that such interests could be "carefully integrated, so that the development in one section [of the Kakadu National Park] is not incompatible with the functions of another",¹⁸² despite the novelty of the structure, sustained a set of assumptions of Aborigines as the "original conservationists", living in harmony with Nature.

Such an assumption of a "careful integration" of Aboriginal and conservation interests via the joint management arrangement fails to recognise the divergence in motivations of the arranging parties. For example, Davies cites the promotion of efficiency in remote area management, the provision of a cultural dimension to tourists and participation in government social justice programmes as several of the unwritten policy objectives of the SANPWS in its support of the joint management of national parks.¹⁸³ It is significant that the encouragement of Aboriginal land management does not feature as a primary policy objective.

180 Jones, "Landscapes of the Mind: Aboriginal Perceptions of the Environment" in Mulvaney (ed), *The Humanities and the Australian Environment* p43.

181 Craig, "Environmental Law and Aboriginal Rights: Legal Framework for Aboriginal Joint Management of Australian National Parks" in Birkhead, et al (eds), *Aboriginal Involvement in Parks and Protected Areas* p141

182 Fox, *Ranger Uranium Environmental Enquiry: First and Second Reports* (AGPS, Canberra 1977) quoted in Craig above.

183 Davies, *Guidelines for Joint Management*, Report to the SANPWS (Department of Environment and Planning, Adelaide 1992) pp20ff.

Furthermore, the adoption of joint management as a means of fulfilling certain social justice criteria, such as the Aboriginal Employment and Development Programme is unlikely, according to Walsh, to sustain positive collaboration between conservation agencies and Aborigines.¹⁸⁴ This criticism highlights the distinction between joint management as a means of fulfilling moral obligations to social justice issues,¹⁸⁵ and as a form of recognition of the validity (if not necessity) of indigenous input into national parks and wildlife management.

Often the perceptions of conservation agencies of the benefits of joint management arrangements contrast with the unwritten policy of Aboriginal traditional owners, whose acceptance of the structure is likely to have arisen from conflict and compromise over land ownership.¹⁸⁶ Joint management may offer a more politically acceptable means of securing residence and control over traditional lands than does the fight for freehold title. Whilst this motivation does not preclude the coincidence of conservation objectives, via Aboriginal obligations to "care for country", it cannot be assumed that the fulfillment of neglected cultural responsibilities with respect to land management is a universal feature of Aboriginal involvement in national parks. In particular, where contemporary communities have diverse origins and contact/displacement histories, their interest in joint management will not necessarily be related to traditional ownership of, or responsibility for, the land in question.¹⁸⁷ It may not be the maintenance, or the regaining, of knowledge and the practice of traditional land management, but the securing of economic opportunities (for example, via the tourist industry)¹⁸⁸ which provides the motivation behind the acceptance of joint management.

184 Walsh, "The relevance of some aspects of Aboriginal subsistence activities to the management of national parks: with reference to Martu people of the Western Desert" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p93.

185 As above.

186 Butler & Morgan, "Cooperatively Managed Parks in the Northern Territory: The Evolutionary Process" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia*, CSIRO Paper No 3 (Melbourne, 1986) p23.

187 Davies, *Guidelines for Joint Management* (1992) p23.

188 Davies stresses the diversity of Aboriginal motivations in the comment: "there is a lot of interest amongst Aboriginal people in provincial towns in securing jobs as rangers - some of this interest may be engendered by perceptions that the working conditions are good and the job undemanding": as above.

Such acknowledgement of the potential conflict in parties' motivation for entering into joint management arrangements is essential for the formulation of management plans and the long-term success of their implementation. The equation of Aboriginal and conservation interests in the first plan of management for Kakadu National Park has been criticised in this respect, and the warning given that "unless there is a very clear recognition of the ... areas of difference in park interests and Aboriginal interests, and these limitations are clearly built into management proposals, then one can only predict severe conflict both in the short and in the long term".¹⁸⁹

Equally destructive of the claim that joint management bears out the compatible interests of Aboriginal groups and conservation agencies is the unequal positions from which both groups operate in securing their aforementioned objectives.

Aboriginal peoples' operating position is one of weakness in terms of land, resources for, and expertise in, modern land management and political support.¹⁹⁰ Moreover, they must operate within a structure of what remains, essentially, a eurocentric concept based on non-Aboriginal notions of land tenure. Ultimately, "it is impossible to forge a decision-making partnership between unequal parties".¹⁹¹

This inequality between negotiating parties has the potential to give rise to Aboriginal involvement as something not to be seen as necessary for effective species management, but as an input to be tolerated so as to satisfy the same sense of moral obligation referred to by Walsh above.¹⁹² Furthermore, the danger in not accepting the inequality inherent in existing joint management structures is the perpetuation of a "rhetoric of 'conservation' and 'involvement' work[ing] to place the discussion of Aboriginal management within the confines of purely cultural issues while

189 Butler & Morgan, "Cooperatively Managed Parks in the Northern Territory: The Evolutionary Process" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia* p2.

190 Davies, *Guidelines for Joint Management* p4.

191 As above, p29

192 Walsh, "The relevance of some aspects of Aboriginal subsistence activities to the management of national parks: with reference to Martu people of the Western Desert" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p93.

denying the political nature of many of these issues".¹⁹³ This denial, it is submitted, has its origins in the classification of Aboriginal interests with respect to wildlife use as purely "cultural": that is, relevant as a historic artefact rather than pertaining to dynamic and political issues.

Obstacles to the Convergence of Aboriginal and Conservation Objectives - The Four Levels of Joint Management

A close examination of the joint management model at its various levels underlines the fallibility of the founding assumptions of commonality and equality. A definitive and universal model of the jointly-managed national park does not exist. However, it is proposed to examine the four main areas of Aboriginal involvement in such schemes. These areas are: policy, law, planning, and day-to-day management.¹⁹⁴ A study of each of these aspects of joint management provides more than a measure of the degree and genuineness of Aboriginal involvement in national parks generally; it highlights those potential instances of conflict to which the "almost unbridgeable"¹⁹⁵ gap between Aboriginal and non-Aboriginal perceptions of a changing environment give rise.

Level One: Law

The existing "role-model" of joint management - the Emu Model - has at its pinnacle and prime objective "Tjukurpa", or the observance of Aboriginal Law.¹⁹⁶ Such observance entails "caring for country" according to the Dreamtime tenets. However, it takes place today inevitably within the confines of a Western legal structure and social context.¹⁹⁷ Traditional owners are responsible under Aboriginal Law for managing land within and beyond park boundaries, whilst conservation departments have similar responsibilities under State or Commonwealth law. Such responsibilities

193 Birkhead & Smith, "Introduction: Conservation and Country - A Reassessment" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement In Parks and Protected Areas* p1.

194 Such an analysis is adopted by Butler & Morgan, "Cooperatively Managed Parks in the Northern Territory: The Evolutionary Process" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia*.

195 Wright, quoted in Yapp, "Wilderness in Kakadu National Park: Aboriginal and other interests" (1989) 29 *Nat Res J* 178.

196 As adopted at the Emu conference, held on the Maralinga lands in 1988. For further discussion of this model, see Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p29.

197 As above p79.

do not, however, operate in separate spheres: where they collide, arbitration mechanisms are in place which may not explicitly favour adherence to the Law prescribed by the Dreamtime ancestors. For example, the arbitration clause in the Kakadu lease cites Aboriginal interests as merely one of a number of factors to which the arbitrator must have regard in the determination of a dispute between the parties.¹⁹⁸

This division of interests is at odds with a belief system where behavior and responses to the natural environment are rooted in an immutable Law, and where Aboriginal priorities are founded in an indivisible relationship between land, Law and people.¹⁹⁹ This relationship has been described by one anthropologist in the following way: "[T]he cosmology of the Dreaming is set as a timeless absolute, its rules rigidly unchanging and to be enforced by both men and the spiritual forces themselves".²⁰⁰ Thus, Aboriginal Law (as expressed and renewed in the use and control of the land and its resources) is subject to the arbitration process of a Western legal structure which has regard to the observance of Dreamtime tenets as merely one of a *number of* factors in the dispute resolution process.

The "immutability" of Aboriginal Law may be equally vulnerable to the malleability of Commonwealth or State conservation legislation as it itself becomes affected by policy changes or by ministerial direction. There are two possible means of protection of traditional owners' responsibility against the relatively inconstant nature of Australian legislative and policy changes.²⁰¹ First, Aboriginal "interests" such as the right to hunt and gather can be safeguarded beyond provisions in legislation to clauses in registered leases, as has occurred with respect to Kakadu and Uluru. Of particular relevance to the strength of their protection is the existing clause 12 of the Kakadu lease. This provides that the enactment of any act or regulation by the Commonwealth which is inconsistent with the lease and which is "substantially detrimental to the interest of the lessor or relevant Aboriginals as regards the administration, management or control of the park" shall be deemed a breach of a fundamental term for which the lease

198 Clause 17 of the Kakadu lease.

199 Bennett, "Some aspects of Aboriginal and non-Aboriginal notions of responsibility to non-human animals" (1983) 2 *Aust Ab Stud* 20.

200 Jones, "Landscapes of the Mind: Aboriginal Perceptions of the Environment" in Mulvaney (ed), *The Humanities and the Australian Environment* (Highland Press, Canberra, 1991) p37.

201 The functions of the Board of Management for Gurig National Park, for example, are subject to ministerial direction.

may be unilaterally terminated.²⁰² It is arguable that a regulation made under s70 of the *National Parks and Wildlife Conservation Act 1975* (Cth): abrogating traditional hunting rights for the conservation of a particular species could be classified as "substantially detrimental" to the interests of the Aboriginal users of that species. Any resolution of such a conflict, in light of clause 12, would be a true test of the supposed commonality of interests and equality in partnership in jointly managed national parks.

Level Two: Policy

A second means of ensuring the recognition of Aboriginal Law in the face of policy change would be to guarantee Aboriginal involvement in the formulation of that policy itself, if policy rather than law is indeed "the apex of the park-government system".²⁰³ The lack of Aboriginal representation on the Biological Diversity Advisory Committee, but the recognition of the specialist knowledge of indigenous people in the conservation of biodiversity,²⁰⁴ is a prime example of the acknowledgement by government and conservationists of the validity of Aboriginal input on one level (management) whilst not on another (policy). Similar criticisms have been made with respect to the formulation of the recent Commonwealth strategy on Environmentally Sustainable Development.²⁰⁵ Therefore, whilst traditional owners may contribute to the formulation of individual management plan objectives, they may have less input into the creation of the policies on which such plans are invariably based.

Furthermore, whilst plans of joint management are generally required to take into account the protection of Aboriginal interests, this requirement may not necessarily derive from a lease or legislative provision: its source with respect to Purnululu National Park in West Australia, for example, is

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- 202 For a full discussion of the terms of the Kakadu lease, see Blowes, "From Terra Nullius to Every Person's Land - a Perspective from Legal History" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* pp152ff.
- 203 Weaver, quoted in Butler & Morgan: Butler & Morgan, "Cooperatively Managed Parks in the Northern Territory: The Evolutionary Process" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia*.
- 204 Aust, Dept of Arts, Sport, the Environment and Territories, *The Biological Diversity Advisory Committee, A National Strategy for the Conservation of Australia's Biological Diversity* (1992) p3.
- 205 Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p43.

government decision rather than any Act.²⁰⁶ Once again, where Aboriginal input into the making of government policy is lacking, then any subsequent implementation of that policy may not reflect the concerns of traditional owners with respect to the use of wildlife on their land. For example, SANPWS policy regarding Aboriginal hunting in national parks, which states that "these activities can only take place within zones laid down in approved management plans and must not conflict with other park usage or conservation objectives ... hunting and foraging on reserves will be permitted only when communities demonstrate past hunting use of the reserve",²⁰⁷ renders any subsequent Aboriginal involvement in the formulation of management plan objectives with respect to hunting questionable.

From the perspective of Aboriginal communities themselves, participation in policy formulation may not be without difficulty. Not only may "Aboriginal policy" be unwritten, but communities face the added disadvantage of a pattern of past political activity whereby "band-aid treatment" is provided to meet short-term goals.²⁰⁸ This problem has been exacerbated by variety of history of some groups' displacement and retention of cultural knowledge and practices, such that they are yet to reestablish their relationship with the land after substantial periods of forced removal. Where policy is thus concerned with the formulation of long-term *conservation* objectives, and, moreover, with uniformity in community aims, it is difficult for Aboriginal traditional owners to outline definitively their communities' future requirements for access to, and use of, park resources.²⁰⁹ The "ideology of permanence" of the Dreamtime Law does not provide contemporary Aboriginal communities with the resources, expertise or the financial or political support enjoyed by conservation agencies to enable them to participate in the creation of policy on which future management plans will be based.

206 Davies, *Guidelines for Joint Management* p29.

207 SA, SANPWS, *Strategy for the Involvement of Aborigines in Nature Conservation* (1991) p1.

208 Davies, *Guidelines for Joint Management* p29.

209 Such uncertainty has been expressed by the Maralinga Tjarutja with regards planning for the Unnamed Conservation Park: Department of Environment and Planning, SANPWS, *Unnamed Conservation Park Management Plan [Draft]* (1991) p12.

Level Three: Planning

The Plan of Management

The plan of management is both the primary tool of planning for jointly managed parks, as well as the most crucial point of reconciliation of two fundamentally different views of land/people interactions.²¹⁰ However, the practical method by which such reconciliation takes place (the categorisation of specific management issues and the negotiation of a common position for each of them²¹¹) may itself be culturally inappropriate for traditional owners:

[I]t may be neither appropriate nor possible to translate Aboriginal customary law into codes of management, since this necessarily involves the itemisation and generalisation of Aboriginal culture in ways that cannot capture the totality of Aboriginal relationships with the landscape.²¹²

Moreover, the codification of particular aspects of Aboriginal knowledge of species and their habitats, seen by conservation agencies as necessary for their protection, may be forbidden by Aboriginal Law. The most obvious example of this would be where a species' prime habitat coincides with an Aboriginal sacred site, information about which is restricted to certain tribal members.

On a more practical level, Butler and Morgan question the appropriateness of the management plan document itself, given its usual length and complexity.²¹³ They cite the Gurig Plan as an example of a document defying both easy understanding by the traditional owners and translation into their language. As such, this does not help to promote the education of the prime users of the park's resources nor their awareness of conservation priorities. Indeed, the significance of language in joint management regimes cannot be underestimated; it goes far beyond the ease of translation of the management plan. As pointed out by Jones, "if we wish to consider the landscape from the perspective of the hunter-gatherer, it is necessary not

210 Davies, *Guidelines for Joint Management* p4.

211 As above p51.

212 Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p105.

213 Butler & Morgan, "Cooperatively Managed Parks in the Northern Territory: The Evolutionary Process" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia* p3.

only to work within an ecological framework, but also within a linguistic one".²¹⁴ This comment highlights the potential difficulties of incorporating into the park planning process the Aboriginal view of the natural environment, inextricably tied in as it is with their social and spiritual life.

The existing barriers to Aboriginal input in the planning process can be further assessed from the perspective of the actual drafting of the management plan: that is, by posing the questions: who is responsible for its initial creation and who has the subsequent power to alter its provisions? The usual answer to the first question is that the relevant State or Federal conservation agency is responsible for the initial preparation of the management plan, which is then presented to the traditional owners for "consultation" and negotiation.²¹⁵ However, two alternatives exist to this procedure, both of which could, if implemented, strengthen the bargaining position of traditional owners with respect to the use of species on their land.

The first of these alternatives, whereby it is the relevant Aboriginal group or their representatives who are responsible for documenting the original plan, is currently being implemented in South Australia with respect to Witjira National Park.²¹⁶ Though the plan is yet to be completed, it will be interesting to note whether the reversal of the preparation procedure (the plan will eventually be presented for negotiation on, and acceptance by, the SANPWS) gives rise to substantially different provisions for hunting and gathering than those found in other plans for jointly management parks in South Australia (such as the Unnamed Conservation Park).

The second approach to the creation of the management plan, mooted for introduction in South Australia by Davies,²¹⁷ is the establishment of a *preliminary* joint Board of Management, to whom the Plan's drafter, be they a SANPWS Department officer or a member of an Aboriginal organisation, is responsible. However, such a procedure does not necessarily change the practice of non-Aboriginal responsibility for *initial* drafting of the management plan. Nor does the formation of another administrative

214 Jones, "Landscapes of the Mind: Aboriginal Perceptions of the Environment" in Mulvaney (ed), *The Humanities and the Australian Environment* p29. For an excellent example of how comparative linguistics are aiding modern conservationists with respect to species' extinction in the Flinders Ranges, see Tunbridge, "Flinders Ranges Mammals" (July, 1992) *Habitat Australia* pp26ff.

215 Davies, *Guidelines for Joint Management* p53.

216 Personal communication, Garry Richardson.

217 Davies, *Guidelines for Joint Management* p53.

committee allay the criticism that *any* Aboriginal involvement in main-stream decision-making will lead to the "institutionalisation of cooperation".²¹⁸

The Planning Process

Beyond the issue of the "cultural compatibility" of Aboriginal contribution to the planning instrument, several issues concerning participation in the planning process itself need to be addressed. These issues concern accessibility, timing and the decision-making necessary for planning jointly managed national parks. The SANPWS has recognised that the existing management planning process and the practice of exhibiting plans for public comment has not been successful in gaining adequate Aboriginal input, citing remoteness, illiteracy and lack of respect for non-Aboriginal law as reasons for this failure.²¹⁹ Nevertheless, its *Strategy for the Involvement of Aborigines in Nature Conservation* focusses on Aboriginal employment and community development, rather than the ways in which the accessibility of Aboriginal communities to the planning process could be improved. The danger is that planning for species conservation will take place in a vacuum of knowledge of Aboriginal communities' aspirations, both long and short term, for the use of species.²²⁰

One of the main obstacles to full Aboriginal participation in the planning process, even where accessibility is ensured, is the difficulties faced by traditional owners in taking an assertive role in the decision-making process. Their relative subservience can be attributed not only to a history of dislocation and dependence on non-Aboriginal bureaucracies, but to the traditional style of decision-making amongst Aboriginal communities.²²¹ Although meetings and committees are now "a ubiquitous part of Aboriginal decision-making processes"²²² the planning process must acknowledge "a cultural tradition that does not incorporate the concepts of debate and argument Consensus and conflict avoidance characterise Aboriginal

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- 218 Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p80.
- 219 SA, SANPWS, *Strategy for the Involvement of Aborigines in Nature Conservation* p9.
- 220 Davies suggests that field meetings, inspections and seminars involving Aboriginal people with other interest groups are mechanisms which could be used to prevent such a vacuum: Davies, *Guidelines for Joint Management* p55.
- 221 SA, Department of Environment and Planning, SANPWS, *Unnamed Conservation Park Management Plan [Draft]* (1991) p50.
- 222 Davies, *Guidelines for Joint Management* p40.

decision-making rather than confrontation and assertion".²²³ When read in the context of one of the main functions of the conventional planning process (to highlight incidents of conflict and resolve them before management takes place) this comment is all the more significant. The problem has been made even more acute through the pursuit of efficiency by conservation agencies which has served to frustrate the Aboriginal desire for greater dialogue in decision-making.²²⁴

Not only must planning for jointly managed national parks thus take into account the time required in and the process itself of Aboriginal decision-making, marked as it is by widespread consultation and unanimity and "rooted in an intuitive rather than an analytical approach to problem-solving",²²⁵ but it should further respect the *institutions* of their decision-making. Failure to do so may lead to pressure being placed on particular individuals to make decisions, rather than consultation occurring with entire family groups responsible for specific estate areas.²²⁶ Difficulties faced by Aboriginal representatives in this respect are twofold: first, their representative function may not be seen as or desired to be an ongoing one; and secondly, they may find themselves caught between the desires of their elders to retain a "traditional" lifestyle and the aspirations of the younger generation, more open to changes and more adaptive to non-Aboriginal influences.

A more culturally sensitive approach to these difficulties is that taken by the SANPWS in the joint management planning for the Unnamed Conservation Park. Not only is the management plan for the park submitted to the Maralinga Tarutja (as representatives of the area's traditional owners), but the consultation process allows all members of the community to take part in the necessary meetings.²²⁷ Moreover, these meetings are accepted by the SANPWS as a forum for the exchange of information rather than an opportunity for discussion and debate. Similar strategies which seek to give

223 As above.

224 Boer & Richardson, *Regional Agreements in Australia and Canada: Strategies for Aboriginal Self-Determination and Control* (Environmental Law Centre, Macquarie University, unpublished 1991) p158.

225 As above p114.

226 Nesbitt, "Aboriginal 'joint' management of north-west Kimberley conservation reserves: achievable under existing legislation but is there political will?" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p253.

227 SA, Department of Environment and Planning, SANPWS, *Unnamed Conservation Park Management Plan [Draft]* (1991) p15.

validity to Aboriginal processes, structures and institutions of decision-making, as well as to the knowledge base behind them, will avoid the danger of Aboriginal involvement in the planning process leading to reliance on and assimilation into the dominating culture.²²⁸ Failure to adopt such strategies may reinforce the criticism of the "collective vision of the encompassing state distilled into legislation, administrative procedures, by-laws and management plans [which] is a strong counter-current to tradition".²²⁹

Level Four: Management

Issues of Aboriginal participation in the day-to-day management of national parks go far beyond the employment of Aboriginal rangers and the incorporation of Aboriginal culture into the tourist experience. Whereas the previous discussion has highlighted obstacles to the recognition of Aboriginal decision-making structures and processes in the policy and planning of national parks, central to *this* level of joint management is the use of Aboriginal cultural skills and knowledge as "assets for conservation". Not only does this use present numerous obstacles to the compatibility of Aboriginal land management practices and modern attitudes to conservation, but it poses a threat to the integrity of Aboriginal culture itself.

Recognition of the contribution of indigenous ecological knowledge has taken various forms. Most recently, the National Strategy for Biodiversity called for the integration of traditional Aboriginal and Torres Strait Islander knowledge into a three-year programme to "identify components of biological diversity that are inadequately surveyed."²³⁰ In 1987, a survey was conducted of the vertebrae fauna of Uluru by CSIRO scientists and Anungu experts working together. A summary of similar programmes,

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- 228 Craig, "Environmental law and Aboriginal Rights: Legal Framework for Aboriginal Joint Management of Australian National Parks" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p147.
- 229 McNeely & Pitts (eds), *Culture and Conservation: the Human Dimension in Environmental Planning* (Croom Helm, London 1985) p6.
- 230 Aust, Department of Arts, Sport, the Environment and Territories, The Biological Diversity Advisory Committee, *A National Strategy for the Conservation of Australia's Biological Diversity* (1992) p14.

both within and beyond the boundaries of national parks, is provided by Williams.²³¹

The recording of Aboriginal ecological knowledge has served to highlight its parallels with Western science: "[W]hat we term "Aboriginal science" is simply Aboriginal knowledge of the natural world ... [I]ts analogy with Western science comes from its focus on natural phenomena, and from its power and predictive value in dealing with the local environment."²³² Jones makes a similar conclusion with respect to Gidjingarli taxonomy, a system of classification which was sometimes superior to European taxonomy,²³³ More recently, a leading CSIRO scientist has (generously) stated that Aboriginal science "is a science that in its own way is as good as our own".²³⁴

Despite these parallels, Aboriginal science does not merely consist of "discreet sets of prescriptions marked with taxonomies and econiches".²³⁵ The spiritual framework of ecological knowledge cannot be underestimated. It gives rise to a difference in approach to the function of knowledge: while Western science seeks to elucidate in order to inform as widely as possible,²³⁶ generally treating any information collected as neutral and available for public use,²³⁷ management of information in Aboriginal culture involves *control and protection* rather than discovery and communication. Nor is ecological information ever seen as "neutral", for the restrictions placed upon its distribution, particularly to uninitiated men or women, ensure its value both as an indication of the status of its possessor,

231 Williams, "Aboriginal Customary Resource Management and Conservation Agencies in Australia" in Fowler (ed), *Proceedings of the International Conference on Environmental Law* (National Environmental Law Association, Environmental Law and Policy Unit, University of Adelaide 1989).

232 Webb & Smith, quoted in Williams above, p13.

233 Jones, "Landscapes of the Mind: Aboriginal Perceptions of the Environment" in Mulvaney (ed), *The Humanities and the Australian Environment* p29.

234 Julian Cribb, speaking on ABC Radio, 3rd November 1992.

235 Williams, "Aboriginal Customary Resource Management and Conservation Agencies in Australia" in Fowler (ed), *Proceedings of the International Conference on Environmental Law* (National Environmental Law Association, Environmental Law and Policy Unit, University of Adelaide 1989) p2.

236 Creagh, "Looking After the Land at Uluru" (1992) 71 *Ecos* 13.

237 Baker & Woenne-Green, "The Role of Aboriginal Ecological Knowledge in Ecosystem Management" in Birckhead, DeLacy & Smith (eds) *Aboriginal Involvement in Parks and Protected Areas* p69.

and as an inter-tribal commodity.²³⁸ According to Palmer, the currency of exchange in traditional Aboriginal society was indeed *knowledge* as opposed to physical artefacts or ceremonial objects. Like any other commodity, the wider it was distributed, the less value it commanded.²³⁹

This analysis of knowledge as a tradable commodity concludes that "values are moulded by their immediate economic relationship with the environment".²⁴⁰ Whilst the introduction of technology into Aboriginal society and the lessening of dependence on a subsistence lifestyle has irreversibly affected the Aboriginal economic relationship with the environment, ecological knowledge retains its spiritual value today. Furthermore, it has attained greater political value as a primary tool in the negotiation for joint management or Aboriginal control of land.²⁴¹ The danger thus exists that the use of knowledge as a basis for the joint management may, whilst aiding in the classification, reintroduction and conservation of species and their habitats, devalue Aboriginal cultural integrity: "dispossession takes place as much through misappropriation of knowledge as it does by other more physical means".²⁴² Thus, any model of joint management, having as its core at least the sharing of day to day management, must accept Aboriginal cultural restraints on the dissemination of information. In certain circumstances, information may be further affected by language and dialect difficulties, gender and age restrictions and Aboriginal social etiquette, such as the inappropriateness of asking too many questions.²⁴³

At the same time, conservation agencies stress the benefit to Aboriginal communities of recording that knowledge once contained in oral tradition, in "the mnemonic role of a group-memory encoded within its songs".²⁴⁴ The nature of its transmission has been disrupted by dislocation and assimilation, and is currently in danger of being lost altogether through the death of older community members. It is thus ironic that the very means of protecting ecological knowledge today, via recording on paper or computer,

238 Palmer, *Aborigines, Values and the Environment* Fundamental Questions Paper No 7 (CRES, ANU, Canberra 1991) p3.

239 As above.

240 As above.

241 Creagh, "Looking After the Land at Uluru" (1992) 71 *Ecos* 13.

242 Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p37.

243 As above.

244 Jones, "Landscapes of the Mind: Aboriginal perceptions of the Environment" in Mulvaney (ed), *The Humanities and the Australian Environment* p31.

may itself destroy its cultural significance. It remains to be seen whether the protection of knowledge through sensitive scientific research and the attitude of conservation agencies is sufficient to avoid such destruction, or whether the application of Western legal concepts such as copyright or intellectual property will eventually be applied to Aboriginal ecological knowledge.²⁴⁵

Cultural limits on the dissemination of knowledge are by no means the only obstacle to the integration of Aboriginal perspectives and interests into contemporary species management. Further limits, which will be demonstrated via the example of the reintroduction of mosaic burning into Uluru National Park, reveal another manifestation of the attitudes implicit in the wilderness ideal, in particular, the portrayal of Aboriginal culture and Western industrialised "civilisation" as part of a set of binary opposites.

This manifestation takes the form of the portrayal of Aboriginal society as technologically impoverished and relies on the equation of "technology" with an "inventory of objects".²⁴⁶ By contrast, it can be argued that technology is more correctly defined as a system of knowledge used for practical purposes, "information about the possible relationships people and the natural environment".²⁴⁷ It is then readily obvious that Aboriginal society possessed a much more sophisticated "technology" than either its relatively small "inventory of objects" or its composition of "noble savages" would suggest.

One of the chief expressions of the technological sophistication of Aboriginal society was the use of fire to maintain a wide diversity of species "micro-habitats".²⁴⁸ Yet the legacy of the technology versus primitivity dichotomy is still evident today in the results of the Uluru and Kakadu fire management programmes. An assessment of the former parks fire management programme six years after its introduction (in 1987) concluded that an effective mosaic of patch burns within the Park has yet to be created.²⁴⁹ Lewis attributes this result to the caution of ANPWS personnel

245 McNeely & Pitts (eds), *Culture and Conservation: the Human Dimension in Environmental Planning* p170.

246 Lewis, "The technology and ecology of Nature's Custodians: anthropological perspectives on Aborigines and National Parks" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* pp17ff.

247 As above p18.

248 Julian Cribb, speaking on ABC Radio, 3rd November 1992.

249 Allan & Baker, "Uluru (Ayers Rock - Mt Olga) National Park: An Assessment of a Fire Management Programme" in Saunders, Hopkins & How (eds), *Two*

and the legacy of the once "uneasy truce" between them and the traditional owners.²⁵⁰ Morgan et al have made a similar finding that the restrictions placed on Warlpiri burning by the ANPWS makes it now of limited value to wildlife diversity.²⁵¹

It remains the case that although the effectiveness of Aboriginal methods of burning has been recognised since the early 1960s, "for most ANPWS personnel, scientific explanations are considered superior to traditional Aboriginal explanations".²⁵² Furthermore, Aboriginal corrective fire management to rehabilitate neglected country is still seen to be a "cultural aberration", differing as it does in its intensity and seasonality from "traditional" low-intensity burns.²⁵³

Whilst a recognition of the validity of Aboriginal science and technology would go some way towards ensuring greater sensitivity to the appropriate use of that knowledge, it cannot be assumed that this use will operate in isolation from "modern" conservation techniques. The use of fly-overs and remote sensing (satellite) data as tools to monitor the success of fire management programmes and more generally land degradation, is equally important to a "two-way transfer of ecological knowledge".²⁵⁴ This is particularly vital given that Aboriginal communities, on their own, lack the necessary resources to measure, let alone respond to, habitat degradation beyond their immediate environment.

Hundred Years of Utilization and Degradation Proceedings of the Ecological Society of Australia Vol 16 (1990) p215.

- 250 Quoted in Williams, "Aboriginal Customary Resource Management and Conservation Agencies in Australia" in Fowler (ed), *Proceedings of the International Conference on Environmental Law* (National Environmental Law Association, Environmental Law and Policy Unit, University of Adelaide 1989) p3.
- 251 Morgan, Smith & Butler, "Community Rangers: Aboriginal Involvement in Conservation" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia* p4.
- 252 Allan & Baker, "Uluru (Ayers Rock - Mt Olga) National Park: An Assessment of a Fire Management Programme" in Saunders, Hopkins & How (eds), *Two Hundred Years of Utilization and Degradation* Proceedings of the Ecological Society of Australia Vol 16 (1990) p215.
- 253 McNeely & Pitts (eds), *Culture and Conservation: the Human Dimension in Environmental Planning* p170.
- 254 Williams, "Aboriginal Customary Resource Management and Conservation Agencies in Australia" in Fowler (ed), *Proceedings of the International Conference on Environmental Law* (National Environmental Law Association, Environmental Law and Policy Unit, University of Adelaide 1989) p15.

The incorporation of modern conservation techniques by the traditional owners of jointly managed national parks must rely on the flexibility of Aboriginal society and its adaption to change in species management practices. It is significant that the use of an altered "inventory of objects" in the lighting of fires has not altered the knowledge basis of when and where to light to bring about and maintain a variety of environmental conditions.²⁵⁵ Whether conservation agencies and Western scientists can show similar flexibility in incorporating Aboriginal perspectives on the use of their technology and the restraints it entails is a matter for conjecture.

Joint Management versus Self Management and the Commercial Use of Wildlife by Aborigines

In no other context is the claim of the compatability of traditional land more vulnerable than in the context of the commercial use of species by Aboriginal communities. Joint management, according to one of its critics, gives rise to an "automatic assumption that indigenous people will accept or even welcome cultural status as a condition of their involvement in conservation management".²⁵⁶ Whether the acceptance of joint management constitutes a trade-off in Aboriginal economic opportunities is one of the issues to be addressed in the following paragraphs.

The contracting of Aboriginal organisations and individuals for conservation projects and the development of "cultural tourism" denote some form of recognition by conservation agencies of the economic relationship of Aborigines resident in national parks to their traditional land. The SANPWS has, for example, acknowledged that "joint management to be effective must reinforce Aboriginal traditional owners as the custodians of their own culture, and advocate for their own social and *economic* interests".²⁵⁷ Furthermore, the Service claims that one management goal of parks in South Australia is to take into account the *economic* significance to Aboriginal communities of the area, including "enterprise development opportunities associated with the nature conservation industry in South

255 Lewis, "The Technology and Ecology of Nature's Custodians: Anthropological Perspectives on Aborigines and National Parks" in Birkhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p19.

256 Clad, "Conservation and Indigenous Peoples: A Study of Convergent Interests" in McNeely & Pitts (eds), *Culture and Conservation: the Human Dimension in Environmental Planning* p51.

257 SA, Dept of Environment and Planning, SANPWS, *Unnamed Conservation Park Management Plan [Draft]* (1991) p11 (emphasis added).

Australia".²⁵⁸ Even if such statements of principle are taken in their broadest possible interpretation, implying the recognition of possible commercial use of species, they are meaningless in the face of existing restrictions on Aboriginal use of wildlife for commercial purposes. Such restrictions are found throughout Australia and remain one of the greatest obstacles to the economic development of Aboriginal communities based on the very species which once sustained them.

Several reasons can be cited for the reluctance of the South Australian government, by example, to put its policy of encouraging the economic self-sufficiency of Aboriginal communities into practice via the self-management of wildlife. The first of these, the proposition that the commercial use of species will "probably negate traditional values"²⁵⁹ was the subject of argument in the section above on the requirement of traditionality. A second reason for this reluctance is based on arguments of legal formalism, whereby the extension of hunting rights for commercial purposes to Aborigines is seen to place them in a position of privilege not shared by "other Australians".²⁶⁰ This is no novel argument; taken in another context, it was the basis of Sir Charles Court's opposition to land rights legislation in Western Australia and remains one of the main grounds cited by the mining industry in opposition to the recognition of native title under Australian common law. The ALRC has specifically rejected the view that equality is achieved only through the universality of (conservation) legislation.²⁶¹ However, it has gone on to conclude (somewhat inconsistently) that such legislation "must ensure that Aboriginal people who have adopted European values do not *abuse their privileges* to the detriment of the overriding interests of conservation".²⁶² Yet, just as it has been argued that the incorporation of indigenous knowledge into modern management practices should not be seen as the fulfilment of some moral obligation but as the recognition of the validity of that knowledge, then surely its exploitation (where culturally acceptable) to enable Aboriginal communities greater self-sufficiency is a *right*, not a privilege. Restoration of control over the resources of the land and the capacity to determine their

258 SA, SANPWS, *Strategy for the Involvement of Aborigines in Nature Conservation* (1991) p8.

259 Brown, *Keeping the Land Alive: Aboriginal People and Wilderness Protection in Australia* p34.

260 As above p70.

261 ALRC, *The Recognition of Aboriginal Customary Laws* (Report No 31, 1986) para 130.

262 As above.

use, would then be seen not as a matter of redressing disadvantage but as further recognition of this right.²⁶³

A third justification cited for restrictions on the taking of wildlife by Aborigines for commercial use is the fear of sudden undue species depletion. This ground is, however, similarly vulnerable to criticism, particularly in light of the comparative context of the international examples of Papua New Guinea and Zimbabwe.²⁶⁴ In both countries, wildlife management programmes have been implemented based on the empowerment of local indigenous communities (as opposed to central government conservation agencies) and the development of species commercial potential. Local communities have the authority to regulate not only the internal use of species, but to allocate rights to users external to the indigenous group and ensure their enforcement. Most importantly, both programmes are based on the premise that species long-term sustainability is not threatened, but is indeed enhanced by, commercial use. That such a premise exists has been argued in the past by Dasmann²⁶⁵ and more recently by an IUCN resolution of 1990 which affirmed that "the ethical, wise and sustainable use of some wildlife can provide an alternative or supplementary means of productive land-use."²⁶⁶ Thus, utilisation equates with conservation, with the economic incentive to preserve species supplementing any spiritual obligations to do the same. Furthermore, long-term sustainability is best ensured by the management of species in the hands of local communities "small enough to feel a sense of identity with the resource".²⁶⁷ As well as their reliance on the premise of sustainability, the success of both the Papua New Guinean and Zimbabwean programmes

263 Coombs, McCann, Ross & Williams (eds), *Land of Promises: Aborigines and Development in the East Kimberley* (CRES, ANU and Aboriginal Studies Press, Canberra 1988) p39.

264 The following discussion of PNG's Wildlife Management Committees and Zimbabwe's Campfire Programme is taken from Wilson, McNee & Platts, *Wild Animal Resources: their use by Aboriginal Communities* (AGPS, Canberra 1992) pp92ff. See also Child, "Managing Wildlife for People in Zimbabwe" and Kwapena, "Wildlife Management by the People", both in McNeely & Miller (eds), *National Parks, Conservation and Development: the role of Protected Areas in Sustaining Society* (Smithsonian Institute Press, Washington 1982) pp118, 315 respectively.

265 Dasmann argued with respect to Africa's wildlife that economic value can ensure the continuance of species and supplement aesthetic and scientific arguments for conservation: quoted in Wilson, McNee & Platts, *Wild Animal Resources* p5.

266 IUCN resolution at General Assembly held in Perth, 5th December, 1990, as above, pp106-108.

267 Wilson, McNee & Platts, *Wild Animal Resources* p89.

has been attributed to the objective of ensuring that "people become involved in the conservation of their own wildlife, rather than having regulations forced on them from outside".²⁶⁸

The most valid arguments against the commercial use of species are ones which are not imposed by Eurocentric notions of traditionality and legal formalism, but which arise from within Aboriginal society itself. These take the form of religious prohibitions and intergenerational conflict. For example, some cultural taboos may still affect Aboriginal attitudes to particular species use although, it must be emphasised, such attitudes are in continual process of evolution.²⁶⁹ With respect to the commercial potential of crocodile farming, for instance, it has been found that "although crocodiles are a totem for some kinship groups, this does not mean they cannot be utilised, rather totem groups must be consulted and their approval given".²⁷⁰

Evolving attitudes to species use can be seen in the broader conflict within Aboriginal communities between the values of traditional elders and the younger generation and relating to the natural environment and economic development.²⁷¹ Just as the issue of mining has proved divisive of Aboriginal society, so too may the commercial development of native species be seen by some as an alternative to welfare dependence, as the unwelcome imposition of Western values by others, or again as one means by which the economic base vital to greater political autonomy can be developed.²⁷²

Were these internal conflicts to be resolved, legislative restrictions would yet remain the greatest obstacle to the commercial development of species such as kangaroos, crocodiles, emus and magpie geese.²⁷³ Joint management has made no difference to this aspect of Aboriginal use of wildlife. Perhaps it is because of such restrictions, and moreover, the attitudes they evidence, that despite the success of the international examples given above, the steps taken by Aboriginal communities in the movement from joint management to self management of species have been

268 As above p92.

269 As above p21.

270 As above p73.

271 Boer & Richardson, *Regional Agreements in Australia and Canada: Strategies for Aboriginal Self-Determination and Control* pp111ff.

272 As above p113.

273 Wilson, McNee & Platts, *Wild Animal Resources: Their Use by Aboriginal Communities*.

comparatively tentative. This can also be attributed to the lack of support generally of subsistence as a legitimate land use. Despite proposals for income support of subsistence, based on the Income Security Programme for the Cree Indians,²⁷⁴ whereby eligibility for unemployment benefits is lost in exchange for a basic minimum income if indigenous people can demonstrate a substantial commitment to hunting, the Aboriginal relationship to species is yet to be recognised in a commercial context. On the international level, support for the self-management of species by indigenous groups can be found in the World Commission for Environment and Development's comment that "the recognition of traditional rights must go hand in hand with measures to protect the local institutions that enforce responsibility in resource use. And this recognition must also give local communities a decisive voice about resource use in their area."²⁷⁵

The Northern Territory Conservation Commission has recently developed a new Aboriginal Ranger classification (the community ranger) as a means of implementing Aboriginal species management patterns and techniques.²⁷⁶ Yet even this initiative does nothing to implement indigenous management *structures* and is far from the initiative of Cape York Aborigines who have set up a Land and Resource Management Office via a community council. Under the scheme, traditional authority is recognised through an Elders group which retains an over-arching decision-making role with respect to conservation management.²⁷⁷

It appears that with respect to Australian Aboriginals, a view of subsistence lifestyle lead in isolation from the market economy is retained: a view tainted by, if not founded on, the recurring notion of "traditionality". It is further influenced by the hierarchy of conservation values, of which Aboriginal development interests are just one. As pointed out by the ALRC,

274 For a full analysis of such a proposal, see Ellanna, Loveday, Stanley & Young, *Economic Enterprises in Aboriginal Communities in the Northern Territory* (ANU NARU, Darwin 1988).

275 WCED, *Our Common Future* (The Brundtland Report) (Oxford University Press, United Kingdom 1987) p115.

276 See, generally, Morgan, Smith & Butler, "Community Rangers: Aboriginal Involvement in Conservation" in Foran & Walker (eds), *The Application of Science and Technology to Aboriginal Development in Central Australia*.

277 Hill, "Models for Aboriginal Involvement in Natural Resource Management on Cape York" in Birckhead, DeLacy & Smith (eds), *Aboriginal Involvement in Parks and Protected Areas* p269.

in the area of resource management, some form of unitary, or at least cooperative, regime is necessary in any case where resources are scarce and demand threatens supply. In such cases it is necessary to consider a variety of factors, and Aboriginal interests, however important, are only one amongst them.²⁷⁸

Yet the representation of Aboriginal interests in such a hierarchy is not, as revealed in this article, without significant difficulties.

CONCLUSION

The very survival of Aboriginal culture today is testament to its innovativeness and flexibility in adapting to both long-term environmental change as severe as any of the challenges foreshadowed by the loss of Australia's biodiversity,²⁷⁹ and to the dramatic and rapid changes brought about in two hundred years of European settlement. The maintenance of hunting and gathering practices during the latter period is further evidence of the importance of continuity and ritual in reaffirming the laws laid down by the spiritual ancestors. Aboriginal use of wildlife thus represents both a pragmatic adaptability to change and the continuity of belief through present expression.

This article has attempted to highlight the diversity of the cultural response to environmental change. It is this very difference which lies at the heart of the cultural diversity and biodiversity debate. A genuine acknowledgement of *Aboriginal* reactions to change in the physical and social environment would require the recognition of several features of contemporary Aboriginal society. This would include an understanding of the different time-frame of Aboriginal groups and conservation agencies. It would also need to take into account the indigenous perception of time itself, where "the future may differentiate itself only as a kind of extended present, whose principle is to be continuously at one with the past"²⁸⁰ and whose perception of the past is perhaps best expressed by Kath Walker:

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- 278 Australian Law Reform Commission, *The Recognition of Aboriginal Customary Laws* (Report No 31, 1986) para 972.
- 279 Mulvaney, "Visions of Environment: An Afterview" in Mulvaney (ed), *The Humanities and the Australian Environment* (Highland Press, Canberra 1991) p111.
- 280 Stanner, *White Man Got No Dreaming: Essays 1938-1973* (ANU Press, Canberra 1979) p58.

Let no one say the past is dead.
 The past is all about us and within.
 Haunted by tribal memories, I know
 This little now, this accidental present
 Is not the all of me, whose long making
 Is so much of the past.²⁸¹

Recognising the diverse and divergent cultural reactions to change carries with it an acceptance that loss of species diversity may be perceived in different, and not universally negative, terms both by and within Aboriginal communities. Compartmentalising indigenous response to change, or merely assuming it to be the same as that of conservationists, ignores the variety of aspirations of contemporary Aboriginal communities, aspirations which may well include the commercial development of species potential. It is thus impossible to classify Aboriginal interest in wildlife use as peculiarly "cultural", recreational, traditional, or otherwise.

Finally, the diversity of cultural response to change entails the affirmation that "conservation" is itself a uniquely Western cultural concept. Like the wilderness ideal, it came with us, the invaders, "whose culture is perhaps the only one that needs to invent and articulate such a concept, because ours is the only one which has had the capability to destroy the environment on the scale that we now have".²⁸²

Such is the nature of the recognition which must occur before any reconciliation between the values of biodiversity and cultural diversity can take place. It will not come about if those assumptions of past Aboriginal interactions with the environment and present aspirations and practices are sustained: the stereotype of the "Natural Man", the "Ecological Being", as presented by the wilderness ideal, the absolute and undefined dichotomy of traditional versus non-traditional behavior and the presumption of the inferiority of Aboriginal science and technology discussed above. Certainly, many of the associated dichotomies presented by conventional forms of conservation have been overcome through a *redefinition of humankind's interaction with, and management of, the "natural" environment*. Nevertheless, such a reanalysis has left untouched those assumptions and categorisations of Aboriginal species use criticised in this

281 From the poem "The Past" in Walker, *My People: The Kath Walker Collection* (The Jacaranda Press, Milton, 3rd ed 1981) p93.

282 Anderson, "Aborigines and Conservationism: The Daintree-Bloomfield Road" (1983) 24 *Aust J Soc Iss* 219.

article. The weakness of many of these assumptions and dichotomies has been revealed not only by the recent disposal of terra nullius; this article has sought to highlight the very divergence in the Aboriginal holistic view and the non-Aboriginal approach to the environment which undermines them.

It remains the case that the biodiversity and cultural diversity debate seeks to set absolute limits, whether it be with respect to the delineation of boundaries or the purpose of wildlife use, on two of the most dynamic and relative features of the Australian environment: both Australian ecosystems and indigenous culture remain in a process of recovery from the watershed of European arrival on the continent two hundred years ago.²⁸³ Current legislation reflects this dilemma by setting absolute prescriptions on current species use based on false assumptions of past behavior, rather than by focussing on the promotion of the continuity of sustainable wildlife practices and the knowledge basis which sustains them. The task of legislatures is to assess the *reality* of the current impact of indigenous hunting on loss of biodiversity, to discover the aspirations of Aboriginal communities with respect to species use and, above all, to embrace the diversity in the cultural response to environmental change.

283 Taylor, "Naturalness: The Concept and its Application to Australian Ecosystems" in Saunders, Hopkins & How (eds), *Australian Ecosystems: Two Hundred Years of Utilization, Degradation and Reconstruction* (1990) 16 Proceedings of the Ecological Society of Australia 414.